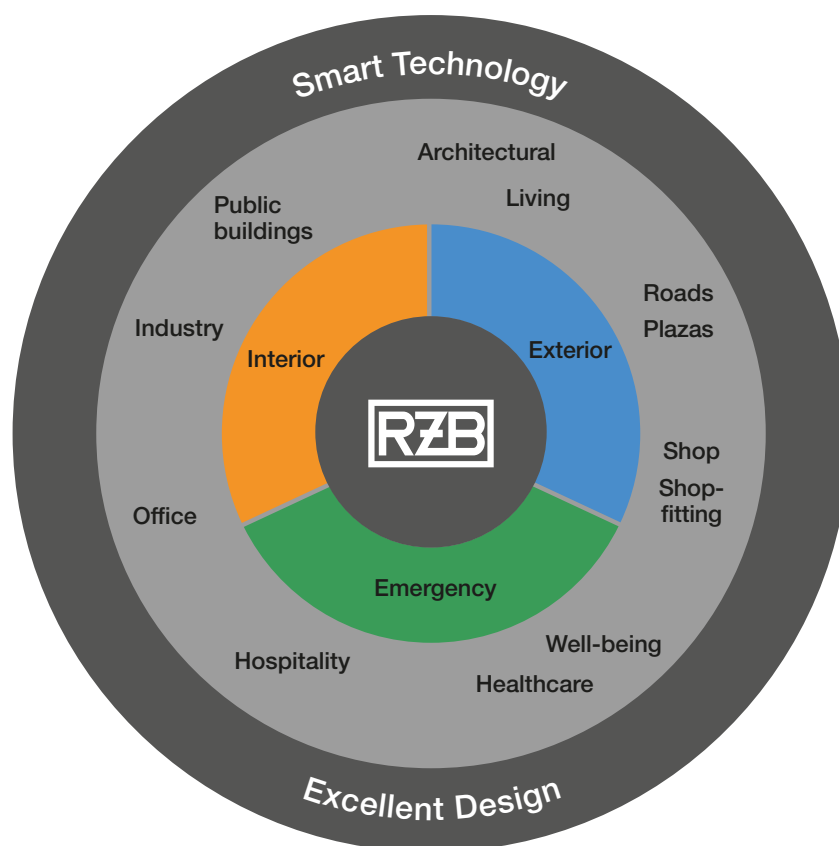




PRODUCT SELECTION GUIDE

RZB – The Lighting Specialists



RZB is a generalist when it comes to lighting solutions.

RZB's portfolio comprises luminaires for interior and exterior use, as well as emergency lighting and emergency lighting systems.

Our products are developed in strict accordance with our »Smart Technology« and »Excellent Design« strategies.

»Smart Technology« refers to the efficiency, functionality, and quality of our products and our system solutions. For us, quality means not only product quality but also the quality of the lighting provided by our products from both a physical and physiological standpoint.

»Excellent Design« represents our unwavering commitment to developing solutions that combine best in class technologies, unmatched lighting quality, and superb designs.

Over the past decade, our products have been awarded over 60 international design prizes.

Special applications which are covered by our lighting solutions are for example:

- **Public buildings**
Museums, theaters, churches, train stations, airports, exhibition centers, sports facilities, leisure facilities
- **Education**
Universities, schools, daycares
- **Residential buildings**
Low energy houses, dormitories
- **Roads & plazas**
Facades, pathways, parks, car parks and roads
- **Retail stores**
Retail, shopping malls, showrooms
- **Healthcare**
Clinics, retirement homes, practices, public swimming pools and spas
- **Hotels and restaurants**
- **Offices and conference rooms**
- **Industry**

CONTENTS AND NEWS	2 - 13
INDOOR LIGHTING	14 - 471
LIGHT MANAGEMENT	472 - 499
OUTDOOR LIGHTING	500 - 675
LED CONVERSION KITS	676 - 687
EMERGENCY LIGHTING	688 - 823
APPENDIX	824 - 864
Service	826
Conditions of sale and delivery	832
Reference number index	835
Alphabetical index	858
Customer contact	864

Our Product Selection Guide A8 gives an overview of the RZB luminaire portfolio and is an useful tool to help you find the product you are looking for. The A8 edition of our Product Selection Guide supersedes and replaces all previous editions, errors excepted.

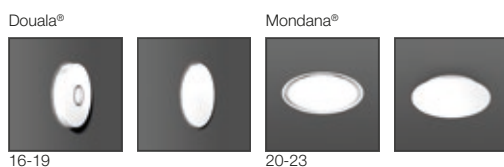
We reserve the right to effect changes in our products at any time, without notice. As our luminaires are technical devices, they may only be used for their intended purpose and in accordance with our specifications.

Any use of our products in a manner not authorized by us, as well as effecting any change in any of our products, will exempt us from any legal obligations in the event of loss, damage or injury – except insofar as we authorize such nonconformance in writing.

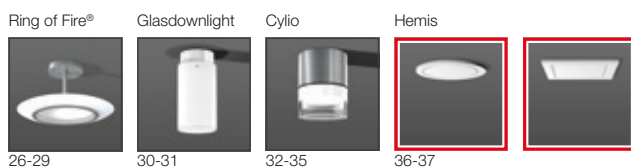
Our standard terms of sale and delivery can be found in the appendix.

 New items are marked with a red frame.

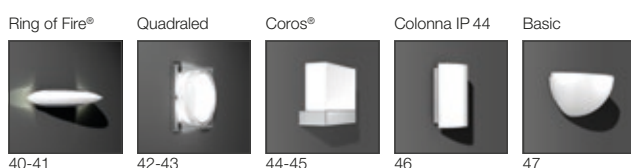
Recessed ceiling and wall luminaires



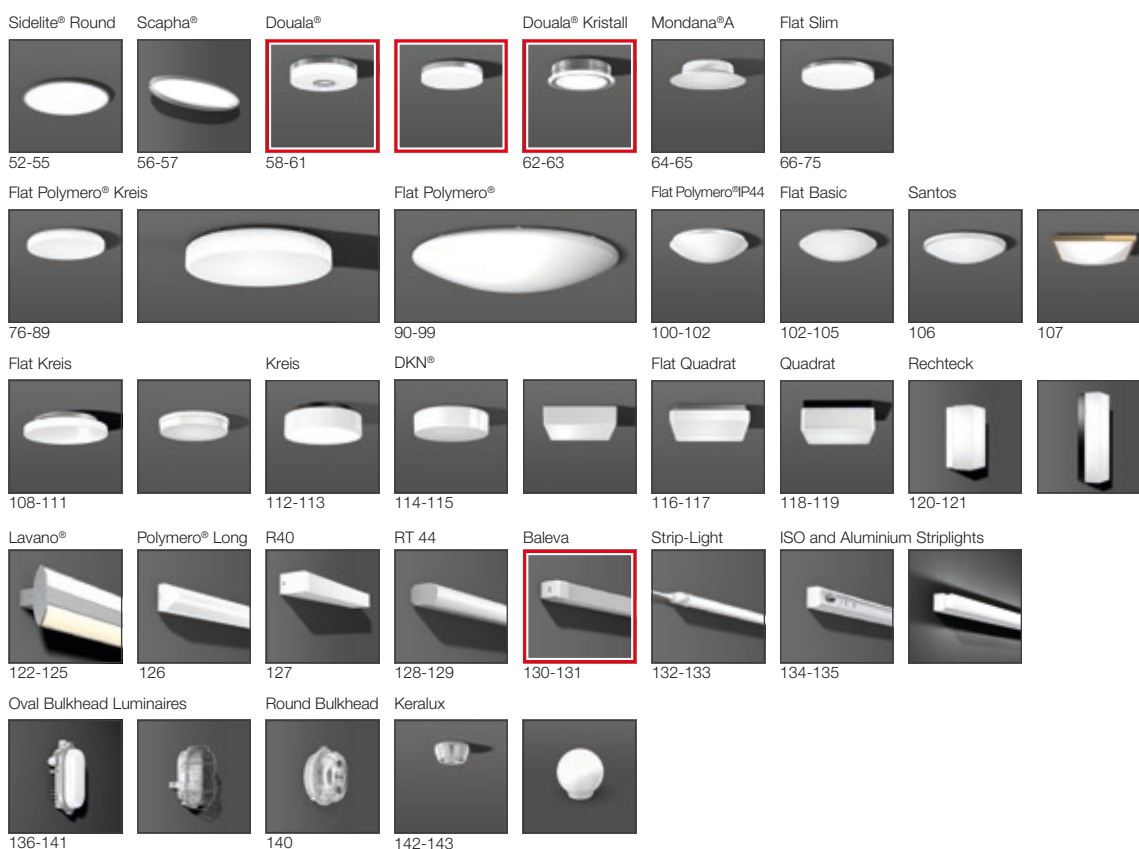
Ceiling luminaires



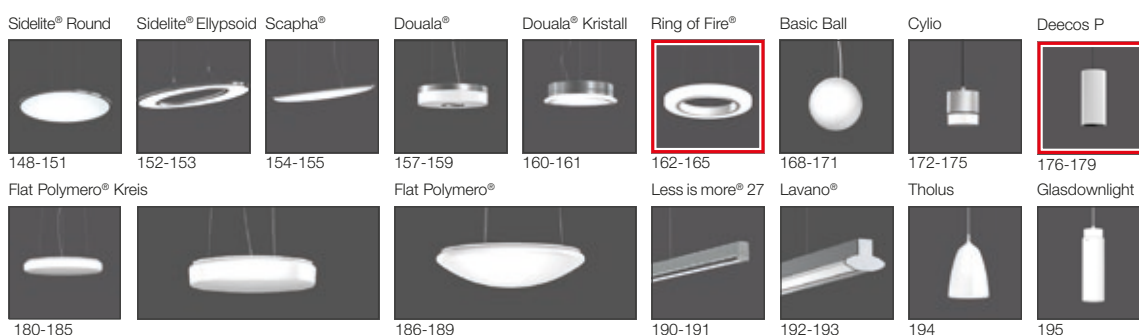
Wall luminaires



Ceiling and wall luminaires



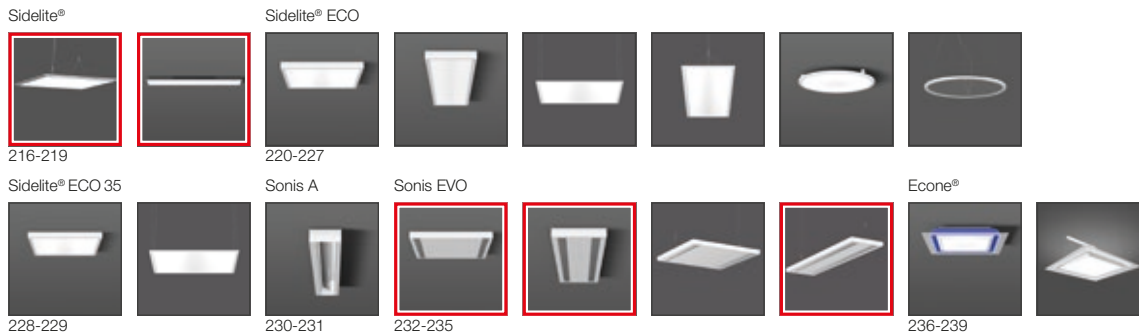
Pendant luminaires



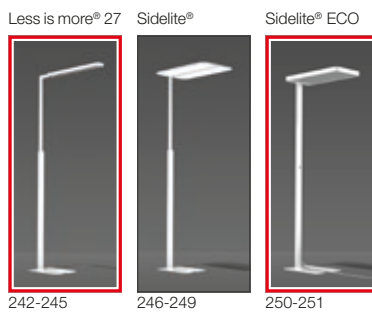
Recessed modular luminaires



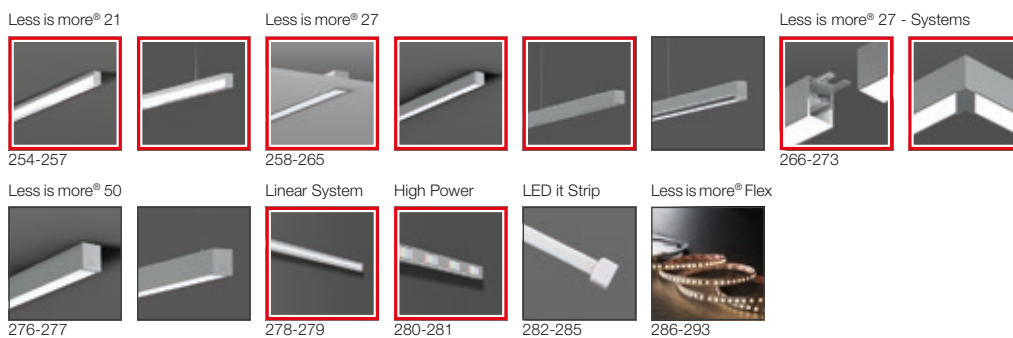
Modular luminaires: surface mounted or pendant mounted



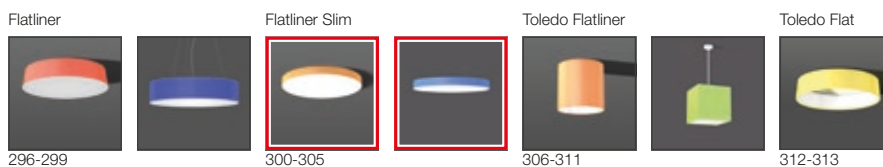
Free-standing luminaires



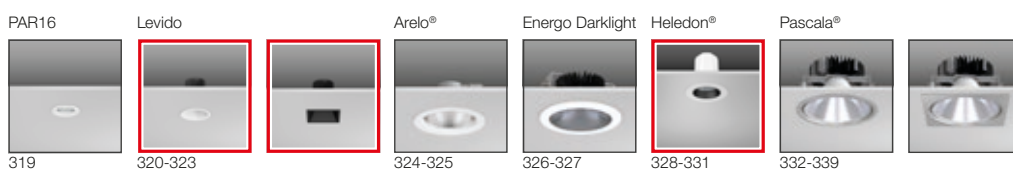
LED linear systems



Fabric lampshade luminaires

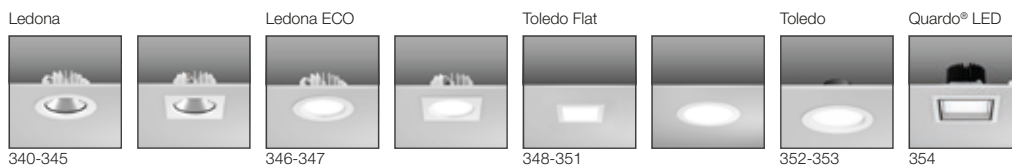


Recessed downlights

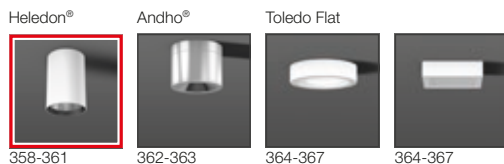


 New items are marked with a red frame.

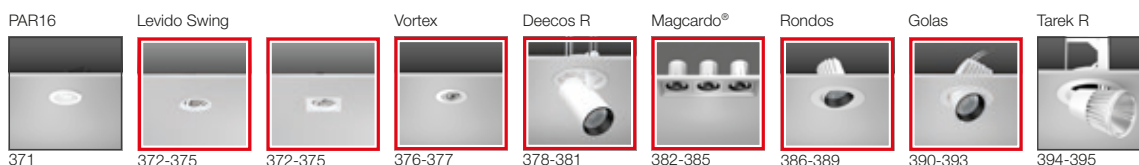
Recessed downlights



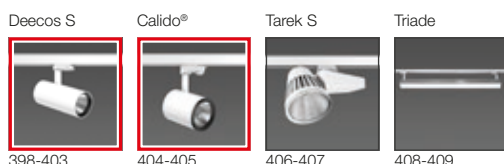
Surface mounted downlights



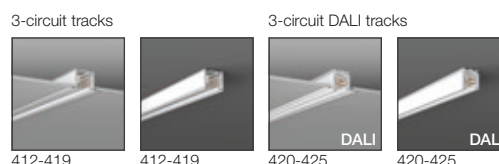
Recessed projectors



Surface mounted projectors



Tracks



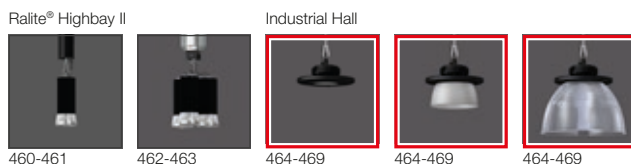
Continuous line luminaire systems



Luminaires for moist/humid environments



Highbay luminaires



Light management



Recessed luminaires

Mondana®



502-505

Brick® Steps



506-509

Brick® EVO



510-511

Wall luminaires

Rounded® Midi



514-515

Alu-Design



516-517

Rounded® EVO



518-519

Brick® EVO



520-521

Zylinder Opal



522-523

Kugel Opal



522, 524

Trima



525

Wallscaping



528-532

Slopia®



533

Alu-Superior



534-535

Alu-Rund



536

Alu-Lux oval



537

Wall Head



538

Rechteck



539

House number luminaires

Rounded® Midi



542-543

The Ultra-flat House Number Luminaire



544-545

Quadrat



544-545

Opal glass luminaires



546-548

Kreis



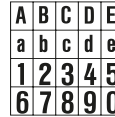
549

Adhesive lettering

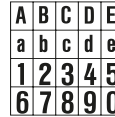


551-552

Kreis



550



553

Ceiling and wall luminaires

Flat Slim



556-561

Mondana®-A



562-563

Rounded®



564-567

Cadéro®



568-571

Alu-Design



572-575

Alu-Rund



576-577

Alu-Superior



578-579

Alu-Superior



580-581

Alu Oval Bulk.



582-583

Alu-Lux oval



584-585

Flat Polymero®



586-587

Bollards

Slopia®



592-593

Bocaro®



594-595

Mega Tower



598-599

Mega Lamelle



600-601

Mega Laterne



600-603

Mega Tube



604-607

Mega Square



608-609

Mega Kugel



610-611

Mega Gürtellinse



612-613

Mega Glaspoller



614-615

In-ground luminaires

Terra Edelstahl 130



618-619

Terra Edelstahl 190



618-619

Terra Edelstahl 245



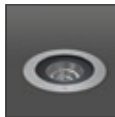
620-623

Terra Edelstahl 245



620-623

Terra Edelstahl 245



624-627

Terra Edelstahl 245



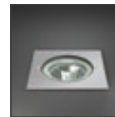
624-627

Terra Edelstahl 245



624-627

Terra Edelstahl 245



624-627



New items are marked with a red frame.



Floodlights and spotlights

Alu-Star



630-635

Lightstream® LED

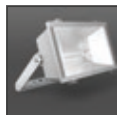


636-653



636-653

Box-Type®



660-661

PAR16



657-658

Standard-Spot



659

Steel poles



654-655

Outdoor pole luminaires

Gonia



664-665

Laruta



666-667

Lupalo



668-669

Slopia® Sky



670-674

Steel poles



675

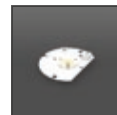
LED conversion kits

Indoor luminaires



678-683

Outdoor luminaires



684-687

Central power supply (CPS)



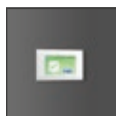
692-693

Low power supply (LPS)



692-693

Self-contained monitoring systems



694-701



694-701

Self-contained technology



702-707



702-707

Safety luminaires

Powerbox Flood



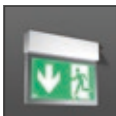
708-709

Tenuo®



710-717

Halyxx®



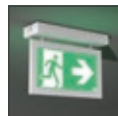
718-723

GSUN® | Universal



724-725

Rechteck



726-727

Signcube



728-729

Centryxx®



742-747

748-751



748-751

Centryxx® D



730-733

Centryxx® D



730-733

Multivariabel



734-735

Minisign



736-737

Varioplast I



738-741

Rechteck



752-757

Signcube



758-761

Centryxx®



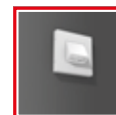
762-773

762-773



762-773

762-773



762-773

Lucio



774-775

Turia®



776-779

Edo



776-779

Edo



780-781

Toledo Flat



780-781

782-791



782-791

782-791



782-791

Sidelite® ECO



792-793

Sonis EVO



794-795

Planos



796-799

Planox



800-803

Flat Polymero®



804-807

808-809



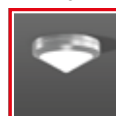
808-809

Cadero



810-811

Alu-Design



812-813

Rounded®



814-819

Lightstream® LED



820-821

823



823

NEW: The fast route to your lighting solution

Our new icons help you discover the key attributes of our products at a glance. So you can quickly and easily find the right solution for your project!



TOLEDO FLAT

This symbol shows that individual luminaires from a range have been tested or are available for emergency lighting.

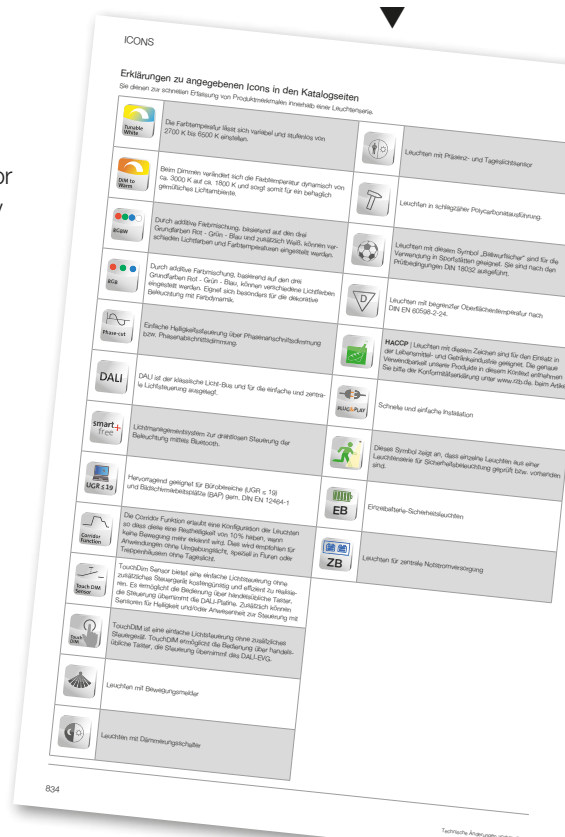
Fast and easy installation

Light management system for wireless lighting control via Bluetooth.

DALI is the classic light bus and is designed for simple and central light control.

The colour temperature can be adjusted infinitely from 2700 K to 6500 K.

You can find a full overview of icons on page 834.



SUCCESSFUL YEAR 2017/2018



Managing Director Reiner Jürgens with Ranga Yogeshwar

RZB Rudolf Zimmermann, Bamberg GmbH recognised as a leading innovator

Überlingen – RZB Rudolf Zimmermann, Bamberg GmbH is one of this year's leading innovators in the German SME sector. The Bamberg-based company will be presented with the Top 100 award, now in its 24th year, by Ranga Yogeshwar, Professor Nikolaus Franke and compa-media. This is the second time that RZB Rudolf Zimmermann, Bamberg GmbH has joined this elite group. The independent panel of judges particularly praised the success of the company's innovations.

The award for Germany's
most innovative SMEs
2017 „Top 100“



RZB is one of BAVARIA'S BEST 50

RZB Rudolf Zimmermann, Bamberg GmbH is in BAVARIA'S BEST 50. In 2017, the Bavarian State Ministry of Economic Affairs and Media, Energy and Technology once again recognised the 50 fastest-growing SMEs in Bavaria with the BAVARIA'S BEST 50 award.

BAYERN'S
BEST 50
PREISTRÄGER 2017



„The Major German Brands“
Volume 5



Major German Brands. Responsible. Future-oriented.

As an international luminaire manufacturer, it is an honour for RZB to have been selected by the German Design Council for the fifth time to appear in the current edition of “Die großen deutschen Marken” (“Major German Brands”) as a responsible and forward-looking brand. With its award-winning SONIS EVO range of office luminaires, RZB presents yet another prime example of the successful implementation of our corporate guidelines:
Smart Technology.
Excellent Design.

Awards

RZB received more than 60 renowned design awards during the past years. Below our latest winners:



Triple for RZB Lighting at the iF DESIGN AWARD 2017

LARUTA



MEGA ROUND | MEGA SQUARE



ALU-STAR



reddot design award
winner 2017

Award-winning: SONIS EVO receives the Red Dot for high design quality

SONIS EVO



ALEA OPTIC SYSTEM



Double victory for RZB at the „German Design Award 2018“

TOLEDO FLAT(LINER)



FLAT SLIM



DIGITAL MEDIA

Social Media ▼



You can also visit us in:
Facebook, Twitter, LinkedIn, Youtube, Xing
and Google +

Website ▼

Our website provides ready access to all of these communication options. In addition to what you'll find in our product catalogue, our website contains a wealth of information about projects we have carried out; plus there are many useful planning tools and documents available for downloading.

Please visit our website at

www.rzb-lighting.com

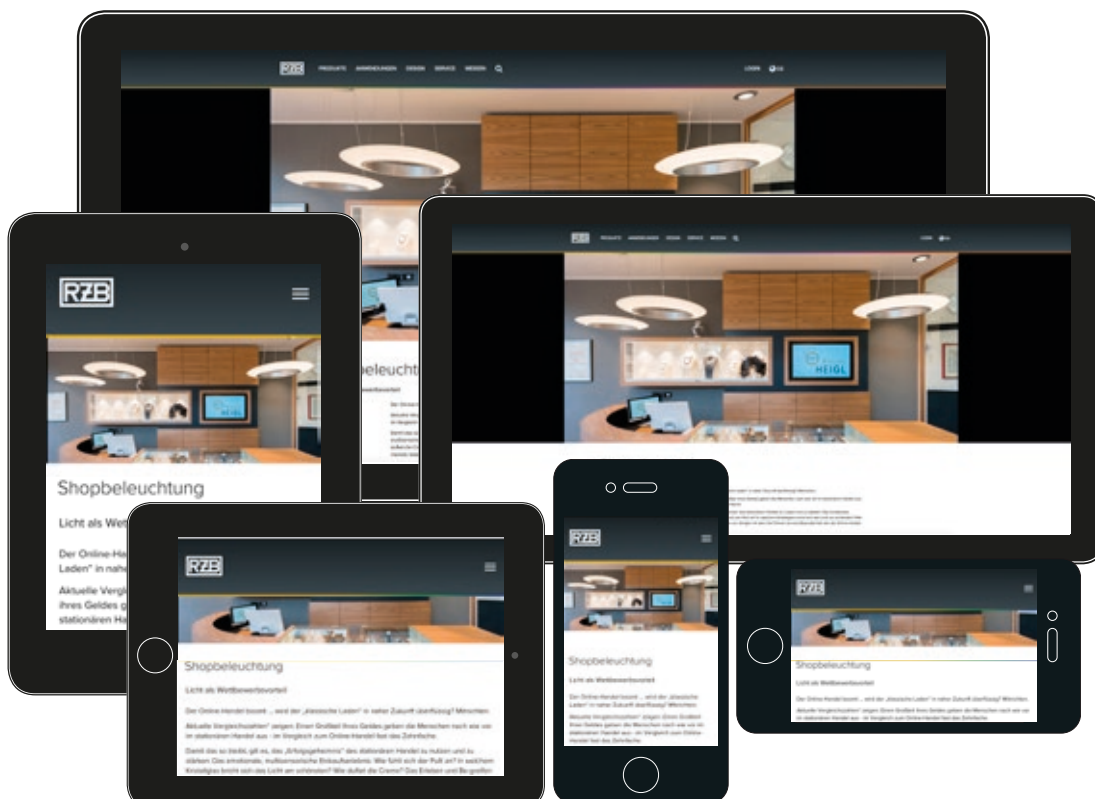
▼ RZB Newsletter

You can obtain the latest information about our products by e-mail.



Full responsive

- adapted to your terminal device



Our Product Selection Guide gives an overview of approximate 10,000 RZB luminaires and is an useful tool to help you find and order the product you are looking for.

Additional Print Media:



▲ New product series are presented in separate, detailed brochures

Example pages from the
▼ Toledo Flat(liner) brochure



360° competence brochures covering various topics
▼



Examples from the 360° Light Industry brochure
▶



▲ Global Impressions

The RZB compendium titled Global Impressions contains photos and descriptions of projects that have been carried out worldwide using RZB lighting fixtures. The RZB portfolio products comprising interior and exterior luminaires, as well as emergency lighting solutions "Made in Germany", are presented in this book in their architectural and interior design contexts.

LIGHT PLANNING

DIALux & RELUX®

light simulation tools

You decide what you would like to work with.

Technological leaps, resource management, compliance with standards, energy efficiency: your projects are becoming more and more complex, and planning them is becoming more and more challenging.

The right light planning software can offer you substantial advantages - the two planning aids **RELUX** and **DIALux** are doubtless among the most reliable in this segment. You probably already use one of these two programs.

To ensure that you do not have to do without your preferred or familiar software when working with RZB products, we can offer you not only the already well-established project planning program **RELUX**, as of now we can also offer you project planning with **DIALux**.

And what about spacing? Here too, the tools by **RELUX** and **DIALux** will support you: In only a few steps you can determine the spacing of bollard and pole luminaires on path areas for optimum illuminance.

Of course, these tools are also available for planning your emergency lighting.

You can now get the following additional information on our luminaires. As usual, you will find this information on the item page for our products under downloads.

BIM (Revit) / CAD

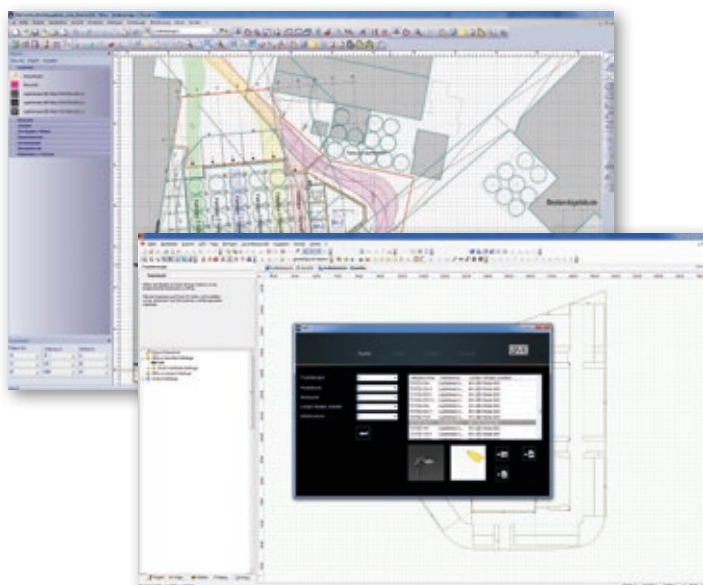
Revit (*.RFA) files for our luminaires can be imported into REVIT (AUTODESK) CAD software for further processing. As well as the 3D geometry of the luminaires, you will also get additional information such as system rating, luminous fluxes, specifications, lamps and prospective additional information.

CAD (*.DWG) files are 3D records of our luminaires, which can be processed by just about all CAD programmes.

GAEB

GAEB files are suitable for standardised data exchange for specifications.

They are available in text (*.D81) or XML format (*.X81).



BIM - the benefits for you!

BIM stands for Building Information Modelling and is an integral method for innovative building planning using software. With BIM, building data can be recorded, processed and networked. This means that buildings can be designed, modelled, optimised and simulated, from the planning phase through to design and operation and including any potential dismantling. This all takes place in just one 3D model, on which all those involved work together.



Unlike traditional technical drawings, BIM provides the potential to develop a model right from the very start, which is then further refined during the planning stage. At the end, an image of the actual building is produced.

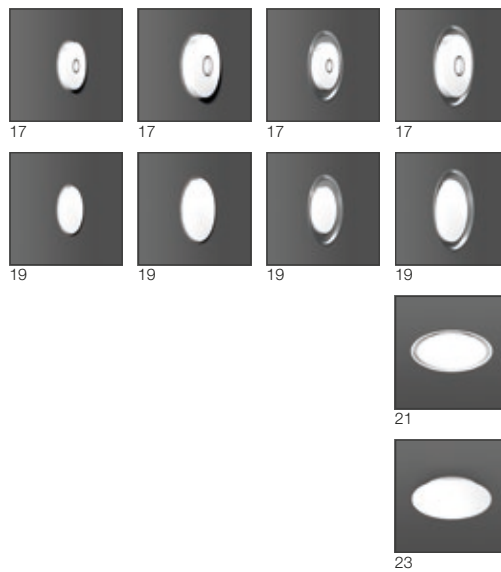
The BIM method is, however, much more than a simple 3D model: a wide variety of information can be associated with each building component and each element, such as maintenance cycles or information on the recycling of each element. This means that integral digital planning with BIM can be used to make precise predictions for the construction and life cycle costs of a building right from the planning stage.

- ✓ All RZB luminaires are BIM objects! (Current for Revit, planned for Allplan and ArchiCAD)
- ✓ Transparent data right from the start
- ✓ Improved exchange of information between those involved in the planning process
- ✓ Automatic adjustment in the event of modifications (e.g. bills of materials or costs)
- ✓ Automatic collision testing (e.g. for marked-out routes and channels)





The application image shows:
Mondana®-E

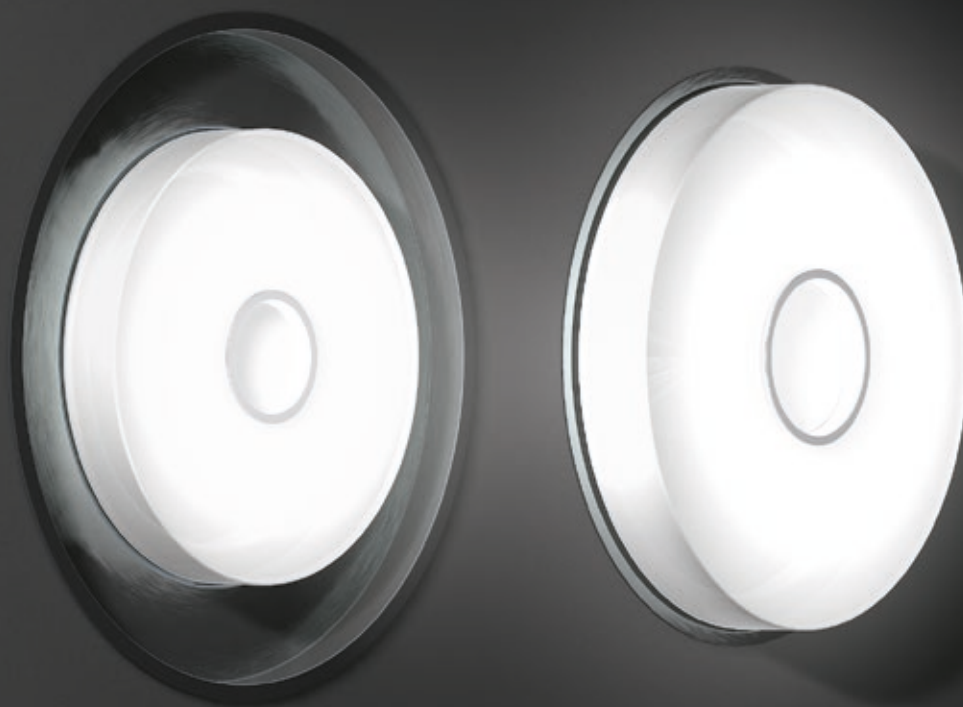


Douala®
16-17

Douala® Slim
18-19

Mondana®-E
20-21

Mondana®-HE
22-23

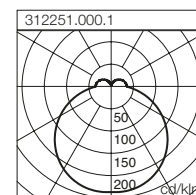


DOUALA®

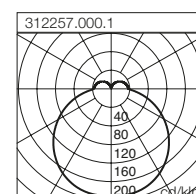
Recessed ceiling and wall luminaires, Semi-recessed ceiling and wall luminaires

- A multi-faceted range for interiors, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- The luminaire is timelessly elegant and fully integrates architectural surrounding
- The stainless steel base and the glass create an impression of unity
- The cover made of mouth-blown, satin-finished three-layer opal glass is available in two different sizes
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- Also available for DALI control and with movement sensor (master and slave)
- On/Off with integrated phase cut dimming

312251.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	11	18



312257.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



Further luminaires of this series, see:
 Indoor lighting | Ceiling and wall luminaires
 Indoor lighting | Pendant luminaires

Recessed ceiling and wall luminaires, Semi-recessed ceiling and wall luminaires | Series: Douala®

 Type of Protection: **IP 40**

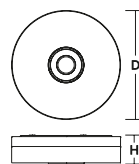
Protection Class: I

Impact Protection: IK02

 Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish.
 Patented spring fastening system.

LED included.

Available colour: 0 = stainless steel, brushed


For ceiling-recessed and wall-recessed applications the recess housing must be ordered separately.

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 300 mm							
312251.000 *	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	on/off	A+ A+
312251.000.76	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	DALI	A+ A+
312251.000.1 *	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	on/off	A+ A+
312251.000.1.76	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	DALI	A+ A+
Glass D 400 mm							
312257.000 *	D 400, H 102	LED ⁽¹⁾	830	2300 lm	27 W	on/off	A+ A+
312257.000.1 *	D 400, H 102	LED ⁽¹⁾	840	2400 lm	27 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement glasses							
05-1934.012	D 300, H 76						
05-2018.032	D 400, H 87						

Accessories | Installation housing for Douala range

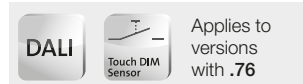
Lacquered aluminium housing for installation in cavity walls of 15-35 mm wall thickness.

Accessories							
Recessed housing for cavity walls							
Cut out DA 440 mm							
981893.000	D 454, H 120, HE 120						for luminaires D 300
Cut out DA 510 mm							
981762.000	D 524, H 150, HE 150						for luminaires D 400
Semi-recessed housing for cavity walls							
Cut out DA 312 mm							
981892.000	D 326, H 90, HE 90						for luminaires D 300
Cut out DA 410 mm							
981763.000	D 426, H 90, HE 90						for luminaires D 400

Comparison LED vs. conventional lamps
LED 21 W ≈

 2 x 26 W TC-D (68 W CB)
 1 x 40 W T16-R (43 W EB)

LED 27 W ≈

 4 x 18 W TC-D (104 W CB)
 1 x 55 W T16-R (60 W EB)

Recessed housing installation

Semi-recessed housing installation



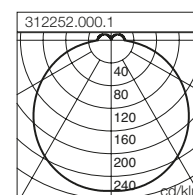

DOUALA® SLIM

Recessed ceiling and wall luminaires, Semi-recessed ceiling and wall luminaires

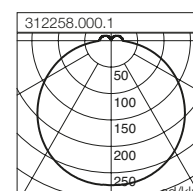
- A multi-faceted range for interiors, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- The luminaire is timelessly elegant and fully integrates architectural surrounding
- The stainless steel base and the glass create an impression of unity

- Featuring the new superflat diffuser made of mouth-blown, satin-finished three-layer opal glass, this luminaire rounds out our Douala® product family.
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- Also available for DALI control and with movement sensor (master and slave)

312252.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	12	19



312258.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	14



Further luminaires of this series, see:
 Indoor lighting | Ceiling and wall luminaires
 Indoor lighting | Pendant luminaires

Recessed ceiling and wall luminaires, Semi-recessed ceiling and wall luminaires | Series: Douala® Slim

 Type of Protection: **IP 40**

Protection Class: I

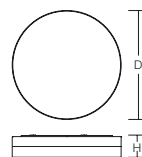
Impact Protection: IK02

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish.

Patented spring fastening system.

LED included.

Available colour: 0 = stainless steel, brushed


For ceiling-recessed and wall-recessed applications the recess housing must be ordered separately.

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 300 mm							
312252.000 *	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	on/off	A+ A+
312252.000.76	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	DALI	A+ A+
312252.000.1 *	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	on/off	A+ A+
312252.000.1.76	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	DALI	A+ A+
Glass D 400 mm							
312258.000 *	D 400, H 75	LED ⁽¹⁾	830	2000 lm	27 W	on/off	A+ A+
312258.000.1 *	D 400, H 75	LED ⁽¹⁾	840	2100 lm	27 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement glasses							
05-1965.002	D 300, H 62						
05-1966.002	D 400, H 62						

Accessories | Installation housing for Douala range

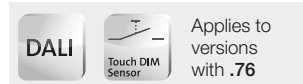
Lacquered aluminium housing for installation in cavity walls of 15-35 mm wall thickness.

Accessories							
Recessed housing for cavity walls							
Cut out DA 440 mm							
981893.000	D 454, H 120, HE 120						for luminaires D 300
Cut out DA 510 mm							
981762.000	D 524, H 150, HE 150						for luminaires D 400
Semi-recessed housing for cavity walls							
Cut out DA 312 mm							
981892.000	D 326, H 90, HE 90						for luminaires D 300
Cut out DA 410 mm							
981763.000	D 426, H 90, HE 90						for luminaires D 400

Comparison LED vs. conventional lamps
LED 21 W ≈

 2 x 26 W TC-D (68 W CB)
 1 x 40 W T16-R (43 W EB)

LED 27 W ≈

 4 x 18 W TC-D (104 W CB)
 1 x 55 W T16-R (60 W EB)

Recessed housing installation

Semi-recessed housing installation

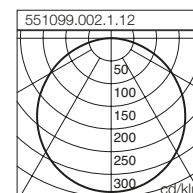



MONDANA®-E

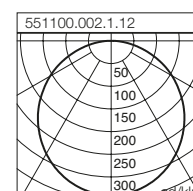
Recessed ceiling and wall luminaires

- Comprehensive range consisting of:
 - Ceiling and wall luminaires
 - Semi-recessed ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- For indoor and outdoor lighting
- The IP 65 type of protection provides excellent guard against rain and humidity and the luminaire is kept free from dirt and insects
- Integral membrane valve for ventilation against condensed water
- With mouth-blown, 3-layer opal glass satin finish or opal plastic (PE) diffuser
- For barrier-free architecture - flush with wall and ceiling

551099.002.1.12		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	9	12
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
9	13	21



551100.002.1.12		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

Recessed ceiling and wall luminaires | Series: Mondana®-E

 Type of Protection: **IP 65**

Protection Class: I, II upon request

UGR: < 19

Ceiling Thickness: 10-30 mm

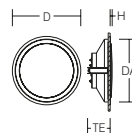
Impact Protection: IK03 (glass), IK10 (polyethylene)

Base: plastic (polycarbonate). Diffuser: mouth-blown opal glass, satin finish or plastic (polyethylene) opal, satin finish. Diffuser fastening: screwneck. Housing for recessed installation in walls and ceilings: aluminium, powder-coated.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Recessed ceiling and wall luminaires							
Glass: opal, satin finish							
Housing: D 352 mm, glass D 280 mm, cut out DA 325 mm, TE 120 mm							
551086.002.1.12	D 352, H 2	LED ⁽¹⁾	830	510 lm	9 W	on/off	A+ A+
551086.002.12	D 352, H 2	LED ⁽¹⁾	840	520 lm	9 W	on/off	A+ A+
Diffuser: plastic							
Housing D 352 mm, diffuser D 280 mm, cut out DA 325 mm, TE 120 mm							
551087.002.1.12	D 352, H 2	LED ⁽¹⁾	830	620 lm	9 W	on/off	A+ A+
551087.002.12	D 352, H 2	LED ⁽¹⁾	840	650 lm	9 W	on/off	A+ A+
Housing D 530 mm, diffuser D 440 mm, cut out DA 505 mm, TE 120 mm							
551099.002.1.12 *	D 530, H 2	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
551099.002.1.76	D 530, H 2	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
551099.002.12 *	D 530, H 2	LED ⁽¹⁾	840	1150 lm	13,5 W	on/off	A+ A+
551099.002.76	D 530, H 2	LED ⁽¹⁾	840	1150 lm	13,5 W	DALI	A+ A+
Housing D 650 mm, diffuser D 550 mm, cut out DA 625 mm, TE 140 mm							
551100.002.1.12 *	D 650, H 2	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
551100.002.1.76	D 650, H 2	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
551100.002.12 *	D 650, H 2	LED ⁽¹⁾	840	1900 lm	21 W	on/off	A+ A+
551100.002.76	D 650, H 2	LED ⁽¹⁾	840	1900 lm	21 W	DALI	A+ A+

* With integrated phase cut dimming

Replacement glasses		Price Category 13
05-2008.002	D 280, H 88	

Replacement diffusers		Price Category 13
08-2036.002	D 280, H 88	Plastic (polyethylene)
08-2037.002	D 440, H 83	Plastic (polyethylene)
08-2038.002	D 550, H 114	Plastic (polyethylene)

Accessories | Concrete box

Supports for installation in concrete walls, ceilings and façades are available for all recessed and semi-recessed luminaires of the MONDANA series.

Concrete box		Price Category 11
981632.002	D 330, H 125	for Mondana-E 350
981633.002	D 510, H 125	for Mondana-E 530
981634.002	D 630, H 150	for Mondana-E 650

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

1 x 75 W GLS (75 W)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

2 x 75 W GLS (150 W)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)

2 x 100 W GLS (200 W)



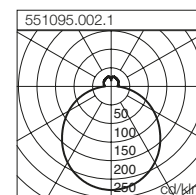


MONDANA®-HE

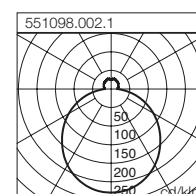
Semi-recessed ceiling and wall luminaires

- Comprehensive range consisting of:
 - Ceiling and wall luminaires
 - Semi-recessed ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- For indoor and outdoor lighting
- The IP 65 type of protection provides excellent guard against rain and humidity and the luminaire is kept free from dirt and insects
- Integral membrane valve for ventilation against condensed water
- With mouth-blown, 3-layer opal glass satin finish or opal plastic (PE) diffuser

551095.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
7	10	14
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
10	15	24



551098.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	9	14



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

Semi-recessed ceiling and wall luminaires | Series: Mondana®-HE

 Type of Protection: **IP 65**

Protection Class: I, II upon request

UGR: < 19

Ceiling Thickness: 10-30 mm

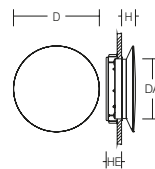
Impact Protection: IK03 (glass), IK10 (polyethylene)

Base: plastic (polycarbonate). Diffuser: mouth-blown opal glass, satin finish or plastic (polyethylene) opal, satin finish. Diffuser fastening: screwneck. Housing for semi-recessed installation in walls and ceilings: powder-coated aluminium.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Semi-recessed ceiling and wall luminaires							
Glass: opal, satin finish							
Price Category 11							
Diameter D 280 mm, cut out DA 185 mm, TE 90 mm							
551088.002.1	D 280, H 68	LED ⁽¹⁾	830	570 lm	9 W	on/off	A+ A+
551088.002	D 280, H 68	LED ⁽¹⁾	840	570 lm	9 W	on/off	A+ A+
Diameter D 390 mm, cut out DA 310 mm, TE 96 mm							
551095.002.1 *	D 390, H 57	LED ⁽¹⁾	830	1050 lm	13,5 W	on/off	A+ A+
551095.002.1.76	D 390, H 57	LED ⁽¹⁾	830	1050 lm	13,5 W	DALI	A+ A+
551095.002 *	D 390, H 57	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off	A+ A+
551095.002.76	D 390, H 57	LED ⁽¹⁾	840	1050 lm	13,5 W	DALI	A+ A+
Diameter D 500 mm, cut out DA 390 mm, TE 100 mm							
551098.002.1 *	D 500, H 78	LED ⁽¹⁾	830	1800 lm	21 W	on/off	A+ A+
551098.002.1.76	D 500, H 78	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+ A+
551098.002 *	D 500, H 78	LED ⁽¹⁾	840	1950 lm	21 W	on/off	A+ A+
551098.002.76	D 500, H 78	LED ⁽¹⁾	840	1950 lm	21 W	DALI	A+ A+
Diffuser: plastic							
Diameter D 280 mm, cut out DA 185 mm, TE 90 mm							
551089.002.1	D 280, H 70	LED ⁽¹⁾	830	650 lm	9 W	on/off	A+ A+
551089.002	D 280, H 70	LED ⁽¹⁾	840	690 lm	9 W	on/off	A+ A+
Diameter D 440 mm, cut out DA 310 mm, TE 96 mm							
551096.002.1 *	D 440, H 65	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off	A+ A+
551096.002.1.76	D 440, H 65	LED ⁽¹⁾	830	1250 lm	13,5 W	DALI	A+ A+
551096.002 *	D 440, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
551096.002.76	D 440, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
Diameter D 550 mm, cut out DA 390 mm, TE 100 mm							
551097.002.1 *	D 550, H 85	LED ⁽¹⁾	830	2200 lm	21 W	on/off	A+ A+
551097.002.1.76	D 550, H 85	LED ⁽¹⁾	830	2200 lm	21 W	DALI	A+ A+
551097.002 *	D 550, H 85	LED ⁽¹⁾	840	2150 lm	21 W	on/off	A+ A+
551097.002.76	D 550, H 85	LED ⁽¹⁾	840	2150 lm	21 W	DALI	A+ A+

* With integrated phase cut dimming

Replacement glasses			Price Category 13
05-2008.002	D 280, H 88		
05-2009.002	D 390, H 83		
05-2010.002	D 500, H 109		

Replacement diffusers			Price Category 13
08-2036.002	D 280, H 88	Plastic (polyethylene)	
08-2037.002	D 440, H 83	Plastic (polyethylene)	
08-2038.002	D 550, H 114	Plastic (polyethylene)	

Accessories | Concrete box

Supports for installation in concrete walls, ceilings and façades are available for all recessed and semi-recessed luminaires of the MONDANA series.

Concrete box			Price Category 11
981629.002	D 190, H 65	for Mondana-HE 280	
981630.002	D 320, H 70	for Mondana-HE 390/440	
981631.002	D 395, H 75	for Mondana-HE 500/550	

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

1 x 75 W GLS (75 W)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

2 x 75 W GLS (150 W)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)

2 x 100 W GLS (200 W)

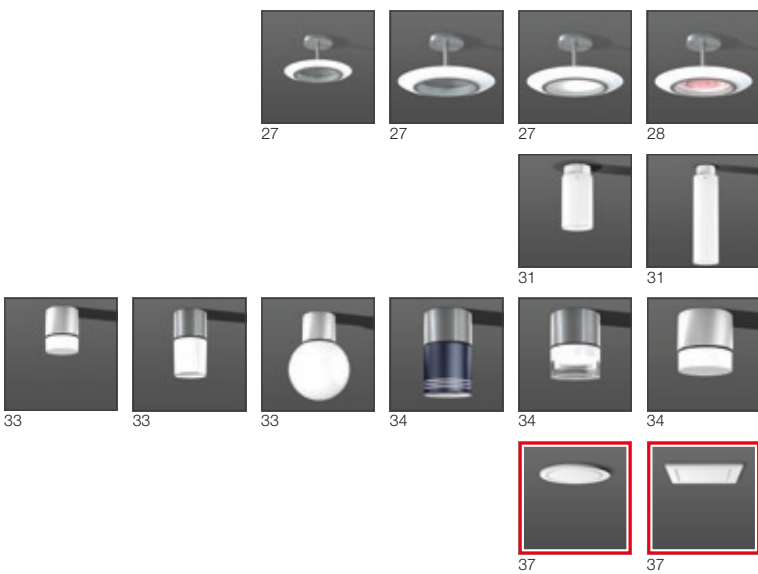
DALI


 Applies to
versions
with **.76**




The application image shows:
Cyllo
Flat Polymero® Kreis

© Daniel Vieser . Architekturfotografie, Karlsruhe, www.dv-a.de



Ring of Fire®
26-29

Glasdownlight
30-31

Cylio
32-35

Hemis
36-37



RING OF FIRE®

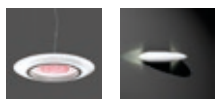
Ceiling luminaires

- A unique luminaire in form and dimension for interiors
- Lighting technology and form lend themselves to long service life as a design element for interior decors.
- A masterpiece of craftsmanship with outstanding design and durability attributes:
 - Surface or pendant mount ring-shaped ceiling luminaire
 - Luminaire with opal or Murano glass insert
 - Surface mount half-ring-shaped wall luminaire

- Energy-efficient LED light technology ensures consistent illumination levels of the large glass area
- A glass and aluminium luminaire
- Provides a large amount of indirect light
- Light colour 830 and 840, also on request 827
- LED rated life 50,000 h (L70, B10)

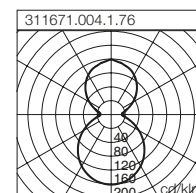


Further information on coloured FerroMurano glass as well as an overview of additional FerroMurano RZB luminaires can be found on page 29 of this catalogue or at www.rzb-lighting.com

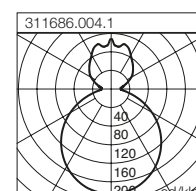


Further luminaires of this series, see:
Indoor lighting | Pendant luminaires
Indoor lighting | Wall luminaires

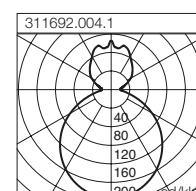
311671.004.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	8



311686.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



311692.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



Ceiling luminaires | Series: Ring of Fire®

Type of Protection: IP 20

Protection Class: I

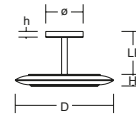
Impact Protection: IK02

Suspension Length: 230 mm (D 495), 300 mm (690)

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Inner circle surface, suspension rod and canopy: anodised aluminium.

LED included.

Available colour: 4 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling luminaires							
Price Category 21							
Diameter D 495 mm, canopy Ø 221 mm, h 36 mm							
311670.004	D 495, H 55	LED	830	2450 lm	24 W	on/off	A++ A++
311670.004.76	D 495, H 55	LED	830	2450 lm	24 W	DALI	A++ A++
311670.004.1	D 495, H 55	LED	840	2550 lm	24 W	on/off	A++ A++
311670.004.1.76	D 495, H 55	LED	840	2550 lm	24 W	DALI	A++ A++
Diameter D 690 mm, canopy Ø 263 mm, h 40 mm							
311671.004	D 690, H 81	LED	830	3450 lm	35 W	on/off	A++ A++
311671.004.76	D 690, H 81	LED	830	3450 lm	35 W	DALI	A++ A++
311671.004.1	D 690, H 81	LED	840	3550 lm	35 W	on/off	A++ A++
311671.004.1.76	D 690, H 81	LED	840	3550 lm	35 W	DALI	A++ A++
Light colour 827 on request.							
Replacement glasses							
Price Category 13							
05-1941.002	D 495, H 48						
05-1936.002	D 690, H 75						

**Comparison
LED vs. conventional lamps**
LED 24 W ≈

1 x 55 W T16-R (60 W EB)

LED 35 W ≈

1 x 22 + 40 W T16-R (70 W EB)

DALI



Applies to versions with .76

Ceiling luminaires | Series: Ring of Fire®

Type of Protection: IP 20

Protection Class: I

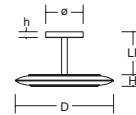
Impact Protection: IK02

Suspension Length: 300 mm

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Inner circle surface: 417 mm in diameter opal white glass insert, for additional direct light output, which can be controlled separately. Suspension rod and canopy: aluminium anodised.

LED included.

Available colour: 4 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling luminaires							
Price Category 21							
Diameter D 690 mm, canopy Ø 263 mm, h 40 mm with white opal glass insert							
311686.004	D 690, H 81	2 x LED	830	5450 lm	63 W	on/off	A+,A++ A+
311686.004.76	D 690, H 81	2 x LED	830	5450 lm	63 W	DALI	A+,A++ A+
311686.004.1	D 690, H 81	2 x LED	840	5550 lm	63 W	on/off	A+,A++ A+
311686.004.1.76	D 690, H 81	2 x LED	840	5550 lm	63 W	DALI	A+,A++ A+
Light colour 827 on request.							
Replacement glasses							
Price Category 13							
05-1936.002	D 690, H 75						

**Comparison
LED vs. conventional lamps**
LED 63 W ≈

2 x 55 W T16-R (120 W EB)

4 x 32 W TC-TEL (138 W CB)



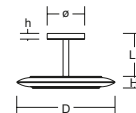
Ceiling luminaires | Series: Ring of Fire®

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK02
Suspension Length: 300 mm

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Inner circle surface: 417 mm in diameter coloured Murano glass insert, for additional direct light output, which can be controlled separately. Suspension rod and canopy: aluminium anodised.

LED included.

Available colour: 4 = aluminium, anodised



Comparison LED vs. conventional lamps

LED 63 W ≈

2 x 55 W T16-R (120 W EB)
4 x 32 W TC-TEL (138 W CB)

DALI



Applies to
versions
with .76

Ceiling luminaires

Price Category 21

Diameter D 690 mm, canopy Ø 263 mm, h 40 mm

Glass FerroMurano red

311683.004	D 690, H 81	2 x LED	830	4850 lm	63 W	on/off	A+,A++ A+
311683.004.76	D 690, H 81	2 x LED	830	4850 lm	63 W	DALI	A+,A++ A+
311683.004.1	D 690, H 81	2 x LED	840	4950 lm	63 W	on/off	A+,A++ A+
311683.004.1.76	D 690, H 81	2 x LED	840	4950 lm	63 W	DALI	A+,A++ A+

Glass FerroMurano blue

311684.004	D 690, H 81	2 x LED	830	4850 lm	63 W	on/off	A+,A++ A+
311684.004.76	D 690, H 81	2 x LED	830	4850 lm	63 W	DALI	A+,A++ A+
311684.004.1	D 690, H 81	2 x LED	840	4950 lm	63 W	on/off	A+,A++ A+
311684.004.1.76	D 690, H 81	2 x LED	840	4950 lm	63 W	DALI	A+,A++ A+

Glass FerroMurano green

311685.004	D 690, H 81	2 x LED	830	4850 lm	63 W	on/off	A+,A++ A+
311685.004.76	D 690, H 81	2 x LED	830	4850 lm	63 W	DALI	A+,A++ A+
311685.004.1	D 690, H 81	2 x LED	840	4950 lm	63 W	on/off	A+,A++ A+
311685.004.1.76	D 690, H 81	2 x LED	840	4950 lm	63 W	DALI	A+,A++ A+

Glass FerroMurano white

311692.004	D 690, H 81	2 x LED	830	5350 lm	63 W	on/off	A+,A++ A+
311692.004.76	D 690, H 81	2 x LED	830	5350 lm	63 W	DALI	A+,A++ A+
311692.004.1	D 690, H 81	2 x LED	840	5450 lm	63 W	on/off	A+,A++ A+
311692.004.1.76	D 690, H 81	2 x LED	840	5450 lm	63 W	DALI	A+,A++ A+

The luminous flux of each luminaire varies due to the difference in colour intensity and structure of the glasses. Light colour 827 on request.

Replacement glasses

Price Category 13

05-1936.002	D 690, H 75
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Venice Legend

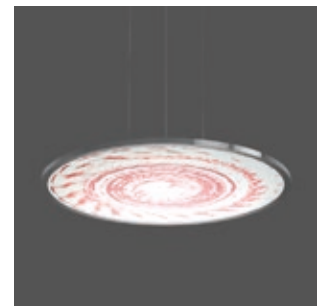
The venetian art of glassmaking is considered legendary to this day. Pioneers of this craft, like the world famous company Ferro from Murano, have been keeping this tradition carefully over many generations and share their know-how advisedly selected. The cooperation of the old master Guido Ferro and RZB unite the venetian art of glassmaking and the high standards in design and technology of RZB; it is cross-border appreciation and synergy at the same time. The result is a liaison between glass and light that definitely can be regarded as epic work.

More than 700 years of craftsmanship, tradition and passion "a la Ferro" make each of the hand-blown glass panels a touchingly beautiful individual item. Each millimetre of this "levitating" circle is steeped in light; the seamless, almost playful colouring of the Murano glass is brought to live in a fascinating way. Great designing skills, construction expertise that has been perfected over decades and pathbreaking LED technology were required to create such even light control and luminance. Through this, the quality and substance of RZB LUMINAIRES FerroMurano are rationally explained - but not its almost magic aesthetics. It remains a secret.

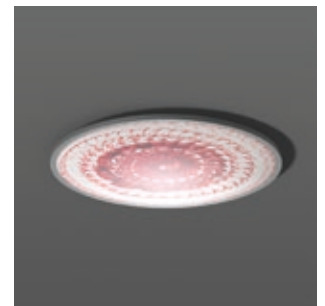
Each legend lives through one...

Luminaires with glass FerroMurano:

Sidelite® Round FerroMurano
Pendant luminaire
Page 150



Sidelite® Round FerroMurano
Ceiling and wall luminaire
Page 54



Ring of Fire® FerroMurano
Pendant luminaire
Page 164



Ring of Fire® FerroMurano
Ceiling luminaire
Page 28





GLASDOWNLIGHT

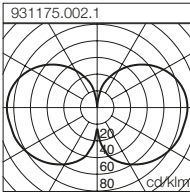
Ceiling luminaires

- A sleekly designed surface mount ceiling luminaire for interiors
- Mouth blown 3-layer opal glass (Triplex glass) with satin finish
- Triplex glass produces particularly homogeneous, soft and glare free lighting
- Two different light colours 830 and 840
- LED rated life 50,000 h (L80, B10)

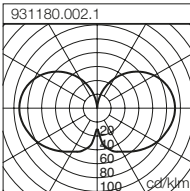


Further luminaires of this series, see:
Indoor lighting | Pendant luminaires

931175.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
7	11	14
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
10	15	24



931180.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



Ceiling luminaires | Series: Glasdownlight

Type of Protection: IP 20

Protection Class: I

Impact Protection: IK02

Base: aluminium, powder-coated. Diffuser: mouth-blown opal glass, satin finish. Glass fastening: retaining screws.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling luminaires							
D 120, H 300							
931175.002	D 120, H 300	LED	830	1400 lm	14 W	on/off	A++ A++
931175.002.1	D 120, H 300	LED	840	1450 lm	14 W	on/off	A++ A++
D 120, H 470							
931176.002	D 120, H 470	LED	830	2750 lm	27 W	on/off	A+ A+
931176.002.1	D 120, H 470	LED	840	2850 lm	27 W	on/off	A+ A+
D 150, H 300							
931178.002	D 150, H 300	LED	830	2900 lm	32 W	on/off	A++ A++
931178.002.1	D 150, H 300	LED	840	2900 lm	32 W	on/off	A++ A++
D 150, H 470							
931180.002	D 150, H 470	LED	830	3250 lm	30 W	on/off	A+ A+
931180.002.1	D 150, H 470	LED	840	3250 lm	30 W	on/off	A+ A+
Replacement glasses							
05-931174.012	D 120, H 250						
05-931176.012	D 120, H 420						
05-931177.012	D 150, H 250						
05-931179.012	D 150, H 420						

Price Category 11

Comparison LED vs. conventional lamps

LED 14 W ≈

1 x 32 W TC-TEL (36 W EB)
1 x 150 W GLS (150 W)

LED 27 / 30 / 32 W ≈

1 x 57 W TC-TEL (59 W EB)

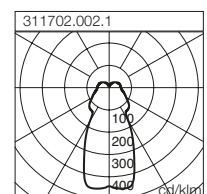
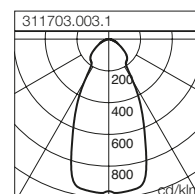
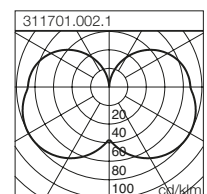
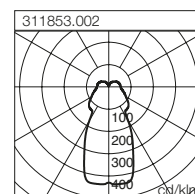
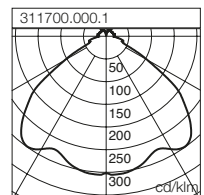
Price Category 13



CYLIO

Ceiling luminaires

- Comprehensive range featuring a number of glass designs, consisting of:
 - Surface mounted ceiling luminaires
 - Pendant luminaires
- A sleekly designed surface or pendant mount ceiling luminaire for interiors
- Made of top-notch components:
 - Base and canopy made of aluminium with brushed stainless steel finish
 - Hand-made glass elements
- Each glass fixture is a unique element. The following versions are available:
 - Transparent crystal glass, partially frosted
 - White opal glass
 - White opal glass with transparent glass bottom
 - Two-tone opal glass “white in white”
 - Black glass with cobalt-blue haloes with transparent glass bottom
- Two different light colours 830 and 840



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires

Ceiling luminaires | Series: Cyllo

Type of Protection: IP 20

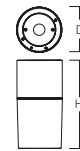
Protection Class: I

Impact Protection: IK02, IK03, IK05

Base: aluminium with brushed stainless steel finish. Glass fastening: bayonet fixing.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dimmable	EEC
Ceiling luminaires									
Price Category 21									
Short white opal glass									
311963.002	D 100, H 127	LED ⁽¹⁾	830	700 lm	14 W	158°	24,4	on/off	A A
311963.002.1	D 100, H 127	LED ⁽¹⁾	840	750 lm	14 W	159°	24,5	on/off	A A
Opal glass white									
311721.002	D 100, H 230	LED ⁽¹⁾	830	560 lm	14 W	180°	20,9	on/off	A A
311721.002.1	D 100, H 230	LED ⁽¹⁾	840	590 lm	14 W	180°	21,1	on/off	A A
311862.002	D 100, H 230	1 x QA60 (clear) 46 W				180°	23,0	on/off	C,E A+
Opal glass white with transparent glass cover									
311850.002	D 100, H 220	LED ⁽¹⁾	830	600 lm	14 W	45°	19,4	on/off	A A
311850.002.1	D 100, H 220	LED ⁽¹⁾	840	620 lm	14 W	45°	19,6	on/off	A A
311865.002	D 100, H 220	1 x QA60 (clear) 46 W				108°	22,3	on/off	C,E A+
Opal glass "white in white" with transparent glass cover									
311722.002	D 100, H 220	LED ⁽¹⁾	830	540 lm	14 W	40°	19,1	on/off	A A
311722.002.1	D 100, H 220	LED ⁽¹⁾	840	570 lm	14 W	40°	19,2	on/off	A A
311863.002	D 100, H 220	1 x QA60 (clear) 46 W				36°	15,7	on/off	C,E A+
Opal glass sphere									
311965.002	D 180, H 252	LED ⁽¹⁾	830	910 lm	14 W	180°	19,0	on/off	A A
311965.002.1	D 180, H 252	LED ⁽¹⁾	840	920 lm	14 W	180°	19,1	on/off	A A
Replacement glasses									
Price Category 13									
05-1953.002	D 100, H 57	Short white opal glass							
05-1952.032	D 100, H 150	Opal glass "white in white" with transparent glass cover							
05-1952.062	D 100, H 150	Opal glass white with transparent glass cover							
05-1952.002	D 100, H 160	White opal glass							
05-1954.002	D 180, H 182	Opal glass sphere							

**Comparison
LED vs. conventional lamps**
LED 14 W ≈
 1 x 50 W QT12 (60 W e-transf.)


Short white opal glass



Opal glass white



Opal glass white with transparent glass cover



Opal glass „white in white“ with transparent glass cover



Opal glass sphere



Comparison LED vs. conventional lamps

LED 18 W ≈

1 x 50 W QT12 (60 W e-transf.)
1 x 75 W QT12 (105 W e-transf.)

Ceiling luminaires | Series: Cylio

Type of Protection: IP 20

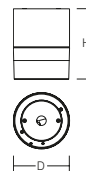
Protection Class: I

Impact Protection: IK02, IK03, IK06

Base: aluminium with brushed stainless steel finish. Glass fastening: bayonet fixing.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Ceiling luminaires								
Short white opal glass								
311969.002	D 150, H 155	LED ⁽¹⁾	830	1150 lm	18 W	151°	24,3 on/off	A A+
311969.002.1	D 150, H 155	LED ⁽¹⁾	840	1150 lm	18 W	151°	24,0 on/off	A+ A+
Opal glass white								
311701.002	D 150, H 262	LED ⁽¹⁾	830	650 lm	18 W	180°	19,5 on/off	A A+
311701.002.1	D 150, H 262	LED ⁽¹⁾	840	680 lm	18 W	180°	19,7 on/off	A+ A+
311866.002	D 150, H 262	1 x QA60 (clear)	46 W			180°	22,6 on/off	C,E A+
Opal glass white with transparent glass cover								
311853.002	D 150, H 257	LED ⁽¹⁾	830	800 lm	18 W	54°	18,6 on/off	A A+
311853.002.1	D 150, H 257	LED ⁽¹⁾	840	840 lm	18 W	54°	18,8 on/off	A+ A+
311869.002	D 150, H 257	1 x QA60 (clear)	46 W			109°	20,7 on/off	C,E A+
Opal glass "white in white" with transparent glass cover								
311702.002	D 150, H 257	LED ⁽¹⁾	830	770 lm	18 W	53°	18,4 on/off	A A+
311702.002.1	D 150, H 257	LED ⁽¹⁾	840	810 lm	18 W	53°	18,6 on/off	A+ A+
311867.002	D 150, H 257	1 x QA60 (clear)	46 W			45°	15,5 on/off	C,E A+
Black cobalt glass with transparent glass cover								
311703.003	D 150, H 258	LED ⁽¹⁾	830	350 lm	18 W	50°	13,3 on/off	A A+
311703.003.1	D 150, H 258	LED ⁽¹⁾	840	360 lm	18 W	50°	13,4 on/off	A+ A+
311868.003	D 150, H 258	1 x QA60 (clear)	46 W			44°	10,3 on/off	C,E A+
Crystal glass								
311700.000	D 150, H 190	LED ⁽¹⁾	830	840 lm	18 W	112°	19,6 on/off	A A+
311700.000.1	D 150, H 190	LED ⁽¹⁾	840	890 lm	18 W	112°	19,8 on/off	A+ A+
Replacement glasses								
05-1955.002	D 150, H 67	Short white opal glass						
05-1937.000	D 150, H 102	Crystal glass						
05-1939.022	D 150, H 167	Opal glass "white in white" with transparent glass cover						
05-1939.033	D 150, H 167	Black cobalt glass with transparent glass cover						
05-1940.022	D 150, H 167	Opal glass white with transparent glass cover						
05-1940.002	D 150, H 172	Opal glass white						



Short white opal glass



Opal glass white



Opal glass white with transparent glass cover



Opal glass „white in white“ with transparent glass cover

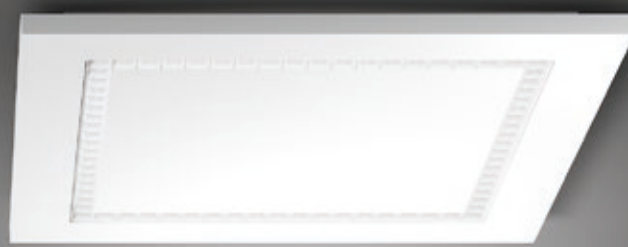


Black cobalt glass with transparent glass cover



Crystal glass





HEMIS®

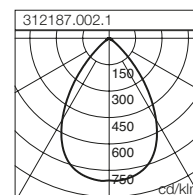
Ceiling luminaires

- Glare-free LED ceiling luminaire with optical lens system
- Compact slim design, total height less than 33 mm
- Simple startup with Plug & Play plug connection
- Thanks to UGR < 22 ideal for corridors, stairways, shops, schools, meeting rooms, rest areas
- Up to 70% energy savings compared to conventional configurations
- Efficiency up to 125 lm/W
- LED rated life 50,000 h (L70, B10)
- Colour rendering index Ra > 80
- Colour temperature 3,000 K and 4,000 K

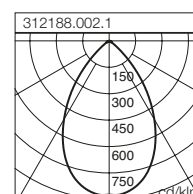
Homogeneous light distribution thanks to the optical system



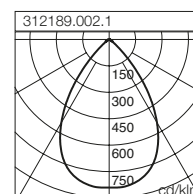
312187.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



312188.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	9



312189.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Ceiling luminaires | Series: Hemis® Round

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK06

Base: metal, powder-coated, with bayonet fixing. Plastic housing (PC), diffuser with optic lenses, housing and diffuser are screwed together.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling luminaires							
Diameter D 250 mm							
312184.002	D 250, H 33	LED	830	1300 lm	12 W	on/off	A++ A++
312184.002.1	D 250, H 33	LED	840	1500 lm	12 W	on/off	A++ A++
Diameter D 300 mm							
312185.002	D 300, H 33	LED	830	1600 lm	15 W	on/off	A++ A++
312185.002.1	D 300, H 33	LED	840	1800 lm	15 W	on/off	A++ A++
Diameter D 400 mm							
312186.002	D 400, H 33	LED	830	2600 lm	25 W	on/off	A++ A++
312186.002.1	D 400, H 33	LED	840	3000 lm	25 W	on/off	A++ A++

Price Category 11

Comparison LED vs. conventional lamps

LED 12 W ≈

2 x 18 W TC-D (52 W CB)

LED 15 W ≈

2 x 26 W TC-D (68 W CB)

LED 25 W ≈

2 x 32 W TC-TEL (69 W EB)

Ceiling luminaires | Series: Hemis® Square

Type of Protection: **IP 40**

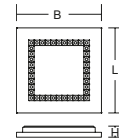
Protection Class: I

Impact Protection: IK06

Base: metal, powder-coated, with bayonet fixing. Plastic housing (PC), diffuser with optic lenses, housing and diffuser are screwed together.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling luminaires							
Length L 250 x Width B 250 mm							
312187.002	L 250, B 250, H 33	LED	830	1400 lm	12 W	on/off	A++ A++
312187.002.1	L 250, B 250, H 33	LED	840	1600 lm	12 W	on/off	A++ A++
Length L 300 x Width B 300 mm							
312188.002	L 300, B 300, H 33	LED	830	1700 lm	15 W	on/off	A++ A++
312188.002.1	L 300, B 300, H 33	LED	840	1900 lm	15 W	on/off	A++ A++
Length L 400 x Width B 400 mm							
312189.002	L 400, B 400, H 33	LED	830	2700 lm	25 W	on/off	A++ A++
312189.002.1	L 400, B 400, H 33	LED	840	3100 lm	25 W	on/off	A++ A++

Price Category 11

Comparison LED vs. conventional lamps

LED 12 W ≈

2 x 18 W TC-D (52 W CB)

LED 15 W ≈

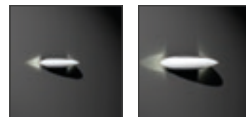
2 x 26 W TC-D (68 W CB)

LED 25 W ≈

2 x 32 W TC-TEL (69 W EB)



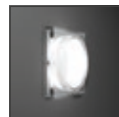
The application image shows:
Ring of Fire®
Less is more®



41

41

Ring of Fire®
40-41



43

43

Quadraled
42-43



45

Coros® Kristall
44-45



45

Coros® White
44-45



46



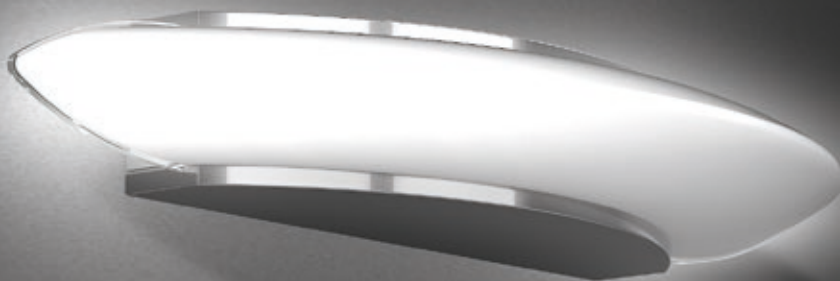
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Colonna IP 44
46



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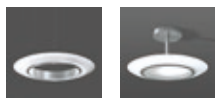
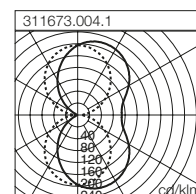
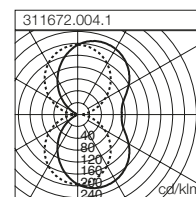
Basic
47



RING OF FIRE®

Wall luminaires

- An interior luminaire that is in a class of its own
- A glass and aluminium luminaire
- Lighting technology and form lend themselves to long service life as a design element for interior decors.
- A masterpiece of craftsmanship with outstanding design and durability attributes:
 - Surface or pendant mount ring-shaped ceiling luminaire
 - Luminaire with opal or Murano glass insert
 - Surface mount half-ring-shaped wall luminaire
- Energy efficient LED technology ensures that the generously proportioned opal glass is evenly lit across its entire surface
- Available in myriad sizes as ceiling, wall or pendant mounted luminaire
- Can be installed horizontally and vertically
- Light colour 830 and 840, also on request 827
- LED rated life 50,000 h (L70, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires
Indoor lighting | Ceiling luminaires

Wall luminaires | Series: Ring of Fire®

Type of Protection: IP 20

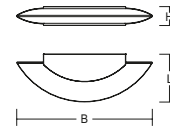
Protection Class: I

Impact Protection: IK02

Base: lacquered die-cast aluminium. Mouth-blown opal glass, satin finish, with transparent glass end caps. Luminaire body fixing with countersunk bolts.

LED included.

Available colour: 4 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Wall luminaires							
Width B 421 mm							
311672.004	L 144, B 421, H 60	LED	830	800 lm	10 W	on/off	A++ A++
311672.004.1	L 144, B 421, H 60	LED	840	850 lm	10 W	on/off	A++ A++
Width B 597 mm							
311673.004	L 210, B 597, H 83	LED	830	2000 lm	28 W	on/off	A++ A++
311673.004.76	L 210, B 597, H 83	LED	830	2000 lm	28 W	DALI	A++ A++
311673.004.1	L 210, B 597, H 83	LED	840	2150 lm	28 W	on/off	A++ A++
311673.004.1.76	L 210, B 597, H 83	LED	840	2150 lm	28 W	DALI	A++ A++

Light colour 827 on request.

Replacement glasses							
05-1941.022	L 423, B 119, H 48						
05-1936.022	L 595, B 175, H 75						

**Comparison
LED vs. conventional lamps**

LED 10 W ≈
2 x 13 W TC-DEL (29 W EB)

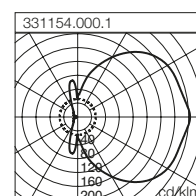
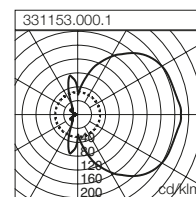
LED 28 W ≈
2 x 26 W TC-DEL (56 W EB)



QUADRALED

Wall luminaires

- The crystal glass body of this flat symmetrical luminaire makes a stylish and elegant impression.
- The form is in keeping with its minimalistic LED technology, which provides outstanding illumination.
- Each Quadraled is unique and reflects the craftsmanship of the glassmaking process.
- The interior white colored circular and rectangular surfaces prevent glare.
- The luminaire is timelessly elegant and fully integrates architectural surrounding



Wall luminaires | Series: Quadraled

Type of Protection: IP 20

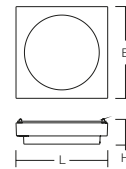
Protection Class: I

Impact Protection: IK02

Base: anodised aluminium, brushed, in the colour of stainless steel. Transparent crystal diffuser, with partially white-coated inner surface to prevent glare. Diffuser fastening: screwneck.

LED included.

Available colour: 0 = transparent



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 21
Wall luminaires								
Quadraled Kreis								
331154.000.1	L 280, B 280, H 76	LED	840	750 lm	13 W	on/off	A+ A+	
Quadraled Quadrat								
331153.000.1	L 280, B 280, H 76	LED	840	800 lm	13 W	on/off	A+ A+	
Replacement glasses								Price Category 13
05-1929.002	L 280, B 280, H 65	For Quadraled Quadrat						
05-1929.012	L 280, B 280, H 65	For Quadraled Kreis						

Comparison LED vs. conventional lamps

LED 13 W ≈

1 x 18 W TC-D (26 W CB)

1 x 100 W GLS (100 W)



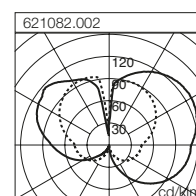
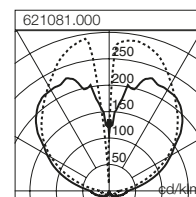
The application image shows:
Quadraled



COROS®

Wall luminaires

- A wall luminaire with minimalist design for private and public interiors
- Uniform light distribution
- The fitting and the pressed crystal glass create an impression of unity
- Exceptionally pleasant light refraction with the combination of matted areas and transparent edges



Wall luminaires | Series: Coros® Kristall

Type of Protection: IP 20

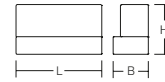
Protection Class: I

Impact Protection: IK02

Base: aluminium with brushed stainless steel finish. Cubic crystal glass: transparent, frosted inside. Diffuser fastening: spring system.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 21
Wall luminaires								
621081.000	L 200, B 82, H 115	LED ⁽¹⁾	840	540 lm	18 W	on/off	A,A+ A+	
Replacement glasses								Price Category 13
05-2022.000	L 200, B 65, H 95							

Comparison LED vs. conventional lamps

LED 18 W ≈

1 x 10 W TC-D (16 W CB)

1 x 60 W GLS (60 W)

Wall luminaires | Series: Coros® White

Type of Protection: IP 20

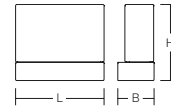
Protection Class: I

Impact Protection: IK02

Base: aluminium with brushed stainless steel finish. Cubic mouth-blown opal glass, satin finish. Diffuser fastening: spring system.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 21
Wall luminaires								
621082.002	L 200, B 82, H 171	LED ⁽¹⁾	830	650 lm	18 W	on/off	A,A+ A	
Replacement glasses								Price Category 13
05-2023.002	L 200, B 65, H 150							





Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 18 W TC-DEL (20 W EB)

Wall luminaires | Series: Colonna IP 44

Type of Protection: **IP 44**

Protection Class: I, II = E14/E27

Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish.

Diffuser fastening: spring system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Price Category 11							
L 245 mm							
211423.002	L 245, B 145, H 110	LED	830	900 lm	9 W	on/off	A++ A++
211423.002.1	L 245, B 145, H 110	LED	840	900 lm	9 W	on/off	A++ A++
211324.002	L 245, B 145, H 110	1 x E27®	60 W			on/off	A,C,E A+
L 340 mm							
211424.002	L 340, B 110, H 102	LED	830	900 lm	9 W	on/off	A+,A++ A++
211424.002.1	L 340, B 110, H 102	LED	840	900 lm	9 W	on/off	A+,A++ A++
211289.002	L 340, B 110, H 102	2 x E14®	40 W			on/off	A,C,E A+
Replacement glasses							
Price Category 13							
05-211324.002	L 245, B 145, H 96						
05-211289.002	L 340, B 110, H 88						
LED conversion kit							
Price Category 11							
982175.002	L 164, B 87, H 44	1 x LED	10,3 W 3000 K - 1200 lm				
982175.002.1	L 164, B 87, H 44	1 x LED	10,3 W 4000 K - 1200 lm				



Wall luminaires | Series: Basic

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02

Base: metal, powder-coated. Diffuser: mouth-blown opal glass, satin finish.

Glass fastening: retaining screws.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Glass 140 x 115 mm							
231016.002.1	L 220, B 140, H 115	LED ⁽¹⁾	830	360 lm	9 W	on/off	A,A+ A+
231016.002	L 220, B 140, H 115	LED ⁽¹⁾	840	370 lm	9 W	on/off	A,A+ A+
23643.002 .Q	L 220, B 140, H 115	1 x E27*	60 W			on/off	A,C,E A+
Glass 130 x 165 mm							
231017.002.1	L 270, B 130, H 165	LED ⁽¹⁾	830	440 lm	9 W	on/off	A,A+ A+
231017.002	L 270, B 130, H 165	LED ⁽¹⁾	840	440 lm	9 W	on/off	A,A+ A+
231008.002	L 270, B 130, H 165	1 x E27*	60 W			on/off	A,C,E A+
Glass 200 x 180 mm							
231018.002.1	L 360, B 200, H 180	LED ⁽¹⁾	830	870 lm	18 W	on/off	A,A+ A+
231018.002	L 360, B 200, H 180	LED ⁽¹⁾	840	880 lm	18 W	on/off	A,A+ A+
231011.002	L 360, B 200, H 180	1 x E27*	100 W			on/off	A,C,E A+
Replacement glasses							
05-23643.002	L 220, B 114, H 131						
05-231008.002	L 270, B 140, H 156						
05-231011.002	L 360, B 180, H 210						

Price Category 11

Price Category 13

Comparison LED vs. conventional lamps

LED 9 W (Glass 140 x 115) ≈

1 x 10 W TC-DEL (14 W EB)
1 x 60 W GLS (60 W)

LED 9 W (Glass 130 x 165) ≈

1 x 13 W TC-DEL (15 W EB)
1 x 75 W GLS (75 W)

LED 18 W ≈

1 x 18 W TC-DEL (20 W EB)
1 x 100 W GLS (100 W)



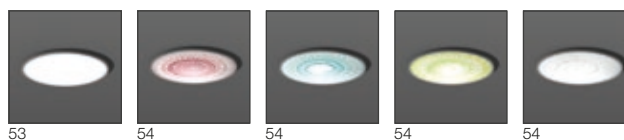
The application image shows:
Flat Polymero®



© Jürg Mächel

INDOOR LIGHTING | Ceiling and wall luminaires

Sidelite® Round
Sidelite® Round FerroMurano
52-55



53

54

54

54

54

Scapha®
56-57



57

Douala®
Douala® Slim
58-61



59



59



61



61

Douala® Kristall
62-63



63



63

Mondana®-A
64-65



65

Flat Slim
66-75



72, 74



73, 75

Flat Polymero® Kreis Slim
76-83



81



82

Flat Polymero® Kreis
84-89



85



86



88-89

Flat Polymero®
90-99



93-94



96-97



98-99

Flat Polymero® IP44
100-101



100



101

Flat Basic
102-105



103



104

Santos Kreis
Santos Quadrat
106-107



106



107

Flat Kreis Glas
Flat Kreis Kunststoff
108-111



109



111

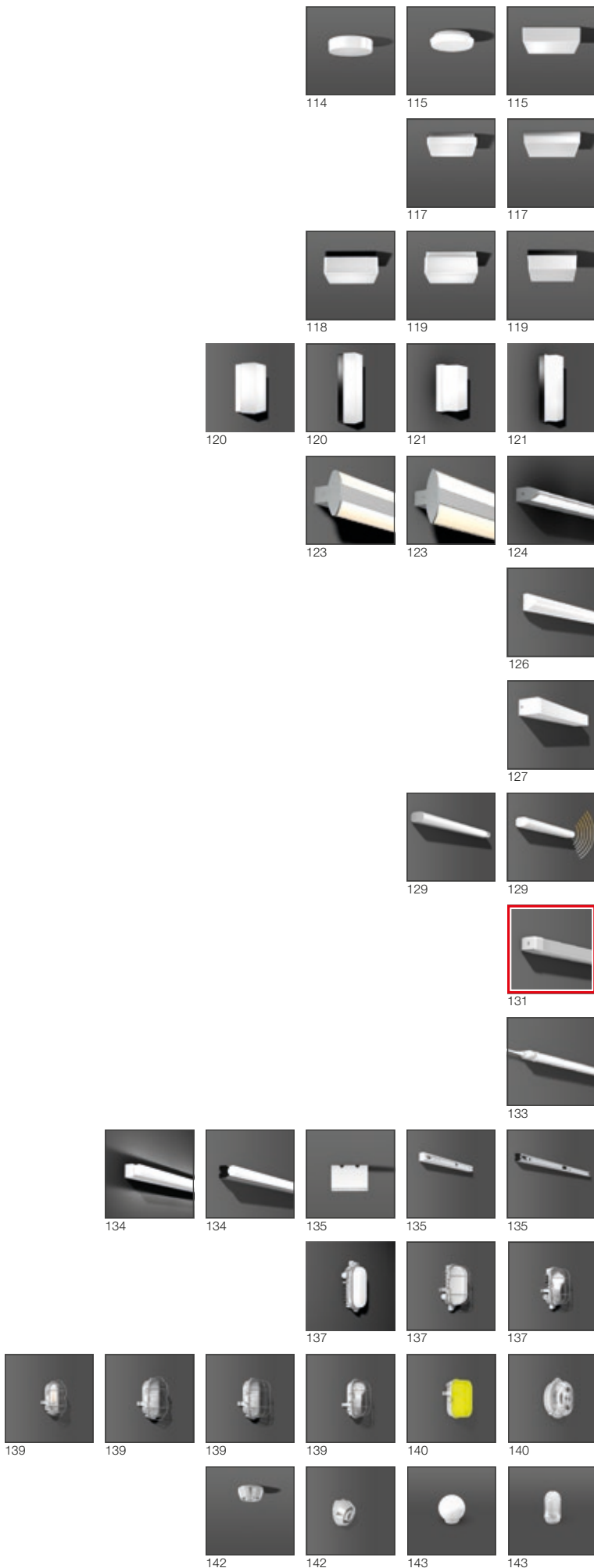
Kreis
112-113



111



113



DKN®-Kreis | DKN®-Classic
DKN-Quadrat®
114-115

Flat Quadrat
116-117

Quadrat®
118-119

Rechteck
120-121

Lavano®
Lavano® Wing
Lavano® Uno
122-125

Polymero® Long
126

R40
127

RT 44
128-129

Baleva
130-131

Strip-Light
132-133

ISO lampholder |
Striplights
134-135

Areno®
Alu oval bulkheads
136-137

Plastic oval bulkheads
Plastic round luminaires
138-141

Keralux
142-143



SIDELITE®

Ceiling and wall luminaires

- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- Lateral light emission with LED
- Application of latest LED technology in minimalistic design
- This lighting fixture's prismatic plastic diffuser is incorporated into a merely 15 mm thick extruded aluminium profile
- Lightguide and diffuser made of non-yellowing PMMA
- $UGR \leq 19$ suitable for computer workstations with microprismatic/opal diffuser



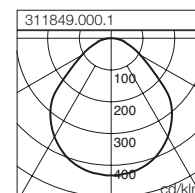
Further luminaires of this series, see:
Indoor lighting | Pendant luminaires

- Design of the distinctive surface luminaire with an opal/prismatic plastic diffuser or with handmade Ferromurano glass diffuser in 4 colour variants
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Light colour 830 and 840, also on request 827
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)

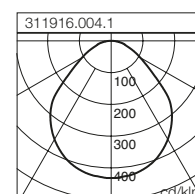


Further information on coloured Ferromurano glass as well as an overview of additional Ferromurano RZB luminaires can be found on page 29 of this catalogue or at www.rzb-lighting.com

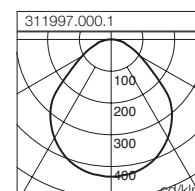
311849.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



311916.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



311997.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



Ceiling and wall luminaires | Series: Sidelite® Round

 Type of Protection: **IP 40**

Protection Class: I

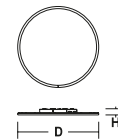
Impact Protection: IK03

Cover: sheet steel, powder-coated. Diffuser: PMMA plastic, opal/microprismatic. Diffuser: PMMA plastic, opal/microprismatic. Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Ceiling and wall luminaires								
Diffuser: plastic (PMMA) opal/microprismatic								
Diameter D 348 mm								
311997.000	D 348, H 50	LED	830	1800 lm	17 W	21,2	on/off	A++ A++
311997.000.730	D 348, H 50	LED	830	1800 lm	17 W	21,3	smart+free	A++ A++
311997.000.76	D 348, H 50	LED	830	1800 lm	17 W	21,2	DALI	A++ A++
311997.000.1	D 348, H 50	LED	840	1950 lm	17 W	21,4	on/off	A++ A++
311997.000.1.730	D 348, H 50	LED	840	1950 lm	17 W	21,6	smart+free	A++ A++
311997.000.1.76	D 348, H 50	LED	840	1950 lm	17 W	21,4	DALI	A++ A++
Tunable White - 2700 K to 6500 K								
311997.000.2.730	D 348, H 50	LED	827-865	1600 lm	16 W	20,7	smart+free	A++ A+
Diameter D 457 mm								
311916.004	D 457, H 50	LED	830	2850 lm	27 W	20,7	on/off	A++ A++
311916.004.730	D 457, H 50	LED	830	2850 lm	27 W	20,8	smart+free	A++ A+
311916.004.76	D 457, H 50	LED	830	2850 lm	27 W	20,7	DALI	A++ A++
311916.004.1	D 457, H 50	LED	840	3050 lm	27 W	20,9	on/off	A++ A++
311916.004.1.730	D 457, H 50	LED	840	3050 lm	27 W	21,0	smart+free	A++ A+
311916.004.1.76	D 457, H 50	LED	840	3050 lm	27 W	20,9	DALI	A++ A++
Tunable White - 2700 K to 6500 K								
311916.004.2.730	D 457, H 50	LED	827-865	3100 lm	31 W	20,8	smart+free	A++ A+
Diameter D 675 mm								
311849.000	D 675, H 50	LED	830	3800 lm	35 W	18,5	on/off	A++ A++
311849.000.730	D 675, H 50	LED	830	3800 lm	35 W	18,5	smart+free	A++ A+
311849.000.76	D 675, H 50	LED	830	3800 lm	35 W	18,5	DALI	A++ A++
311849.000.1	D 675, H 50	LED	840	4300 lm	35 W	19,0	on/off	A++ A++
311849.000.1.730	D 675, H 50	LED	840	4300 lm	35 W	19,0	smart+free	A++ A+
311849.000.1.76	D 675, H 50	LED	840	4300 lm	35 W	19,0	DALI	A++ A++
Tunable White - 2700 K to 6500 K								
311849.000.2.730	D 675, H 50	LED	827-865	4700 lm	47 W	19,3	smart+free	A++ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 16 / 17 W ≈

 1 x 40 W T16-R (43 W EB)
1 x 39 W T16 (42 W EB)

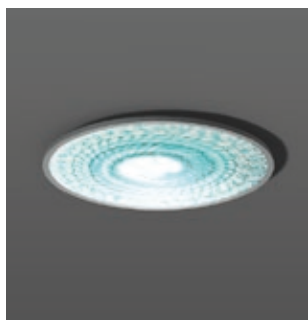
LED 27 / 31 W ≈

 1 x 60 W T16-R (65 W EB)
4 x 14 W T16 (68 W EB)

LED 35 / 47 W ≈

4 x 24 W T16 (98 W EB)





Ceiling and wall luminaires | Series: Sidelite® Round FerroMurano

Type of Protection: IP 40

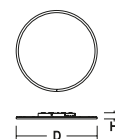
Protection Class: I

Impact Protection: IK02

Cover: sheet steel, powder-coated. Anodised aluminium frame. Diffuser: handcrafted, coloured glass FerroMurano. Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: aluminium, anodised



Comparison LED vs. conventional lamps

LED 38 W ≈

1 x 60 W T16-R (65 W EB)
4 x 18 W T26 (104 W CB)

LED 54 W ≈

3 x 28 W T16 (92 W EB)

DALI



Applies to
versions
with .76

Ceiling and wall luminaires

Price Category 21

Glass FerroMurano red

Diameter D 457 mm

311912.004	D 457, H 50	LED	830	1850 lm	38 W	on/off	A++ A++
311912.004.76	D 457, H 50	LED	830	1850 lm	38 W	DALI	A++ A++
311912.004.1	D 457, H 50	LED	840	2050 lm	38 W	on/off	A++ A++
311912.004.1.76	D 457, H 50	LED	840	2050 lm	38 W	DALI	A++ A++

Diameter D 675 mm

311845.000	D 675, H 50	LED	830	3450 lm	54 W	on/off	A++ A++
311845.000.76	D 675, H 50	LED	830	3450 lm	54 W	DALI	A++ A++
311845.000.1	D 675, H 50	LED	840	3750 lm	54 W	on/off	A++ A++
311845.000.1.76	D 675, H 50	LED	840	3750 lm	54 W	DALI	A++ A++

Glass FerroMurano blue

Diameter D 457 mm

311913.004	D 457, H 50	LED	830	2400 lm	38 W	on/off	A++ A++
311913.004.76	D 457, H 50	LED	830	2400 lm	38 W	DALI	A++ A++
311913.004.1	D 457, H 50	LED	840	2650 lm	38 W	on/off	A++ A++
311913.004.1.76	D 457, H 50	LED	840	2650 lm	38 W	DALI	A++ A++

Diameter D 675 mm

311846.000	D 675, H 50	LED	830	4300 lm	54 W	on/off	A++ A++
311846.000.76	D 675, H 50	LED	830	4300 lm	54 W	DALI	A++ A++
311846.000.1	D 675, H 50	LED	840	4600 lm	54 W	on/off	A++ A++
311846.000.1.76	D 675, H 50	LED	840	4600 lm	54 W	DALI	A++ A++

Glass FerroMurano green

Diameter D 457 mm

311914.004	D 457, H 50	LED	830	2500 lm	38 W	on/off	A++ A++
311914.004.76	D 457, H 50	LED	830	2500 lm	38 W	DALI	A++ A++
311914.004.1	D 457, H 50	LED	840	2700 lm	38 W	on/off	A++ A++
311914.004.1.76	D 457, H 50	LED	840	2700 lm	38 W	DALI	A++ A++

Diameter D 675 mm

311847.000	D 675, H 50	LED	830	4400 lm	54 W	on/off	A++ A++
311847.000.76	D 675, H 50	LED	830	4400 lm	54 W	DALI	A++ A++
311847.000.1	D 675, H 50	LED	840	4700 lm	54 W	on/off	A++ A++
311847.000.1.76	D 675, H 50	LED	840	4700 lm	54 W	DALI	A++ A++

Glass FerroMurano white

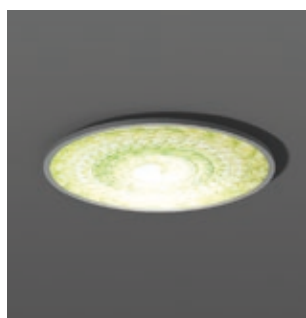
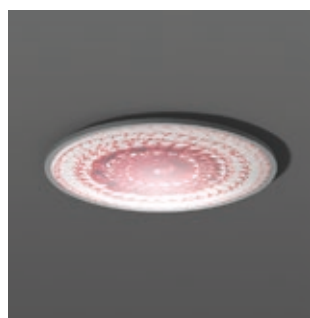
Diameter D 457 mm

311915.004	D 457, H 50	LED	830	3000 lm	38 W	on/off	A++ A++
311915.004.76	D 457, H 50	LED	830	3000 lm	38 W	DALI	A++ A++
311915.004.1	D 457, H 50	LED	840	3200 lm	38 W	on/off	A++ A++
311915.004.1.76	D 457, H 50	LED	840	3200 lm	38 W	DALI	A++ A++

Diameter D 675 mm

311848.000	D 675, H 50	LED	830	4900 lm	54 W	on/off	A++ A++
311848.000.76	D 675, H 50	LED	830	4900 lm	54 W	DALI	A++ A++
311848.000.1	D 675, H 50	LED	840	5400 lm	54 W	on/off	A++ A++
311848.000.1.76	D 675, H 50	LED	840	5400 lm	54 W	DALI	A++ A++

The luminaire flux and UGR of each luminaire varies due to the difference in colour intensity and structure of the glasses.





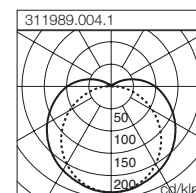


SCAPHA®

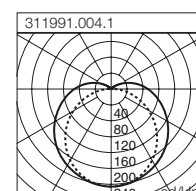
Ceiling and wall luminaires

- A range of luminaires for indoor lighting, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
- Handmade glass using the countersinking process, matt on the outside, painted white on the inside
- Uniform and glare-free illumination of the small boat shaped corpus by specially adapted LED panel boards
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- The luminaire is available in two different sizes
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L80, B10)

311989.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



311991.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires

Ceiling and wall luminaires | Series: Scapha®

Type of Protection: IP 20

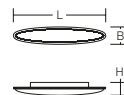
Protection Class: I

 Base: aluminium, powder-coated. Ceiling/wall canopy and glass fixture steel powder-coated.
 Handmade concave glass, matt finish on the outside, painted white on the inside.

LED included.

Available colour: 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Length L 714 mm							
311989.004	L 714, B 134, H 100	LED	830	2350 lm	35 W	on/off	A++ A++
311989.004.1	L 714, B 134, H 100	LED	840	2500 lm	35 W	on/off	A++ A++
Length L 1264 mm							
311991.004	L 1264, B 174, H 104	LED	830	3400 lm	51 W	on/off	A++ A++
311991.004.730	L 1264, B 174, H 104	LED	830	3400 lm	51 W	smart+free	A++ A++
311991.004.76	L 1264, B 174, H 104	LED	830	3400 lm	51 W	DALI	A++ A++
311991.004.1	L 1264, B 174, H 104	LED	840	3600 lm	51 W	on/off	A++ A++
311991.004.1.730	L 1264, B 174, H 104	LED	840	3600 lm	51 W	smart+free	A++ A++
311991.004.1.76	L 1264, B 174, H 104	LED	840	3600 lm	51 W	DALI	A++ A++
Replacement glasses							
05-1956.002	L 696, B 116, H 56						
05-1957.002	L 1246, B 156, H 60						

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 35 W ≈

1 x 58 W T26 (67 W CB)

LED 51 W ≈

2 x 36 W T26 (86 W CB)

DALI


 Applies to
versions
with .76

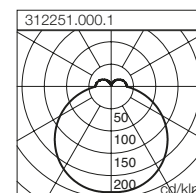


DOUALA®

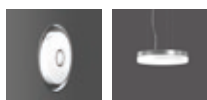
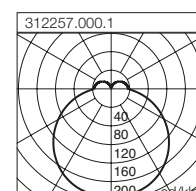
Ceiling and wall luminaires

- A multi-faceted range for indoor lighting, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- The stainless steel base and the glass create an impression of unity
- The cover made of mouth-blown, satin-finished three-layer opal glass is available in two different sizes
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- Also available for DALI control and with movement sensor (master and slave)
- On/Off with integrated phase cut dimming

312251.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	11	18



312257.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



Further luminaires of this series, see:
Indoor lighting | Recessed ceiling and wall luminaires
Indoor lighting | Pendant luminaires

Ceiling and wall luminaires | Series: Douala®

Type of Protection: **IP 40**

Protection Class: I

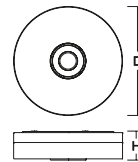
Impact Protection: IK02

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish. Patented spring fastening system.

LED included.

Available colour: 0 = stainless steel, brushed

For recessed ceiling and recessed wall applications the recess housing must be ordered separately.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 300 mm							
312251.000 *	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	on/off	A+ A+
312251.000.76	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	DALI	A+ A+
312251.000.1 *	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	on/off	A+ A+
312251.000.1.76	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	DALI	A+ A+
Glass D 400 mm							
312257.000 *	D 400, H 102	LED ⁽¹⁾	830	2300 lm	27 W	on/off	A+ A+
312257.000.1 *	D 400, H 102	LED ⁽¹⁾	840	2400 lm	27 W	on/off	A+ A+
* With integrated phase cut dimming							
Replacement glasses							
05-1934.012	D 300, H 76						
05-2018.032	D 400, H 87						

Price Category 21

Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)
1 x 40 W T16-R (43 W EB)

LED 27 W ≈

4 x 18 W TC-D (104 W CB)
1 x 55 W T16-R (60 W EB)



Accessories | Installation housing for Douala range

Lacquered aluminium housing for installation in cavity walls of 15-35 mm wall thickness.

Accessories			Price Category 21
Recess housing for cavity walls			
cut out DA 440 mm			
981893.000	D 454, H 120, HE 120	for luminaires D 300	
cut out DA 510 mm			
981762.000	D 524, H 150, HE 150	for luminaires D 400	
Semi-recess housing for cavity walls			
cut out DA 312 mm			
981892.000	D 326, H 90, HE 90	for luminaires D 300	
cut out DA 410 mm			
981763.000	D 426, H 90, HE 90	for luminaires D 400	

Price Category 21

Ceiling and wall luminaires | Series: Douala®

Type of Protection: **IP 40**

Protection Class: I

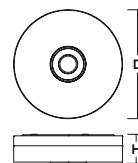
Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish. Patented spring fastening system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 0 = stainless steel, brushed



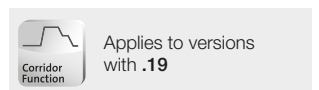
Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
Ceiling and wall luminaires with integrated movement sensor								
Glass D 300 mm								
312251.000.19	D 300, H 95	LED ⁽¹⁾	830	1850 lm	21 W	Master	on/off	A+ A+
312251.000.191	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	Slave	on/off	A+ A+
312251.000.1.19	D 300, H 95	LED ⁽¹⁾	840	1750 lm	21 W	Master	on/off	A+ A+
312251.000.1.191	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	Slave	on/off	A+ A+
Replacement glasses								
05-1934.012	D 300, H 76							

Price Category 21

Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)
1 x 40 W T16-R (43 W EB)



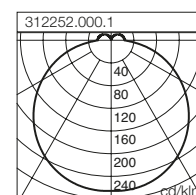


DOUALA® SLIM

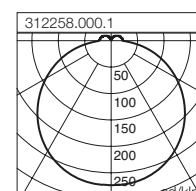
Ceiling and wall luminaires

- A multi-faceted range for indoor lighting, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- The stainless steel base and the glass create an impression of unity
- Featuring the new superflat diffuser made of mouth-blown, satin-finished three-layer opal glass, this luminaire rounds out our Douala® product family.
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- Also available for DALI control and with movement sensor (master and slave)
- On/Off with integrated phase cut dimming

312252.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	12	19



312258.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	14



Further luminaires of this series, see:
 Indoor lighting | Recessed ceiling and wall luminaires
 Indoor lighting | Pendant luminaires

Ceiling and wall luminaires | Series: Douala® Slim

 Type of Protection: **IP 40**

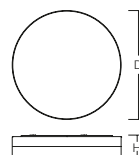
Protection Class: I

Impact Protection: IK02

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish. Patented spring fastening system.

LED included.

Available colour: 0 = stainless steel, brushed

For recess ceiling and recess wall applications the recess housing must be ordered separately.


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 300 mm							
312252.000 *	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	on/off	A+ A+
312252.000.76	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	DALI	A+ A+
312252.000.1 *	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	on/off	A+ A+
312252.000.1.76	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	DALI	A+ A+
Glass D 400 mm							
312258.000 *	D 400, H 75	LED ⁽¹⁾	830	2000 lm	27 W	on/off	A+ A+
312258.000.1 *	D 400, H 75	LED ⁽¹⁾	840	2100 lm	27 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement glasses							
05-1965.002	D 300, H 62						
05-1966.002	D 400, H 62						

Accessories | Installation housing for Douala range

Lacquered aluminium housing for installation in cavity walls of 15-35 mm wall thickness.

Accessories			Price Category 21
Recess housing for cavity walls			
cut out DA 440 mm			
981893.000	D 454, H 120, HE 120	for luminaires D 300	
cut out DA 510 mm			
981762.000	D 524, H 150, HE 150	for luminaires D 400	
Semi-recess housing for cavity walls			
cut out DA 312 mm			
981892.000	D 326, H 90, HE 90	for luminaires D 300	
cut out DA 410 mm			
981763.000	D 426, H 90, HE 90	for luminaires D 400	

Ceiling and wall luminaires, Recessed ceiling and wall luminaires, Semi-recessed ceiling and wall luminaires | Series: Douala® Slim

 Type of Protection: **IP 40**

Protection Class: I

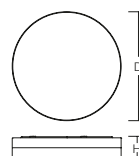
Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish. Patented spring fastening system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
Ceiling and wall luminaires with integrated movement sensor								Price Category 21
Glass D 300 mm								
312252.000.19	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	Master	on/off	A+ A+
312252.000.191	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	Slave	on/off	A+ A+
312252.000.1.19	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	Master	on/off	A+ A+
312252.000.1.191	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	Slave	on/off	A+ A+

Replacement glasses							
05-1965.002	D 300, H 62						

Comparison LED vs. conventional lamps	
LED 21 W ≈	
2 x 26 W TC-D (68 W CB)	
1 x 40 W T16-R (43 W EB)	

Corridor Function	
Applies to versions with .19	

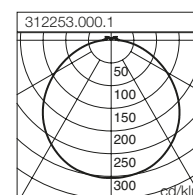


DOUALA® KRISTALL

Ceiling and wall luminaires

- Series of pendant luminaires, ceiling and wall luminaires
- The mouth blown opal glass with the transparent, icy edge of 20 mm gives the luminaire a brilliant look
- The stainless steel base and the stainless steel ring attached to the glass form an optical unit
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- Also available for DALI control and with movement sensor (master and slave)
- On/Off with integrated phase cut dimming

312253.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
9	14	18
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
13	19	32



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires

Ceiling and wall luminaires | Series: Douala® Kristall

 Type of Protection: **IP 40**

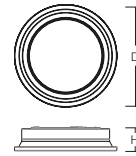
Protection Class: I

Impact Protection: IK02

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass with a 20 mm clear glass edge. Patented spring fastening system.

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 340 mm							

312253.000 *	D 340, H 86	LED ⁽¹⁾	830	1050 lm	21 W	on/off	A+ A+
312253.000.76	D 340, H 86	LED ⁽¹⁾	830	1050 lm	21 W	DALI	A+ A+
312253.000.1 *	D 340, H 86	LED ⁽¹⁾	840	1100 lm	21 W	on/off	A+ A+
312253.000.1.76	D 340, H 86	LED ⁽¹⁾	840	1100 lm	21 W	DALI	A+ A+

* With integrated phase cut dimming

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 21 W ≈
1 x 26 W TC-D (34 W CB)

Applies to versions with **.76**

Ceiling and wall luminaires | Series: Douala® Kristall

 Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02

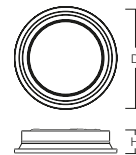
Base: brushed stainless steel. Mouth-blown, 3-layer opal glass with a 20 mm clear glass edge. Patented spring fastening system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires with integrated movement sensor							
Glass D 340 mm							

312253.000.19	D 340, H 86	LED ⁽¹⁾	830	1050 lm	21 W	on/off	A+ A+
312253.000.191	D 340, H 86	LED ⁽¹⁾	830	1050 lm	21 W	on/off	A+ A+
312253.000.1.19	D 340, H 86	LED ⁽¹⁾	840	1100 lm	21 W	on/off	A+ A+
312253.000.1.191	D 340, H 86	LED ⁽¹⁾	840	1100 lm	21 W	on/off	A+ A+

Replacement glasses							
05-2037.012	D 340, H 71						

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 21 W ≈
1 x 26 W TC-D (34 W CB)

Applies to versions with **.19**



MONDANA®-A

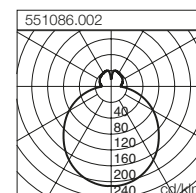
Ceiling and wall luminaires

- Comprehensive range consisting of:
 - Ceiling and wall luminaires
 - Semi-recessed ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- For indoor and outdoor lighting
- The IP 65 type of protection provides excellent protection against rain and humidity and the luminaire is kept free from dirt and insects
- Integral membrane valve allows for ventilation and avoids condensation
- With mouth-blown, 3-layer opal glass satin finish or opal plastic (PE) diffuser
- On/Off with integrated phase cut dimming

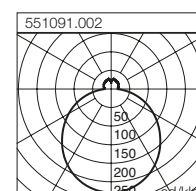


Further luminaires of this series, see:
 Indoor lighting | Recessed ceiling and wall luminaires
 Outdoor lighting | Recessed luminaires

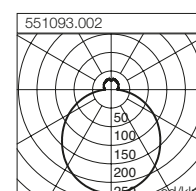
551086.002		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
13	19	26
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
18	27	45



551091.002		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
7	10	14
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
10	15	24



551093.002		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



Ceiling and wall luminaires | Series: Mondana®-A

 Type of Protection: **IP 65**

Protection Class: I, II upon request

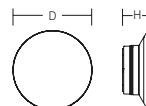
UGR: < 19

Impact Protection: IK03 (glass), IK10 (polyethylene)

Base: plastic (polycarbonate). Diffuser: mouth-blown opal glass, satin finish or plastic (polyethylene) opal, satin finish. Diffuser fastening: screwneck. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Ceiling and wall luminaires							
Opal glass, satin finish							
Diameter D 280 mm							
551086.002.1	D 280, H 105	LED ⁽¹⁾	830	550 lm	9 W	on/off	A+ A+
551086.002	D 280, H 105	LED ⁽¹⁾	840	600 lm	9 W	on/off	A+ A+
Diameter D 390 mm							
551091.002.1	D 390, H 101	LED ⁽¹⁾	830	1050 lm	13,5 W	on/off *	A+ A+
551091.002.1.76	D 390, H 101	LED ⁽¹⁾	830	1050 lm	13,5 W	DALI	A+ A+
551091.002	D 390, H 101	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off *	A+ A+
551091.002.76	D 390, H 101	LED ⁽¹⁾	840	1050 lm	13,5 W	DALI	A+ A+
Diameter D 500 mm							
551093.002.1	D 500, H 128	LED ⁽¹⁾	830	1800 lm	21 W	on/off *	A+ A+
551093.002.1.76	D 500, H 128	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+ A+
551093.002	D 500, H 128	LED ⁽¹⁾	840	1950 lm	21 W	on/off *	A+ A+
551093.002.76	D 500, H 128	LED ⁽¹⁾	840	1950 lm	21 W	DALI	A+ A+
Diffuser: plastic (polyethylene)							
Diameter D 280 mm							
551087.002.1	D 280, H 105	LED ⁽¹⁾	830	650 lm	9 W	on/off	A+ A+
551087.002	D 280, H 105	LED ⁽¹⁾	840	700 lm	9 W	on/off	A+ A+
Diameter D 440 mm							
551092.002.1	D 440, H 109	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off *	A+ A+
551092.002.1.76	D 440, H 109	LED ⁽¹⁾	830	1250 lm	13,5 W	DALI	A+ A+
551092.002	D 440, H 109	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off *	A+ A+
551092.002.76	D 440, H 109	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
Diameter D 550 mm							
551094.002.1	D 550, H 135	LED ⁽¹⁾	830	2200 lm	21 W	on/off *	A+ A+
551094.002.1.76	D 550, H 135	LED ⁽¹⁾	830	2200 lm	21 W	DALI	A+ A+
551094.002	D 550, H 135	LED ⁽¹⁾	840	2150 lm	21 W	on/off *	A+ A+
551094.002.76	D 550, H 135	LED ⁽¹⁾	840	2150 lm	21 W	DALI	A+ A+

* With integrated phase cut dimming

Replacement glasses		Price Category 13
05-2008.002	D 280, H 88	
05-2009.002	D 390, H 83	
05-2010.002	D 500, H 109	

Replacement diffusers		Price Category 13
08-2036.002	D 280, H 88	Plastic (polyethylene)
08-2037.002	D 440, H 83	Plastic (polyethylene)
08-2038.002	D 550, H 114	Plastic (polyethylene)

Accessories | Insert modules for grid ceilings

Metal, white textured, RAL 9003

Accessories		Price Category 11
Insert module 600		
981761.0024/497	L 590, B 590, H 15	Mondana-A 440
Insert module 625		
981712.0024/497	L 615, B 615, H 15	Mondana-A 440
Semi-recessed module 600		
981761.0024/301	L 590, B 590, H 15	Mondana-A 390/440
981761.0024/381	L 590, B 590, H 15	Mondana-A 500/550
Semi-recessed module 625		
981712.0024/301	L 615, B 615, H 15	Mondana-A 390/440
981712.0024/381	L 615, B 615, H 15	Mondana-A 500/550

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

1 x 75 W GLS (75 W)

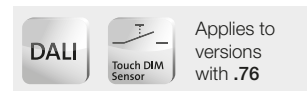
LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)

2 x 100 W GLS (200 W)



FLAT SLIM stands for new benchmarks ...

... in terms of flexibility, ease of installation and energy savings.

FLAT SLIM is equipped exclusively with mains voltage LED units (AC boards) with components already integrated - according to the field of application - in the following versions:

- Switch on/off (phase cut dimming respectively)
- DALI dimmable
- HF movement sensor

1 Versatility
The very flat housing made of die cast aluminium is available in three colours (powder coated) white, silver metallic and anthracite metallic.

2 Options
Mouth-blown opal glass or diffusers made of non-yellowing PMMA plastic or shock-proof PC.

3 Ease of installation
The intelligent fastening concept makes it possible to open and close the luminaire at any time without any tools.

4 Spaciousness
The large connection compartment on the back for convenient connections is also ideal for through wiring.

5 Tightness
Due to the high IP rate of 65, the luminaire is protected against water and dust from the outside.

6 Safety
The touch protection (cover) forms a single unit with the LED board. This ensures the required safety during installation and at the same time protects the LED board against dirt and damage.

7 Replacement
The LED unit is attached to the luminaire housing using a snap-in mechanism so that it can be replaced at any time without any tools. The electrical connection of LED boards to the mains supply is very quick thanks to the Plug & Play system.

8 Long service life
The use of the latest generation of mains voltage LED boards guarantees LED rated life of up to 50,000 hours (L70, B10). A beam angle of up to 140° ensures homogeneous and glare-free lighting.

9 Movement detection
The movement sensor with daylight sensor integrated on the board regulates the lighting according to individual settings. With the Corridor function, light is switched on when it is really needed.

10 Adjustment
Easy adjustment of the following functions via three push button switches:

-  **A** Detection range 0.5 - 5 m radial (10 to 100% adjustable)
-  **H** Hold time 1 s up to 15 min (in 8 different levels)
-  **L** Daylight detection with 5 brightness levels and learning mode





FLAT SLIM is available with mains voltage LED units (AC boards) in the following versions:
Standard On/Off | DALI dimmable | Master luminaires with HF movement sensors and slave luminaires

AC boards with integrated DALI interface



- All components on one board
- Safe installation thanks to touch protection
- Self-cooling boards
- LED rated life 50,000 h (L70, B10) at t_p 70°C
- Dimmable 1-100%
- TouchDim compatible
- DC voltage from 176 - 276 V;
luminous flux in DC mode 25%

What does “TouchDim” mean?

TouchDim offers the simple option of cost-effective and efficient light control without any additional control device. TouchDim means the device can be operated via standard push button, whilst control is taken over by the DALI board.

AC boards with integrated movement sensor



- All components on one board
- Safe installation thanks to touch protection
- Self-cooling boards
- LED rated life 50,000 h (L70, B10) at t_p 70°C
- Corridor function
- Master luminaires DC voltage from 176 - 276 V;
luminous flux in DC mode 25%

What does “Corridor function” mean?

The Corridor function allows the luminaires to be configured so that they maintain a residual brightness of 10% if no movement is detected. This is recommended for applications without any ambient light, especially in corridors or stairwells without any daylight.

You can choose from the following operation scenarios:

Option 0 (factory setting):

100% (hold time) -> 10% (10s) residual brightness
-> 0%

Option 1:

100% (hold time) -> 10% residual brightness

Option 2:

100% (hold time) -> 10% (Xs*) residual brightness
-> 0%

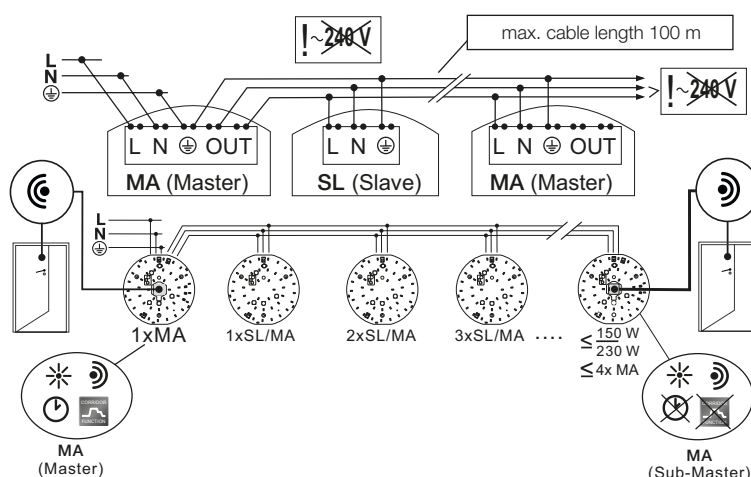
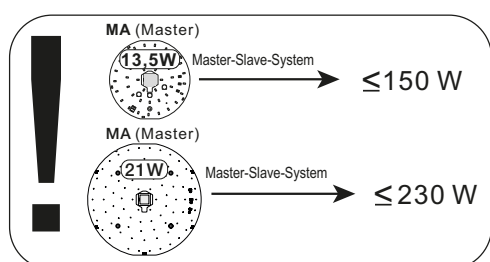
*Xs = 1s, 10s, 30s, 60s, 3min, 5min, 10min, 15min

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/range 0.5-5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Limited suitability for outdoor use, as it is sensitive to all movements
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W) (see diagram below)

Installation example

- Radial movement sensors in the master luminaires





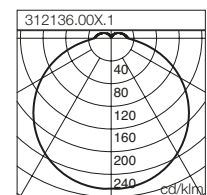


FLAT SLIM

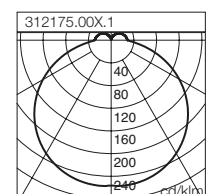
Ceiling and wall luminaires

- Superflat ceiling and wall luminaires with glass or plastic diffuser
- Base made of die-cast aluminium
- Available in three diameters and colours
- Mouth-blown three layer (triplex) opal glass satin finish or plastic diffuser (PMMA/PC) opal satin finish
- Diffuser mounting without use of tools, with bayonet fixing
- Particularly homogeneous, soft and glare-free light thanks to the use of AC surface-mounted boards
- High ingress protection rating: IP 65
- Standard Gore™ Protective Vents diaphragm valve to prevent condensation
- Easy plug-in installation
- LED module can be replaced without use of tools
- Also available for DALI control and with movement sensor (master and slave)
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- DALI and master boards suitable for DC voltage from 176-276 V; luminous flux in DC mode 25%
- On/Off with integrated phase cut dimming

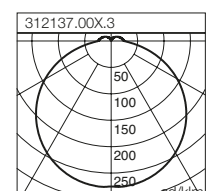
312136.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	14



312175.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	10



312137.00X.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8







Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: IP 65

Protection Class: I

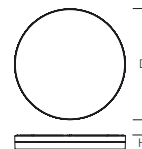
Impact Protection: IK03

Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: bayonet system.

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.

Comparison
LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

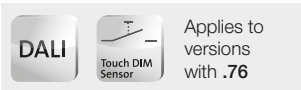
2 x 18 W TC-D (52 W CB)

LED 27 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)



Applies to
versions
with .76

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Glass D 230 mm							
312132.00X.Q*	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	on/off	A+ A+
312132.00X.76	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	DALI	A+ A+
312132.00X.1.Q*	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	on/off	A+ A+
312132.00X.1.76	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	DALI	A+ A+
Glass D 300 mm							
312133.00X.Q*	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	on/off	A+ A+
312133.00X.730	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	smart+free	A+ A+
312133.00X.76	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	DALI	A+ A+
312133.00X.1.Q*	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	on/off	A+ A+
312133.00X.1.730	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	smart+free	A+ A+
312133.00X.1.76	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	DALI	A+ A+
Glass D 400 mm							
312174.00X.*	D 400, H 70	LED ⁽¹⁾	830	2200 lm	27 W	on/off	A+ A+
312174.00X.730	D 400, H 70	LED ⁽¹⁾	830	2200 lm	27 W	smart+free	A+ A+
312174.00X.1.*	D 400, H 70	LED ⁽¹⁾	840	2300 lm	27 W	on/off	A+ A+
312174.00X.1.730	D 400, H 70	LED ⁽¹⁾	840	2300 lm	27 W	smart+free	A+ A+
Glass D 480 mm							
312134.00X	D 480, H 70	LED ⁽¹⁾	830	2600 lm	33 W	on/off	A+ A+
312134.00X.1	D 480, H 70	LED ⁽¹⁾	840	2700 lm	33 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement LED module			Price Category 11
E90-6706.000	D 170, H 22	1 x LED 13,5 W 3000 K	
E90-6706.010	D 170, H 22	1 x LED 13,5 W 4000 K	
E90-6843.020	D 170, H 22	1 x LED 13,5 W 3000 K, DALI	
E90-6843.020.1	D 170, H 22	1 x LED 13,5 W 4000 K, DALI	
E90-6707.000	D 240, H 22	1 x LED 21 W 3000 K	
E90-6707.010	D 240, H 22	1 x LED 21 W 4000 K	
E90-6844.020	D 240, H 22	1 x LED 21 W 3000 K, DALI	
E90-6844.020.1	D 240, H 22	1 x LED 21 W 4000 K, DALI	
E90-6823.000	D 335, H 25	1 x LED 27 W 3000 K	
E90-6823.010	D 335, H 25	1 x LED 27 W 4000 K	
E90-6708.000	D 420, H 22	1 x LED 33 W 3000 K	
E90-6708.010	D 420, H 22	1 x LED 33 W 4000 K	

Replacement glasses		Price Category 13
05-1969.002	D 230, H 51	
05-1970.002	D 300, H 51	
05-312174.002	D 400, H 58	
05-1971.002	D 480, H 59	

Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK03

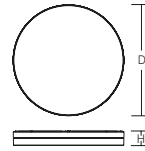
Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: bayonet system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 18 W TC-D (52 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Ceiling and wall luminaires with integrated movement sensor								Price Category 11
Glass D 230 mm								
312132.00X.19	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	Master	on/off	A+ A+
312132.00X.191	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	Slave	on/off	A+ A+
312132.00X.1.19	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	Master	on/off	A+ A+
312132.00X.1.191	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	Slave	on/off	A+ A+
Glass D 300 mm								
312133.00X.19	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	Master	on/off	A+ A+
312133.00X.191	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	Slave	on/off	A+ A+
312133.00X.1.19	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	Master	on/off	A+ A+
312133.00X.1.191	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	Slave	on/off	A+ A+
Replacement LED module								Price Category 11
E90-6843.000	D 170, H 22	1 x LED 13,5 W 3000 K, Slave						
E90-6843.000.1	D 170, H 22	1 x LED 13,5 W 4000 K, Slave						
E90-6843.010	D 170, H 22	1 x LED 13,5 W 3000 K, Master						
E90-6843.010.1	D 170, H 22	1 x LED 13,5 W 4000 K, Master						
E90-6844.000	D 240, H 22	1 x LED 21 W 3000 K, Slave						
E90-6844.000.1	D 240, H 22	1 x LED 21 W 4000 K, Slave						
E90-6844.010	D 240, H 22	1 x LED 21 W 3000 K, Master						
E90-6844.010.1	D 240, H 22	1 x LED 21 W 4000 K, Master						
Replacement glasses								Price Category 13
05-1969.002	D 230, H 51							
05-1970.002	D 300, H 51							

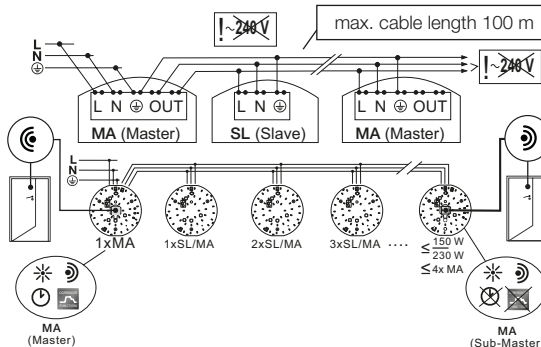
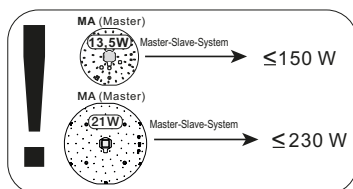


Applies to versions
with .19

Installation example



Radial movement sensors
in the master luminaires





Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: IP 65

Protection Class: I

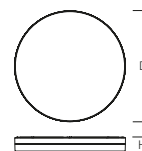
Impact Protection: IK02 (PMMA), IK08 (Polycarbonate)

Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: bayonet system.

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.

Comparison
LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)



Ceiling and wall luminaires

Price Category 11

Diffuser: plastic (PMMA)

D 230 mm

312135.00X.Q*	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
312135.00X.76	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
312135.00X.1.Q*	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	on/off	A+ A+
312135.00X.1.76	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	DALI	A+ A+

D 300 mm

312136.00X.Q*	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	on/off	A+ A+
312136.00X.730	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	smart+free	A+ A+
312136.00X.76	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+ A+
312136.00X.1.Q*	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	on/off	A+ A+
312136.00X.1.730	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	smart+free	A+ A+
312136.00X.1.76	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	DALI	A+ A+

D 400 mm

312175.00X.*	D 400, H 70	LED ⁽¹⁾	830	2400 lm	27 W	on/off	A+ A+
312175.00X.730	D 400, H 70	LED ⁽¹⁾	830	2400 lm	27 W	smart+free	A+ A+
312175.00X.1.*	D 400, H 70	LED ⁽¹⁾	840	2500 lm	27 W	on/off	A+ A+
312175.00X.1.730	D 400, H 70	LED ⁽¹⁾	840	2500 lm	27 W	smart+free	A+ A+

D 480 mm

312137.00X	D 480, H 70	LED ⁽¹⁾	830	3000 lm	33 W	on/off	A+ A+
312137.00X.1	D 480, H 70	LED ⁽¹⁾	840	3100 lm	33 W	on/off	A+ A+

Diffuser: plastic (polycarbonate)

D 230 mm

312135.00X.2.*	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	on/off	A+ A+
312135.00X.2.76	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	DALI	A+ A+
312135.00X.3.*	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	on/off	A+ A+
312135.00X.3.76	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	DALI	A+ A+

D 300 mm

312136.00X.2.*	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	on/off	A+ A+
312136.00X.2.730	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	smart+free	A+ A+
312136.00X.2.76	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	DALI	A+ A+
312136.00X.3.*	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
312136.00X.3.730	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	smart+free	A+ A+
312136.00X.3.76	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+

D 400 mm

312175.00X.2.*	D 400, H 70	LED ⁽¹⁾	830	2700 lm	27 W	on/off	A+ A+
312175.00X.2.730	D 400, H 70	LED ⁽¹⁾	830	2700 lm	27 W	smart+free	A+ A+
312175.00X.3.*	D 400, H 70	LED ⁽¹⁾	840	2800 lm	27 W	on/off	A+ A+
312175.00X.3.730	D 400, H 70	LED ⁽¹⁾	840	2800 lm	27 W	smart+free	A+ A+

D 480 mm

312137.00X.2	D 480, H 70	LED ⁽¹⁾	830	3300 lm	33 W	on/off	A+ A+
312137.00X.3	D 480, H 70	LED ⁽¹⁾	840	3400 lm	33 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement LED module

Price Category 11

E90-6706.000	D 170, H 22	1 x LED 13,5 W 3000 K
E90-6706.010	D 170, H 22	1 x LED 13,5 W 4000 K
E90-6843.020	D 170, H 22	1 x LED 13,5 W 3000 K, DALI
E90-6843.020.1	D 170, H 22	1 x LED 13,5 W 4000 K, DALI
E90-6707.000	D 240, H 22	1 x LED 21 W 3000 K
E90-6707.010	D 240, H 22	1 x LED 21 W 4000 K
E90-6844.020	D 240, H 22	1 x LED 21 W 3000 K, DALI
E90-6844.020.1	D 240, H 22	1 x LED 21 W 4000 K, DALI
E90-6823.000	D 335, H 25	1 x LED 27 W 3000 K
E90-6823.010	D 335, H 25	1 x LED 27 W 4000 K
E90-6708.000	D 420, H 22	1 x LED 33 W 3000 K
E90-6708.010	D 420, H 22	1 x LED 33 W 4000 K

Replacement diffusers

Price Category 13

08-2118.002	D 230, H 55	Plastic (PMMA)
08-2118.012	D 230, H 55	Plastic (polycarbonate)
08-2119.002	D 300, H 55	Plastic (PMMA)
08-2119.012	D 300, H 55	Plastic (polycarbonate)
08-312175.002	D 400, H 62	Plastic (PMMA)
08-312175.012	D 400, H 62	Plastic (polycarbonate)
08-2120.002	D 480, H 62	Plastic (PMMA)
08-2120.012	D 480, H 62	Plastic (polycarbonate)

Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK02 (PMMA), IK08 (Polycarbonate)

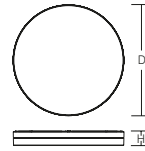
Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: bayonet system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
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Ceiling and wall luminaires with integrated movement sensor

Price Category 11

Diffuser: plastic (PMMA)

D 230 mm

312135.00X.19	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	Master	on/off	A+ A+
312135.00X.191	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	Slave	on/off	A+ A+
312135.00X.1.19	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	Master	on/off	A+ A+
312135.00X.1.191	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	Slave	on/off	A+ A+

D 300 mm

312136.00X.19	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	Master	on/off	A+ A+
312136.00X.191	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	Slave	on/off	A+ A+
312136.00X.1.19	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	Master	on/off	A+ A+
312136.00X.1.191	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	Slave	on/off	A+ A+

Diffuser: plastic (polycarbonate)

D 230 mm

312135.00X.2.19	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	Master	on/off	A+ A+
312135.00X.2.191	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	Slave	on/off	A+ A+
312135.00X.3.19	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	Master	on/off	A+ A+
312135.00X.3.191	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	Slave	on/off	A+ A+

D 300 mm

312136.00X.2.19	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	Master	on/off	A+ A+
312136.00X.2.191	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	Slave	on/off	A+ A+
312136.00X.3.19	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	Master	on/off	A+ A+
312136.00X.3.191	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	Slave	on/off	A+ A+

Replacement LED module

Price Category 11

E90-6843.000	D 170, H 22	1 x LED 13,5 W 3000 K, Slave
E90-6843.000.1	D 170, H 22	1 x LED 13,5 W 4000 K, Slave
E90-6843.010	D 170, H 22	1 x LED 13,5 W 3000 K, Master
E90-6843.010.1	D 170, H 22	1 x LED 13,5 W 4000 K, Master
E90-6844.000	D 240, H 22	1 x LED 21 W 3000 K, Slave
E90-6844.000.1	D 240, H 22	1 x LED 21 W 4000 K, Slave
E90-6844.010	D 240, H 22	1 x LED 21 W 3000 K, Master
E90-6844.010.1	D 240, H 22	1 x LED 21 W 4000 K, Master

Replacement diffusers

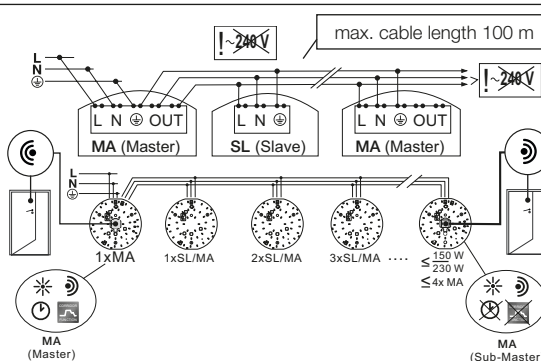
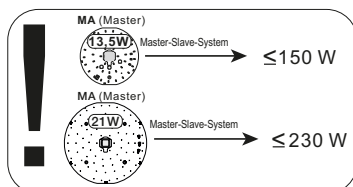
Price Category 13

08-2118.002	D 230, H 55	Plastic (PMMA)
08-2118.012	D 230, H 55	Plastic (polycarbonate)
08-2119.002	D 300, H 55	Plastic (PMMA)
08-2119.012	D 300, H 55	Plastic (polycarbonate)

Installation example



Radial movement sensors in the master luminaires



The FLAT POLYMERO® Kreis system with plastic diffuser

Product name	FLAT POLYMERO® Kreis Slim			
	Page 80-82			
Front view				
Side view				
Movement sensor				
Diameter	300	360	460	515
Diffuser	PMMA PC			
Base	Metal powder coated			
Type of Protection	IP 40			
Lamps				
LED	•	•	•	•

✓ With movement sensor

✓ Corridor function

✓ Touch DIM

PMMA diffuser

RZB offers more than standard PMMA (also known as Plexiglas®).

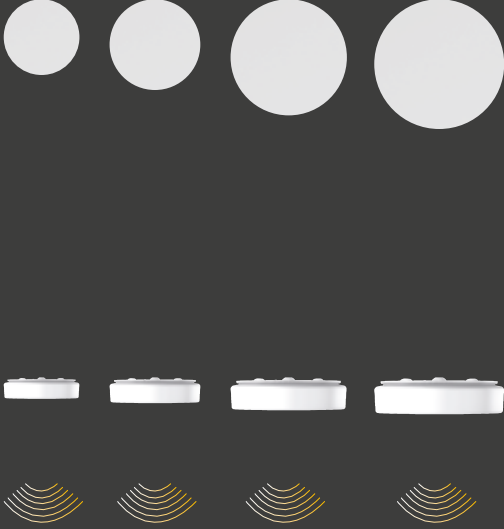
Advantages of Plexiglas®:

- Robust and scratch-resistant - substitute for glass
- Exhibits the same transparency and opal colouration as glass
- UV resistant (colour-true; no yellowing)
- Completely weathering resistant
- For 0–90 °C operating temperatures
- 92 percent light transmission (for 1 mm-thick Plexiglas®)
- Can be cleaned with tap water, soft soap or a pH neutral cleaning agent
- Can be disposed of without residual waste

PC diffusers

RZB offers more than standard polycarbonate high quality UV stabilized plastic - PC:

- Hard, stiff, shockproof, extremely high impact strength
- Exhibits the same transparency and opal colouration as glass
- UV stabilized
- Largely weathering resistant
- Can be used at ambient temperatures ranging from -40° to +135°C
- 88 percent light transmission (for 1 mm-thick material)
- Can be cleaned with tap water

FLAT POLYMERO® Kreis XXL	FLAT POLYMERO® Sensation Kreis	FLAT POLYMERO® Kreis			
Page 85	Page 85	Page 86-89			
					
1040	1040	300	360	460	515
PMMA PC	PMMA PC	PMMA PC			
Metal powder coated	Metal powder coated	Metal powder coated			
IP 40	IP 44	IP 40			
•	•	•	•	•	•

✓ Type of protection **IP 44**

✓ With movement sensor

✓ Ball impact proof

✓ Corridor function

✓ Touch DIM

FLAT POLYMERO® is available with mains voltage LED units (AC boards) in the following versions:
Standard On/Off | DALI dimmable | Master luminaires with HF movement sensors and slave luminaires

AC boards with integrated DALI interface



- All components on one board
- Safe installation thanks to touch protection
- Self-cooling boards
- LED rated life 50,000 h (L70, B10) at t_p 70°C
- Dimmable 1-100%
- TouchDim compatible
- DC voltage from 176 - 276 V;
luminous flux in DC mode 25%

AC boards with integrated movement sensor



- All components on one board
- Safe installation thanks to touch protection
- Self-cooling boards
- LED rated life 50,000 h (L70, B10) at t_p 70°C
- Corridor function
- Master luminaires DC voltage from 176 - 276 V;
luminous flux in DC mode 25%

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/range 0.5-5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Limited suitability for outdoor use, as it is sensitive to all movements
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W) (see diagram below)

What does “TouchDim” mean?

TouchDim offers the simple option of cost-effective and efficient light control without any additional control device. TouchDim means the device can be operated via standard push button, whilst control is taken over by the DALI board.

What does “Corridor function” mean?

The Corridor function allows the luminaires to be configured so that they maintain a residual brightness of 10% if no movement is detected. This is recommended for applications without any ambient light, especially in corridors or stairwells without any daylight.

You can choose from the following operation scenarios:

Option 0 (factory setting):

100% (hold time) -> 10% (10s) residual brightness -> 0%

Option 1:

100% (hold time) -> 10% residual brightness

Option 2:

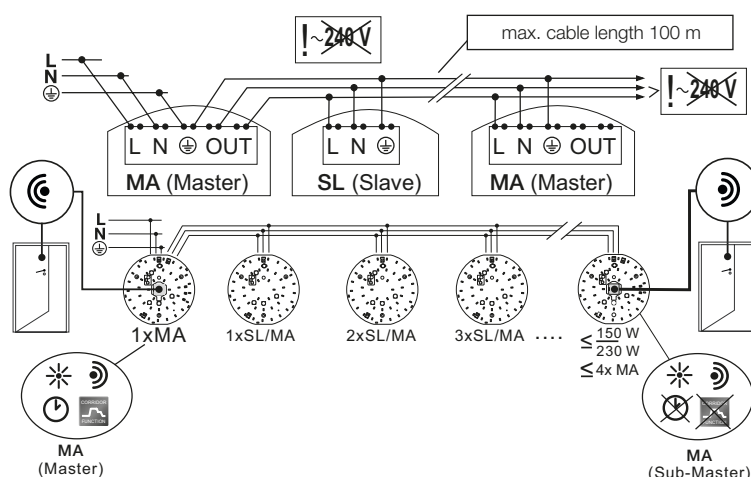
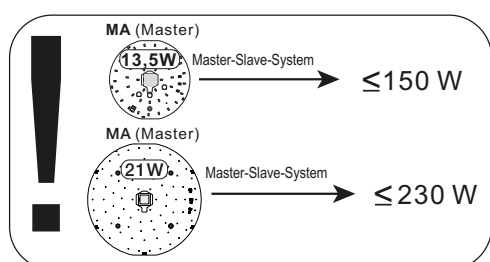
100% (hold time) -> 10% (Xs*) residual brightness -> 0%

*Xs = 1s, 10s, 30s, 60s, 3min, 5min, 10min, 15min

Installation example



Radial movement sensors in the master luminaires



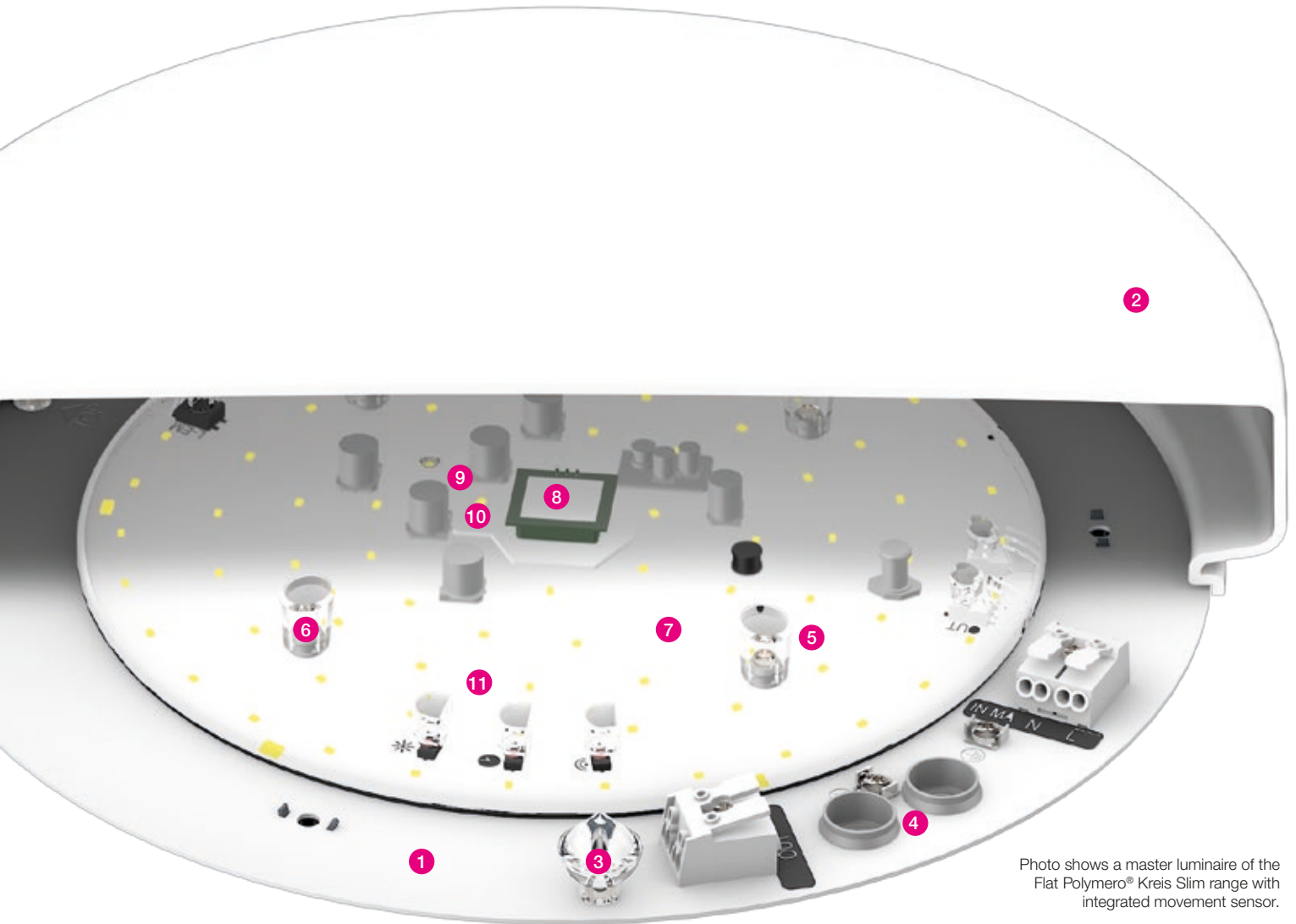


Photo shows a master luminaire of the Flat Polymero® Kreis Slim range with integrated movement sensor.

- 1 Housing: sheet steel, powder coated
- 2 Three different diffusers made of non-yellowing PMMA or PC plastic
- 3 Luminaire can be opened without tools
- 4 Ideal for through wiring
- 5 Touch Protection for safety during installation and protection for the LED boards
- 6 Simple replacement of LED boards possible at any time
- 7 LED rated life 50,000 hrs (L70, B10) | beam angle up to 140°
- 8 Movement sensor
- 9 Daylight sensor
- 10 Feedback display
- 11 Easy adjustment of the following functions via three push button switches:
 -  A Detection range 0.5 - 5m radial (10 to 100% adjustable)
 -  H Hold time 1s up to 15 min (in 8 different levels)
 -  L Daylight detection with 5 brightness levels and learning mode





FLAT POLYMERO® KREIS SLIM

Ceiling and wall luminaires

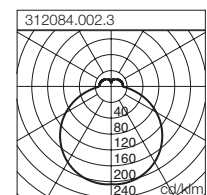
- Featuring the new superlat diffuser, this luminaire rounds out our Flat Polymero® Kreis family
- Use of LED surface modules for uniform illumination
- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffusers
- Different diameters available
- With patented fastening technology



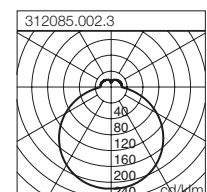
Further luminaires of this series, see:
Indoor lighting | Pendant luminaires
Indoor lighting | Fabric lampshade luminaires

- Luminaire can be opened without tools
- LED exchangeable
- Two different light colours 830 and 840
- LED rated life 50,000 h (L70, B10)
- On/Off with integrated phase cut dimming
- PMMA diffuser:
 - sturdy, scratch resistant (replacement for glass)
 - UV-resistant (non-fade - no yellowing)
 - totally weatherproof
- PC diffuser:
 - hard, stiff, shatterproof, extremely shockproof
 - UV-stabilised

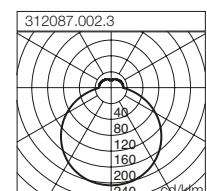
312084.002.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	9	12
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
9	13	21



312085.002.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	13



312087.002.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	8



Ceiling and wall luminaires | Series: Flat Polymero® Kreis Slim

Type of Protection: **IP 40**

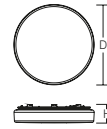
Protection Class: **I**

Impact Protection: **IK03 (PMMA), IK10 (polycarbonate)**

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA)							
Diameter D 300 mm							
312084.002.1 .Q*	D 300, H 65	LED ⁽¹⁾	830	1200 lm	13,5 W	on/off	A+ A+
312084.002.1.76	D 300, H 65	LED ⁽¹⁾	830	1200 lm	13,5 W	DALI	A+ A+
312084.002.3 .Q*	D 300, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
312084.002.3.76	D 300, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
Diameter D 360 mm							
312085.002.1 .Q*	D 360, H 65	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
312085.002.1.76	D 360, H 65	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
312085.002.3 .Q*	D 360, H 65	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
312085.002.3.76	D 360, H 65	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+
Diameter D 460 mm							
312086.002.1 *	D 460, H 70	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
312086.002.1.76	D 460, H 70	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
312086.002.3 *	D 460, H 70	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
312086.002.3.76	D 460, H 70	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+
312240.002.1 *	D 460, H 70	LED ⁽¹⁾	830	2650 lm	27 W	on/off	A+ A+
312240.002.3 *	D 460, H 70	LED ⁽¹⁾	840	2750 lm	27 W	on/off	A+ A+
Diameter D 515 mm							
312087.002.3	D 515, H 70	LED ⁽¹⁾	840	3200 lm	33 W	on/off	A+ A+
312087.002.1	D 515, H 70	LED ⁽¹⁾	830	3100 lm	33 W	on/off	A+ A+
Diffuser: plastic (polycarbonate)							
Diameter D 300 mm							
312084.002.2 *	D 300, H 65	LED ⁽¹⁾	830	1300 lm	13,5 W	on/off	A+ A+
312084.002.2.76	D 300, H 65	LED ⁽¹⁾	830	1300 lm	13,5 W	DALI	A+ A+
312084.002.4 *	D 300, H 65	LED ⁽¹⁾	840	1300 lm	13,5 W	on/off	A+ A+
312084.002.4.76	D 300, H 65	LED ⁽¹⁾	840	1300 lm	13,5 W	DALI	A+ A+
Diameter D 360 mm							
312085.002.2 *	D 360, H 65	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
312085.002.2.76	D 360, H 65	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
312085.002.4 *	D 360, H 65	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
312085.002.4.76	D 360, H 65	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
Diameter D 460 mm							
312086.002.2 *	D 460, H 70	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
312086.002.2.76	D 460, H 70	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
312086.002.4 *	D 460, H 70	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
312086.002.4.76	D 460, H 70	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
312240.002.2 *	D 460, H 70	LED ⁽¹⁾	830	2900 lm	27 W	on/off	A+ A+
312240.002.4 *	D 460, H 70	LED ⁽¹⁾	840	3000 lm	27 W	on/off	A+ A+
Diameter D 515 mm							
312087.002.4	D 515, H 70	LED ⁽¹⁾	840	3500 lm	33 W	on/off	A+ A+
312087.002.2	D 515, H 70	LED ⁽¹⁾	830	3400 lm	33 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement diffusers			Price Category 13				
08-312084.002	D 300, H 60	Plastic (PMMA)					
08-312084.012	D 300, H 60	Plastic (polycarbonate)					
08-312085.002	D 360, H 61	Plastic (PMMA)					
08-312085.012	D 360, H 61	Plastic (polycarbonate)					
08-312086.002	D 460, H 68	Plastic (PMMA)					
08-312086.012	D 460, H 68	Plastic (polycarbonate)					
08-312087.002	D 515, H 69	Plastic (PMMA)					
08-312087.012	D 515, H 69	Plastic (polycarbonate)					

Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

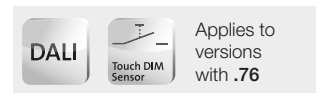
2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)





Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)



Applies to versions
with .19



Ceiling and wall luminaires | Series: Flat Polymero® Kreis Slim

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

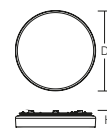
Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. With movement sensor.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
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Ceiling and wall luminaires with integrated movement sensor

Price Category 11

Diffuser: plastic (PMMA)

Diameter D 300 mm

312084.002.1.19	D 300, H 65	LED ⁽¹⁾	830	1200 lm	13,5 W	Master	on/off	A+ A+
312084.002.1.191	D 300, H 65	LED ⁽¹⁾	830	1200 lm	13,5 W	Slave	on/off	A+ A+
312084.002.3.19	D 300, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	Master	on/off	A+ A+
312084.002.3.191	D 300, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	Slave	on/off	A+ A+

Diameter D 360 mm

312085.002.1.19	D 360, H 65	LED ⁽¹⁾	830	1900 lm	21 W	Master	on/off	A+ A+
312085.002.1.191	D 360, H 65	LED ⁽¹⁾	830	1900 lm	21 W	Slave	on/off	A+ A+
312085.002.3.19	D 360, H 65	LED ⁽¹⁾	840	2000 lm	21 W	Master	on/off	A+ A+
312085.002.3.191	D 360, H 65	LED ⁽¹⁾	840	2000 lm	21 W	Slave	on/off	A+ A+

Diffuser: plastic (polycarbonate)

Diameter D 300 mm

312084.002.2.19	D 300, H 65	LED ⁽¹⁾	830	1300 lm	13,5 W	Master	on/off	A+ A+
312084.002.2.191	D 300, H 65	LED ⁽¹⁾	830	1300 lm	13,5 W	Slave	on/off	A+ A+
312084.002.4.19	D 300, H 65	LED ⁽¹⁾	840	1300 lm	13,5 W	Master	on/off	A+ A+
312084.002.4.191	D 300, H 65	LED ⁽¹⁾	840	1300 lm	13,5 W	Slave	on/off	A+ A+

Diameter D 360 mm

312085.002.2.19	D 360, H 65	LED ⁽¹⁾	830	2000 lm	21 W	Master	on/off	A+ A+
312085.002.2.191	D 360, H 65	LED ⁽¹⁾	830	2000 lm	21 W	Slave	on/off	A+ A+
312085.002.4.19	D 360, H 65	LED ⁽¹⁾	840	2100 lm	21 W	Master	on/off	A+ A+
312085.002.4.191	D 360, H 65	LED ⁽¹⁾	840	2100 lm	21 W	Slave	on/off	A+ A+

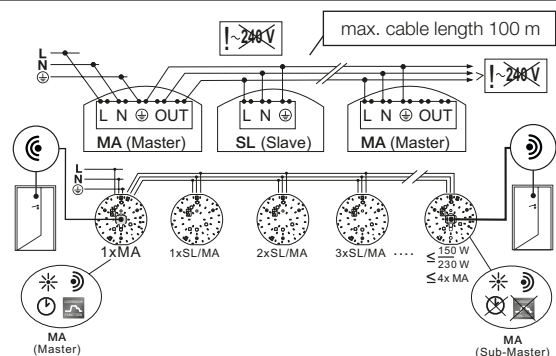
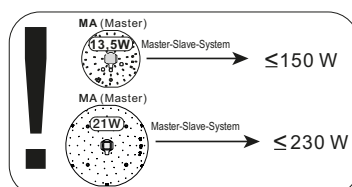
Replacement diffusers

Price Category 13

08-312084.002	D 300, H 60	Plastic (PMMA)
08-312084.012	D 300, H 60	Plastic (polycarbonate)
08-312085.002	D 360, H 61	Plastic (PMMA)
08-312085.012	D 360, H 61	Plastic (polycarbonate)

Installation example

- Radial movement sensors in the master luminaires







FLAT POLYMERO® KREIS

Ceiling and wall luminaires

- Comprehensive range consisting of:

- Pendant luminaires
- Ceiling luminaires
- Wall luminaires

- Can be used indoors or outdoors, depending on the type of protection

- Available in different diameters

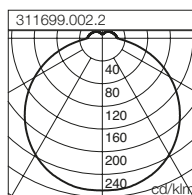
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffusers

- Individual design possible with foil print

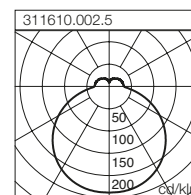
- Two different light colours 830 and 840

- On/Off with integrated phase cut dimming

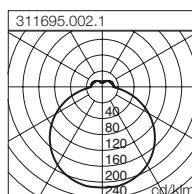
311699.002.2		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	1	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
1	2	3



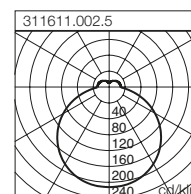
311610.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	7	10
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
7	10	17



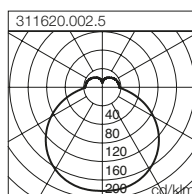
311695.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	1	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
1	2	3



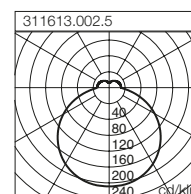
311611.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	13



311620.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	8	10
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
7	11	18



311613.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	10



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires
Emergency lighting

Ceiling and wall luminaires | Series: Flat Polymero® Kreis XXL

 Type of Protection: **IP 40**

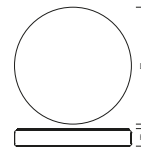
Protection Class: I

Impact Protection: IK07 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal or plastic (polycarbonate, ball impact proof in accordance with DIN 18032-3), opal. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA) D 1040 mm							
311695.002	D 1040, H 150	LED	830	9650 lm	100 W	on/off	A++ A++
311695.002.76	D 1040, H 150	LED	830	9650 lm	100 W	DALI	A++ A++
311695.002.1	D 1040, H 150	LED	840	10500 lm	100 W	on/off	A++ A++
311695.002.1.76	D 1040, H 150	LED	840	10500 lm	100 W	DALI	A++ A++
Diffuser: plastic (polycarbonate) D 1040 mm, ball impact proof in accordance with DIN 18032-03							
311695.002.2	D 1040, H 150	LED	830	10500 lm	100 W	on/off	A++ A++
311695.002.2.76	D 1040, H 150	LED	830	10500 lm	100 W	DALI	A++ A++
311695.002.3	D 1040, H 150	LED	840	11400 lm	100 W	on/off	A++ A++
311695.002.3.76	D 1040, H 150	LED	840	11400 lm	100 W	DALI	A++ A++
Replacement diffusers							
08-311292.002	D 1040, H 150	Plastic (PMMA)					
08-311292.012	D 1040, H 150	Plastic (polycarbonate)					

Price Category 21


**Comparison
LED vs. conventional lamps**
LED 100 W ≈
4 x 55 W TC-L (232 W EB)

Ceiling and wall luminaires | Series: Flat Polymero® Sensation Kreis

 Type of Protection: **IP 44**

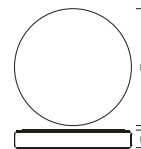
Protection Class: I

Impact Protection: IK07 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal or plastic (polycarbonate, ball impact proof in accordance with DIN 18032-3), opal. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA) D 1040 mm							
311699.002	D 1040, H 150	LED	830	9650 lm	100 W	on/off	A++ A++
311699.002.76	D 1040, H 150	LED	830	9650 lm	100 W	DALI	A++ A++
311699.002.1	D 1040, H 150	LED	840	10500 lm	100 W	on/off	A++ A++
311699.002.1.76	D 1040, H 150	LED	840	10500 lm	100 W	DALI	A++ A++
Diffuser: plastic (polycarbonate) D 1040 mm, ball impact proof in accordance with DIN 18032-03							
311699.002.2	D 1040, H 150	LED	830	10500 lm	100 W	on/off	A++ A++
311699.002.2.76	D 1040, H 150	LED	830	10500 lm	100 W	DALI	A++ A++
311699.002.3	D 1040, H 150	LED	840	11400 lm	100 W	on/off	A++ A++
311699.002.3.76	D 1040, H 150	LED	840	11400 lm	100 W	DALI	A++ A++
Replacement diffusers							
08-311292.002	D 1040, H 150	Plastic (PMMA)					
08-311292.012	D 1040, H 150	Plastic (polycarbonate)					

Price Category 21


**Comparison
LED vs. conventional lamps**
LED 100 W ≈
4 x 55 W TC-L (232 W EB)



Comparison LED vs. conventional lamps

LED 10 / 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 14 W ≈

2 x 18 W TC-D (52 W CB)

LED 19 / 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 24 / 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

DALI



Applies to
versions
with .76

Ceiling and wall luminaires | Series: Flat Polymero® Kreis

Type of Protection: IP 40

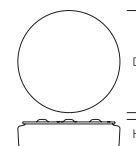
Protection Class: I

Impact Protection: IK03 (PMMA)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EB	EEC
Ceiling and wall luminaires								
Diffuser: plastic (PMMA)								
Diameter D 300 mm								
311619.002.7	D 300, H 80	LED	830	1050 lm	10 W	on/off		A++ A++
311619.002.7.76	D 300, H 80	LED	830	1050 lm	10 W	DALI		A++ A++
311619.002.5	D 300, H 80	LED	840	1050 lm	10 W	on/off		A++ A++
311619.002.5.76	D 300, H 80	LED	840	1050 lm	10 W	DALI		A++ A++
311949.002.1 *	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	on/off		A+ A+
311949.002.1.76	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	DALI		A+ A+
311949.002.3 *	D 300, H 80	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off		A+ A+
311949.002.3.76	D 300, H 80	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI		A+ A+
311620.002.7	D 300, H 80	LED	830	1500 lm	14 W	on/off		A++ A++
311620.002.7.76	D 300, H 80	LED	830	1500 lm	14 W	DALI		A++ A++
311620.002.5	D 300, H 80	LED	840	1500 lm	14 W	on/off		A++ A++
311620.002.5.76	D 300, H 80	LED	840	1500 lm	14 W	DALI		A++ A++
Diameter D 360 mm								
311950.002.1 *	D 360, H 87	LED ⁽¹⁾	830	1200 lm	13,5 W	on/off		A+ A+
311950.002.1.76	D 360, H 87	LED ⁽¹⁾	830	1200 lm	13,5 W	DALI		A+ A+
311950.002.3 *	D 360, H 87	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off		A+ A+
311950.002.3.76	D 360, H 87	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI		A+ A+
311610.002.7	D 360, H 87	LED	830	1600 lm	14 W	on/off	✓	A++ A++
311610.002.7.76	D 360, H 87	LED	830	1600 lm	14 W	DALI		A++ A++
311610.002.5.Q	D 360, H 87	LED	840	1600 lm	14 W	on/off	✓	A++ A++
311610.002.5.76	D 360, H 87	LED	840	1600 lm	14 W	DALI		A++ A++
311951.002.1 *	D 360, H 87	LED ⁽¹⁾	830	2000 lm	21 W	on/off		A+ A+
311951.002.1.76	D 360, H 87	LED ⁽¹⁾	830	2000 lm	21 W	DALI		A+ A+
311951.002.3 *	D 360, H 87	LED ⁽¹⁾	840	2050 lm	21 W	on/off		A+ A+
311951.002.3.76	D 360, H 87	LED ⁽¹⁾	840	2050 lm	21 W	DALI		A+ A+
Diameter D 460 mm								
311611.002.7.Q	D 460, H 93	LED	830	2100 lm	19 W	on/off	✓	A++ A++
311611.002.7.76	D 460, H 93	LED	830	2100 lm	19 W	DALI		A++ A++
311611.002.5	D 460, H 93	LED	840	2100 lm	19 W	on/off	✓	A++ A++
311611.002.5.76	D 460, H 93	LED	840	2100 lm	19 W	DALI		A++ A++
311952.002.1 *	D 460, H 93	LED ⁽¹⁾	830	1900 lm	21 W	on/off		A+ A+
311952.002.1.76	D 460, H 93	LED ⁽¹⁾	830	1900 lm	21 W	DALI		A+ A+
311952.002.3 *	D 460, H 93	LED ⁽¹⁾	840	1950 lm	21 W	on/off		A+ A+
311952.002.3.76	D 460, H 93	LED ⁽¹⁾	840	1950 lm	21 W	DALI		A+ A+
312242.002.1 *	D 460, H 93	LED ⁽¹⁾	830	2800 lm	27 W	on/off		A+ A+
312242.002.3 *	D 460, H 93	LED ⁽¹⁾	840	2900 lm	27 W	on/off		A+ A+
Diameter D 515 mm								
311613.002.7	D 515, H 98	LED	830	2600 lm	24 W	on/off		A++ A++
311613.002.7.76	D 515, H 98	LED	830	2600 lm	24 W	DALI		A++ A++
311613.002.5	D 515, H 98	LED	840	2600 lm	24 W	on/off		A++ A++
311613.002.5.76	D 515, H 98	LED	840	2600 lm	24 W	DALI		A++ A++
312088.002.3	D 515, H 98	LED ⁽¹⁾	840	3200 lm	33 W	on/off		A+ A+
312088.002.1	D 515, H 98	LED ⁽¹⁾	830	3200 lm	33 W	on/off		A+ A+

* With integrated phase cut dimming

Replacement diffusers			Price Category 13					
08-311616.002	D 300, H 75	Plastic (PMMA)						
08-311595.002	D 360, H 81	Plastic (PMMA)						
08-311600.002	D 460, H 88	Plastic (PMMA)						
08-311604.002	D 515, H 93	Plastic (PMMA)						

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							Price Category 11
Diffuser: plastic (polycarbonate)							
Diameter D 300 mm							
311619.002.8	D 300, H 80	LED	830	1100 lm	10 W	on/off	A++ A++
311619.002.8.76	D 300, H 80	LED	830	1100 lm	10 W	DALI	A++ A++
311619.002.6	D 300, H 80	LED	840	1100 lm	10 W	on/off	A++ A++
311619.002.6.76	D 300, H 80	LED	840	1100 lm	10 W	DALI	A++ A++
311949.002.2 *	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	on/off	A+ A+
311949.002.2.76	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	DALI	A+ A+
311949.002.4 *	D 300, H 80	LED ⁽¹⁾	840	1300 lm	13,5 W	on/off	A+ A+
311949.002.4.76	D 300, H 80	LED ⁽¹⁾	840	1300 lm	13,5 W	DALI	A+ A+
311620.002.8	D 300, H 80	LED	830	1550 lm	14 W	on/off	A++ A++
311620.002.8.76	D 300, H 80	LED	830	1550 lm	14 W	DALI	A++ A++
311620.002.6	D 300, H 80	LED	840	1550 lm	14 W	on/off	A++ A++
311620.002.6.76	D 300, H 80	LED	840	1550 lm	14 W	DALI	A++ A++
Diameter D 360 mm							
311950.002.2 *	D 360, H 87	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off	A+ A+
311950.002.2.76	D 360, H 87	LED ⁽¹⁾	830	1250 lm	13,5 W	DALI	A+ A+
311950.002.4 *	D 360, H 87	LED ⁽¹⁾	840	1300 lm	13,5 W	on/off	A+ A+
311950.002.4.76	D 360, H 87	LED ⁽¹⁾	840	1300 lm	13,5 W	DALI	A+ A+
311610.002.8	D 360, H 87	LED	830	1650 lm	14 W	on/off	A++ A++
311610.002.8.76	D 360, H 87	LED	830	1650 lm	14 W	DALI	A++ A++
311610.002.6	D 360, H 87	LED	840	1650 lm	14 W	on/off	A++ A++
311610.002.6.76	D 360, H 87	LED	840	1650 lm	14 W	DALI	A++ A++
311951.002.2 *	D 360, H 87	LED ⁽¹⁾	830	2050 lm	21 W	on/off	A+ A+
311951.002.2.76	D 360, H 87	LED ⁽¹⁾	830	2050 lm	21 W	DALI	A+ A+
311951.002.4 *	D 360, H 87	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
311951.002.4.76	D 360, H 87	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
Diameter D 460 mm							
311611.002.8	D 460, H 93	LED	830	2150 lm	19 W	on/off	A++ A++
311611.002.8.76	D 460, H 93	LED	830	2150 lm	19 W	DALI	A++ A++
311611.002.6	D 460, H 93	LED	840	2150 lm	19 W	on/off	A++ A++
311611.002.6.76	D 460, H 93	LED	840	2150 lm	19 W	DALI	A++ A++
311952.002.2 *	D 460, H 93	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
311952.002.2.76	D 460, H 93	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
311952.002.4 *	D 460, H 93	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
311952.002.4.76	D 460, H 93	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
312242.002.2 *	D 460, H 93	LED ⁽¹⁾	830	3000 lm	27 W	on/off	A+ A+
312242.002.4 *	D 460, H 93	LED ⁽¹⁾	840	3100 lm	27 W	on/off	A+ A+
Diameter D 515 mm							
311613.002.8	D 515, H 98	LED	830	2700 lm	24 W	on/off	A++ A++
311613.002.8.76	D 515, H 98	LED	830	2700 lm	24 W	DALI	A++ A++
311613.002.6	D 515, H 98	LED	840	2700 lm	24 W	on/off	A++ A++
311613.002.6.76	D 515, H 98	LED	840	2700 lm	24 W	DALI	A++ A++
312088.002.2	D 515, H 98	LED ⁽¹⁾	830	3400 lm	33 W	on/off	A+ A+
312088.002.4	D 515, H 98	LED ⁽¹⁾	840	3400 lm	33 W	on/off	A+ A+

* With integrated phase cut dimming

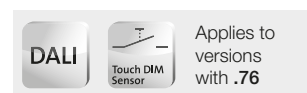
Replacement diffusers			Price Category 13				
08-311616.012	D 300, H 75	Plastic (polycarbonate)					
08-311595.012	D 360, H 81	Plastic (polycarbonate)					
08-311600.012	D 460, H 87	Plastic (polycarbonate)					
08-311604.012	D 515, H 92	Plastic (polycarbonate)					



With individual LEDs and separate converter - ideal for use in emergency lighting modules
LED rated life 50,000 hrs (L80, B10)



LED ⁽¹⁾ = with mains voltage boards also available for DALI control and with movement sensor (master and slave)
LED rated life 50,000 hrs (L70, B10)



Applies to versions with .76

Comparison LED vs. conventional lamps

LED 10 / 13,5 W ≈
1 x 26 W TC-D (34 W CB)

LED 14 W ≈
2 x 18 W TC-D (52 W CB)

LED 19 / 21 W ≈
2 x 26 W TC-D (68 W CB)

LED 24 / 27 W ≈
3 x 18 W TC-D (78 W CB)

LED 33 W ≈
3 x 26 W TC-D (102 W CB)



Comparison LED vs. conventional lamps

LED 14 W ≈

2 x 18 W TC-D (52 W CB)

LED 19 W ≈

2 x 26 W TC-D (68 W CB)



Ceiling and wall luminaires | Series: Flat Polymero® Kreis

Type of Protection: IP 40

Protection Class: I

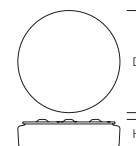
Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. With movement sensor.

LED included.

Functional parameters of the movement sensor installed on a ceiling at a height of max. 4 m or on a wall at a height of approx. 2.7 m:

- HF detector 5.8 GHz ISM frequency band
 - Sensitivity/Range: 1-8 m in diameter (20-100%), adjustable
 - Time control between 10 seconds and 30 minutes, adjustable
 - Detection angle: 120°
 - Can be used as master luminaire up to 800 W (ohmic load) 500 W (fluorescent lamp, LED) / 400 A, 200 µs
 - Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.
- Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires with integrated movement sensor							
Diffuser: plastic (PMMA)							
Diameter D 300 mm							
311620.002.7.19	D 300, H 80	LED	830	1500 lm	14 W	on/off	A++ A++
311620.002.5.19	D 300, H 80	LED	840	1500 lm	14 W	on/off	A++ A++
Diameter D 360 mm							
311610.002.7.19	D 360, H 87	LED	830	1600 lm	14 W	on/off	A++ A++
311610.002.5.19	D 360, H 87	LED	840	1600 lm	14 W	on/off	A++ A++
Diameter D 460 mm							
311611.002.7.19	D 460, H 93	LED	830	2100 lm	19 W	on/off	A++ A++
311611.002.5.19	D 460, H 93	LED	840	2100 lm	19 W	on/off	A++ A++
Diameter D 515 mm							
311612.002.7.19	D 515, H 98	LED	830	2150 lm	19 W	on/off	A++ A++
311612.002.5.19	D 515, H 98	LED	840	2150 lm	19 W	on/off	A++ A++
Diffuser: plastic (polycarbonate)							
Diameter D 300 mm							
311620.002.8.19	D 300, H 80	LED	830	1550 lm	14 W	on/off	A++ A++
311620.002.6.19	D 300, H 80	LED	840	1550 lm	14 W	on/off	A++ A++
Diameter D 360 mm							
311610.002.8.19	D 360, H 87	LED	830	1650 lm	14 W	on/off	A++ A++
311610.002.6.19	D 360, H 87	LED	840	1650 lm	14 W	on/off	A++ A++
Diameter D 460 mm							
311611.002.8.19	D 460, H 93	LED	830	2150 lm	19 W	on/off	A++ A++
311611.002.6.19	D 460, H 93	LED	840	2150 lm	19 W	on/off	A++ A++
Diameter D 515 mm							
311612.002.8.19	D 515, H 98	LED	830	2200 lm	19 W	on/off	A++ A++
311612.002.6.19	D 515, H 98	LED	840	2200 lm	19 W	on/off	A++ A++
Replacement diffusers							
08-311616.002	D 300, H 75	Plastic (PMMA)					
08-311616.012	D 300, H 75	Plastic (polycarbonate)					
08-311595.002	D 360, H 81	Plastic (PMMA)					
08-311595.012	D 360, H 81	Plastic (polycarbonate)					
08-311600.012	D 460, H 87	Plastic (polycarbonate)					
08-311600.002	D 460, H 88	Plastic (PMMA)					
08-311604.012	D 515, H 92	Plastic (polycarbonate)					
08-311604.002	D 515, H 93	Plastic (PMMA)					

Ceiling and wall luminaires | Series: Flat Polymero® Kreis

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

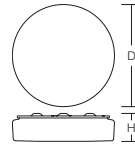
Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. With movement sensor.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Ceiling and wall luminaires with integrated movement sensor								
Diffuser: plastic (PMMA)								
Diameter D 300 mm								
311949.002.1.19	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	Master	on/off	A+ A+
311949.002.1.191	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	Slave	on/off	A+ A+
311949.002.3.19	D 300, H 80	LED ⁽¹⁾	840	1250 lm	13,5 W	Master	on/off	A+ A+
311949.002.3.191	D 300, H 80	LED ⁽¹⁾	840	1250 lm	13,5 W	Slave	on/off	A+ A+
Diameter D 360 mm								
311951.002.1.19	D 360, H 87	LED ⁽¹⁾	830	2000 lm	21 W	Master	on/off	A+ A+
311951.002.1.191	D 360, H 87	LED ⁽¹⁾	830	2000 lm	21 W	Slave	on/off	A+ A+
311951.002.3.19	D 360, H 87	LED ⁽¹⁾	840	2050 lm	21 W	Master	on/off	A+ A+
311951.002.3.191	D 360, H 87	LED ⁽¹⁾	840	2050 lm	21 W	Slave	on/off	A+ A+
Diffuser: plastic (polycarbonate)								
Diameter D 300 mm								
311949.002.2.19	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	Master	on/off	A+ A+
311949.002.2.191	D 300, H 80	LED ⁽¹⁾	830	1200 lm	13,5 W	Slave	on/off	A+ A+
311949.002.4.19	D 300, H 80	LED ⁽¹⁾	840	1300 lm	13,5 W	Master	on/off	A+ A+
311949.002.4.191	D 300, H 80	LED ⁽¹⁾	840	1300 lm	13,5 W	Slave	on/off	A+ A+
Diameter D 360 mm								
311951.002.2.19	D 360, H 87	LED ⁽¹⁾	830	2050 lm	21 W	Master	on/off	A+ A+
311951.002.2.191	D 360, H 87	LED ⁽¹⁾	830	2050 lm	21 W	Slave	on/off	A+ A+
311951.002.4.19	D 360, H 87	LED ⁽¹⁾	840	2100 lm	21 W	Master	on/off	A+ A+
311951.002.4.191	D 360, H 87	LED ⁽¹⁾	840	2100 lm	21 W	Slave	on/off	A+ A+
Replacement diffusers								
08-311616.002	D 300, H 75	Plastic (PMMA)						
08-311616.012	D 300, H 75	Plastic (polycarbonate)						
08-311595.002	D 360, H 81	Plastic (PMMA)						
08-311595.012	D 360, H 81	Plastic (polycarbonate)						

Price Category 11



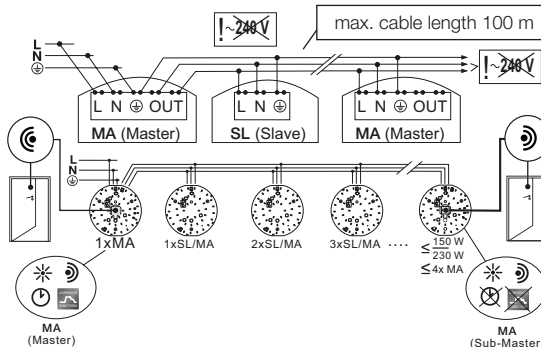
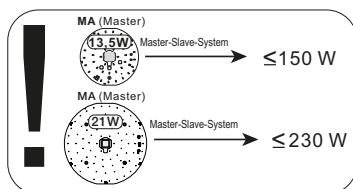
Applies to versions with .19



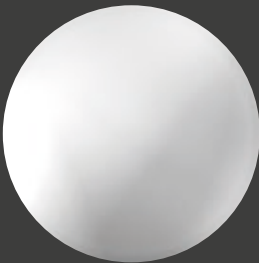
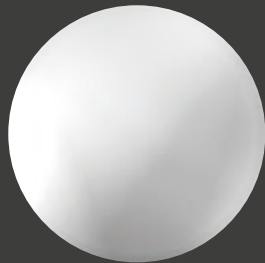
Installation example



Radial movement sensors in the master luminaires



The FLAT POLYMER[®] system with plastic diffuser

Product name	FLAT POLYMER [®] Super XXL	FLAT POLYMER [®] XXL	FLAT POLYMER [®] Sensation XXL
	page 93	page 94	page 94
Front view			
Side view			
Movement sensor			
Diameter	1700	1040	1040
Diffuser	PMMA	PMMA PC	PMMA PC
Base	Metal powder coated	Metal powder coated	Metal powder coated
Type of Protection	IP 40	IP 40	IP 44
Lamps			
LED	•	•	•
E27	–	–	–

✓ Flat metal base

✓ Type of protection IP 44

✓ Ball impact proof

PMMA diffuser

- RZB offers more than standard PMMA (also known as Plexiglas[®])
- Robust and scratch-resistant - substitute for glass
 - Exhibits the same transparency and opal colouration as glass
 - UV resistant (non-fade; no yellowing)
 - Completely weathering resistant
 - For 0–90 °C operating temperatures
 - 92 percent light transmission (for 1 mm-thick Plexiglas[®])
 - Can be cleaned with tap water, soft soap or a pH neutral cleaning agent
 - Can be disposed of without residual waste

PC diffusers

- RZB offers more than standard polycarbonate high quality UV stabilized plastic - PC
- Hard, stiff, shockproof, extremely high impact strength
 - Exhibits the same transparency and opal colouration as glass
 - UV stabilized
 - Largely weathering resistant
 - Can be used at ambient temperatures ranging from -40° to +135°C
 - 88 percent light transmission (for 1 mm-thick material)
 - Can be cleaned with tap water

FLAT POLYMERO®					FLAT POLYMERO® IP44		
page 96-99					page 100-101		
							
							
							
300	360	460	515	620	305	420	580
PMMA PC					PMMA PC		
Metal powder coated					Plastic		
IP 40					IP 43 (Ceiling mounting) IP 44 (Wall mounting)		
•	•	•	•	•	•	•	•
–	–	–	–	–	•	•	•

✓ Flat metal base

✓ With movement sensor

✓ Corridor function

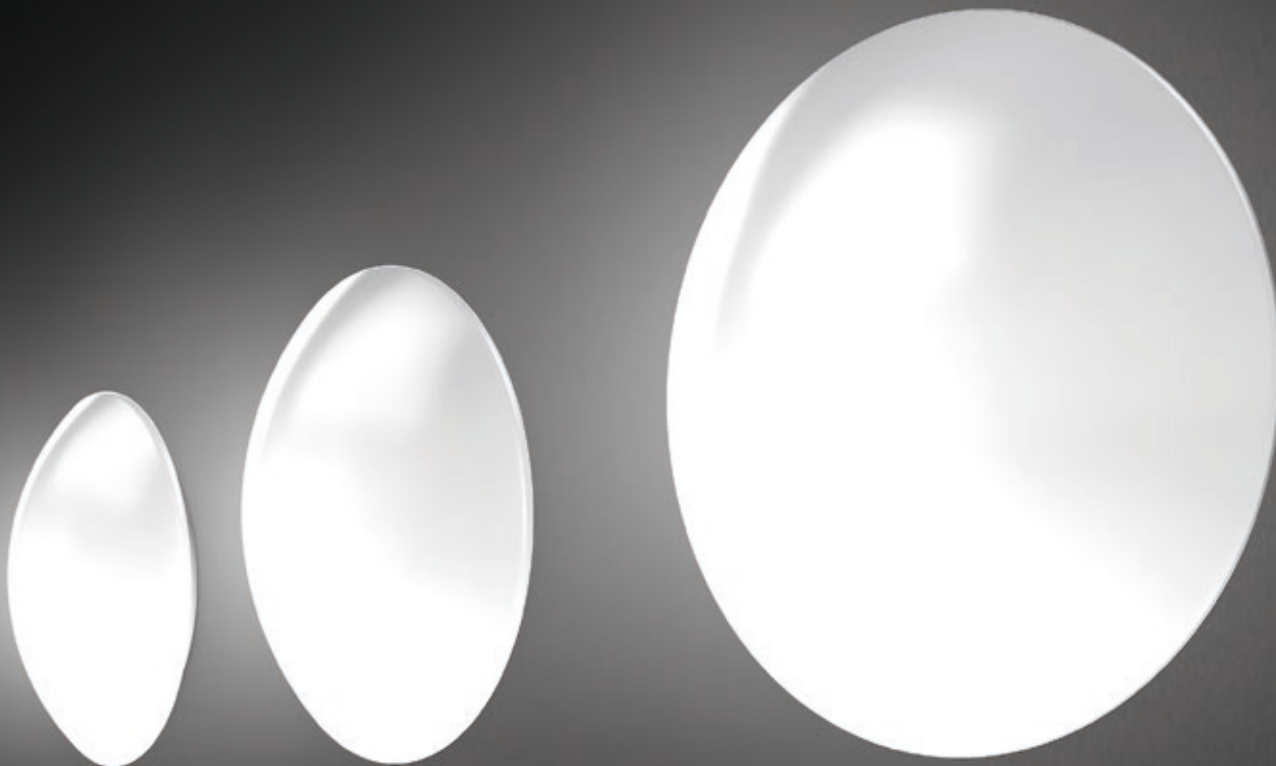
✓ Touch DIM

✓ Base: plastic

✓ Type of protection IP 44

✓ With movement sensor

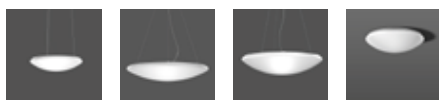
✓ Corridor function



FLAT POLYMERO®

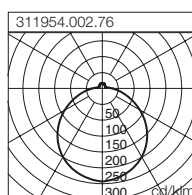
Ceiling and wall luminaires

- A mega series of unmatched versatility
- Available as ceiling, wall or pendant luminaire with diameters from 300 to 1700 mm
- High protection type versions allow for outdoor applications; since it is proof against dust and flies - this luminaire is ideal for hard-to-access installations
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffuser
- Numerous customized solutions are available
- Two different light colours 830 and 840
- On/Off with integrated phase cut dimming

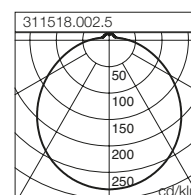


Further luminaires of this series, see:
Indoor lighting | Pendant luminaires
Emergency lighting

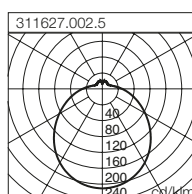
311954.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	1	1
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
1	1	2



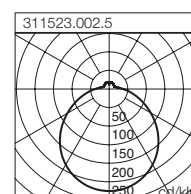
311518.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	12



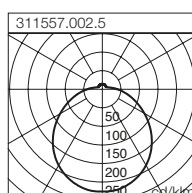
311627.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	11	18



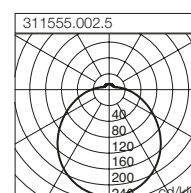
311523.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	8	10
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
7	11	18



311557.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



311555.002.5		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	10



Ceiling and wall luminaires | Series: Flat Polymero® Super XXL

Type of Protection: **IP 40**

Protection Class: I

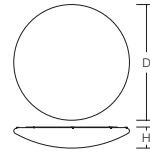
Impact Protection: IK07

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal. Diffuser fastening: sash lock.

LED included.

Weight: 47 kg

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA) D 1700 mm							
311954.002.76	D 1700, H 300	LED	830	20300 lm	280 W	DALI	A++ A++
311954.002.1.76	D 1700, H 300	LED	840	22100 lm	280 W	DALI	A++ A++
Replacement diffusers							
08-311270.002	D 1700, H 300	Plastic (PMMA)					

Price Category 21

Price Category 13

**Comparison
LED vs. conventional lamps**

LED 280 W ≈
12 x 36 W TC-L (468 W CB)





Comparison LED vs. conventional lamps

LED 100 W ≈
4 x 55 W TC-L (232 W EB)

Ceiling and wall luminaires | Series: Flat Polymero® XXL

Type of Protection: **IP 40**

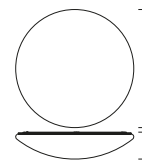
Protection Class: I

Impact Protection: IK07 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal or plastic (polycarbonate, ball impact proof in accordance with DIN 18032-3), opal. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA) D 1040 mm							
311694.002	D 1040, H 230	LED	830	9500 lm	100 W	on/off	A++ A++
311694.002.76	D 1040, H 230	LED	830	9500 lm	100 W	DALI	A++ A++
311694.002.1	D 1040, H 230	LED	840	10300 lm	100 W	on/off	A++ A++
311694.002.1.76	D 1040, H 230	LED	840	10300 lm	100 W	DALI	A++ A++
Diffuser: plastic (polycarbonate) D 1040 mm, ball impact proof in accordance with DIN 18032-03							
311694.002.2	D 1040, H 230	LED	830	10000 lm	100 W	on/off	A++ A++
311694.002.2.76	D 1040, H 230	LED	830	10000 lm	100 W	DALI	A++ A++
311694.002.3	D 1040, H 230	LED	840	10900 lm	100 W	on/off	A++ A++
311694.002.3.76	D 1040, H 230	LED	840	10900 lm	100 W	DALI	A++ A++
Replacement diffusers							
08-311183.022	D 1040, H 230	Plastic (PMMA)					
08-311183.032	D 1040, H 230	Plastic (polycarbonate)					

Price Category 21

Price Category 13



Comparison LED vs. conventional lamps

LED 100 W ≈
4 x 55 W TC-L (232 W EB)

Ceiling and wall luminaires | Series: Flat Polymero® Sensation XXL

Type of Protection: **IP 44**

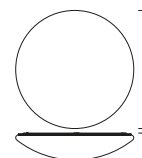
Protection Class: I

Impact Protection: IK07, IK10

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal or plastic (polycarbonate, ball impact proof in accordance with DIN 18032-3), opal. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA) D 1040 mm							
311698.002	D 1040, H 230	LED	830	9500 lm	100 W	on/off	A++ A++
311698.002.76	D 1040, H 230	LED	830	9500 lm	100 W	DALI	A++ A++
311698.002.1	D 1040, H 230	LED	840	10300 lm	100 W	on/off	A++ A++
311698.002.1.76	D 1040, H 230	LED	840	10300 lm	100 W	DALI	A++ A++
Diffuser: plastic (polycarbonate) D 1040 mm, ball impact proof in accordance with DIN 18032-03							
311698.002.2	D 1040, H 230	LED	830	10000 lm	100 W	on/off	A++ A++
311698.002.2.76	D 1040, H 230	LED	830	10000 lm	100 W	DALI	A++ A++
311698.002.3	D 1040, H 230	LED	840	10900 lm	100 W	on/off	A++ A++
311698.002.3.76	D 1040, H 230	LED	840	10900 lm	100 W	DALI	A++ A++
Replacement diffusers							
08-311183.022	D 1040, H 230	Plastic (PMMA)					
08-311183.032	D 1040, H 230	Plastic (polycarbonate)					

Price Category 21

Price Category 13





Comparison LED vs. conventional lamps

LED 10 / 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 14 W ≈

2 x 18 W TC-D (52 W CB)

LED 19 / 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 24 / 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 38 W ≈

4 x 26 W TC-D (136 W CB)

DALI



Applies to
versions
with .76

Ceiling and wall luminaires | Series: Flat Polymero®

Type of Protection: IP 40

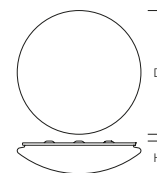
Protection Class: I

Impact Protection: IK03 (PMMA)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EB	CB	EEC
Ceiling and wall luminaires									
Diffuser: plastic (PMMA)									
Diameter D 300 mm									
311626.002.7	D 300, H 100	LED	830	1050 lm	10 W	on/off			A++ A++
311626.002.7.76	D 300, H 100	LED	830	1050 lm	10 W	DALI			A++ A++
311626.002.5	D 300, H 100	LED	840	1050 lm	10 W	on/off			A++ A++
311626.002.5.76	D 300, H 100	LED	840	1050 lm	10 W	DALI			A++ A++
311943.002.1 *	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off			A+ A+
311943.002.1.76	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI			A+ A+
311943.002.3 *	D 300, H 100	LED ⁽¹⁾	840	1200 lm	13,5 W	on/off			A+ A+
311943.002.3.76	D 300, H 100	LED ⁽¹⁾	840	1200 lm	13,5 W	DALI			A+ A+
311627.002.7.Q	D 300, H 100	LED	830	1450 lm	14 W	on/off			A++ A++
311627.002.7.76	D 300, H 100	LED	830	1450 lm	14 W	DALI			A++ A++
311627.002.5	D 300, H 100	LED	840	1450 lm	14 W	on/off			A++ A++
311627.002.5.76	D 300, H 100	LED	840	1450 lm	14 W	DALI			A++ A++
Diameter D 360 mm									
311945.002.1.Q *	D 360, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off			A+ A+
311945.002.1.76	D 360, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI			A+ A+
311945.002.3.Q *	D 360, H 100	LED ⁽¹⁾	840	1200 lm	13,5 W	on/off			A+ A+
311945.002.3.76	D 360, H 100	LED ⁽¹⁾	840	1200 lm	13,5 W	DALI			A+ A+
311523.002.7	D 360, H 100	LED	830	1450 lm	14 W	on/off	✓	✓	A++ A++
311523.002.7.76	D 360, H 100	LED	830	1450 lm	14 W	DALI			A++ A++
311523.002.5	D 360, H 100	LED	840	1450 lm	14 W	on/off	✓	✓	A++ A++
311523.002.5.76	D 360, H 100	LED	840	1450 lm	14 W	DALI			A++ A++
311946.002.1.Q *	D 360, H 100	LED ⁽¹⁾	830	1850 lm	21 W	on/off			A+ A+
311946.002.1.76	D 360, H 100	LED ⁽¹⁾	830	1850 lm	21 W	DALI			A+ A+
311946.002.3.Q *	D 360, H 100	LED ⁽¹⁾	840	1950 lm	21 W	on/off			A+ A+
311946.002.3.76	D 360, H 100	LED ⁽¹⁾	840	1950 lm	21 W	DALI			A+ A+
Diameter D 460 mm									
311518.002.7.Q	D 460, H 120	LED	830	2100 lm	19 W	on/off	✓	✓	A++ A++
311518.002.7.76	D 460, H 120	LED	830	2100 lm	19 W	DALI			A++ A++
311518.002.5.Q	D 460, H 120	LED	840	2100 lm	19 W	on/off	✓	✓	A++ A++
311518.002.5.76	D 460, H 120	LED	840	2100 lm	19 W	DALI			A++ A++
311947.002.1 *	D 460, H 120	LED ⁽¹⁾	830	1950 lm	21 W	on/off			A+ A+
311947.002.1.76	D 460, H 120	LED ⁽¹⁾	830	1950 lm	21 W	DALI			A+ A+
311947.002.3 *	D 460, H 120	LED ⁽¹⁾	840	2050 lm	21 W	on/off			A+ A+
311947.002.3.76	D 460, H 120	LED ⁽¹⁾	840	2050 lm	21 W	DALI			A+ A+
312244.002.1 *	D 460, H 120	LED ⁽¹⁾	830	2800 lm	27 W	on/off			A+ A+
312244.002.3 *	D 460, H 120	LED ⁽¹⁾	840	2900 lm	27 W	on/off			A+ A+
Diameter D 515 mm									
311555.002.7.Q	D 515, H 150	LED	830	2600 lm	24 W	on/off			A++ A++
311555.002.7.76	D 515, H 150	LED	830	2600 lm	24 W	DALI			A++ A++
311555.002.5	D 515, H 150	LED	840	2600 lm	24 W	on/off			A++ A++
311555.002.5.76	D 515, H 150	LED	840	2600 lm	24 W	DALI			A++ A++
312092.002.1	D 515, H 150	LED ⁽¹⁾	830	3200 lm	33 W	on/off			A+ A+
312092.002.3	D 515, H 150	LED ⁽¹⁾	840	3200 lm	33 W	on/off			A+ A+
Diameter D 620 mm									
312096.002.1	D 620, H 160	LED ⁽¹⁾	830	3250 lm	33 W	on/off			A+ A+
312096.002.3	D 620, H 160	LED ⁽¹⁾	840	3250 lm	33 W	on/off			A+ A+
311557.002.7.Q	D 620, H 160	LED	830	4050 lm	38 W	on/off			A++ A++
311557.002.7.76	D 620, H 160	LED	830	4050 lm	38 W	DALI			A++ A++
311557.002.5	D 620, H 160	LED	840	4050 lm	38 W	on/off			A++ A++
311557.002.5.76	D 620, H 160	LED	840	4050 lm	38 W	DALI			A++ A++

* With integrated phase cut dimming

Replacement diffusers

Price Category 13

08-311623.002	D 300, H 90	Plastic (PMMA)
08-311161.012	D 360, H 88	Plastic (PMMA)
08-311165.012	D 460, H 113	Plastic (PMMA)
08-311170.012	D 515, H 137	Plastic (PMMA)
08-311173.012	D 620, H 150	Plastic (PMMA)

Accessories | Decorative metal rings for the Flat Polymero series (IP 40)

Not suitable for luminaires with mains voltage LED (LED ⁽¹⁾)

Lacquered decorative rings are available in the following colours: 2 = white, 4 = silver, further RAL colours are available on request.

Metallised decorative rings are available in the following colours: 42 = nickel, matt

Decorative rings Flat Polymero® (IP 40)

Price Category 11

981804.00X	D 380 mm	for diffuser D 360 mm
981806.00X	D 551 mm	for diffuser D 515 mm

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							Price Category 11
Diffuser: plastic (polycarbonate)							
Diameter D 300 mm							
311626.002.8	D 300, H 100	LED	830	1100 lm	10 W	on/off	A++ A++
311626.002.8.76	D 300, H 100	LED	830	1100 lm	10 W	DALI	A++ A++
311626.002.6	D 300, H 100	LED	840	1100 lm	10 W	on/off	A++ A++
311626.002.6.76	D 300, H 100	LED	840	1100 lm	10 W	DALI	A++ A++
311943.002.2 *	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
311943.002.2.76	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
311943.002.4 *	D 300, H 100	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
311943.002.4.76	D 300, H 100	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
311627.002.8	D 300, H 100	LED	830	1500 lm	14 W	on/off	A++ A++
311627.002.8.76	D 300, H 100	LED	830	1500 lm	14 W	DALI	A++ A++
311627.002.6	D 300, H 100	LED	840	1500 lm	14 W	on/off	A++ A++
311627.002.6.76	D 300, H 100	LED	840	1500 lm	14 W	DALI	A++ A++
Diameter D 360 mm							
311945.002.2 *	D 360, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
311945.002.2.76	D 360, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
311945.002.4 *	D 360, H 100	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
311945.002.4.76	D 360, H 100	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
311523.002.8 .Q	D 360, H 100	LED	830	1500 lm	14 W	on/off	A++ A++
311523.002.8.76	D 360, H 100	LED	830	1500 lm	14 W	DALI	A++ A++
311523.002.6	D 360, H 100	LED	840	1500 lm	14 W	on/off	A++ A++
311523.002.6.76	D 360, H 100	LED	840	1500 lm	14 W	DALI	A++ A++
311946.002.2 *	D 360, H 100	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
311946.002.2.76	D 360, H 100	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
311946.002.4	D 360, H 100	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
311946.002.4.76	D 360, H 100	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+
Diameter D 460 mm							
311518.002.8 .Q	D 460, H 120	LED	830	2150 lm	19 W	on/off	A++ A++
311518.002.8.76	D 460, H 120	LED	830	2150 lm	19 W	DALI	A++ A++
311518.002.6 .Q	D 460, H 120	LED	840	2150 lm	19 W	on/off	A++ A++
311518.002.6.76	D 460, H 120	LED	840	2150 lm	19 W	DALI	A++ A++
311947.002.2	D 460, H 120	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
311947.002.2.76	D 460, H 120	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
311947.002.4 *	D 460, H 120	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
311947.002.4.76	D 460, H 120	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
312244.002.2 *	D 460, H 120	LED ⁽¹⁾	830	2850 lm	27 W	on/off	A+ A+
312244.002.4 *	D 460, H 120	LED ⁽¹⁾	840	2950 lm	27 W	on/off	A+ A+
Diameter D 515 mm							
311555.002.8	D 515, H 150	LED	830	2650 lm	24 W	on/off	A++ A++
311555.002.8.76	D 515, H 150	LED	830	2650 lm	24 W	DALI	A++ A++
311555.002.6	D 515, H 150	LED	840	2650 lm	24 W	on/off	A++ A++
311555.002.6.76	D 515, H 150	LED	840	2650 lm	24 W	DALI	A++ A++
312092.002.2	D 515, H 150	LED ⁽¹⁾	830	3250 lm	33 W	on/off	A+ A+
312092.002.4	D 515, H 150	LED ⁽¹⁾	840	3250 lm	33 W	on/off	A+ A+
Diameter D 620 mm							
312096.002.2	D 620, H 160	LED ⁽¹⁾	830	3300 lm	33 W	on/off	A+ A+
312096.002.4	D 620, H 160	LED ⁽¹⁾	840	3300 lm	33 W	on/off	A+ A+
311557.002.8	D 620, H 160	LED	830	4300 lm	38 W	on/off	A++ A++
311557.002.8.76	D 620, H 160	LED	830	4300 lm	38 W	DALI	A++ A++
311557.002.6	D 620, H 160	LED	840	4300 lm	38 W	on/off	A++ A++
311557.002.6.76	D 620, H 160	LED	840	4300 lm	38 W	DALI	A++ A++

* With integrated phase cut dimming

Replacement diffusers			Price Category 13				
08-311623.012	D 300, H 90	Plastic (polycarbonate)					
08-311161.022	D 360, H 88	Plastic (polycarbonate)					
08-311165.022	D 460, H 113	Plastic (polycarbonate)					
08-311170.022	D 515, H 137	Plastic (polycarbonate)					
08-311173.022	D 620, H 150	Plastic (polycarbonate)					

Accessories | Decorative metal rings for the Flat Polymero series (IP 40)

Not suitable for luminaires with mains voltage LED (LED ⁽¹⁾)

Lacquered decorative rings are available in the following colours: 2 = white, 4 = silver, further RAL colours are available on request.

Metallised decorative rings are available in the following colours: 42 = nickel, matt

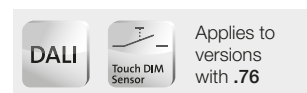
Decorative rings Flat Polymero® (IP 40)			Price Category 11				
981804.00X	D 380 mm	for diffuser D 360 mm					
981806.00X	D 551 mm	for diffuser D 515 mm					



With individual LEDs and separate converter - ideal for use in emergency lighting modules
LED rated life 50,000 hrs (L80, B10)



LED ⁽¹⁾ = with mains voltage boards also available for DALI control and with movement sensor (master and slave)
LED rated life 50,000 hrs (L70, B10)



Comparison LED vs. conventional lamps

LED 10 / 13,5 W ≈
1 x 26 W TC-D (34 W CB)

LED 14 W ≈
2 x 18 W TC-D (52 W CB)

LED 19 / 21 W ≈
2 x 26 W TC-D (68 W CB)

LED 24 / 27 W ≈
3 x 18 W TC-D (78 W CB)

LED 33 W ≈
3 x 26 W TC-D (102 W CB)

LED 38 W ≈
4 x 26 W TC-D (136 W CB)



Comparison LED vs. conventional lamps

LED 14 W ≈
2 x 18 W TC-D (52 W CB)

LED 19 W ≈
2 x 26 W TC-D (68 W CB)



Ceiling and wall luminaires | Series: Flat Polymero® movement sensor

Type of Protection: **IP 40**

Protection Class: I

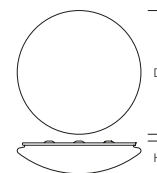
Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. With movement sensor.

LED included.

Functional parameters of the movement sensor installed on a ceiling at a height of max. 4 m or on a wall at a height of approx. 2.7 m:

- HF detector 5.8 GHz ISM frequency band
 - Sensitivity/Range: 1-8 m in diameter (20-100%), adjustable
 - Time control between 10 seconds and 30 minutes, adjustable
 - Detection angle: 120°
 - Can be used as master luminaire up to 800 W (ohmic load) 500 W (fluorescent lamp, LED) / 400 A, 200 µs
 - Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.
- Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EB	EEC
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Ceiling and wall luminaires with integrated movement sensor

Price Category 11

Diffuser: plastic (PMMA)

D 300 mm

311627.002.7.19	D 300, H 100	LED	830	1450 lm	14 W	on/off		A++ A++
311627.002.5.19 .Q	D 300, H 100	LED	840	1450 lm	14 W	on/off		A++ A++

D 360 mm

311523.002.7.19 .Q	D 360, H 100	LED	830	1450 lm	14 W	on/off	✓	A++ A++
311523.002.5.19 .Q	D 360, H 100	LED	840	1450 lm	14 W	on/off	✓	A++ A++

D 460 mm

311518.002.7.19	D 460, H 120	LED	830	2100 lm	19 W	on/off	✓	A++ A++
311518.002.5.19 .Q	D 460, H 120	LED	840	2100 lm	19 W	on/off	✓	A++ A++

D 515 mm

311525.002.7.19	D 515, H 150	LED	830	2150 lm	19 W	on/off		A++ A++
311525.002.5.19	D 515, H 150	LED	840	2150 lm	19 W	on/off		A++ A++

Diffuser: plastic (polycarbonate)

D 300 mm

311627.002.8.19	D 300, H 100	LED	830	1500 lm	14 W	on/off		A++ A++
311627.002.6.19	D 300, H 100	LED	840	1500 lm	14 W	on/off		A++ A++

D 360 mm

311523.002.8.19	D 360, H 100	LED	830	1500 lm	14 W	on/off		A++ A++
311523.002.6.19 .Q	D 360, H 100	LED	840	1500 lm	14 W	on/off		A++ A++

D 460 mm

311518.002.8.19	D 460, H 120	LED	830	2150 lm	19 W	on/off		A++ A++
311518.002.6.19	D 460, H 120	LED	840	2150 lm	19 W	on/off		A++ A++

D 515 mm

311525.002.8.19	D 515, H 150	LED	830	2200 lm	19 W	on/off		A++ A++
311525.002.6.19	D 515, H 150	LED	840	2200 lm	19 W	on/off		A++ A++

Replacement diffusers

Price Category 13

08-311623.002	D 300, H 90	Plastic (PMMA)
08-311623.012	D 300, H 90	Plastic (polycarbonate)
08-311161.012	D 360, H 88	Plastic (PMMA)
08-311161.022	D 360, H 88	Plastic (polycarbonate)
08-311165.012	D 460, H 113	Plastic (PMMA)
08-311165.022	D 460, H 113	Plastic (polycarbonate)
08-311170.012	D 515, H 137	Plastic (PMMA)
08-311170.022	D 515, H 137	Plastic (polycarbonate)

Accessories | Decorative metal rings for the Flat Polymero series (IP 40)

Not suitable for luminaires with mains voltage LED (LED ⁽¹⁾)

Lacquered decorative rings are available in the following colours: 2 = white, 4 = silver, further RAL colours are available on request.

Metallised decorative rings are available in the following colours: 42 = nickel, matt

Decorative rings Flat Polymero® (IP 40)

Price Category 11

981804.00X	D 380 mm	for diffuser D 360 mm
981805.00X	D 490 mm	for diffuser D 460 mm
981806.00X	D 551 mm	for diffuser D 515 mm

Ceiling and wall luminaires | Series: Flat Polymero®

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

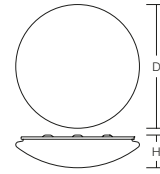
Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. With movement sensor.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Ceiling and wall luminaires with integrated movement sensor								
Diffuser: plastic (PMMA)								
Diameter D 300 mm								
311943.002.1.191	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	Slave	on/off	A+ A+
311943.002.3.191	D 300, H 100	LED ⁽¹⁾	840	1200 lm	13,5 W	Slave	on/off	A+ A+
311943.002.1.19	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	Master	on/off	A+ A+
311943.002.3.19	D 300, H 100	LED ⁽¹⁾	840	1200 lm	13,5 W	Master	on/off	A+ A+
Diameter D 360 mm								
311946.002.1.19	D 360, H 100	LED ⁽¹⁾	830	1850 lm	21 W	Master	on/off	A+ A+
311946.002.1.191	D 360, H 100	LED ⁽¹⁾	830	1850 lm	21 W	Slave	on/off	A+ A+
311946.002.3.19	D 360, H 100	LED ⁽¹⁾	840	1950 lm	21 W	Master	on/off	A+ A+
311946.002.3.191	D 360, H 100	LED ⁽¹⁾	840	1950 lm	21 W	Slave	on/off	A+ A+
Diffuser: plastic (polycarbonate)								
Diameter D 300 mm								
311943.002.2.191	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	Slave	on/off	A+ A+
311943.002.4.191	D 300, H 100	LED ⁽¹⁾	840	1250 lm	13,5 W	Slave	on/off	A+ A+
311943.002.2.19	D 300, H 100	LED ⁽¹⁾	830	1150 lm	13,5 W	Master	on/off	A+ A+
311943.002.4.19	D 300, H 100	LED ⁽¹⁾	840	1250 lm	13,5 W	Master	on/off	A+ A+
Diameter D 360 mm								
311946.002.2.19	D 360, H 100	LED ⁽¹⁾	830	1900 lm	21 W	Master	on/off	A+ A+
311946.002.2.191	D 360, H 100	LED ⁽¹⁾	830	1900 lm	21 W	Slave	on/off	A+ A+
311946.002.4.19	D 360, H 100	LED ⁽¹⁾	840	2000 lm	21 W	Master	on/off	A+ A+
311946.002.4.191	D 360, H 100	LED ⁽¹⁾	840	2000 lm	21 W	Slave	on/off	A+ A+
Replacement diffusers								
08-311623.002	D 300, H 90	Plastic (PMMA)						
08-311623.012	D 300, H 90	Plastic (polycarbonate)						
08-311161.012	D 360, H 88	Plastic (PMMA)						
08-311161.022	D 360, H 88	Plastic (polycarbonate)						

Price Category 11

Price Category 13



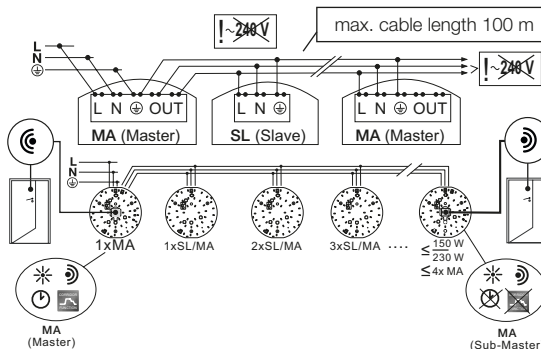
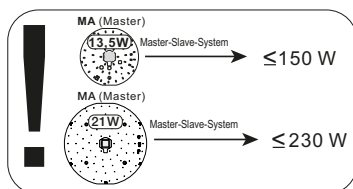
Applies to versions with .19



Installation example



Radial movement sensors in the master luminaires





Ceiling and wall luminaires | Series: Flat Polymero® IP44

Type of Protection: IP 43 ceiling mounting, IP 44 wall mounting

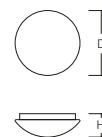
Protection Class: I, II = E27

Impact Protection: IK02 (PMMA), IK10 (polycarbonate)

Base: plastic. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shock-proof. Diffuser fastening: spring system.

LED included.

Available colour: 2 = white

Comparison
LED vs. conventional lamps

LED 13,5 W ≈

2 x 18 W TC-D (52 W CB)
1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 56 W ≈

4 x 26 W TC-D (136 W CB)



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Diffuser: plastic (PMMA)							
Diffuser D 305 mm							
221153.002.1 *	D 305, H 115	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off	A+ A+
221153.002.1.76	D 305, H 115	LED ⁽¹⁾	830	1250 lm	13,5 W	DALI	A+ A+
221153.002.3 *	D 305, H 115	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
221153.002.3.76	D 305, H 115	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
221023.002.1 .Q	D 305, H 115	1 x E27*	75 W			on/off	A,C,E A+
221105.002 .Q	D 305, H 115	2 x E27*	40 W			on/off	A,C,E A+
Diffuser D 420 mm							
221154.002.1 *	D 420, H 150	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
221154.002.1.76	D 420, H 150	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
221154.002.3 *	D 420, H 150	LED ⁽¹⁾	840	2050 lm	21 W	on/off	A+ A+
221154.002.3.76	D 420, H 150	LED ⁽¹⁾	840	2050 lm	21 W	DALI	A+ A+
221106.002 .Q	D 420, H 150	3 x E27*	40 W			on/off	A,C,E A+
Diffuser D 580 mm							
221172.002.1	D 580, H 160	LED ⁽¹⁾	830	3000 lm	33 W	on/off	A+ A+
221172.002.3	D 580, H 160	LED ⁽¹⁾	840	3000 lm	33 W	on/off	A+ A+
221157.002.1	D 580, H 160	LED	830	4550 lm	56 W	on/off	A++ A++
221157.002.1.76	D 580, H 160	LED	830	4550 lm	56 W	DALI	A++ A++
221157.002.3	D 580, H 160	LED	840	4700 lm	56 W	on/off	A++ A++
221157.002.3.76	D 580, H 160	LED	840	4700 lm	56 W	DALI	A++ A++
221114.002.1	D 580, H 160	3 x E27*	40 W			on/off	A,C,E A+
Diffuser: plastic (polycarbonate)							
Diffuser D 305 mm							
221153.002 .Q*	D 305, H 115	LED ⁽¹⁾	830	1350 lm	13,5 W	on/off	A+ A+
221153.002.76	D 305, H 115	LED ⁽¹⁾	830	1350 lm	13,5 W	DALI	A+ A+
221153.002.2 *	D 305, H 115	LED ⁽¹⁾	840	1350 lm	13,5 W	on/off	A+ A+
221153.002.2.76	D 305, H 115	LED ⁽¹⁾	840	1350 lm	13,5 W	DALI	A+ A+
221022.002 .Q	D 305, H 115	2 x E27*	60 W			on/off	A,C,E A+
221023.002 .Q	D 305, H 115	1 x E27*	75 W			on/off	A,C,E A+
Diffuser D 420 mm							
221154.002 *	D 420, H 150	LED ⁽¹⁾	830	2050 lm	21 W	on/off	A+ A+
221154.002.76	D 420, H 150	LED ⁽¹⁾	830	2050 lm	21 W	DALI	A+ A+
221154.002.2 *	D 420, H 150	LED ⁽¹⁾	840	2200 lm	21 W	on/off	A+ A+
221154.002.2.76	D 420, H 150	LED ⁽¹⁾	840	2200 lm	21 W	DALI	A+ A+
221026.002 .Q	D 420, H 150	3 x E27*	60 W			on/off	A,C,E A+
Diffuser D 580 mm							
221172.002	D 580, H 160	LED ⁽¹⁾	830	3250 lm	33 W	on/off	A+ A+
221172.002.2	D 580, H 160	LED ⁽¹⁾	840	3250 lm	33 W	on/off	A+ A+
221157.002	D 580, H 160	LED	830	5300 lm	56 W	on/off	A++ A++
221157.002.76	D 580, H 160	LED	830	5300 lm	56 W	DALI	A++ A++
221157.002.2	D 580, H 160	LED	840	5450 lm	56 W	on/off	A++ A++
221157.002.2.76	D 580, H 160	LED	840	5450 lm	56 W	DALI	A++ A++
221114.002	D 580, H 160	3 x E27*	75 W			on/off	A,C,E A+

* With integrated phase cut dimming

Replacement diffusers			Price Category 13
08-5145.002	D 305, H 97	Plastic (polycarbonate)	
08-5145.012	D 305, H 97	Plastic (PMMA)	
08-5146.002	D 420, H 130	Plastic (polycarbonate)	
08-5146.012	D 420, H 130	Plastic (PMMA)	
08-5229.002	D 580, H 140	Plastic (polycarbonate)	
08-5229.012	D 580, H 140	Plastic (PMMA)	

Ceiling and wall luminaires | Series: Flat Polymero® IP44 movement sensor

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

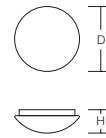
Protection Class: I

Impact Protection: IK02 (PMMA), IK10 (polycarbonate)

Functional parameters of the movement sensor installed on a ceiling at a height of max. 4 m or on a wall at a height of approx. 2.7 m:

- HF detector 5.8 GHz ISM frequency band
- Sensitivity/Range: 1-8 m in diameter (20-100%), adjustable
- Time control between 10 seconds and 30 minutes, adjustable
- Detection angle: 120°
- Can be used as master luminaire up to 800 W (ohmic load) 500 W (fluorescent lamp, LED) / 400 A, 200 µs
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 2 = white



Reference number	Dimensions	Lamp	dimm-able	EEC
Ceiling and wall luminaires with integrated movement sensor				
Diffuser: plastic (PMMA)				
Diffuser D 305 mm				
221126.002.4.19 .Q	D 305, H 115	1 x E27 [®] 60 W	on/off	C,E A+
Diffuser: plastic (polycarbonate)				
Diffuser D 305 mm				
221126.002.3.19	D 305, H 115	1 x E27 [®] 60 W	on/off	C,E A+

Ceiling and wall luminaires | Series: Flat Polymero® IP44

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

Protection Class: I

Impact Protection: IK02 (PMMA), IK10 (polycarbonate)

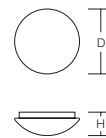
Base: plastic. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: spring system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Suitable for outdoor use to a limited extent only, as it is sensitive to all movements.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Ceiling and wall luminaires with integrated movement sensor							
Diffuser: plastic (PMMA)							
Diffuser D 305 mm							
221153.002.1.19	D 305, H 115	LED ⁽¹⁾	830	1250 lm	13,5 W	Master on/off	A+ A+
221153.002.1.191	D 305, H 115	LED ⁽¹⁾	830	1250 lm	13,5 W	Slave on/off	A+ A+
221153.002.3.19	D 305, H 115	LED ⁽¹⁾	840	1250 lm	13,5 W	Master on/off	A+ A+
221153.002.3.191	D 305, H 115	LED ⁽¹⁾	840	1250 lm	13,5 W	Slave on/off	A+ A+
Diffuser D 420 mm							
221154.002.1.19	D 420, H 150	LED ⁽¹⁾	830	1900 lm	21 W	Master on/off	A+ A+
221154.002.1.191	D 420, H 150	LED ⁽¹⁾	830	1900 lm	21 W	Slave on/off	A+ A+
221154.002.3.19	D 420, H 150	LED ⁽¹⁾	840	2050 lm	21 W	Master on/off	A+ A+
221154.002.3.191	D 420, H 150	LED ⁽¹⁾	840	2050 lm	21 W	Slave on/off	A+ A+
Diffuser: plastic (polycarbonate)							
Diffuser D 305 mm							
221153.002.19	D 305, H 115	LED ⁽¹⁾	830	1350 lm	13,5 W	Master on/off	A+ A+
221153.002.191	D 305, H 115	LED ⁽¹⁾	830	1350 lm	13,5 W	Slave on/off	A+ A+
221153.002.2.19	D 305, H 115	LED ⁽¹⁾	840	1350 lm	13,5 W	Master on/off	A+ A+
221153.002.2.191	D 305, H 115	LED ⁽¹⁾	840	1350 lm	13,5 W	Slave on/off	A+ A+
Diffuser D 420 mm							
221154.002.19	D 420, H 150	LED ⁽¹⁾	830	2050 lm	21 W	Master on/off	A+ A+
221154.002.191	D 420, H 150	LED ⁽¹⁾	830	2050 lm	21 W	Slave on/off	A+ A+
221154.002.2.19	D 420, H 150	LED ⁽¹⁾	840	2200 lm	21 W	Master on/off	A+ A+
221154.002.2.191	D 420, H 150	LED ⁽¹⁾	840	2200 lm	21 W	Slave on/off	A+ A+

Comparison
LED vs. conventional lamps

LED 13,5 W ≈
2 x 18 W TC-D (52 W CB)
1 x 26 W TC-D (34 W CB)

LED 21 W ≈
2 x 26 W TC-D (68 W CB)

 Applies to versions with **.19**



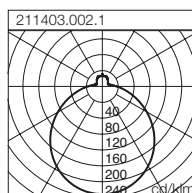


FLAT BASIC

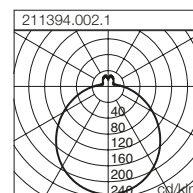
Ceiling and wall luminaires

- Very extensive line of wall and ceiling luminaires for interiors
- Mouth-blown three layer (triplex) opal glass available in satin finish (Basic)
- Triplex glass provides particularly even, soft and glare-free lighting
- Available in various diameters ranging from 200 to 630 mm
- Models with movement sensors are also available
- Optional decorative ring for additional individualization
- Two different light colours 830 and 840
- On/Off with integrated phase cut dimming

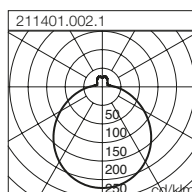
211403.002.1			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
2	3	3	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
3	4	6	



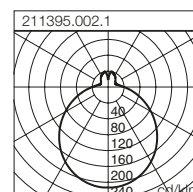
211394.002.1			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
7	10	13	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
10	14	23	



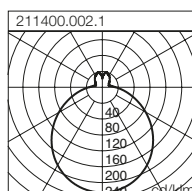
211401.002.1			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
4	6	7	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
5	8	13	



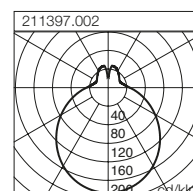
211395.002.1			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
13	19	25	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
18	27	45	



211400.002.1			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
6	9	12	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
9	13	21	



211397.002			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
18	27	36	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
26	38	64	



Ceiling and wall luminaires | Series: Flat Basic

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

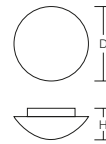
Protection Class: I, II = E27

Impact Protection: IK02 (Diffuser fastening: spring system), IK03 (Diffuser fastening: bayonet fixing)

Base: plastic. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: spring system or bayonet fixing. For the version with bayonet fastening, a decorative ring is not possible.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser fastening: spring system							
Glass D 200 mm							
211396.002.1	D 200, H 106	LED ⁽¹⁾	830	390 lm	9 W	on/off	A,A+ A+
211396.002	D 200, H 106	LED ⁽¹⁾	840	380 lm	9 W	on/off	A,A+ A+
211004.002 .Q	D 200, H 106	1 x E27*	60 W			on/off	A,C,E A+
Glass D 250 mm							
211397.002.1	D 250, H 106	LED ⁽¹⁾	830	430 lm	9 W	on/off	A,A+ A+
211397.002	D 250, H 106	LED ⁽¹⁾	840	420 lm	9 W	on/off	A,A+ A+
211005.002 .Q	D 250, H 106	1 x E27*	60 W			on/off	A,C,E A+
Glass D 300 mm							
211395.002 .Q	D 300, H 106	LED ⁽¹⁾	830	550 lm	9 W	on/off	A+ A+
211395.002.1 .Q	D 300, H 106	LED ⁽¹⁾	840	580 lm	9 W	on/off	A+ A+
211006.002 .Q	D 300, H 106	1 x E27*	75 W			on/off	A,C,E A+
Glass D 370 mm							
211394.002 .Q*	D 370, H 118	LED	830	1000 lm	12,1 W	on/off	A++ A++
211394.002.1 .Q*	D 370, H 118	LED	840	1100 lm	12,1 W	on/off	A+,A++ A++
211399.002 .Q**	D 370, H 118	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
211399.002.76	D 370, H 118	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
211399.002.1 .Q**	D 370, H 118	LED ⁽¹⁾	840	1150 lm	13,5 W	on/off	A+ A+
211399.002.1.76	D 370, H 118	LED ⁽¹⁾	840	1150 lm	13,5 W	DALI	A+ A+
211059.002 .Q	D 370, H 118	2 x E27*	60 W			on/off	A,C,E A+
211060.002 .Q	D 370, H 118	1 x E27*	100 W			on/off	A,C,E A+
Glass D 420 mm							
211400.002 .Q**	D 420, H 124	LED ⁽¹⁾	830	1200 lm	13,5 W	on/off	A+ A+
211400.002.76	D 420, H 124	LED ⁽¹⁾	830	1200 lm	13,5 W	DALI	A+ A+
211400.002.1.76	D 420, H 124	LED ⁽¹⁾	840	1200 lm	13,5 W	DALI	A+ A+
211400.002.1 .Q**	D 420, H 124	LED ⁽¹⁾	840	1200 lm	13,5 W	on/off	A+ A+
211011.002 .Q	D 420, H 124	2 x E27*	75 W			on/off	A,C,E A+
Diffuser fastening: bayonet fixing							
Glass D 500 mm							
211401.002 .Q**	D 500, H 150	LED ⁽¹⁾	830	2200 lm	21 W	on/off	A+ A+
211401.002.76	D 500, H 150	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
211401.002.1 .Q**	D 500, H 150	LED ⁽¹⁾	840	2200 lm	21 W	on/off	A+ A+
211401.002.1.76	D 500, H 150	LED ⁽¹⁾	840	2200 lm	21 W	DALI	A+ A+
211071.002	D 500, H 150	3 x E27*	60 W			on/off	A,C,E A+
Glass D 630 mm							
211425.002	D 630, H 160	LED ⁽¹⁾	830	2800 lm	33 W	on/off	A+ A+
211425.002.1	D 630, H 160	LED ⁽¹⁾	840	2800 lm	33 W	on/off	A+ A+
211403.002	D 630, H 160	LED	830	4400 lm	56 W	on/off	A++ A++
211403.002.76	D 630, H 160	LED	830	4400 lm	56 W	DALI	A++ A++
211403.002.1	D 630, H 160	LED	840	4650 lm	56 W	on/off	A++ A++
211403.002.1.76	D 630, H 160	LED	840	4650 lm	56 W	DALI	A++ A++

* Dimmable versions are available on request | ** With integrated phase cut dimming

Replacement glasses			Price Category 13				
05-211004.002	D 200, H 96	for diffuser fastening: spring system					
05-211005.002	D 250, H 96	for diffuser fastening: spring system					
05-211006.002	D 300, H 94	for diffuser fastening: spring system					
05-211059.002	D 370, H 108	for diffuser fastening: spring system					
05-211011.002	D 420, H 114	for diffuser fastening: spring system					
05-211071.002	D 500, H 129	for diffuser fastening: bayonet fixing					
05-211250.012	D 630, H 144	for diffuser fastening: bayonet fixing					

Accessories | Decorative rings, metal, for series: Flat Basic

Available colours decorative ring, painted: 2 = white. Other RAL colours available on request

Available colours decorative ring, metallised: 4 = chrome, 42 = nickel, matt, 5 = brass

Decorative rings metal			Price Category 11				
981096.00X	D 220, H 10	for glass D 200					
981097.00X	D 270, H 10	for glass D 250					
981098.00X	D 320, H 10	for glass D 300					
981129.00X	D 390, H 10	for glass D 370					
981100.00X	D 440, H 10	for glass D 420					


**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

LED 12,1 / 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 56 W ≈

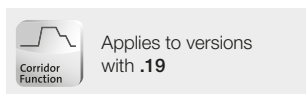
4 x 26 W TC-D (136 W CB)





Comparison LED vs. conventional lamps

LED 13,5 W ≈
1 x 26 W TC-D (34 W CB)



Applies to versions
with **.19**



Ceiling and wall luminaires | Series: Flat Basic

Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

Protection Class: I

Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: spring system.

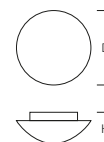
With integrated HF movement sensor.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated Corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 W)
- Only suitable for outdoor use to a limited extent, as it is sensitive to all movements.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
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Ceiling and wall luminaires with integrated movement sensor

Price Category 11

Diffuser fastening: spring system

Glass D 370 mm

211399.002.19	D 370, H 118	LED ⁽¹⁾	830	1150 lm	13,5 W	Master	on/off	A+ A+
211399.002.191	D 370, H 118	LED ⁽¹⁾	830	1150 lm	13,5 W	Slave	on/off	A+ A+
211399.002.1.19	D 370, H 118	LED ⁽¹⁾	840	1150 lm	13,5 W	Master	on/off	A+ A+
211399.002.1.191	D 370, H 118	LED ⁽¹⁾	840	1150 lm	13,5 W	Slave	on/off	A+ A+
211344.002.3.19.Q	D 370, H 118	1 x E27*	60 W			Yes	on/off	E

Glass D 420 mm

211400.002.19	D 420, H 124	LED ⁽¹⁾	830	1200 lm	13,5 W	Master	on/off	A+ A+
211400.002.191	D 420, H 124	LED ⁽¹⁾	830	1200 lm	13,5 W	Slave	on/off	A+ A+
211400.002.1.19	D 420, H 124	LED ⁽¹⁾	840	1200 lm	13,5 W	Master	on/off	A+ A+
211400.002.1.191	D 420, H 124	LED ⁽¹⁾	840	1200 lm	13,5 W	Slave	on/off	A+ A+
211355.002.3.19	D 420, H 124	1 x E27*	60 W			Yes	on/off	E A+

Replacement glasses

Price Category 13

05-211059.002	D 370, H 108	for diffuser fastening: spring system
05-211011.002	D 420, H 114	for diffuser fastening: spring system

Accessories | Decorative rings, metal, for series: Flat Basic

Available colours decorative ring, painted: 2 = white. Other RAL colours available on request

Available colours decorative ring, metallised: 4 = chrome, 42 = nickel, matt, 5 = brass

Decorative rings metal

Price Category 11

981129.00X	D 390, H 10	for glass D 370
981100.00X	D 440, H 10	for glass D 420



The application image shows:
Flat Basic



Comparison LED vs. conventional lamps

LED 10 W ≈
1 x 18 W TC-D (26 W CB)

LED 19 W ≈
2 x 18 W TC-D (52 W CB)

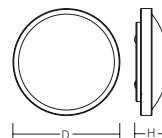
Ceiling and wall luminaires | Series: Santos Kreis

Type of Protection: IP 20
Protection Class: I

Base: white coated metal. Glass: domed, opal, frosted. Decorative ring, metal. Glass and decorative ring fastening: spring system.

LED included.

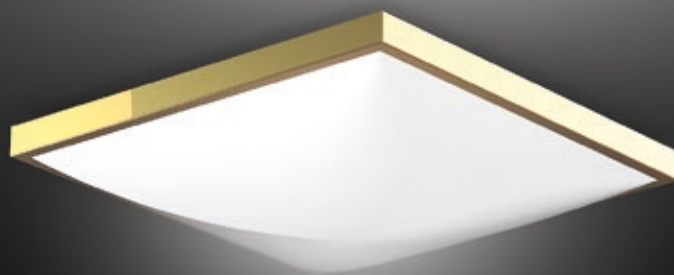
Available colours (X): 42 = nickel matt, 44 = chrome coloured, 5 = brass



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diameter D 310 mm							
311879.00X	D 310, H 87	LED	830	680 lm	10 W	on/off	A++ A++
311879.00X.1	D 310, H 87	LED	840	680 lm	10 W	on/off	A++ A++
311488.00X	D 310, H 87	1 x E27*	60 W			on/off	A,C,E A+
Diameter D 410 mm							
311880.00X	D 410, H 95	LED	830	1550 lm	19 W	on/off	A++ A++
311880.00X.1	D 410, H 95	LED	840	1550 lm	19 W	on/off	A++ A++
311489.00X	D 410, H 95	2 x E27*	60 W			on/off	A,C,E A+
Replacement glasses							
05-311488.012	D 300, H 60						
05-311489.012	D 400, H 70						

Price Category 11

Price Category 13



Ceiling and wall luminaires | Series: Santos Quadrat

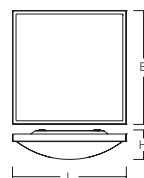
Type of Protection: IP 20

Protection Class: I

Base: white coated metal. Glass: domed, opal, frosted. Decorative metal frame. Glass and decorative frame fastening system: springs.

LED included.

Available colours (X): 42 = nickel matt, 44 = chrome coloured, 5 = brass



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 11							
Luminaires L 310 x B 310 mm							
311881.00X	L 310, B 310, H 95	LED	830	750 lm	10 W	on/off	A++ A++
311881.00X.1	L 310, B 310, H 95	LED	840	750 lm	10 W	on/off	A++ A++
311491.00X	L 310, B 310, H 95	1 x E27*	60 W			on/off	A,C,E A+
Luminaires L 410 x B 410 mm							
311882.00X	L 410, B 410, H 105	LED	830	1500 lm	19 W	on/off	A++ A++
311882.00X.1	L 410, B 410, H 105	LED	840	1500 lm	19 W	on/off	A++ A++
311492.00X	L 410, B 410, H 105	2 x E27*	60 W			on/off	A,C,E A+
Replacement glasses							
Price Category 13							
05-311491.012	L 292, B 292, H 52						
05-311492.012	L 392, B 392, H 69						

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 18 W TC-D (26 W CB)

LED 19 W ≈

2 x 18 W TC-D (52 W CB)

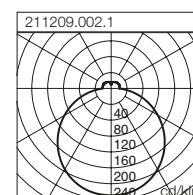


FLAT KREIS

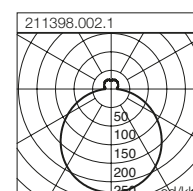
Ceiling and wall luminaires

- Mouth-blown three layer (triplex) opal glass satin finish
- Triplex glass provides particularly even, soft and glare-free lighting
- Available in various diameters ranging from 250 to 630 mm
- Flat design
- Diffuser fastening: spring system or bayonet fixing
- Two different light colours 830 and 840
- On/Off with integrated phase cut dimming

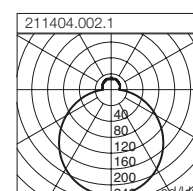
211209.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
7	10	13
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
9	14	23



211398.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



211404.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Ceiling and wall luminaires | Series: Flat Kreis Glas

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

Protection Class: I

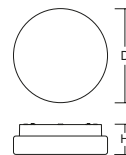
Impact Protection: IK02 (Diffuser fastening: spring system), IK03 (Diffuser fastening: bayonet fixing)

Base: plastic. Diffuser: mouth-blown opal glass, satin finish.

Diffuser fastening: spring system or bayonet fixing.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser fastening: spring system							
Glass D 250 mm							
211207.002	D 250, H 75	LED ⁽¹⁾	830	560 lm	9 W	on/off	A+ A+
211207.002.1	D 250, H 75	LED ⁽¹⁾	840	580 lm	9 W	on/off	A+ A+
Glass D 300 mm							
211209.002 *	D 300, H 75	LED ⁽¹⁾	830	1050 lm	13,5 W	on/off	A+ A+
211209.002.76	D 300, H 75	LED ⁽¹⁾	830	1050 lm	13,5 W	DALI	A+ A+
211209.002.1 *	D 300, H 75	LED ⁽¹⁾	840	1100 lm	13,5 W	on/off	A+ A+
211209.002.1.76	D 300, H 75	LED ⁽¹⁾	840	1100 lm	13,5 W	DALI	A+ A+
Diffuser fastening: bayonet fixing							
Glass D 500 mm							
211398.002 *	D 500, H 100	LED ⁽¹⁾	830	2100 lm	21 W	on/off	A+ A+
211398.002.76	D 500, H 100	LED ⁽¹⁾	830	2100 lm	21 W	DALI	A+ A+
211398.002.1 *	D 500, H 100	LED ⁽¹⁾	840	1900 lm	21 W	on/off	A+ A+
211398.002.1.76	D 500, H 100	LED ⁽¹⁾	840	1900 lm	21 W	DALI	A+ A+
Glass D 630 mm							
211426.002	D 630, H 110	LED ⁽¹⁾	830	2850 lm	33 W	on/off	A+ A+
211426.002.1	D 630, H 110	LED ⁽¹⁾	840	2850 lm	33 W	on/off	A+ A+
211404.002	D 630, H 110	LED	830	4400 lm	56 W	on/off	A++ A++
211404.002.76	D 630, H 110	LED	830	4400 lm	56 W	DALI	A++ A++
211404.002.1	D 630, H 110	LED	840	4650 lm	56 W	on/off	A++ A++
211404.002.1.76	D 630, H 110	LED	840	4650 lm	56 W	DALI	A++ A++

* With integrated phase cut dimming

Replacement glasses							
05-2002.002	D 250, H 59						
05-2003.002	D 300, H 59						
05-2005.002	D 500, H 79						
05-2007.002	D 630, H 89						

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 56 W ≈

4 x 26 W TC-D (136 W CB)


 Applies to
versions
with **.76**

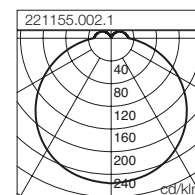


FLAT KREIS

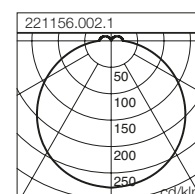
Ceiling and wall luminaires

- Flat design
- The opal plastic cover ensures homogeneous, soft and glare-free lighting
- Available in 3 different diameters
- Type of protection up to IP 44
- Two different light colours 830 and 840
- On/Off with integrated phase cut dimming

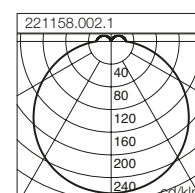
221155.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
8	12	16
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
12	17	29



221156.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	12	19



221158.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



Ceiling and wall luminaires | Series: Flat Kreis Kunststoff

Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

Protection Class: I

Impact Protection: IK08

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
D 262 mm							
221155.002.76	D 262, H 70	LED ⁽¹⁾	830	900 lm	13,5 W	DALI	A+ A+
221155.002.1.76	D 262, H 70	LED ⁽¹⁾	840	900 lm	13,5 W	DALI	A+ A+
221155.002 *	D 262, H 70	LED ⁽¹⁾	830	900 lm	13,5 W	on/off	A+ A+
221155.002.1 *	D 262, H 70	LED ⁽¹⁾	840	900 lm	13,5 W	on/off	A+ A+
D 380 mm							
221156.002 *	D 380, H 78	LED ⁽¹⁾	830	1200 lm	21 W	on/off	A+ A+
221156.002.76	D 380, H 78	LED ⁽¹⁾	830	1200 lm	21 W	DALI	A+ A+
221156.002.1 *	D 380, H 78	LED ⁽¹⁾	840	1300 lm	21 W	on/off	A+ A+
221156.002.1.76	D 380, H 78	LED ⁽¹⁾	840	1300 lm	21 W	DALI	A+ A+
D 537 mm							
221173.002	D 537, H 100	LED ⁽¹⁾	830	2400 lm	33 W	on/off	A+ A+
221173.002.1	D 537, H 100	LED ⁽¹⁾	840	2400 lm	33 W	on/off	A+ A+
221158.002	D 537, H 100	LED	830	3300 lm	56 W	on/off	A++ A++
221158.002.76	D 537, H 100	LED	830	3300 lm	56 W	DALI	A++ A++
221158.002.1	D 537, H 100	LED	840	3500 lm	56 W	on/off	A++ A++
221158.002.1.76	D 537, H 100	LED	840	3500 lm	56 W	DALI	A++ A++

* With integrated phase cut dimming

Price Category 11

Replacement diffusers

08-221057.002	D 262, H 58
08-221061.002	D 381, H 60
08-221083.002	D 534, H 77

Price Category 13

Comparison LED vs. conventional lamps

LED 13,5 / 21 W ≈

1 x 26 W TC-D (34 W CB)

LED 33 W ≈

2 x 26 W TC-D (68 W CB)

LED 56 W ≈

3 x 26 W TC-D (102 W CB)



Applies to
versions
with **.76**



Comparison LED vs. conventional lamps

LED 9 W ≈

1 x 13 W TC-D (19 W CB)
1 x 18 W TC-D (26 W CB)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

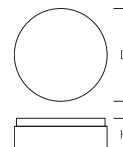
Ceiling and wall luminaires | Series: Kreis

Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting
Protection Class: I, II = E27
Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish.
Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Glass D 180 mm							
211414.002	D 180, H 100	LED ⁽¹⁾	830	400 lm	9 W	on/off	A,A+ A+
211414.002.1	D 180, H 100	LED ⁽¹⁾	840	410 lm	9 W	on/off	A,A+ A+
21116.00X .Q	D 180, H 100	1 x E27*	60 W			on/off	A,C,E A+
Glass D 230 mm							
211415.002	D 230, H 110	LED ⁽¹⁾	830	680 lm	9 W	on/off	A+ A+
211415.002.1	D 230, H 110	LED ⁽¹⁾	840	720 lm	9 W	on/off	A+ A+
21101.00X .Q	D 230, H 110	1 x E27*	75 W			on/off	A,C,E A+
Glass D 280 mm							
211416.002 *	D 280, H 120	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
211416.002.1 *	D 280, H 120	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
21171.00X	D 280, H 120	1 x E27*	100 W			on/off	A,C,E A+
Glass D 330 mm							
211417.002 *	D 330, H 120	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off	A+ A+
211417.002.1 *	D 330, H 120	LED ⁽¹⁾	840	1300 lm	13,5 W	on/off	A+ A+
21117.00X	D 330, H 120	2 x E27*	75 W			on/off	A,C,E A+

* With integrated phase cut dimming

Replacement glasses		Price Category 13	
05-21116	D 180, H 84		
05-21101	D 230, H 90		
05-21102	D 280, H 99		
05-21117	D 330, H 104		



Ceiling and wall luminaires | Series: Kreis

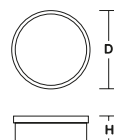
Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting
Protection Class: I, II = E27

Impact Protection: IK08

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Luminaires D 200 mm							
221168.002	D 200, H 100	LED ⁽¹⁾	830	680 lm	9 W	on/off	A+ A+
221168.002.1	D 200, H 100	LED ⁽¹⁾	840	720 lm	9 W	on/off	A+ A+
22141.00X .Q	D 200, H 100	1 x E27*	60 W			on/off	A,C,E A+
Luminaires D 260 mm							
221169.002 *	D 260, H 110	LED ⁽¹⁾	830	1100 lm	13,5 W	on/off	A+ A+
221169.002.1 *	D 260, H 110	LED ⁽¹⁾	840	1200 lm	13,5 W	on/off	A+ A+
22142.00X .Q	D 260, H 110	2 x E27*	60 W			on/off	A,C,E A+
22150.00X .Q	D 260, H 110	1 x E27*	100 W			on/off	A,C,E A+
* With integrated phase cut dimming							
Replacement diffusers							
08-22141	D 201, H 88						
08-22142	D 262, H 88						

Price Category 11

Price Category 13

Comparison LED vs. conventional lamps

LED 9 W ≈

1 x 18 W TC-D (26 W CB)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 13 W TC-D (19 W CB)

LED 13,5 / 18 W ≈
1 x 26 W TC-D (34 W CB)

Ceiling and wall luminaires | Series: DKN® Kreis silk finish

Type of Protection: **IP 40**

Protection Class: I

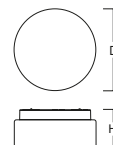
Impact Protection: IK02

Base: metal, galvanised. Opal glass: mouth blown, silk finish.

Glass fastening: DKN system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 250 mm							
10322.002.1	D 250, H 100	LED ⁽¹⁾	830	450 lm	9 W	on/off	A+ A+
10322.002	D 250, H 100	LED ⁽¹⁾	840	460 lm	9 W	on/off	A+ A+
10320.002	D 250, H 100	1 x E27®	60 W			on/off	A,C,E A+
Glass D 300 mm							
10337.002.1	D 300, H 100	LED ⁽¹⁾	830	900 lm	18 W	on/off	A+ A+
10337.002	D 300, H 100	LED ⁽¹⁾	840	900 lm	18 W	on/off	A+ A+
10330.002	D 300, H 100	1 x E27®	75 W			on/off	A,C,E A+
Glass D 370 mm							
10345.002.1 *	D 370, H 105	LED ⁽¹⁾	830	1100 lm	13,5 W	on/off	A+ A+
10345.002 *	D 370, H 105	LED ⁽¹⁾	840	1100 lm	13,5 W	on/off	A+ A+
10340.002	D 370, H 105	2 x E27®	75 W			on/off	A,C,E A+
* With integrated phase cut dimming							
Replacement glasses							
05-10320	D 250, H 95						
05-10330	D 300, H 95						
05-10340	D 370, H 100						

Ceiling and wall luminaires | Series: DKN® Classic

 Type of Protection: **IP 40**

Protection Class: I

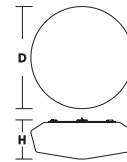
Impact Protection: IK02

Base: metal, galvanised. Opal glass: mouth blown, silk finish.

Glass fastening: DKN system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 250 mm							
10122.002.1	D 250, H 105	LED ⁽¹⁾	830	400 lm	9 W	on/off	A+ A+
10122.002	D 250, H 105	LED ⁽¹⁾	840	410 lm	9 W	on/off	A+ A+
10120.002	D 250, H 105	1 x E27*	60 W			on/off	A,C,E A+
Glass D 300 mm							
10138.002.1	D 300, H 115	LED ⁽¹⁾	830	850 lm	18 W	on/off	A+ A+
10138.002	D 300, H 115	LED ⁽¹⁾	840	940 lm	18 W	on/off	A+ A+
10130.002	D 300, H 115	1 x E27*	75 W			on/off	A,C,E A+
Glass D 350 mm							
10131.002	D 350, H 120	2 x E27*	60 W			on/off	A,C,E A+
Replacement glasses							
05-10120	D 250, H 100						
05-10130	D 300, H 110						
05-10131	D 350, H 115						

Price Category 11

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

LED 18 W ≈

1 x 26 W TC-D (34 W CB)

Ceiling and wall luminaires | Series: DKN® Quadrat

 Type of Protection: **IP 40**

Protection Class: I

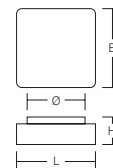
Impact Protection: IK02

Base: metal, galvanised. Opal glass: mouth blown, silk finish.

Glass fastening: DKN system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass L 235 x B 235 mm							
10422.002.1	L 235, B 235, H 100	LED ⁽¹⁾	830	430 lm	9 W	on/off	A+ A+
10422.002	L 235, B 235, H 100	LED ⁽¹⁾	840	430 lm	9 W	on/off	A+ A+
10420.002	L 235, B 235, H 100	1 x E27*	60 W			on/off	A,C,E A+
Glass L 280 x B 280 mm							
10434.002.1	L 280, B 280, H 105	LED ⁽¹⁾	830	860 lm	18 W	on/off	A+ A+
10434.002	L 280, B 280, H 105	LED ⁽¹⁾	840	860 lm	18 W	on/off	A+ A+
10430.002	L 280, B 280, H 105	1 x E27*	75 W			on/off	A,C,E A+
Glass L 360 x B 360 mm							
10445.002.1 *	L 360, B 360, H 110	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
10445.002 *	L 360, B 360, H 110	LED ⁽¹⁾	840	1150 lm	13,5 W	on/off	A+ A+
Replacement glasses							
05-10420	L 235, B 235, H 95						
05-10430	L 280, B 280, H 100						
05-10442	L 360, B 360, H 100						

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

LED 13,5 / 18 W ≈

1 x 26 W TC-D (34 W CB)

* With integrated phase cut dimming

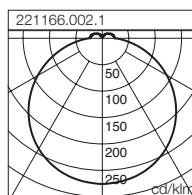


FLAT QUADRAT

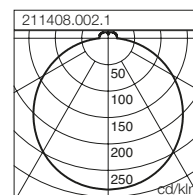
Ceiling and wall luminaires

- High protection type versions allow for outdoor applications; since it is proof against dust and flies - this luminaire is ideal for hard-to-access installations
- Diffusers made of mouth blown opal glass with satin finish or shockproof plastic (PP)
- Flat design
- Easy to install thanks to tool-free spring fastening system
- Two different light colours 830 and 840
- On/Off with integrated phase cut dimming

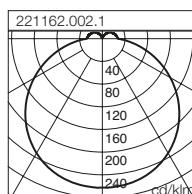
221166.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



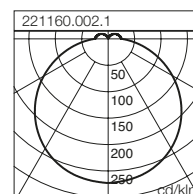
211408.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
8	11	15
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
11	16	26



221162.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



221160.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
9	14	18
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
13	19	32



Ceiling and wall luminaires | Series: Flat Quadrat Glas

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

Protection Class: I

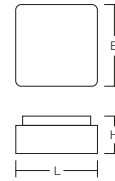
Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish.

Diffuser fastening: spring system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass L 250 x B 250 mm							
211407.002	L 250, B 250, H 75	LED ⁽¹⁾	830	400 lm	9 W	on/off	A,A+ A+
211407.002.1	L 250, B 250, H 75	LED ⁽¹⁾	840	400 lm	9 W	on/off	A,A+ A+
Glass L 300 x B 300 mm							
211408.002 *	L 300, B 300, H 75	LED ⁽¹⁾	830	900 lm	13,5 W	on/off	A+ A+
211408.002.1 *	L 300, B 300, H 75	LED ⁽¹⁾	840	960 lm	13,5 W	on/off	A+ A+
* With integrated phase cut dimming							
Replacement glasses							
05-211223.002	L 250, B 250, H 59						
05-211227.002	L 300, B 300, H 59						

Price Category 11

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

Ceiling and wall luminaires | Series: Flat Quadrat Kunststoff

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

Protection Class: I

Impact Protection: IK06

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Luminaires L 270 x B 270 mm							
221160.002 *	L 270, B 270, H 70	LED ⁽¹⁾	830	800 lm	13,5 W	on/off	A+ A+
221160.002.1 *	L 270, B 270, H 70	LED ⁽¹⁾	840	800 lm	13,5 W	on/off	A+ A+
Luminaires L 380 x B 380 mm							
221161.002 *	L 380, B 380, H 78	LED ⁽¹⁾	830	1500 lm	21 W	on/off	A+ A+
221161.002.76	L 380, B 380, H 78	LED ⁽¹⁾	830	1500 lm	21 W	DALI	A+ A+
221161.002.1 *	L 380, B 380, H 78	LED ⁽¹⁾	840	1500 lm	21 W	on/off	A+ A+
221161.002.1.76	L 380, B 380, H 78	LED ⁽¹⁾	840	1500 lm	21 W	DALI	A+ A+
221166.002	L 380, B 380, H 78	LED	830	2300 lm	37 W	on/off	A++ A++
221166.002.1	L 380, B 380, H 78	LED	840	2300 lm	37 W	on/off	A++ A++
Luminaires L 470 x B 470 mm							
221162.002	L 470, B 470, H 100	LED	830	3500 lm	54 W	on/off	A++ A++
221162.002.76	L 470, B 470, H 100	LED	830	3500 lm	54 W	DALI	A++ A++
221162.002.1	L 470, B 470, H 100	LED	840	3700 lm	54 W	on/off	A++ A++
221162.002.1.76	L 470, B 470, H 100	LED	840	3700 lm	54 W	DALI	A++ A++
* With integrated phase cut dimming							
Replacement diffusers							
08-221069.002	L 270, B 270, H 58						
08-221073.002	L 380, B 380, H 62						
08-221080.002	L 470, B 470, H 77						

Price Category 11

**Comparison
LED vs. conventional lamps**
LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

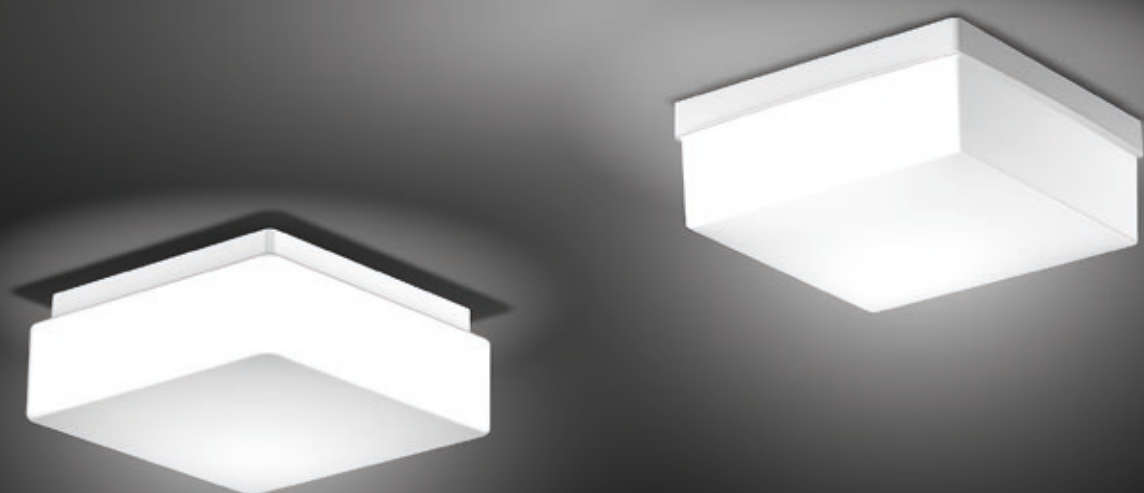
2 x 18 W TC-D (52 W CB)

LED 37 W ≈

2 x 26 W TC-T (58 W CB)

LED 54 W ≈

2 x 42 W TC-TEL (90 W EB)



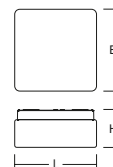
Ceiling and wall luminaires | Series: Quadrat

Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting
Protection Class: I, II = E27
Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish.
Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Glass L 190 x B 190 mm, round glass neck							

21127.00X .Q	L 190, B 190, H 100	1 x E27®	60 W			on/off	A,C,E A+
Glass L 240 x B 240 mm, round glass neck							
211410.002	L 240, B 240, H 110	LED ⁽¹⁾	830	400 lm	9 W	on/off	A,A+ A+
211410.002.1	L 240, B 240, H 110	LED ⁽¹⁾	840	430 lm	9 W	on/off	A,A+ A+
21128.00X .Q	L 240, B 240, H 110	1 x E27®	75 W			on/off	A,C,E A+
Glass L 280 x B 280 mm, round glass neck							
211412.002 *	L 280, B 280, H 120	LED ⁽¹⁾	830	1000 lm	13,5 W	on/off	A+ A+
211412.002.1 *	L 280, B 280, H 120	LED ⁽¹⁾	840	1100 lm	13,5 W	on/off	A+ A+
21129.00X	L 280, B 280, H 120	2 x E27®	60 W			on/off	C,E A+

* With integrated phase cut dimming

Replacement glasses			Price Category 13				
05-21127	L 190, B 190, H 86	Glass neck, round					
05-21128	L 240, B 240, H 95	Glass neck, round					
05-21129	L 280, B 280, H 106	Glass neck, round					

Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 13 W TC-D (19 W CB)

LED 13,5 W ≈
1 x 26 W TC-D (34 W CB)

Ceiling and wall luminaires | Series: Quadrat

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

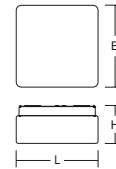
Protection Class: I, II = E27

Impact Protection: IK02

Base: plastic. Opal glass: mouth blown, silk finish. Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass L 240 x B 240 mm, round glass neck							
201410.002	L 240, B 240, H 110	LED ⁽¹⁾	830	400 lm	9 W	on/off	A,A+ A+
201410.002.1	L 240, B 240, H 110	LED ⁽¹⁾	840	430 lm	9 W	on/off	A,A+ A+
20128.00X .Q	L 240, B 240, H 110	1 x E27*	75 W			on/off	A,C,E A+
Glass L 280 x B 280 mm, round glass neck							
201412.002 *	L 280, B 280, H 120	LED ⁽¹⁾	830	1000 lm	13,5 W	on/off	A+ A+
201412.002.1 *	L 280, B 280, H 120	LED ⁽¹⁾	840	1100 lm	13,5 W	on/off	A+ A+
20129.00X .Q	L 280, B 280, H 120	2 x E27*	60 W			on/off	A,C,E A+
20172.00X	L 280, B 280, H 120	1 x E27*	100 W			on/off	A,C,E A+
* With integrated phase cut dimming							
Replacement glasses							
05-20128	L 240, B 240, H 95	Glass neck, round					
05-20129	L 280, B 280, H 106	Glass neck, round					

Ceiling and wall luminaires | Series: Quadrat

 Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting

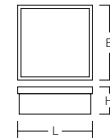
Protection Class: I, II = E27

Impact Protection: IK08

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Luminaires L 226 x B 226 mm							
221164.002	L 226, B 226, H 110	LED ⁽¹⁾	830	410 lm	9 W	on/off	A,A+ A+
221164.002.1	L 226, B 226, H 110	LED ⁽¹⁾	840	450 lm	9 W	on/off	A,A+ A+
22146.00X .Q	L 226, B 226, H 110	1 x E27*	75 W			on/off	A,C,E A+
Luminaires L 270 x B 270 mm							
221165.002 *	L 270, B 270, H 115	LED ⁽¹⁾	830	1000 lm	13,5 W	on/off	A+ A+
221165.002.1 *	L 270, B 270, H 115	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off	A+ A+
22130.00X .Q	L 270, B 270, H 115	1 x E27*	100 W			on/off	A,C,E A+
22148.00X .Q	L 270, B 270, H 115	2 x E27*	60 W			on/off	A,C,E A+
* With integrated phase cut dimming							
Replacement diffusers							
08-22146	L 226, B 226, H 88						
08-22148	L 270, B 270, H 94						

**Comparison
LED vs. conventional lamps**
LED 9 W ≈
1 x 13 W TC-D (19 W CB)

LED 13,5 W ≈
1 x 26 W TC-D (34 W CB)



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 18 W TC-D (26 W CB)

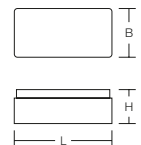
Ceiling and wall luminaires | Series: Rechteck

Type of Protection: **IP 43** ceiling mounting, **IP 44** wall mounting
Protection Class: I, II = E27
Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish.
Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							Price Category 11
211421.002	L 220, B 120, H 105	LED	830	850 lm	9 W	on/off	A++ A++
211421.002.1	L 220, B 120, H 105	LED	840	850 lm	9 W	on/off	A++ A++
21146.00X.Q	L 220, B 120, H 105	1 x E27®	60 W			on/off	A,C,E A+
211422.002	L 315, B 85, H 90	LED	830	900 lm	9 W	on/off	A+,A++ A++
211422.002.1	L 315, B 85, H 90	LED	840	900 lm	9 W	on/off	A+,A++ A++
Replacement glasses							Price Category 13
05-21136	L 220, B 120, H 82	Opal glass, satin finish					
05-21157	L 315, B 85, H 71	Opal glass, satin finish					
LED conversion kit							Price Category 11
982175.002	L 164, B 87, H 44	1 x LED 10,3 W 3000 K - 1200 lm					
982175.002.1	L 164, B 87, H 44	1 x LED 10,3 W 4000 K - 1200 lm					



Ceiling and wall luminaires | Series: Rechteck

Type of Protection: **IP 44**

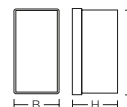
Protection Class: I, II = E14/E27

Impact Protection: IK06

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							Price Category 11
221170.002	L 215, B 115, H 110	LED	830	900 lm	9 W	on/off	A++ A++
221170.002.1	L 215, B 115, H 110	LED	840	900 lm	9 W	on/off	A++ A++
22144.00X .Q	L 215, B 115, H 110	1 x E27*	60 W			on/off	A,C,E A+
221171.002	L 310, B 80, H 95	LED	830	800 lm	9 W	on/off	A+,A++ A++
221171.002.1	L 310, B 80, H 95	LED	840	800 lm	9 W	on/off	A+,A++ A++
22143.00X	L 310, B 80, H 95	2 x E14*	25 W			on/off	A,C A+
Replacement diffusers							Price Category 13
08-22144	L 215, B 115, H 86						
08-22243	L 310, B 80, H 74						
LED conversion kit							Price Category 11
982175.002	L 164, B 87, H 44	1 x LED	10,3 W 3000 K - 1200 lm				
982175.002.1	L 164, B 87, H 44	1 x LED	10,3 W 4000 K - 1200 lm				

Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 18 W TC-D (26 W CB)



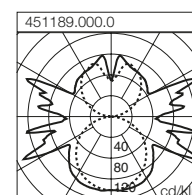
LAVANO® | LAVANO® WING | LAVANO® UNO

Ceiling and wall luminaires

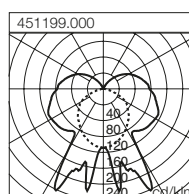
- Lavano® UNO with single-side light output
- Latest LED technology for high levels of energy efficiency
- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- The technical features of these luminaires with their LEDs and two diffusers for dual light control guarantee high levels of visual comfort and lighting intensity.

- The special design of the diffuser generates brightly sparkling direct light along the contour of the ellipse.
- The choice of high-quality materials, the finish and the energy-efficient use of LEDs all aim to ensure a long service life.

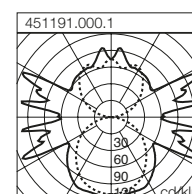
451189.000.0		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



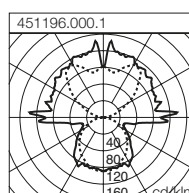
451199.000		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



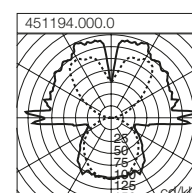
451191.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



451196.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



451194.000.0		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	12



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires

Ceiling and wall luminaires | Series: Lavano®

 Type of Protection: **IP 40**

Protection Class: I

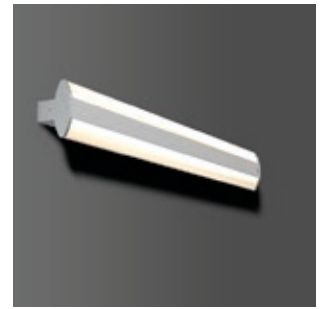
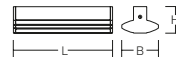
Impact Protection: IK02

Extruded aluminium profile base, brushed. End caps: aluminium. Diffuser: plastic, opal, allows for brilliant glittering light along the lines of the ellipse.

Available colours for decorative element: stainless steel, mirror finish (.0), aluminium, brushed (.1)

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Length L 580 mm							
451189.000.0	L 580, B 109, H 80	LED	830	2400 lm	23 W	on/off	A+ A+
451189.000.0.76	L 580, B 109, H 80	LED	830	2400 lm	23 W	DALI	A+ A+
451189.000.1	L 580, B 109, H 80	LED	830	2400 lm	23 W	on/off	A+ A+
451189.000.1.76	L 580, B 109, H 80	LED	830	2400 lm	23 W	DALI	A+ A+
Length L 860 mm							
451190.000.0	L 860, B 109, H 80	LED	830	3850 lm	35 W	on/off	A+ A+
451190.000.0.76	L 860, B 109, H 80	LED	830	3850 lm	35 W	DALI	A+ A+
451190.000.1	L 860, B 109, H 80	LED	830	3850 lm	35 W	on/off	A+ A+
451190.000.1.76	L 860, B 109, H 80	LED	830	3850 lm	35 W	DALI	A+ A+
Length L 1140 mm							
451191.000.1	L 1140, B 109, H 80	LED	830	5200 lm	47 W	on/off	A+ A+
451191.000.1.76	L 1140, B 109, H 80	LED	830	5200 lm	47 W	DALI	A+ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 23 W ≈

1 x 36 W T26 (43 W CB)

LED 35 W ≈

1 x 58 W T26 (67 W CB)

LED 47 W ≈

1 x 80 W T16 (86 W EB)

Ceiling and wall luminaires | Series: Lavano® Wing

 Type of Protection: **IP 40**

Protection Class: I

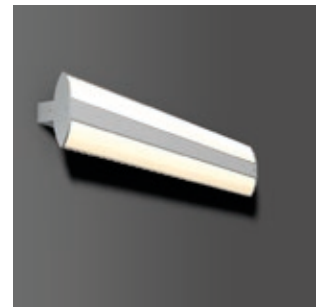
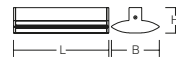
Impact Protection: IK02

Extruded aluminium profile base, brushed. End caps: aluminium. Diffuser (tapering at the sides): plastic (PMMA), opal, allows for brilliant glittering light.

Available colours for decorative element: stainless steel, mirror finish (.0), aluminium, brushed (.1)

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Length L 580 mm							
451194.000.0	L 580, B 150, H 80	LED	830	2600 lm	23 W	on/off	A+ A+
451194.000.0.76	L 580, B 150, H 80	LED	830	2600 lm	23 W	DALI	A+ A+
451194.000.1	L 580, B 150, H 80	LED	830	2600 lm	23 W	on/off	A+ A+
451194.000.1.76	L 580, B 150, H 80	LED	830	2600 lm	23 W	DALI	A+ A+
Length L 860 mm							
451195.000.0	L 860, B 150, H 80	LED	830	4150 lm	35 W	on/off	A+ A+
451195.000.0.76	L 860, B 150, H 80	LED	830	4150 lm	35 W	DALI	A+ A+
451195.000.1	L 860, B 150, H 80	LED	830	4150 lm	35 W	on/off	A+ A+
451195.000.1.76	L 860, B 150, H 80	LED	830	4150 lm	35 W	DALI	A+ A+
Length L 1140 mm							
451196.000.1	L 1140, B 150, H 80	LED	830	5700 lm	47 W	on/off	A+ A+
451196.000.1.76	L 1140, B 150, H 80	LED	830	5700 lm	47 W	DALI	A+ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 23 W ≈

1 x 36 W T26 (43 W CB)

LED 35 W ≈

1 x 58 W T26 (67 W CB)

LED 47 W ≈

1 x 80 W T16 (86 W EB)



Lavano®



Lavano® Wing



**Comparison
LED vs. conventional lamps**

LED 12,5 W ≈
1 x 15 W T26 (23 W CB)

LED 23 W ≈
1 x 36 W T26 (43 W CB)

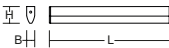
Ceiling and wall luminaires | Series: Lavano® Uno

Type of Protection: **IP 40**
Protection Class: I
Impact Protection: IK02

Extruded aluminium profile base, brushed. End caps: aluminium. Diffuser: plastic, opal, allows for brilliant glittering light along the lines of the ellipse.

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Ceiling and wall luminaires							
Length L 580 mm							
451198.000	L 580, B 40, H 83	LED	830	1250 lm	12,5 W	on/off	A+ A+
451198.000.76	L 580, B 40, H 83	LED	830	1250 lm	12,5 W	DALI	A+ A+
Length L 1140 mm							
451199.000	L 1140, B 40, H 83	LED	830	2550 lm	23 W	on/off	A+ A+
451199.000.76	L 1140, B 40, H 83	LED	830	2550 lm	23 W	DALI	A+ A+

Light colour 840 on request.



Lavano® Uno





Comparison
LED vs. conventional lamps

LED 21 W ≈
1 x 24 W T16 (26 W EB)

LED 31 W ≈
1 x 39 W T16 (42 W EB)

LED 40 W ≈
1 x 54 W T16 (58 W EB)

LED 48 W ≈
1 x 80 W T16 (86 W EB)

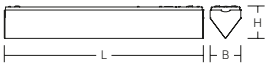
Ceiling and wall luminaires | Series: Polymero® Long

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK02

Housing: sheet steel, powder-coated, white. Diffuser: frosted PMMA plastic, with prisms. Diffuser fastening: spring system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmi-able	EEC
Ceiling and wall luminaires							
Length L 585 mm							
312128.002	L 585, B 90, H 102	LED	830	2050 lm	21 W	on/off	A+ A+
312128.002.76	L 585, B 90, H 102	LED	830	2050 lm	21 W	DALI	A+ A+
312128.002.1	L 585, B 90, H 102	LED	840	2200 lm	21 W	on/off	A+ A+
312128.002.1.76	L 585, B 90, H 102	LED	840	2200 lm	21 W	DALI	A+ A+
Length L 885 mm							
312129.002	L 885, B 90, H 102	LED	830	3200 lm	31 W	on/off	A+ A+
312129.002.76	L 885, B 90, H 102	LED	830	3200 lm	31 W	DALI	A+ A+
312129.002.1	L 885, B 90, H 102	LED	840	3350 lm	31 W	on/off	A+ A+
312129.002.1.76	L 885, B 90, H 102	LED	840	3350 lm	31 W	DALI	A+ A+
Length L 1185 mm							
312130.002	L 1185, B 90, H 102	LED	830	4200 lm	40 W	on/off	A+ A+
312130.002.76	L 1185, B 90, H 102	LED	830	4200 lm	40 W	DALI	A+ A+
312130.002.1	L 1185, B 90, H 102	LED	840	4450 lm	40 W	on/off	A+ A+
312130.002.1.76	L 1185, B 90, H 102	LED	840	4450 lm	40 W	DALI	A+ A+
Length L 1485 mm							
312131.002	L 1485, B 90, H 102	LED	830	5100 lm	48 W	on/off	A+ A+
312131.002.76	L 1485, B 90, H 102	LED	830	5100 lm	48 W	DALI	A+ A+
312131.002.1	L 1485, B 90, H 102	LED	840	5350 lm	48 W	on/off	A+ A+
312131.002.1.76	L 1485, B 90, H 102	LED	840	5350 lm	48 W	DALI	A+ A+



Linear light fittings | Series: R40

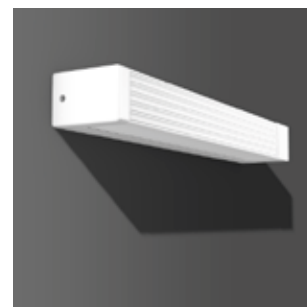
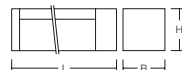
Type of Protection: IP 40

Protection Class: I

Impact Protection: IK02

Base: plastic. Opal glass: mouth blown, silk finish.

Available colour: 2 = white



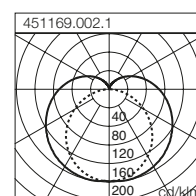
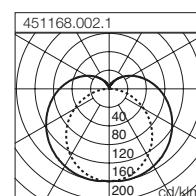
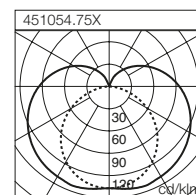
Reference number	Dimensions	Lamp	dimmable	EEC	
Linear luminaires					Price Category 11
without socket					
L 315 mm					
40120.002.1	L 315, B 55, H 80	2 x E14 [®] 40 W	on/off	A,C,E A+	
L 315 mm, with tip switch					
40122.002.1	L 315, B 55, H 80	2 x E14 [®] 40 W	on/off	A,C,E A+	
L 457 mm					
40130.002.1	L 457, B 55, H 80	3 x E14 [®] 40 W	on/off	A,C,E A+	
L 457 mm, with tip switch					
40132.002.1	L 457, B 55, H 80	3 x E14 [®] 40 W	on/off	A,C,E A+	
with socket					
L 355 mm					
40123.002.1	L 355, B 55, H 80	2 x E14 [®] 40 W	on/off	A,C,E A+	
L 355 mm, with tip switch					
40125.002.1	L 355, B 55, H 80	2 x E14 [®] 40 W	on/off	A,C,E A+	
L 500 mm					
40133.002.1	L 500, B 55, H 80	3 x E14 [®] 40 W	on/off	A,C,E A+	
L 500 mm, with tip switch					
40135.002.1	L 500, B 55, H 80	3 x E14 [®] 40 W	on/off	A,C,E A+	
Replacement glasses					Price Category 13
05-40120	L 289, B 55, H 55	for lengths 315 mm and 355 mm			
05-40130	L 433, B 55, H 55	for lengths 457 mm and 500 mm			



RT 44

Linear light fittings

- Timeless design
- Easy plug-in installation
- Uses 63% less energy than conventional lamps
- High degree of protection: IP 44 for use in wet areas
- Basic luminaire measuring 600 mm is the ideal size for mirrors
- Can be installed horizontally and vertically
- LED rated life 50,000 h (L70, B10)
- Two different light colours 830 and 840



Linear light fittings | Series: RT 44

 Type of Protection: **IP 44**, IP 21, if European flat plugs are used

Protection Class: I

Impact Protection: IK03

Base: metal, powder-coated. Diffuser: plastic (polycarbonate), opal. End caps: plastic (polycarbonate), shock-resistant. Electronic ballast included.

Dampproof according to bathrooms standard DIN VDE 0100-701 (october 2008).

Available colours (X): 2 = white, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall and mirror luminaires							Price Category 11
Length L 600 mm							
451168.002 .Q	L 600, B 55, H 87	LED	830	910 lm	10 W	on/off	A+ A+
451168.002.1 .Q	L 600, B 55, H 87	LED	840	970 lm	10 W	on/off	A+ A+
451054.75X .Q	L 600, B 55, H 87	1 x T16 (T5) 14 W				on/off	A,A+
Length L 900 mm							
451169.002	L 900, B 55, H 87	LED	830	1400 lm	14 W	on/off	A+ A+
451169.002.1	L 900, B 55, H 87	LED	840	1450 lm	14 W	on/off	A+ A+
451055.75X	L 900, B 55, H 87	1 x T16 (T5) 21 W				on/off	A,A+,B
with push button switch							
Length L 644 mm							
451170.002	L 644, B 55, H 87	LED	830	910 lm	10 W	on/off	A+ A+
451170.002.1	L 644, B 55, H 87	LED	840	970 lm	10 W	on/off	A+ A+
451056.75X	L 644, B 55, H 87	1 x T16 (T5) 14 W				on/off	A,A+
Length L 944 mm							
451171.002	L 944, B 55, H 87	LED	830	1400 lm	14 W	on/off	A+ A+
451171.002.1	L 944, B 55, H 87	LED	840	1450 lm	14 W	on/off	A+ A+
451057.75X	L 944, B 55, H 87	1 x T16 (T5) 21 W				on/off	A,A+,B
with socket							
Length L 677 mm							
451172.002	L 677, B 55, H 87	LED	830	910 lm	10 W	on/off	A+ A+
451172.002.1	L 677, B 55, H 87	LED	840	970 lm	10 W	on/off	A+ A+
451058.75X	L 677, B 55, H 87	1 x T16 (T5) 14 W				on/off	A,A+
Length L 977 mm							
451173.002	L 977, B 55, H 87	LED	830	1400 lm	14 W	on/off	A+ A+
451173.002.1	L 977, B 55, H 87	LED	840	1450 lm	14 W	on/off	A+ A+
451059.75X	L 977, B 55, H 87	1 x T16 (T5) 21 W				on/off	A,A+,B
with push button switch and with socket							
Length L 721 mm							
451174.002	L 721, B 55, H 87	LED	830	910 lm	10 W	on/off	A+ A+
451174.002.1	L 721, B 55, H 87	LED	840	970 lm	10 W	on/off	A+ A+
451060.75X .Q	L 721, B 55, H 87	1 x T16 (T5) 14 W				on/off	A,A+
Length L 1021 mm							
451175.002	L 1021, B 55, H 87	LED	830	1400 lm	14 W	on/off	A+ A+
451175.002.1	L 1021, B 55, H 87	LED	840	1450 lm	14 W	on/off	A+ A+
451061.75X	L 1021, B 55, H 87	1 x T16 (T5) 21 W				on/off	A,A+,B

Price Category 11

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

1 x 24 W T16 (26 W EB)

LED 14 W ≈

1 x 36 W T26 (43 W CB)

Linear light fittings | Series: RT 44

 Type of Protection: **IP 44**, IP 21, if European flat plugs are used

Protection Class: I

Impact Protection: IK03

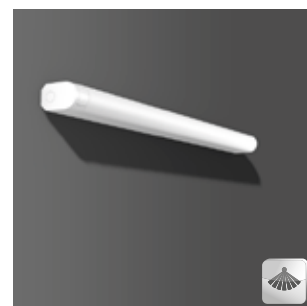
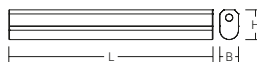
Base: metal, powder-coated. Diffuser: plastic (polycarbonate), opal. End caps: plastic (polycarbonate), shock-resistant. Electronic ballast included.

IR movement sensor parameters at a ceiling or wall-mounted height of min. 1,7 m

- Range 1-8 m, diameter, adjustable
- Time control approx. 3 - 30 minutes, adjustable
- Range: horizontal 360° and vertical approx. 110°
- Switching capacity: 400 VA

Dampproof according to bathrooms standard DIN VDE 0100-701 (october 2008).

Available colours (X): 2 = white, 45 = white aluminium



Reference number	Dimensions	Lamp	dimmable	EEC
Wall and mirror luminaires				
with movement sensor				
Length L 657 mm				
451054.75X.19	L 657, B 55, H 87	1 x T16 (T5) 14 W		on/off A,A+

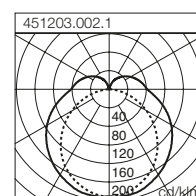
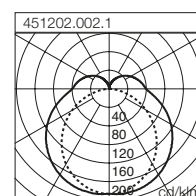
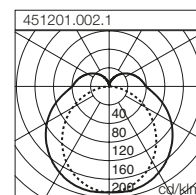
Price Category 11



BALEVA

Ceiling and wall luminaires

- Timeless and functional design
- Soft and homogeneous illumination through opal diffuser
- High protection class IP 44 (wall mounting) for use in wet areas
- Quick and easy to install
- 2 central cable inlets for looping the cable
- Horizontal and vertical mounting allows you to find a suitable solution for most applications
- LED life of 50,000 hours (L80, B10)
- Ideal for sanitary areas, corridors, waiting areas, nursing homes, patient rooms



Ceiling and wall luminaires | Series: Baleva

Type of Protection: **IP 40** Ceiling mounting, **IP 44** wall mounting

Protection Class: II

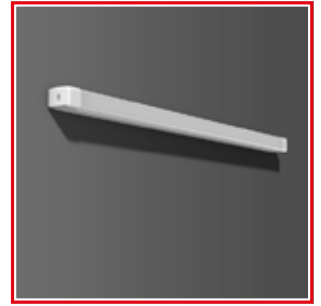
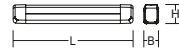
Impact Protection: IK07

Body and end caps made of white plastic. Diffuser: plastic, opal.

Converter integrated and encapsulated.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC	Price Category 11
Linear luminaires								
Length L 500 mm								
451215.002	L 500, B 46, H 60	LED	830	1000 lm	10 W	on/off	A+ A+	
451215.002.1	L 500, B 46, H 60	LED	840	1000 lm	10 W	on/off	A+ A+	
Length L 600 mm								
451201.002	L 600, B 46, H 60	LED	830	1000 lm	10 W	on/off	A+ A+	
451201.002.1	L 600, B 46, H 60	LED	840	1000 lm	10 W	on/off	A+ A+	
Length L 900 mm								
451202.002	L 900, B 46, H 60	LED	830	1450 lm	14 W	on/off	A+ A+	
451202.002.1	L 900, B 46, H 60	LED	840	1550 lm	14 W	on/off	A+ A+	
Length L 1200 mm								
451203.002	L 1200, B 46, H 60	LED	830	2100 lm	19 W	on/off	A+ A+	
451203.002.1	L 1200, B 46, H 60	LED	840	2100 lm	19 W	on/off	A+ A+	

Comparison LED vs. conventional lamps

LED 10 W ≈

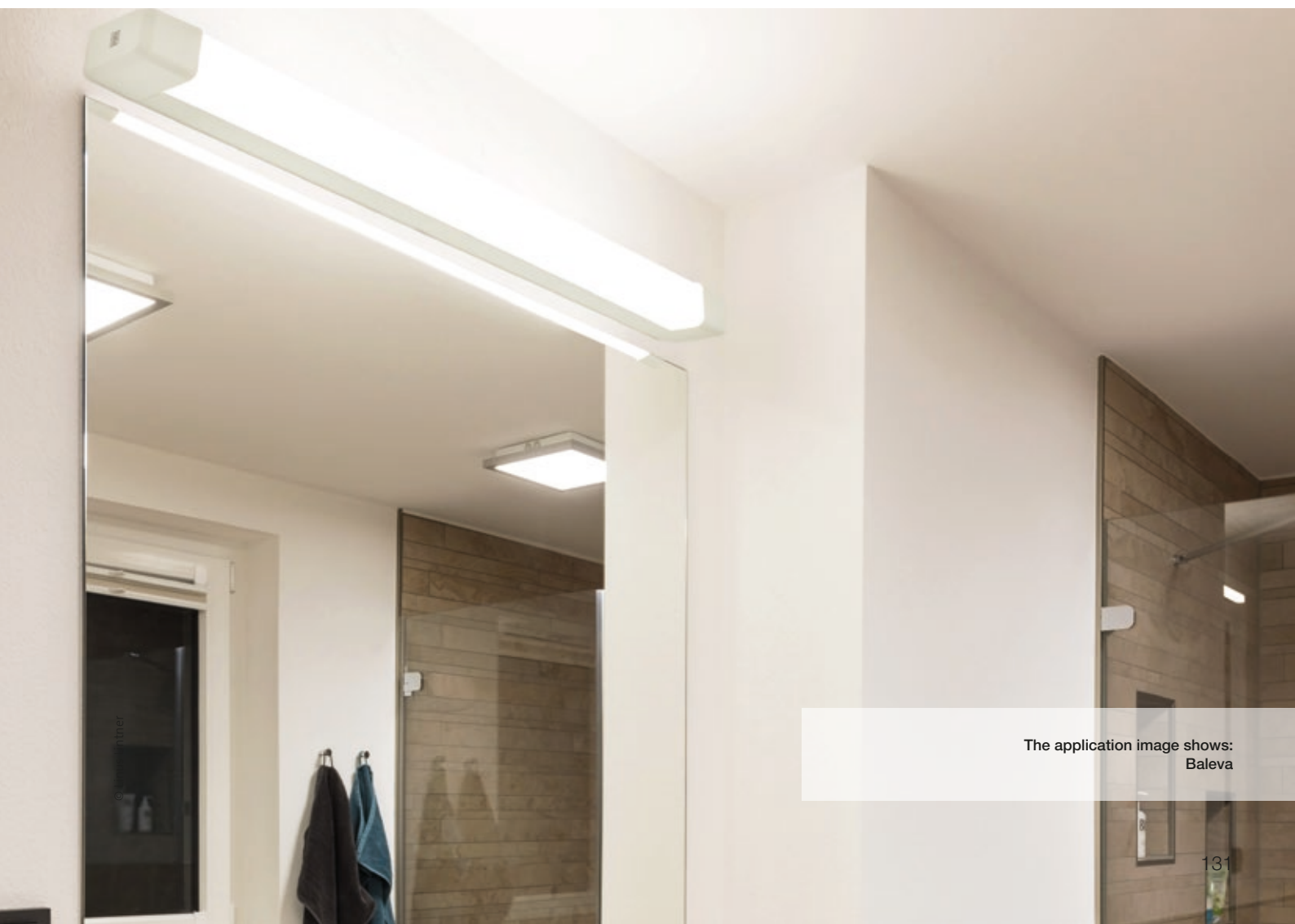
1 x 24 W T16 (26 W EB)

LED 14 W ≈

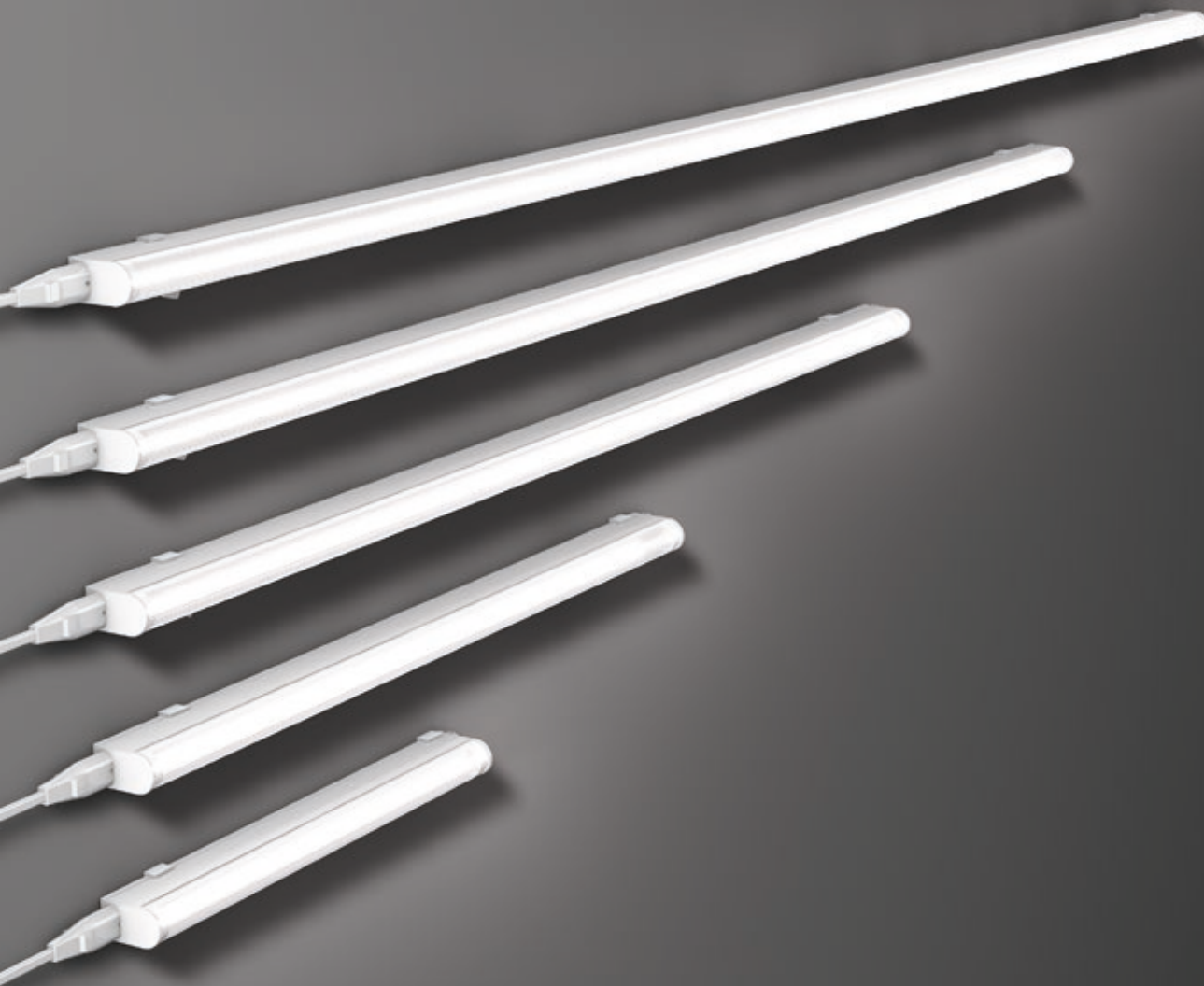
1 x 28 W T16 (31 W EB)

LED 19 W ≈

1 x 36 W T26 (43 W CB)



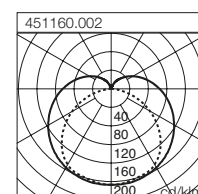
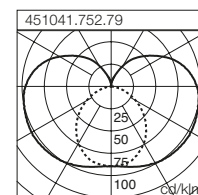
The application image shows:
Baleva



STRIP-LIGHT

Ceiling and wall luminaires

- Universally suitable for store lighting, vault lighting, kitchen and bathroom lighting
- Excellent light distribution thanks to prismatic lamp cover
- Easy to mount with clips
- Suitable for light channel (12 luminaires) and furniture lighting
- Suitable for mounting on or in furniture
- Included in delivery: 1.80 m power cable, 150 mm connecting cable, straight rigid coupling and 2 brackets each for wall and ceiling mounting
- Two different light colours 830 and 840
- LED rated life 25,000 h (L70, B50)



Ceiling and wall luminaires | Series: Strip-Light LED

Type of Protection: IP 20

Protection Class: II

Impact Protection: IK02

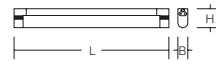
Base: plastic. Diffuser: transparent plastic, prismatic. Connecting cables for through-wiring without tools. With rocker switch.

Suitable for mounting on or into furniture.

Included in delivery: 1.80 m power supply cable, 150 mm connecting cable, straight rigid coupling and 2 brackets each for wall and ceiling mounting. Max. 12 luminaires can be mounted as a light channel.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Linear luminaires							
Length L 275 mm							
451156.002	L 275, B 23, H 37	LED	830	380 lm	4 W	on/off	A+ A+
451156.002.1	L 275, B 23, H 37	LED	840	430 lm	4 W	on/off	A+ A+
Length L 503 mm							
451157.002	L 503, B 23, H 37	LED	830	690 lm	7 W	on/off	A+ A+
451157.002.1	L 503, B 23, H 37	LED	840	750 lm	7 W	on/off	A+ A+
Length L 536 mm							
451181.002	L 536, B 23, H 37	LED	830	800 lm	8 W	on/off	A+ A+
451181.002.1	L 536, B 23, H 37	LED	840	900 lm	8 W	on/off	A+ A+
Length L 836 mm							
451158.002	L 836, B 23, H 37	LED	830	1200 lm	13 W	on/off	A+ A+
451158.002.1	L 836, B 23, H 37	LED	840	1300 lm	13 W	on/off	A+ A+
Length L 1136 mm							
451159.002	L 1136, B 23, H 37	LED	830	1750 lm	18 W	on/off	A+ A+
451159.002.1	L 1136, B 23, H 37	LED	840	1850 lm	18 W	on/off	A+ A+
Length L 1436 mm							
451160.002 .Q	L 1436, B 23, H 37	LED	830	2100 lm	22 W	on/off	A+ A+
451160.002.1 .Q	L 1436, B 23, H 37	LED	840	2450 lm	22 W	on/off	A+ A+
Accessories							
981470.002	L 47, B 47, H 42	Corner connectors					
981464.002	L 300	Connecting cable					
981466.002	L 600	Connecting cable					
981467.002	L 900	Connecting cable					
981457.002	L 1800	Power supply cable (Europlug with socket)					

Price Category 11

**Comparison
LED vs. conventional lamps**
LED 4 W ≈

1 x 13 W T16 (15 W EB)

LED 7 W ≈

1 x 14 W T16 (18 W EB)

LED 8 W ≈

1 x 21 W T16 (24 W EB)

LED 13 W ≈

1 x 24 W T16 (26 W EB)

LED 18 W ≈

1 x 35 W T16 (38 W EB)

LED 22 W ≈

1 x 39 W T16 (42 W EB)

Ceiling and wall luminaires | Series: T5 Strip-Light

Type of Protection: IP 20

Protection Class: II

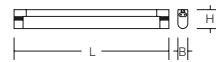
Impact Protection: IK02

Base: plastic. Diffuser: transparent plastic, prismatic. Cold start ballast. Connecting cables for through-wiring without tools. With rocker switch.

Suitable for mounting on or into furniture.

Included in delivery: 1.80 m power supply cable, 150 mm connecting cable, straight rigid coupling and 2 brackets each for wall and ceiling mounting. Max. 10 luminaires can be mounted as a light channel.

Available colour: 2 = white



Reference number	Dimensions	Lamp	dimm-able	EEC
Linear luminaires				
Price Category 11				
451035.752.79	L 345, B 22, H 44	1 x T16 (T5) 8 W	on/off	A,B
451036.752.79	L 575, B 22, H 44	1 x T16 (T5) 13 W	on/off	A,B
451037.752.79 .Q	L 605, B 22, H 44	1 x T16 (T5) 14 W	on/off	A,A+
451038.752.79	L 905, B 22, H 44	1 x T16 (T5) 21 W	on/off	A,A+,B
451040.752.79 .Q	L 1205, B 22, H 44	1 x T16 (T5) 28 W	on/off	A,A+
451041.752.79 .Q	L 1505, B 22, H 44	1 x T16 (T5) 35 W	on/off	A,A+
Accessories				
Price Category 11				
981464.002	L 300	Connecting cable		
981466.002	L 600	Connecting cable		
981467.002	L 900	Connecting cable		
981457.002	L 1800	Power supply cable (Europlug with socket)		
981470.002	L 47, B 47, H 42	Corner connectors		



Set of ISO striplights with LED lamp

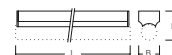
Type of Protection: **IP 40**

Protection Class: II

Impact Protection: IK02

Base: plastic. With push button switch. **LED lamp included.** Lamp contacts disconnection during lamp replacement.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Striplights							
411015.002.1	L 300, B 35, H 58	LED	827	400 lm	5 W	on/off	A+ A+
411016.002.1	L 500, B 35, H 58	LED	827	620 lm	8 W	on/off	A+ A+

Price Category 11



Set of aluminium striplights with LED lamp

Type of Protection: **IP 40**

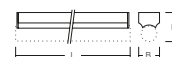
Protection Class: I

Impact Protection: IK02

Base: aluminium extrusion profile. End caps: plastic. With push button switch.

LED lamp included. Lamp contacts disconnection during lamp replacement.

Available colour: 4 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Striplights							
411017.004.1	L 300, B 35, H 58	LED	827	400 lm	5 W	on/off	A+ A+
411018.004.1	L 500, B 35, H 58	LED	827	620 lm	8 W	on/off	A+ A+
411019.004.1	L 1000, B 35, H 58	LED	827	1200 lm	16 W	on/off	A A

Price Category 11

ISO striplights for linear lamps

Type of Protection: **IP 40**

Protection Class: II

Impact Protection: IK02

Base: plastic. Lamp contacts disconnection during lamp replacement.

Available colour: 2 = white



Reference number	Dimensions	Lamp	dimmable	EEC	
Striplights					Price Category 11
without push button switch					
41110.002.1	L 300, B 35, H 58	1 x L-DE 35 W	on/off	B,E A+	
41120.002.1	L 500, B 35, H 58	1 x L-DE 60 W	on/off	B A+	
with push button switch					
41111.002.1	L 300, B 35, H 58	1 x L-DE 35 W	on/off	B,E A+	
41121.002.1	L 500, B 35, H 58	1 x L-DE 60 W	on/off	B A+	

Aluminium striplights for linear lamps

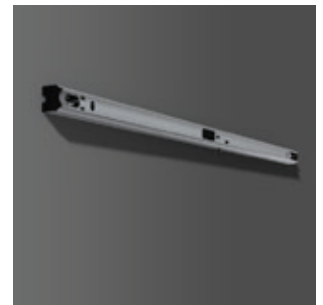
Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02

Base: aluminium, powder-coated / anodised. End caps: plastic. Lamp contacts disconnection during lamp replacement.

Available colours (X): 2 = white, 4 = aluminium, anodised



Reference number	Dimensions	Lamp	dimmable	EEC	
Striplights					Price Category 11
without push button switch					
41530.00X .Q	L 300, B 35, H 58	1 x L-DE 35 W	on/off	B,E A+	
41510.00X	L 500, B 35, H 58	1 x L-DE 60 W	on/off	B A+	
41520.00X .Q	L 1000, B 35, H 58	1 x L-DE 120 W	on/off	B A	
with push button switch					
41531.00X	L 300, B 35, H 58	1 x L-DE 35 W	on/off	B,E A+	
41511.00X	L 500, B 35, H 58	1 x L-DE 60 W	on/off	B A+	
41521.00X .Q	L 1000, B 35, H 58	1 x L-DE 120 W	on/off	B A	

ISO lampholders for linear lamps

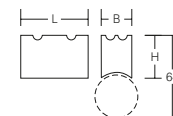
Type of Protection: **IP 20**

Protection Class: II

Impact Protection: IK02

Individual lampholder. Without strain relief for connecting cable.

Available colour: 2 = white



Reference number	Dimensions	Lamp	dimmable	EEC	
Individual lampholder					Price Category 11
for lamps with central sockets					
41401.002 .Q	L 60, B 23, H 38	1 x L 35 W (S14d)	on/off	B,E A+	
Individual lampholder (pair)					
for lamps with sockets at both ends					
41402.002	L 60, B 23, H 38	1 x L-DE 120 W (S14s)	on/off	B,E A,A+	

LED linear lamp

single socket S14d

10-2334	L 300, D 30	LED L, 300 lm, 5 W, 2700 K
10-2335	L 500, D 30	LED L, 500 lm, 8 W, 2700 K

double socket S14s

10-2331	L 300, D 30	LED L-DE, 300 lm, 5 W, 2700 K
10-2332	L 500, D 30	LED L-DE, 500 lm, 8 W, 2700 K
10-2333	L 1000, D 30	LED L-DE, 1000 lm, 16 W, 2700 K

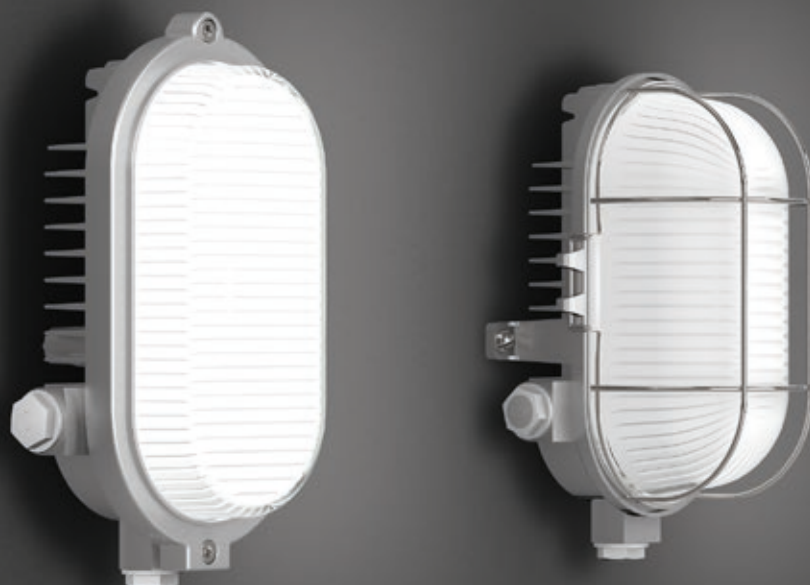
Price Category 11

Comparison LED vs. conventional lamps

LED 5 W ≈
1 x 8 W T16 (11 W EB)

LED 8 W ≈
1 x 13 W T16 (15 W EB)

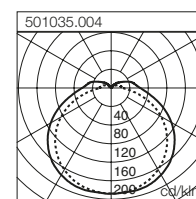
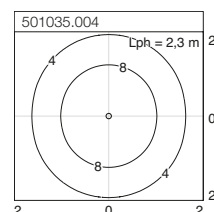
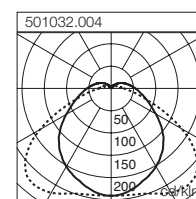
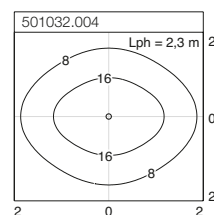
LED 16 W ≈
1 x 24 W T16 (26 W EB)



ARENO® | ALU OVAL BULKHEAD LUMINAIRES

Ceiling and wall luminaires

- The oval bulkhead luminaire, a RZB classic revamped.
- LED technology for high levels of energy efficiency
- Virtually maintenance-free operation
- Base made of die-cast aluminium
- Impact resistant crystal glass, coated on the inside
- Suitable for use in harsh conditions (e.g. industry and wind power stations, cold storage areas, etc.)
- Operating range: -30°C to +40°C
- LED rated life 32,000 hours (L70, B50)



Ceiling and wall luminaires | Series: Areno®

 Type of Protection: **IP 65**

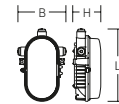
Protection Class: I

Impact Protection: IK03

Base: pressure die-cast aluminium, powder-coated. With three cable inlets: M20x1.5.
Cover: glass, painted white inside, textured. Bezel ring: powder-coated die-cast aluminium, screwed on the luminaire. Drill holes at the inside, with silicone scaling ring.

LED included.

Available colour: 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 11							
501036.004.1	L 227, B 141, H 87	LED ⁽¹⁾	830	220 lm	9 W	on/off	A A
501036.004	L 227, B 141, H 87	LED ⁽¹⁾	840	220 lm	9 W	on/off	A,A+ A+
501035.004.1	L 227, B 141, H 87	LED ⁽¹⁾	830	420 lm	18 W	on/off	A A
501035.004	L 227, B 141, H 87	LED ⁽¹⁾	840	430 lm	18 W	on/off	A,A+ A+
Replacement glasses							
Price Category 13							
05-50200.042	L 188, B 97, H 40						

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 40 W GLS (40 W)

LED 18 W ≈

1 x 60 W GLS (60 W)

**Die-cast aluminium oval bulkhead luminaires, impact resistant |
Series: Alu-Standard LED**

 Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK02

Base: pressure die-cast aluminium, powder-coated. Screw mounting for decorative protective cage. With three cable inlets: M20x1.5. Crystal glass: textured, satin finish.
Protective cage: steel wire, galvanised.

LED included.

Available colour: 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 11							
501031.004.1	L 210, B 130, H 115	LED ⁽¹⁾	830	380 lm	9 W	on/off	A,A+ A
501031.004	L 210, B 130, H 115	LED ⁽¹⁾	840	380 lm	9 W	on/off	A+ A+
501032.004.1	L 210, B 130, H 120	LED ⁽¹⁾	830	720 lm	18 W	on/off	A,A+ A
501032.004	L 210, B 130, H 120	LED ⁽¹⁾	840	720 lm	18 W	on/off	A,A+ A+
Replacement glasses							
Price Category 13							
05-50200.020	L 188, B 97, H 64						

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 40 W GLS (40 W)

LED 18 W ≈

1 x 60 W GLS (60 W)

**Die-cast aluminium oval bulkhead luminaires, impact resistant |
Series: Alu-Standard**

 Type of Protection: **IP 43**

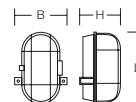
Protection Class: I

Impact Protection: IK07

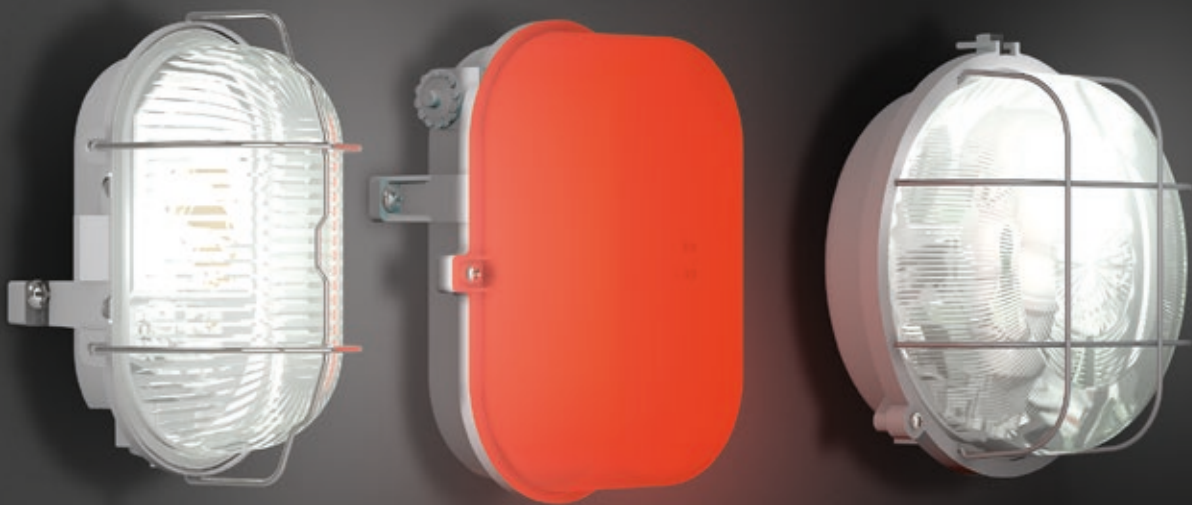
Base: pressure die-cast aluminium, powder-coated. Screw mounting for decorative protective cage. With three cable inlets: M20x1.5. Crystal glass: transparent. Protective cage: steel wire, galvanised.

The lampholder must be pointed downwards for wall mounting (lamp upright).

Available colour: 4 = silver coloured



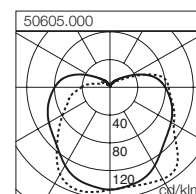
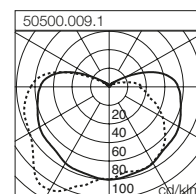
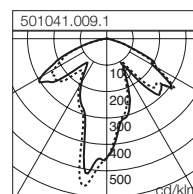
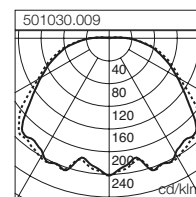
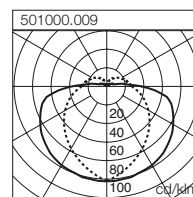
Reference number	Dimensions	Lamp	dimmable	EEC
Ceiling and wall luminaires				
Price Category 11				
50700.004	L 210, B 130, H 120	1 x E27® 60 W	on/off	A,C,E A+
50702.004	L 210, B 130, H 120	1 x E27® 100 W	on/off	A,C,E A+
Replacement glasses				
Price Category 13				
05-50200	L 188, B 97, H 64			



PLASTIC OVAL LUMINAIRES | PLASTIC ROUND LUMINAIRES

Oval bulkhead luminaires, plastic, impact resistant

- Ideal for use with movement sensors thanks to virtually unlimited switching capacity and immediate provision of light when switched on
- LED technology for high levels of energy efficiency
- Mains voltage supply - no control gear needed
- LED can be individually replaced
- In the housing of the well-known standard plastic bulkhead
- LED rated life 32,000 hours (L70, B50)
- Shock-proof



Oval bulkhead luminaires, plastic, impact resistant | Series: Oval bulkhead ECO-LED

Type of Protection: **IP 44**

Protection Class: I

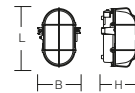
Impact Protection: IK07

Base: plastic. Snap-on protective guard. Crystal glass: transparent.

Protective cage: steel wire, galvanised. 5 cable entries.

LED included.

Available colour: 9 = grey



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 11							
501030.009.1	L 176, B 122, H 110	LED ⁽¹⁾	830	480 lm	9 W	on/off	A,A+ A
501030.009	L 176, B 122, H 110	LED ⁽¹⁾	840	490 lm	9 W	on/off	A,A+ A+
Replacement glasses							
Price Category 13							
650-3002	L 165, B 89, H 65						

Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 75 W GLS (75 W)

Oval bulkhead luminaires, plastic, impact resistant | Series: Standard

Type of Protection: **IP 44**

Protection Class: II

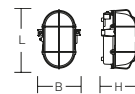
Impact Protection: IK07

Base: plastic. Snap-on protective guard. Crystal glass: transparent.

Protective cage: steel wire, galvanised. 5 cable entries.

The lampholder must be pointed downwards for wall mounting (lamp upright).

Available colour: 9 = grey



Reference number	Dimensions	Lamp	dimmable	EEC
Ceiling and wall luminaires				
Price Category 11				
50500.009.1	L 176, B 122, H 110	1 x E27* 60 W	on/off	A,C,E A+
Replacement glasses				
Price Category 13				
650-3002	L 165, B 89, H 65			

Oval bulkhead luminaires, plastic, impact resistant | Series: Standard

Type of Protection: **IP 44**

Protection Class: II

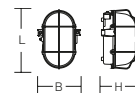
Impact Protection: IK07

Base: plastic. Screw mounting for decorative protective cage. Crystal glass: transparent.

Protective cage: steel wire, galvanised. 5 cable entries.

The lampholder must be pointed downwards for wall mounting (lamp upright).

Available colour: 9 = grey



Reference number	Dimensions	Lamp	dimmable	EEC
Ceiling and wall luminaires				
Price Category 11				
50500.889.1	L 176, B 122, H 110	1 x E27* 60 W	on/off	C,E A+
Replacement glasses				
Price Category 13				
650-3002	L 165, B 89, H 65			

Oval bulkhead luminaires, plastic, impact resistant | Series: Standard

Type of Protection: **IP 44**

Protection Class: II

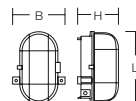
Impact Protection: IK07

Base: plastic. Screw mounting for decorative protective cage. Crystal glass: transparent.

Protective cage: steel wire, galvanised. Four cable inlets, one of which is located at the back.

The lampholder must be pointed downwards for wall mounting (lamp upright).

Available colour: 9 = grey



Reference number	Dimensions	Lamp	dimmable	EEC
Ceiling and wall luminaires				
Price Category 11				
50400.009.1	L 193, B 126, H 115	1 x E27* 100 W	on/off	A,C,E A+
Replacement glasses				
Price Category 13				
05-50200	L 188, B 97, H 64			



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 75 W GLS (75 W)

Oval bulkhead luminaires, plastic | Series: Signal luminaires

Type of Protection: **IP 43**

Protection Class: I = LED, II = E27

Impact Protection: IK04

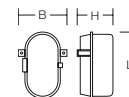
Base: plastic, grey. Screw mounting of diffuser. Diffuser: plastic, coloured, smooth finish. Two cable inlets.

RZB signal luminaires bear the identification: Signal light DIN 67527-C-2-3.

Wall luminaires have to be mounted with the lamp socket in upward position (lamp hanging downwards!)

LED included.

Available colours (X): 0 = white, transparent, 7 = yellow, 8 = red



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 12							
50608.007	L 195, B 132, H 115	LED ⁽¹⁾	830	280 lm	9 W	on/off	A+ A
50608.008	L 195, B 132, H 115	LED ⁽¹⁾	830	50 lm	9 W	on/off	A+ A
50608.000.1	L 195, B 132, H 115	LED ⁽¹⁾	840	510 lm	9 W	on/off	A+ A+
50605.000	L 195, B 132, H 115	1 x E27*	60 W			on/off	A,C,E A+
50605.007	L 195, B 132, H 115	1 x E27*	60 W			on/off	A,C,E A+
50605.008	L 195, B 132, H 115	1 x E27*	60 W			on/off	A,C,E A+



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 75 W GLS (75 W)

Round luminaires, plastic | Series: Standard

Type of Protection: **IP 44**

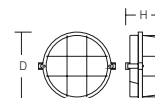
Protection Class: I = LED, II = E27

Impact Protection: IK07

Base: plastic. Screw mounting for decorative protective cage. Textured glass, transparent. Protective cage: steel wire, galvanised. Two cable inlets.

LED included.

Available colour: 9 = grey



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 11							
501041.009	D 200, H 105	LED ⁽¹⁾	830	470 lm	9 W	on/off	A,A+ A
501041.009.1	D 200, H 105	LED ⁽¹⁾	840	480 lm	9 W	on/off	A,A+ A+
501000.009	D 200, H 105	1 x E27*	100 W			on/off	A,C,E A+

Replacement glasses		Price Category 13					
05-50450	D 182, H 59						



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 75 W GLS (75 W)

Round luminaires, plastic | Series: Colour

Type of Protection: **IP 44**

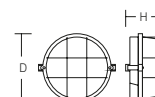
Protection Class: I = LED, II = E27

Impact Protection: IK07

Base: plastic. Screw mounting for decorative protective cage. Textured glass, transparent. Protective cage: plastic Two cable inlets.

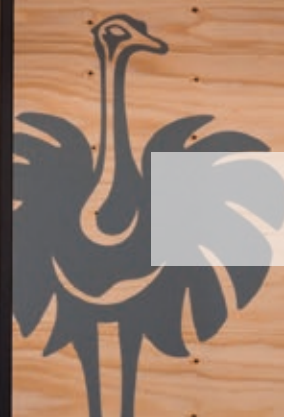
LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Price Category 12							
501042.002	D 200, H 100	LED ⁽¹⁾	830	470 lm	9 W	on/off	A,A+ A
501042.002.1	D 200, H 100	LED ⁽¹⁾	840	480 lm	9 W	on/off	A,A+ A+
501004.002	D 200, H 100	1 x E27*	100 W			on/off	A,C,E A+

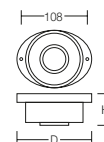
Replacement glasses		Price Category 13					
05-50450	D 182, H 59						





Ceiling and wall luminaires | Series: Keralux

Type of Protection: **IP 40** with screwneck glass
 Protection Class: II
 Impact Protection: IK04
 Base: ceramic for Ø 84.5 mm thread. With E27 lampholder.
 One or two cable inlets at the side, PG 13.5.
 Available colour: 2 = white



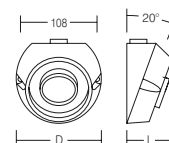
Reference number	Dimensions	Lamp	dimmable	EEC
Ceiling and wall mounting				
with one cable entry				
59250.002 .Q	D 125, H 50	1 x E27® 100 W	on/off	A,C,E A+
with two cable entries				
59251.002	D 125, H 50	1 x E27® 100 W	on/off	A,C,E A+

Price Category 11



Wall luminaires | Series: Keralux

Type of Protection: **IP 40** with screwneck glass
 Protection Class: II
 Impact Protection: IK04
 Base: ceramic for Ø 84.5 mm thread. With E27 lampholder.
 One cable inlet at the top, PG 13.5.
 Available colour: 2 = white



Reference number	Dimensions	Lamp	dimmable	EEC
Wall mounting				
59222.002 .Q	D 125, L 70	1 x E27® 100 W	on/off	A,C,E A+

Price Category 11

Screwneck glasses

Glass sphere with glass screwneck.

Reference number	Dimensions
------------------	------------

Screwneck glasses

Price Category 11

with screwneck D 84.5 mm

Glass diffuser: opal, silk finish

05-56150	D 150, H 155
----------	--------------



Screwneck glasses

Glass diffuser: cylindrical, with semi-circular dome, with glass screwneck.

Reference number	Dimensions
------------------	------------

Screwneck glasses

Price Category 11

with screwneck D 84.5 mm

Glass diffuser: transparent

05-59160	D 95, H 180
----------	-------------

Glass diffuser: opal, satin finish

05-59162	D 95, H 180
----------	-------------



Screwneck glasses

Glass diffuser: cylindrical, closed, with glass screwneck.

Reference number	Dimensions
------------------	------------

Screwneck glasses

Price Category 11

with screwneck D 84.5 mm

Glass diffuser: smooth, frosted finish

05-59250	D 95, H 125
----------	-------------

Glass diffuser: transparent

05-59256	D 95, H 125
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Glass diffuser: opal, silk finish

05-59252	D 95, H 125
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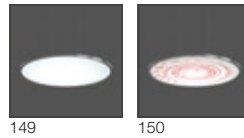
05-55863	D 98, H 145
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The application image shows:
Ring of Fire®

© Unius Lintner



149

150

Sidelite® Round
Sidelite® Round FerroMurano
148-151



153

Sidelite® Ellipsoid
152-153



155

Scapha®
154-155



157

159

161

Douala®
156-161

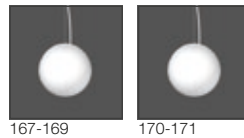


163

163

164

Ring of Fire®
162-165



167-169

170-171

Basic Ball
166-171



173-174

173-174

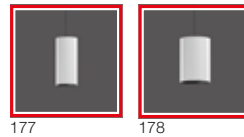
173-174

173-174

173-174

175

Cylio
Cylio Track
172-175



177

178

Deecos P
176-179

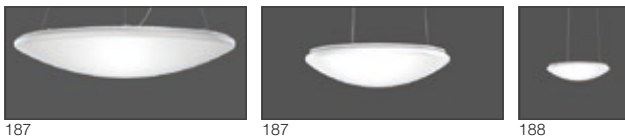


181

183

184

Flat Polymero® Kreis
180-185



187

187

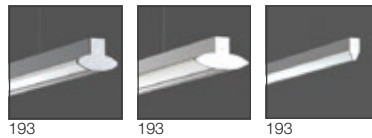
188

Flat Polymero®
186-189



191

Less is more 27 Kristall
190-191

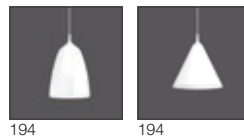


193

193

193

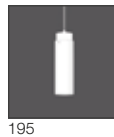
Lavano®
Lavano® Wing
Lavano® Uno
192-194



194

194

Tholus
194

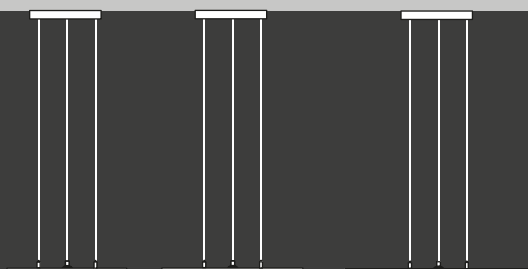


195

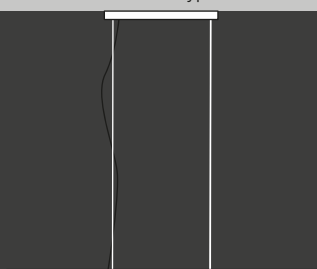
Glasdownlight
195

Overview

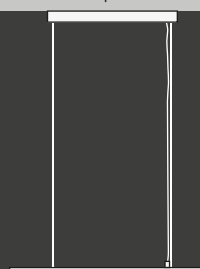
Sidelite® Round



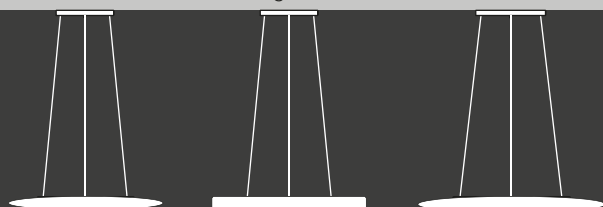
Sidelite® Ellipsoid



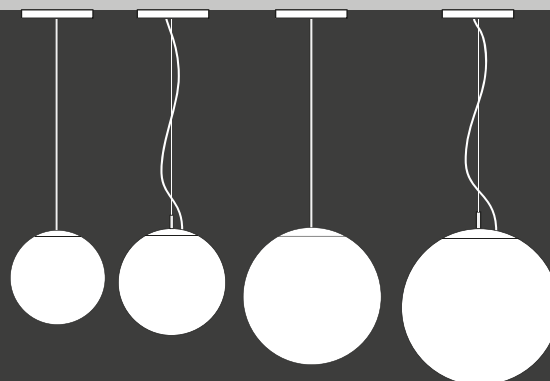
Scapha®



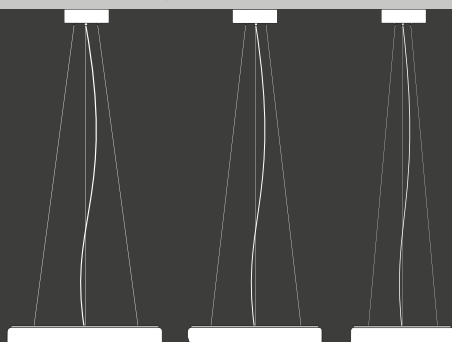
Ring of Fire®



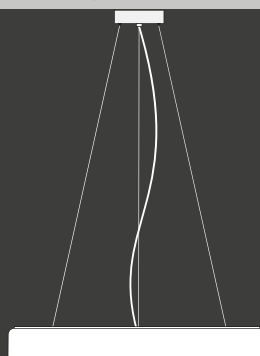
Basic Ball LED



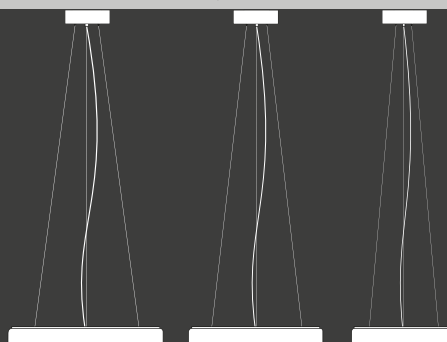
Flat Polymero® Kreis Slim



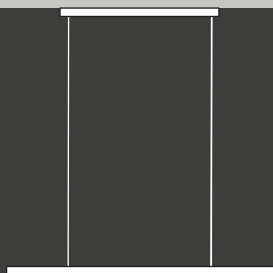
Flat Polymero® Kreis XXL



Flat Polymero® Kreis



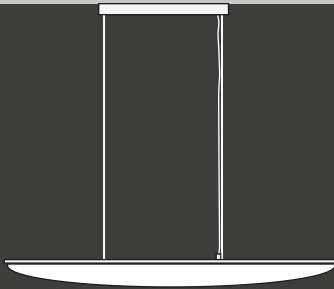
Less is more® Kristall



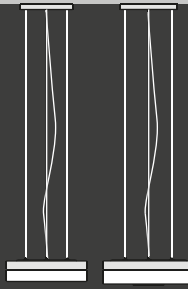
Lavano® | Lavano® Wing | Lavano® Uno



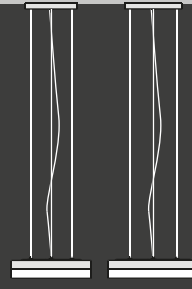
Scapha®



Douala®



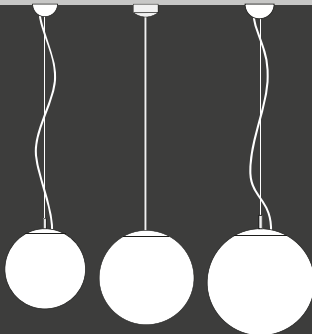
Douala® Slim



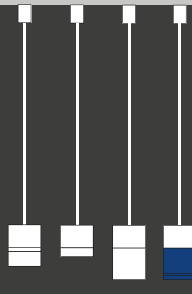
Douala® Kristall



Basic Ball



Cylio



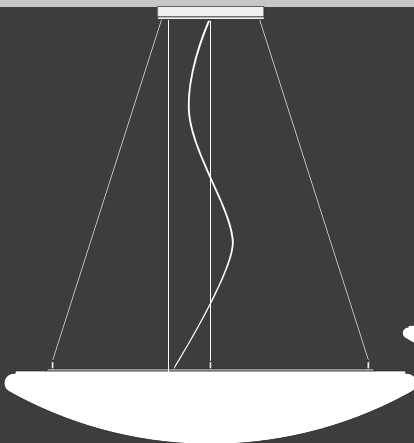
Cylio Track



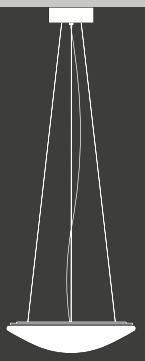
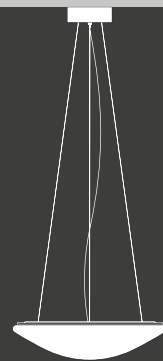
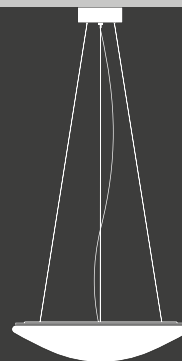
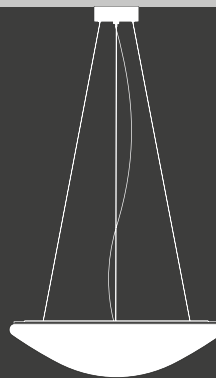
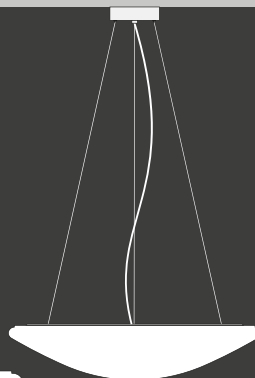
Deecos



Flat Polymero® Super XXL

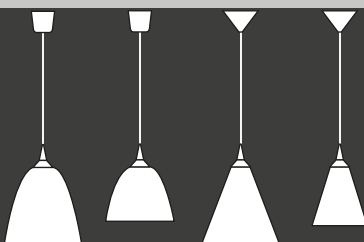


Flat Polymero® XXL

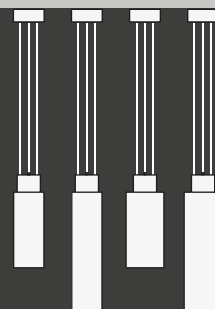


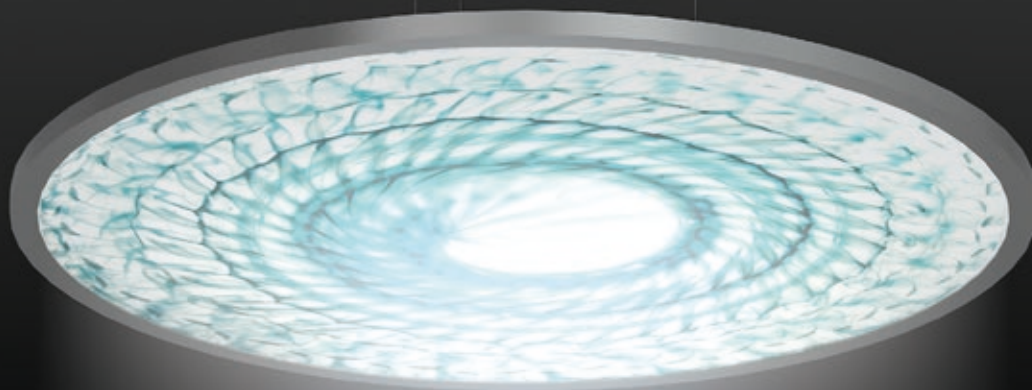
Flat Polymero®

Tholus



Glasdownlight





SIDELITE® ROUND | SIDELITE® ROUND FERROMURANO

Pendant luminaires

- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- Lateral light emission with LED
- Application of latest LED technology in minimalistic design
- This lighting fixture's prismatic plastic diffuser is incorporated into a merely 15 mm thick extruded aluminium profile
- Power supply through the suspension cable
- Design of the distinctive surface luminaire with an opal/prismatic plastic diffuser
- This distinctive lighting fixture features hand-crafted FerroMurano glass inserts available in four different colours.



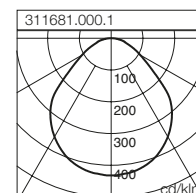
Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

- Prismatic model, ideal for computer workstations (UGR ≤ 19)
- Lightguide and diffuser made of non-yellowing PMMA
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Light colour 830 and 840, also on request 827
- LED rated life 50,000 h (L70, B10)

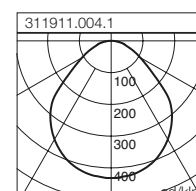


Further information on coloured FerroMurano glass as well as an overview of additional FerroMurano RZB luminaires can be found on page 29 of this catalogue or at www.rzb-lighting.com

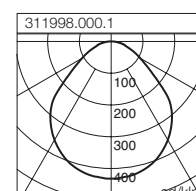
311681.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



311911.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



311998.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



Pendant luminaires | Series: Sidelite® Round

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

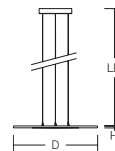
Suspension Length: 500-1200 mm

Anodised aluminium frame. Diffuser: PMMA plastic, opal/microprismatic. Canopy aluminium anodised. Power supply through suspension cable (on/off and DALI) or through separate cable (smart+free). 3-point steel cable suspension, steplessly adjustable. Special lengths available on request. Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC	
Pendant luminaires									Price Category 21
Diffuser: plastic (PMMA) opal/microprismatic									
Diameter D 348 mm, canopy Ø 221 mm, h 36 mm									
311998.000	D 348, H 15	LED	830	1800 lm	17 W	21,3	on/off	A++ A++	
311998.000.730	D 348, H 15	LED	830	1800 lm	17 W	21,3	smart+free	A++ A++	
311998.000.76	D 348, H 15	LED	830	1800 lm	17 W	21,3	DALI	A++ A++	
311998.000.1	D 348, H 15	LED	840	1950 lm	17 W	21,6	on/off	A++ A++	
311998.000.1.730	D 348, H 15	LED	840	1950 lm	17 W	21,6	smart+free	A++ A+	
311998.000.1.76	D 348, H 15	LED	840	1950 lm	17 W	21,6	DALI	A++ A++	
Tunable White - 2700 K to 6500 K									
311998.000.2.730	D 348, H 15	LED	827-865	1600 lm	16 W	20,7	smart+free	A++ A+	
Diameter D 457 mm, canopy Ø 221 mm, h 36 mm									
311911.004	D 457, H 15	LED	830	2850 lm	27 W	20,7	on/off	A++ A++	
311911.004.730	D 457, H 15	LED	830	2850 lm	27 W	20,8	smart+free	A+ A+	
311911.004.76	D 457, H 15	LED	830	2850 lm	27 W	20,7	DALI	A++ A++	
311911.004.1	D 457, H 15	LED	840	3050 lm	27 W	20,9	on/off	A++ A++	
311911.004.1.730	D 457, H 15	LED	840	3050 lm	27 W	21,0	smart+free	A+ A+	
311911.004.1.76	D 457, H 15	LED	840	3050 lm	27 W	20,9	DALI	A++ A++	
Tunable White - 2700 K to 6500 K									
311911.004.2.730	D 457, H 15	LED	827-865	3100 lm	31 W	20,8	smart+free	A+ A+	
Diameter D 675 mm, canopy Ø 263 mm, h 40 mm									
311681.000	D 675, H 15	LED	830	3800 lm	35 W	18,5	on/off	A++ A++	
311681.000.730	D 675, H 15	LED	830	3800 lm	35 W	18,5	smart+free	A++ A++	
311681.000.76	D 675, H 15	LED	830	3800 lm	35 W	18,5	DALI	A++ A++	
311681.000.1	D 675, H 15	LED	840	4300 lm	35 W	19,0	on/off	A++ A++	
311681.000.1.730	D 675, H 15	LED	840	4300 lm	35 W	19,0	smart+free	A++ A+	
311681.000.1.76	D 675, H 15	LED	840	4300 lm	35 W	19,0	DALI	A++ A++	
Tunable White - 2700 K to 6500 K									
311681.000.2.730	D 675, H 15	LED	827-865	4700 lm	47 W	19,3	smart+free	A+ A+	

Comparison LED vs. conventional lamps

LED 16 / 17W ≈

1 x 40 W T16-R (43 W EB)
3 x 14 W T16 (52 W EB)
3 x 18 W T26 (78 W CB)

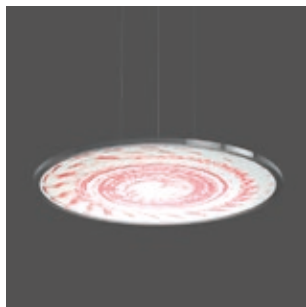
LED 27 / 31 W ≈

1 x 60 W T16-R (65 W EB)
4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)

LED 35 / 47 W ≈

4 x 24 W T16 (98 W EB)
2 x 36 W T26 (86 W CB)

Applies to versions with .76



Comparison LED vs. conventional lamps

LED 38 W ≈

1 x 40 W T16-R (43 W EB)
3 x 14 W T16 (52 W EB)

LED 54 W ≈

1 x 55 W T16-R (60 W EB)
4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)

DALI



Applies to
versions
with **.76**

Pendant luminaires | Series: Sidelite® Round FerroMurano

Type of Protection: **IP 40**

Protection Class: I

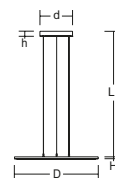
Impact Protection: IK02

Suspension Length: 500-1200 mm

Anodised aluminium frame. Diffuser: handcrafted, coloured glass FerroMurano. Canopy aluminium anodised. Power supply through suspension cable. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request. Integral driver. Lateral light emission thanks to LED.

LED included.

Available colours: aluminium, anodised

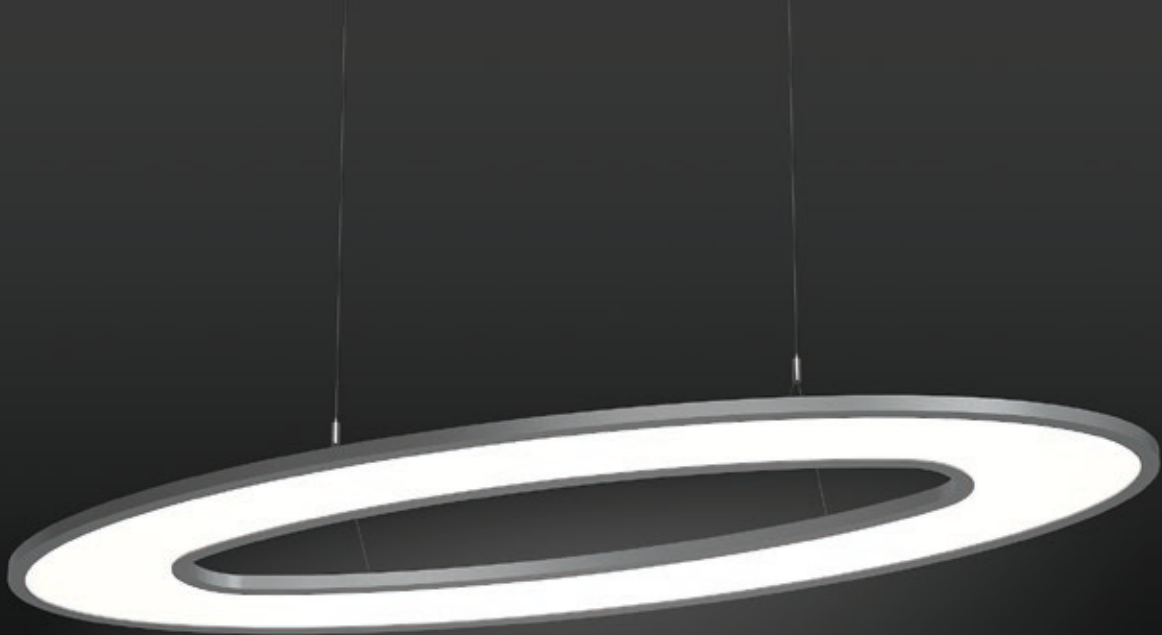


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Pendant luminaires								
Glass FerroMurano red								
Diameter D 457 mm, canopy Ø 221 mm, h 36 mm								
311907.004	D 457, H 15	LED	830	1850 lm	38 W	16,7	on/off	A++ A++
311907.004.76	D 457, H 15	LED	830	1850 lm	38 W	16,7	DALI	A++ A++
311907.004.1	D 457, H 15	LED	840	2050 lm	38 W	17,0	on/off	A++ A++
311907.004.1.76	D 457, H 15	LED	840	2050 lm	38 W	17,0	DALI	A++ A++
Diameter D 675 mm, canopy Ø 263 mm, h 40 mm								
311677.000	D 675, H 15	LED	830	3450 lm	54 W	18,6	on/off	A++ A++
311677.000.76	D 675, H 15	LED	830	3450 lm	54 W	18,6	DALI	A++ A++
311677.000.1	D 675, H 15	LED	840	3750 lm	54 W	17,0	on/off	A++ A++
311677.000.1.76	D 675, H 15	LED	840	3750 lm	54 W	17,0	DALI	A++ A++
Glass FerroMurano blue								
Diameter D 457 mm, canopy Ø 221 mm, h 36 mm								
311908.004	D 457, H 15	LED	830	2400 lm	38 W	20,1	on/off	A++ A++
311908.004.76	D 457, H 15	LED	830	2400 lm	38 W	20,1	DALI	A++ A++
311908.004.1	D 457, H 15	LED	840	2650 lm	38 W	20,4	on/off	A++ A++
311908.004.1.76	D 457, H 15	LED	840	2650 lm	38 W	20,4	DALI	A++ A++
Diameter D 675 mm, canopy Ø 263 mm, h 40 mm								
311678.000	D 675, H 15	LED	830	4300 lm	54 W	18,6	on/off	A++ A++
311678.000.76	D 675, H 15	LED	830	4300 lm	54 W	18,6	DALI	A++ A++
311678.000.1	D 675, H 15	LED	840	4600 lm	54 W	17,0	on/off	A++ A++
311678.000.1.76	D 675, H 15	LED	840	4600 lm	54 W	17,0	DALI	A++ A++
Glass FerroMurano green								
Diameter D 457 mm, canopy Ø 221 mm, h 36 mm								
311909.004	D 457, H 15	LED	830	2500 lm	38 W	21,1	on/off	A++ A++
311909.004.76	D 457, H 15	LED	830	2500 lm	38 W	21,1	DALI	A++ A++
311909.004.1	D 457, H 15	LED	840	2700 lm	38 W	21,4	on/off	A++ A++
311909.004.1.76	D 457, H 15	LED	840	2700 lm	38 W	21,4	DALI	A++ A++
Diameter D 675 mm, canopy Ø 263 mm, h 40 mm								
311679.000	D 675, H 15	LED	830	4400 lm	54 W	18,6	on/off	A++ A++
311679.000.76	D 675, H 15	LED	830	4400 lm	54 W	18,6	DALI	A++ A++
311679.000.1	D 675, H 15	LED	840	4700 lm	54 W	17,0	on/off	A++ A++
311679.000.1.76	D 675, H 15	LED	840	4700 lm	54 W	17,0	DALI	A++ A++
Glass FerroMurano white								
Diameter D 457 mm, canopy Ø 221 mm, h 36 mm								
311910.004	D 457, H 15	LED	830	3000 lm	38 W	22,3	on/off	A++ A++
311910.004.76	D 457, H 15	LED	830	3000 lm	38 W	22,3	DALI	A++ A++
311910.004.1	D 457, H 15	LED	840	3200 lm	38 W	22,6	on/off	A++ A++
311910.004.1.76	D 457, H 15	LED	840	3200 lm	38 W	22,6	DALI	A++ A++
Diameter D 675 mm, canopy Ø 263 mm, h 40 mm								
311693.000	D 675, H 15	LED	830	4900 lm	54 W	18,6	on/off	A++ A++
311693.000.76	D 675, H 15	LED	830	4900 lm	54 W	18,6	DALI	A++ A++
311693.000.1	D 675, H 15	LED	840	5400 lm	54 W	17,0	on/off	A++ A++
311693.000.1.76	D 675, H 15	LED	840	5400 lm	54 W	17,0	DALI	A++ A++

The luminaire flux and UGR of each luminaire varies due to the difference in colour intensity and structure of the glasses. Light colour 827 on request.





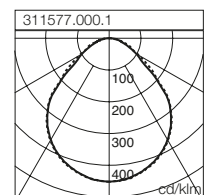


SIDELITE® ELLYPSOID

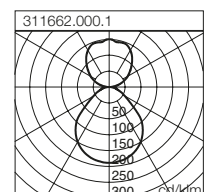
Pendant luminaires

- Lateral light emission with LED
- Application of latest LED technology in minimalistic design
- This lighting fixture's prismatic plastic diffuser is incorporated into a merely 15 mm thick extruded aluminium profile.
- Ideal for office areas (UGR ≤ 19) and computer workstations in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA
- Direct or direct/indirect light emission
- Sleek design featuring an eye-catching elliptical shape allows for unique interior lighting that creates a feeling of spaciousness
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Light colour 830 and 840, also on request 827
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)

311577.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	2	3



311662.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



Further luminaires of this series, see:
 Indoor lighting | Modular luminaires: surface mounted or pendant mounted
 Indoor lighting | Ceiling and wall luminaires
 Indoor lighting | Pendant luminaires

Pendant luminaires | Series: Sidelite® Ellipsoid

 Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

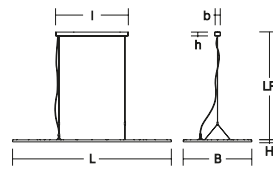
Suspension Length: 500-1200 mm

Anodised aluminium frame. Diffuser: PMMA plastic, opal/micropismatic. Canopy aluminium anodised, l 540, b 42, h 29 mm. Power supply through suspension cable (direct light emission with on/off or DALI) or through separate cable (direct/indirect light emission and direct light emission with smart+free). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Driver included in canopy. Lateral light emission thanks to LED.

LED included.

Available colour: 0 = aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.


**Comparison
LED vs. conventional lamps**
LED 44 W ≈

3 x 28 W T16 (92 W EB)

LED 70 W ≈

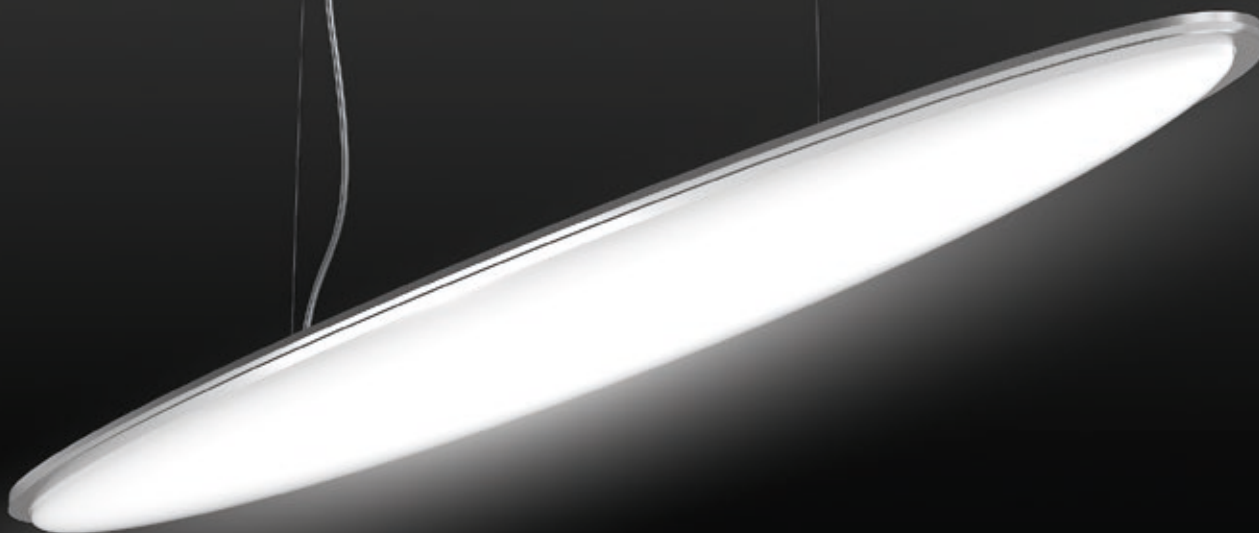
4 x 28 W T16 (122 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimming	EEC	Price Category 21
Pendant luminaires									
100% direct light emission									
311577.000	L 1204, B 521, H 15	LED	830	6950 lm	70 W	19,8	on/off	A++ A++	
311577.000.730	L 1204, B 521, H 15	LED	830	6950 lm	70 W	19,8	smart+free	A+ A+	
311577.000.76	L 1204, B 521, H 15	LED	830	6950 lm	70 W	19,8	DALI	A++ A++	
311577.000.1	L 1204, B 521, H 15	LED	840	7400 lm	70 W	20,2	on/off	A++ A++	
311577.000.1.730	L 1204, B 521, H 15	LED	840	7400 lm	70 W	20,2	smart+free	A+ A+	
311577.000.1.76	L 1204, B 521, H 15	LED	840	7400 lm	70 W	20,2	DALI	A++ A++	
Tunable White - 2700 K to 6500 K									
311577.000.2.730	L 1204, B 521, H 15	LED	827-865	4850 lm	44 W	18,7	smart+free	A+ A+	
60% direct and 40% indirect light emission									
311662.000	L 1204, B 521, H 15	LED	830	6900 lm	70 W	14,5	on/off	A++ A++	
311662.000.730	L 1204, B 521, H 15	LED	830	6900 lm	70 W	14,5	smart+free	A+ A+	
311662.000.76	L 1204, B 521, H 15	LED	830	6900 lm	70 W	14,5	DALI	A++ A++	
311662.000.1	L 1204, B 521, H 15	LED	840	7350 lm	70 W	14,8	on/off	A++ A++	
311662.000.1.730	L 1204, B 521, H 15	LED	840	7350 lm	70 W	14,8	smart+free	A+ A+	
311662.000.1.76	L 1204, B 521, H 15	LED	840	7350 lm	70 W	14,8	DALI	A++ A++	
Tunable White - 2700 K to 6500 K									
311662.000.2.730	L 1204, B 521, H 15	LED	827-865	4800 lm	44 W	13,4	smart+free	A+ A+	

DALI


 Applies to
versions
with .76

 The application image shows:
Sidelite® Ellipsoid



SCAPHA®

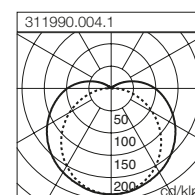
Pendant luminaires

- A range of luminaires for indoor lighting, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
- Glass hand-made using the countersinking process, matt on the outside, painted white on the inside
- Uniform and glare-free illumination of the small boat shaped corpus by specially adapted LED panel boards
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- The luminaire is available in two different sizes
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L80, B10)

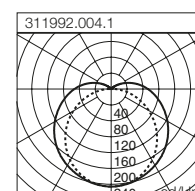


Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

311990.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



311992.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



Pendant luminaires | Series: Scapha®

Type of Protection: IP 20

Protection Class: I

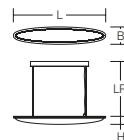
Suspension Length: 500-1200 mm

Base: aluminium, powder-coated. Canopy and glass fixture steel powder-coated.
Handmade concave glass, matt finish on the outside, painted white on the inside.
2-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using
Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Pendant luminaires							
Length L 714 mm							
311990.004	L 714, B 134, H 63	LED	830	2350 lm	35 W	on/off	A++ A++
311990.004.1	L 714, B 134, H 63	LED	840	2500 lm	35 W	on/off	A++ A++
Length L 1264 mm							
311992.004	L 1264, B 174, H 67	LED	830	3400 lm	51 W	on/off	A++ A++
311992.004.730	L 1264, B 174, H 67	LED	830	3400 lm	51 W	smart+free	A++ A++
311992.004.76	L 1264, B 174, H 67	LED	830	3400 lm	51 W	DALI	A++ A++
311992.004.1	L 1264, B 174, H 67	LED	840	3600 lm	51 W	on/off	A++ A++
311992.004.1.730	L 1264, B 174, H 67	LED	840	3600 lm	51 W	smart+free	A++ A++
311992.004.1.76	L 1264, B 174, H 67	LED	840	3600 lm	51 W	DALI	A++ A++
Replacement glasses							
05-1956.002	L 696, B 116, H 56						
05-1957.002	L 1246, B 156, H 60						

**Comparison
LED vs. conventional lamps**
LED 35 W ≈

1 x 58 W T26 (67 W CB)

LED 51 W ≈

2 x 36 W T26 (86 W CB)

DALI

 Applies to
versions
with .76

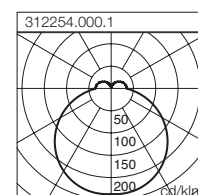



DOUALA®

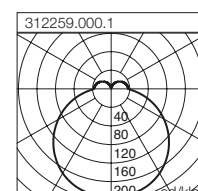
Pendant luminaires

- A multi-faceted range for indoor lighting, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- The stainless steel base and the glass create an impression of unity
- The cover made of mouth-blown, satin-finished three-layer opal glass is available in two different sizes
- High illuminance for superb visual comfort
- Steplessly adjustable 3-point steel cable suspension
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- On/Off with integrated phase cut dimming

312254.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	11	18



312259.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



Further luminaires of this series, see:
 Indoor lighting | Recessed ceiling and wall luminaires
 Indoor lighting | Ceiling and wall luminaires

Pendant luminaires | Series: Douala®

Type of Protection: **IP 40**

Protection Class: I

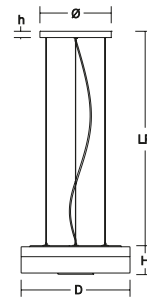
Impact Protection: IK02

Suspension Length: 500-1200 mm

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish. Patented spring fastening system. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Pendant luminaires

Price Category 21

Diameter D 300 mm

312254.000 *	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	on/off	A+ A+
312254.000.76	D 300, H 95	LED ⁽¹⁾	830	1750 lm	21 W	DALI	A+ A+
312254.000.1 *	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	on/off	A+ A+
312254.000.1.76	D 300, H 95	LED ⁽¹⁾	840	1850 lm	21 W	DALI	A+ A+

Diameter D 400 mm

312259.000 *	D 400, H 102	LED ⁽¹⁾	830	2300 lm	27 W	on/off	A+ A+
312259.000.1 *	D 400, H 102	LED ⁽¹⁾	840	2400 lm	27 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement glasses

Price Category 13

05-1934.012	D 300, H 76
05-2018.032	D 400, H 87

Comparison

LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 26 W TC-D (102 W CB)

DALI



Applies to versions with .76

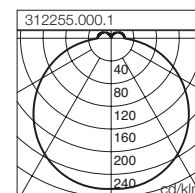


DOUALA® SLIM

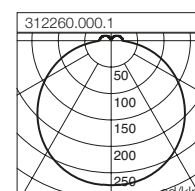
Pendant luminaires

- Featuring the new superflat diffuser made of mouth-blown, satin-finished three-layer opal glass, this luminaire rounds out our Douala® product family.
- A multi-faceted range for indoor lighting, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- The stainless steel base and the glass create an impression of unity
- The diffuser made of mouth-blown, satin-finished three-layer opal glass is available in two different sizes
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- On/Off with integrated phase cut dimming

312255.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	8	11
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	12	19



312260.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	14



Further luminaires of this series, see:
 Indoor lighting | Recessed ceiling and wall luminaires
 Indoor lighting | Ceiling and wall luminaires

Pendant luminaires | Series: Douala® Slim

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02

Suspension Length: 500-1200 mm

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass, satin finish.

Patented spring fastening system. 3-point steel cable suspension, steplessly adjustable.

Special lengths available on request.

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Pendant luminaires							
Diameter D 300 mm							
312255.000 *	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	on/off	A+ A+
312255.000.76	D 300, H 75	LED ⁽¹⁾	830	1500 lm	21 W	DALI	A+ A+
312255.000.1 *	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	on/off	A+ A+
312255.000.1.76	D 300, H 75	LED ⁽¹⁾	840	1600 lm	21 W	DALI	A+ A+
Diameter D 400 mm							
312260.000 *	D 400, H 75	LED ⁽¹⁾	830	2000 lm	27 W	on/off	A+ A+
312260.000.1 *	D 400, H 75	LED ⁽¹⁾	840	2100 lm	27 W	on/off	A+ A+
* With integrated phase cut dimming							
Replacement glasses							
05-1965.002	D 300, H 62						
05-1966.002	D 400, H 62						

Price Category 21

Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 18 W TC-D (52 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

DALI



Applies to
versions
with .76



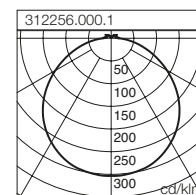


DOUALA® KRISTALL

Pendant luminaires

- Series of pendant luminaires, ceiling and wall luminaires
- The mouth blown opal glass with the transparent, icy edge of 20 mm gives the luminaire a brilliant look
- The stainless steel base and the stainless steel ring attached to the glass form an optical unit
- The luminaire is timelessly elegant and fully integrates in architectural surroundings
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- On/Off with integrated phase cut dimming

312256.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
9	14	18
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
13	20	32



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

Pendant luminaires | Series: Douala® Kristall

Type of Protection: **IP 40**

Protection Class: I

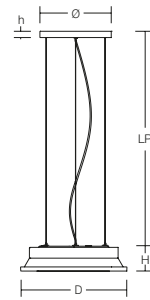
Impact Protection: IK02

Suspension Length: 500-1200 mm

Base: brushed stainless steel. Mouth-blown, 3-layer opal glass with a 20 mm clear glass edge. Patented spring fastening system. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 0 = stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Pendant luminaires

Price Category 21

Diameter D 340 mm

312256.000 *	D 340, H 86	LED ⁽¹⁾	830	1050 lm	21 W	on/off	A+ A+
312256.000.76	D 340, H 86	LED ⁽¹⁾	830	1050 lm	21 W	DALI	A+ A+
312256.000.1 *	D 340, H 86	LED ⁽¹⁾	840	1100 lm	21 W	on/off	A+ A+
312256.000.1.76	D 340, H 86	LED ⁽¹⁾	840	1100 lm	21 W	DALI	A+ A+

* With integrated phase cut dimming

Replacement glasses

Price Category 13

05-2037.012	D 340, H 71
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Comparison

LED vs. conventional lamps

LED 21 W ≈

1 x 26 W TC-D (34 W CB)



Applies to versions with .76



RING OF FIRE®

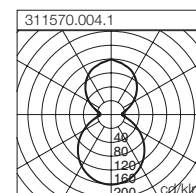
Pendant luminaires

- **NEW:** Addition to the series of a further glass version for D 495mm
- An interior luminaire that is in a class of its own
- Power supply through the suspension cable
- With outstanding design and durability attributes:
 - Surface or pendant mount ring-shaped ceiling luminaire
 - Luminaire with opal or Murano glass insert
 - Surface mount half-ring-shaped ceiling or wall luminaire
- Infinitely height-adjustable steel cable suspension; special lengths on request
- Provides a large amount of indirect light
- Lighting technology and form lend themselves to long service life as a design element for interior decoration
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)

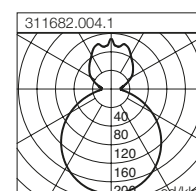


Further luminaires of this series, see:
Indoor lighting | Ceiling luminaires
Indoor lighting | Wall luminaires

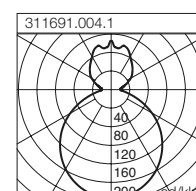
311570.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	8



311682.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



311691.004.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



Pendant luminaires | Series: Ring of Fire®

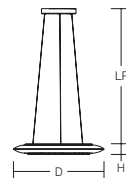
Type of Protection: IP 20
 Protection Class: I
 Impact Protection: IK02
 Suspension Length: 500-1200 mm

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Canopy aluminium anodised. Power supply through suspension cable (on/off and DALI) or through separate cable (smart+free). 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colours (X): 4 = aluminium, anodised, 5 = gold

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Price Category 21							
Diameter D 495 mm, canopy Ø 221 mm, h 36 mm							
311669.004	D 495, H 55	LED	830	2450 lm	24 W	on/off	A++ A++
311669.004.730	D 495, H 55	LED	830	2450 lm	24 W	smart+free	A++ A+
311669.004.76	D 495, H 55	LED	830	2450 lm	24 W	DALI	A++ A++
311669.004.1	D 495, H 55	LED	840	2550 lm	24 W	on/off	A++ A++
311669.004.1.730	D 495, H 55	LED	840	2550 lm	24 W	smart+free	A++ A+
311669.004.1.76	D 495, H 55	LED	840	2550 lm	24 W	DALI	A++ A++
Tunable White - 2700 K to 6500 K							
311669.004.2.730	D 495, H 55	LED	827-865	2250 lm	19 W	smart+free	A+ A+
Diameter D 690 mm, canopy Ø 263 mm, h 40 mm							
311570.004	D 690, H 81	LED	830	3450 lm	35 W	on/off	A++ A++
311570.004.730	D 690, H 81	LED	830	3450 lm	35 W	smart+free	A+ A+
311570.004.76.Q	D 690, H 81	LED	830	3450 lm	35 W	DALI	A++ A++
311570.005 *	D 690, H 81	LED	830	3450 lm	35 W	on/off	A++ A++
311570.005.76 *	D 690, H 81	LED	830	3450 lm	35 W	DALI	A++ A++
311570.004.1	D 690, H 81	LED	840	3550 lm	35 W	on/off	A++ A++
311570.004.1.730	D 690, H 81	LED	840	3550 lm	35 W	smart+free	A+ A+
311570.004.1.76	D 690, H 81	LED	840	3550 lm	35 W	DALI	A++ A++
Tunable White - 2700 K to 6500 K							
311570.004.2.730	D 690, H 81	LED	827-865	3450 lm	36 W	smart+free	A+ A+

* Canopy, bezel ring and supporting ring 24 carat gold-plated

Replacement glasses							
Price Category 13							
05-1941.002	D 495, H 48						
05-1936.002	D 690, H 75						

Comparison LED vs. conventional lamps
LED 19 / 24 W ≈

1 x 55 W T16-R (60 W EB)

LED 35 / 36 W ≈

3 x 26 W TC-D (102 W CB)

1 x 22 + 40 W T16-R (70 W EB)



Applies to versions with .76

Pendant luminaires | Series: Ring of Fire®

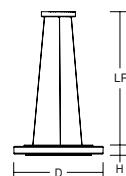
Type of Protection: IP 20
 Protection Class: I
 Suspension Length: 500-1200 mm

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Canopy aluminium anodised. Power supply through suspension cable (on/off and DALI) or through separate cable (smart+free). 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 4 = aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Price Category 21							
Diameter D 495 mm, canopy Ø 221 mm, h 36 mm							
312261.004	D 495, H 55	LED	830	2450 lm	24 W	on/off	A+ A++
312261.004.730	D 495, H 55	LED	830	2450 lm	24 W	smart+free	A+ A+
312261.004.76	D 495, H 55	LED	830	2450 lm	24 W	DALI	A+ A++
312261.004.1	D 495, H 55	LED	840	2550 lm	24 W	on/off	A+ A++
312261.004.1.730	D 495, H 55	LED	840	2550 lm	24 W	smart+free	A+ A+
312261.004.1.76	D 495, H 55	LED	840	2550 lm	24 W	DALI	A+ A++
Tunable White - 2700 K to 6500 K							
312261.004.2.730	D 495, H 55	LED	827-865	2250 lm	19 W	smart+free	A+ A+
Replacement glasses							
Price Category 13							
05-2038.002	D 495, H 48						

Comparison LED vs. conventional lamps
LED 19 / 24 W ≈

1 x 55 W T16-R (60 W EB)



Comparison LED vs. conventional lamps

LED 63 W ≈
4 x 21 W T16 (90 W EB)

Pendant luminaires | Series: Ring of Fire®

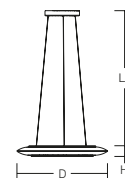
Type of Protection: IP 20
Protection Class: I
Impact Protection: IK02
Suspension Length: 500-1200 mm

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Inner circle surface: 417 mm in diameter opal white glass insert, for additional direct light output, which can be controlled separately. Canopy aluminium anodised.

3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 4 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Pendant luminaires							
Diameter D 690 mm, canopy Ø 263 mm, h 40 mm							
311682.004	D 690, H 81	2 x LED	830	5450 lm	63 W	on/off	A+,A++ A+
311682.004.76	D 690, H 81	2 x LED	830	5450 lm	63 W	DALI	A+,A++ A+
311682.004.1	D 690, H 81	2 x LED	840	5550 lm	63 W	on/off	A+,A++ A+
311682.004.1.76	D 690, H 81	2 x LED	840	5550 lm	63 W	DALI	A+,A++ A+
Replacement glasses							
05-1936.002	D 690, H 75						



Comparison LED vs. conventional lamps

LED 63 W ≈
4 x 26 W TC-D (136 W CB)
1 x 55 W T16-R (60 W EB)

Pendant luminaires | Series: Ring of Fire®

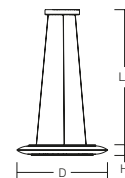
Type of Protection: IP 20
Protection Class: I
Impact Protection: IK02
Suspension Length: 500-1200 mm

Supporting ring made of anodised aluminium. Diffuser: mouth-blown opal glass, satin finish. Inner circle surface: 417 mm in diameter coloured Murano glass insert, for additional direct light output, which can be controlled separately. Canopy aluminium anodised.

3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 4 = aluminium, anodised

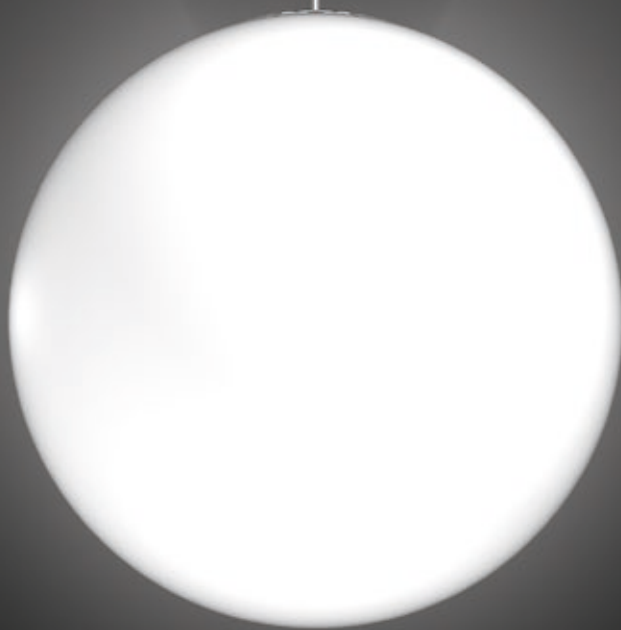


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Pendant luminaires							
Diameter D 690 mm, canopy Ø 263 mm, h 40 mm							
Glass FerroMurano red							
311674.004	D 690, H 81	2 x LED	830	4850 lm	63 W	on/off	A+,A++ A+
311674.004.76	D 690, H 81	2 x LED	830	4850 lm	63 W	DALI	A+,A++ A+
311674.004.1	D 690, H 81	2 x LED	840	4950 lm	63 W	on/off	A+,A++ A+
311674.004.1.76	D 690, H 81	2 x LED	840	4950 lm	63 W	DALI	A+,A++ A+
Glass FerroMurano blue							
311675.004	D 690, H 81	2 x LED	830	4850 lm	63 W	on/off	A+,A++ A+
311675.004.76	D 690, H 81	2 x LED	830	4850 lm	63 W	DALI	A+,A++ A+
311675.004.1	D 690, H 81	2 x LED	840	4950 lm	63 W	on/off	A+,A++ A+
311675.004.1.76	D 690, H 81	2 x LED	840	4950 lm	63 W	DALI	A+,A++ A+
Glass FerroMurano green							
311676.004	D 690, H 81	2 x LED	830	4850 lm	63 W	on/off	A+,A++ A+
311676.004.76	D 690, H 81	2 x LED	830	4850 lm	63 W	DALI	A+,A++ A+
311676.004.1	D 690, H 81	2 x LED	840	4950 lm	63 W	on/off	A+,A++ A+
311676.004.1.76	D 690, H 81	2 x LED	840	4950 lm	63 W	DALI	A+,A++ A+
Glass FerroMurano white							
311691.004	D 690, H 81	2 x LED	830	5350 lm	63 W	on/off	A+,A++ A+
311691.004.76	D 690, H 81	2 x LED	830	5350 lm	63 W	DALI	A+,A++ A+
311691.004.1	D 690, H 81	2 x LED	840	5450 lm	63 W	on/off	A+,A++ A+
311691.004.1.76	D 690, H 81	2 x LED	840	5450 lm	63 W	DALI	A+,A++ A+
The luminaire flux of each luminaire varies due to the difference in colour intensity and structure of the glass. Light colour 827 on request.							
Replacement glasses							
05-1936.002	D 690, H 75						



Further information on coloured FerroMurano glass as well as an overview of additional FerroMurano RZB luminaires can be found on page 29 of this catalogue or at www.rzb-lighting.com



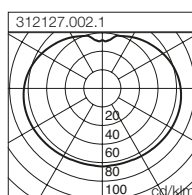


BASIC BALL LED

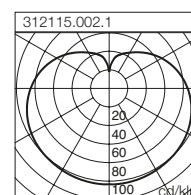
Pendant luminaires

- Pendant luminaire in timelessly classic sphere design
- Spheres in four different diameters
- Mouth-blown opal glass or shockproof plastic sphere
- Shadow-free, homogeneous and soft illumination
- Infinitely height adjustable single-point steel cable suspension (Special lengths available on request) or chrome-plated pendant tubes
- Luminaire flux from 2450 - 8350 lm possible
- Luminous efficiency up to 111 lm/W
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L80, B10)
- DALI versions suitable for use with AC/DC central power supply according to EN 50172

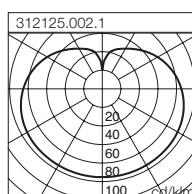
312127.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



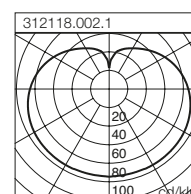
312115.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



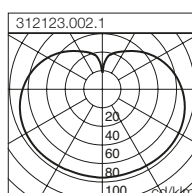
312125.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



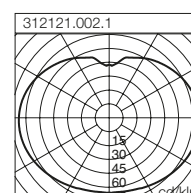
312118.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312123.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312121.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



Pendant luminaires | Series: Basic Ball LED

 Type of Protection: **IP 40**

Protection Class: I

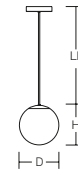
Impact Protection: IK02 (Glass sphere), IK10 (Plastic sphere)

Canopy: metal, chrome-plated. Sphere: opal glass, mouth-blown, satin finish, or plastic, shockproof, opal, satin finish.

LED included.

Modular design: Pendant tube must be ordered separately!

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Glass sphere							
D 350 mm							
312115.002	D 350, H 350	LED	830	2450 lm	28 W	on/off	A+ A+
312115.002.76	D 350, H 350	LED	830	2450 lm	28 W	DALI	A+ A+
312115.002.1	D 350, H 350	LED	840	2500 lm	28 W	on/off	A+ A+
312115.002.1.76	D 350, H 350	LED	840	2500 lm	28 W	DALI	A+ A+
312116.002	D 350, H 350	LED	830	5450 lm	55 W	on/off	A+ A+
312116.002.76	D 350, H 350	LED	830	5450 lm	55 W	DALI	A+ A+
312116.002.1	D 350, H 350	LED	840	5600 lm	55 W	on/off	A+ A+
312116.002.1.76	D 350, H 350	LED	840	5600 lm	55 W	DALI	A+ A+
D 400 mm							
312118.002	D 400, H 400	LED	830	5450 lm	55 W	on/off	A+ A+
312118.002.1	D 400, H 400	LED	840	5650 lm	55 W	on/off	A+ A+
312119.002	D 400, H 400	LED	830	7400 lm	79 W	on/off	A+ A+
312119.002.76	D 400, H 400	LED	830	7400 lm	79 W	DALI	A+ A+
312119.002.1	D 400, H 400	LED	840	7650 lm	79 W	on/off	A+ A+
312119.002.1.76	D 400, H 400	LED	840	7650 lm	79 W	DALI	A+ A+
D 500 mm							
312120.002	D 500, H 500	LED	830	7650 lm	79 W	on/off	A+ A+
312120.002.76	D 500, H 500	LED	830	7650 lm	79 W	DALI	A+ A+
312120.002.1	D 500, H 500	LED	840	7900 lm	79 W	on/off	A+ A+
312120.002.1.76	D 500, H 500	LED	840	7900 lm	79 W	DALI	A+ A+
D 600 mm							
312121.002	D 600, H 600	LED	830	7700 lm	79 W	on/off	A+ A+
312121.002.76	D 600, H 600	LED	830	7700 lm	79 W	DALI	A+ A+
312121.002.1	D 600, H 600	LED	840	7950 lm	79 W	on/off	A+ A+
312121.002.1.76	D 600, H 600	LED	840	7950 lm	79 W	DALI	A+ A+
Plastic sphere							
D 350 mm							
312122.002	D 350, H 350	LED	830	2600 lm	28 W	on/off	A+ A+
312122.002.76	D 350, H 350	LED	830	2600 lm	28 W	DALI	A+ A+
312122.002.1	D 350, H 350	LED	840	2650 lm	28 W	on/off	A+ A+
312122.002.1.76	D 350, H 350	LED	840	2650 lm	28 W	DALI	A+ A+
312123.002	D 350, H 350	LED	830	5800 lm	55 W	on/off	A+ A+
312123.002.76	D 350, H 350	LED	830	5800 lm	55 W	DALI	A+ A+
312123.002.1	D 350, H 350	LED	840	5950 lm	55 W	on/off	A+ A+
312123.002.1.76	D 350, H 350	LED	840	5950 lm	55 W	DALI	A+ A+
D 400 mm							
312124.002	D 400, H 400	LED	830	5900 lm	55 W	on/off	A+ A+
312124.002.1	D 400, H 400	LED	840	6100 lm	55 W	on/off	A+ A+
312125.002	D 400, H 400	LED	830	8050 lm	79 W	on/off	A+ A+
312125.002.76	D 400, H 400	LED	830	8050 lm	79 W	DALI	A+ A+
312125.002.1	D 400, H 400	LED	840	8300 lm	79 W	on/off	A+ A+
312125.002.1.76	D 400, H 400	LED	840	8300 lm	79 W	DALI	A+ A+
D 500 mm							
312126.002	D 500, H 500	LED	830	8100 lm	79 W	on/off	A+ A+
312126.002.76	D 500, H 500	LED	830	8100 lm	79 W	DALI	A+ A+
312126.002.1	D 500, H 500	LED	840	8350 lm	79 W	on/off	A+ A+
312126.002.1.76	D 500, H 500	LED	840	8350 lm	79 W	DALI	A+ A+
D 630 mm							
312127.002	D 630, H 630	LED	830	8100 lm	79 W	on/off	A+ A+
312127.002.76	D 630, H 630	LED	830	8100 lm	79 W	DALI	A+ A+
312127.002.1	D 630, H 630	LED	840	8350 lm	79 W	on/off	A+ A+
312127.002.1.76	D 630, H 630	LED	840	8350 lm	79 W	DALI	A+ A+

Pendant tube (can be shortened on site)
Price Category 21
To be ordered separately

982229.0044	D 25, LP 1000
982230.0044	D 25, LP 1500
982231.0044	D 25, LP 2000

Adaptor, aluminium
Price Category 21

981222.000	D 35, H 15	For mounting a pendant tube shortened on site (incl. mounting material)
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Connection sleeve, M13 x 1, chrome-plated, for pendant tube extension
Price Category 21

981230.0044	D 18, H 40	Accessories for connecting two pendant tubes
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**Comparison
LED vs. conventional lamps**
LED 28 W ≈

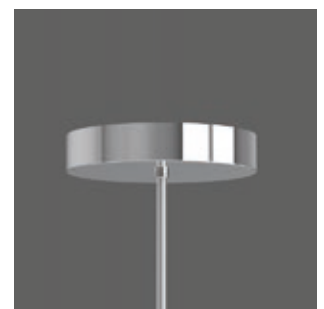
3 x 26 W TC-D (102 W CB)

LED 55 W ≈

3 x 42 W TC-TEL (137 W EB)

LED 79 W ≈

4 x 42 W TC-TEL (180 W EB)



Canopy with pendant tube



The application image shows:
Basic Ball

Pendant luminaires | Series: Basic Ball LED

Type of Protection: IP 40

Protection Class: I

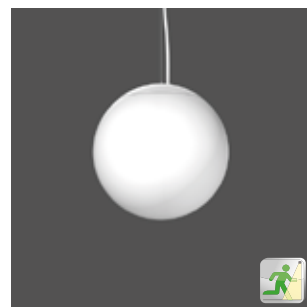
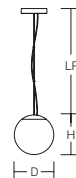
Impact Protection: IK02 (Glass sphere), IK10 (Plastic sphere)

Suspension Length: 4000 mm

Base: metal, white, powder-coated. Sphere: opal glass, mouth-blown, satin finish, or plastic, shockproof, opal, satin finish. Canopy: metal, white. Power supply cable: white. Single-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Glass sphere							
D 350 mm							
312105.002	D 350, H 350	LED	830	2450 lm	28 W	on/off	A+ A+
312105.002.76	D 350, H 350	LED	830	2450 lm	28 W	DALI	A+ A+
312105.002.1	D 350, H 350	LED	840	2500 lm	28 W	on/off	A+ A+
312105.002.1.76	D 350, H 350	LED	840	2500 lm	28 W	DALI	A+ A+
312094.002	D 350, H 350	LED	830	5450 lm	55 W	on/off	A+ A+
312094.002.76	D 350, H 350	LED	830	5450 lm	55 W	DALI	A+ A+
312094.002.1	D 350, H 350	LED	840	5600 lm	55 W	on/off	A+ A+
312094.002.1.76	D 350, H 350	LED	840	5600 lm	55 W	DALI	A+ A+
D 400 mm							
312106.002	D 400, H 400	LED	830	5450 lm	55 W	on/off	A+ A+
312106.002.1	D 400, H 400	LED	840	5650 lm	55 W	on/off	A+ A+
312095.002	D 400, H 400	LED	830	7400 lm	79 W	on/off	A+ A+
312095.002.76	D 400, H 400	LED	830	7400 lm	79 W	DALI	A+ A+
312095.002.1	D 400, H 400	LED	840	7650 lm	79 W	on/off	A+ A+
312095.002.1.76	D 400, H 400	LED	840	7650 lm	79 W	DALI	A+ A+
D 500 mm							
312107.002	D 500, H 500	LED	830	7650 lm	79 W	on/off	A+ A+
312107.002.76	D 500, H 500	LED	830	7650 lm	79 W	DALI	A+ A+
312107.002.1	D 500, H 500	LED	840	7900 lm	79 W	on/off	A+ A+
312107.002.1.76	D 500, H 500	LED	840	7900 lm	79 W	DALI	A+ A+
D 600 mm							
312108.002	D 600, H 600	LED	830	7700 lm	79 W	on/off	A+ A+
312108.002.76	D 600, H 600	LED	830	7700 lm	79 W	DALI	A+ A+
312108.002.1	D 600, H 600	LED	840	7950 lm	79 W	on/off	A+ A+
312108.002.1.76	D 600, H 600	LED	840	7950 lm	79 W	DALI	A+ A+
Plastic sphere							
D 350 mm							
312109.002	D 350, H 350	LED	830	2600 lm	28 W	on/off	A+ A+
312109.002.76	D 350, H 350	LED	830	2600 lm	28 W	DALI	A+ A+
312109.002.1	D 350, H 350	LED	840	2650 lm	28 W	on/off	A+ A+
312109.002.1.76	D 350, H 350	LED	840	2650 lm	28 W	DALI	A+ A+
312110.002	D 350, H 350	LED	830	5800 lm	55 W	on/off	A+ A+
312110.002.76	D 350, H 350	LED	830	5800 lm	55 W	DALI	A+ A+
312110.002.1	D 350, H 350	LED	840	5950 lm	55 W	on/off	A+ A+
312110.002.1.76	D 350, H 350	LED	840	5950 lm	55 W	DALI	A+ A+
D 400 mm							
312111.002	D 400, H 400	LED	830	5900 lm	55 W	on/off	A+ A+
312111.002.1	D 400, H 400	LED	840	6100 lm	55 W	on/off	A+ A+
312112.002	D 400, H 400	LED	830	8050 lm	79 W	on/off	A+ A+
312112.002.76	D 400, H 400	LED	830	8050 lm	79 W	DALI	A+ A+
312112.002.1	D 400, H 400	LED	840	8300 lm	79 W	on/off	A+ A+
312112.002.1.76	D 400, H 400	LED	840	8300 lm	79 W	DALI	A+ A+
D 500 mm							
312113.002	D 500, H 500	LED	830	8100 lm	79 W	on/off	A+ A+
312113.002.76	D 500, H 500	LED	830	8100 lm	79 W	DALI	A+ A+
312113.002.1	D 500, H 500	LED	840	8350 lm	79 W	on/off	A+ A+
312113.002.1.76	D 500, H 500	LED	840	8350 lm	79 W	DALI	A+ A+
D 630 mm							
312114.002	D 630, H 630	LED	830	8100 lm	79 W	on/off	A+ A+
312114.002.76	D 630, H 630	LED	830	8100 lm	79 W	DALI	A+ A+
312114.002.1	D 630, H 630	LED	840	8350 lm	79 W	on/off	A+ A+
312114.002.1.76	D 630, H 630	LED	840	8350 lm	79 W	DALI	A+ A+

Replacement glasses

Price Category 13

05-311012.002	D 350, H 331
05-311015.002	D 400, H 384
05-311044.002	D 500, H 489
05-311469.002	D 600, H 591

Replacement diffusers

Price Category 13

08-311050.012	D 350, H 331	Plastic (polyethylene)
08-311053.012	D 400, H 380	Plastic (polyethylene)
08-311056.012	D 500, H 488	Plastic (polyethylene)
08-311378.012	D 630, H 621	Plastic (polyethylene)

Comparison
LED vs. conventional lamps

LED 28 W ≈

3 x 26 W TC-D (102 W CB)

LED 55 W ≈

3 x 42 W TC-TEL (137 W EB)

LED 79 W ≈

4 x 42 W TC-TEL (180 W EB)



Canopy with suspension cable



Canopy with suspension cable

Pendant luminaires | Series: Basic Ball

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02 (Glass sphere), IK10 (Plastic sphere)

Suspension Length: 4000 mm

Base: metal, white, powder-coated. Sphere: opal glass, mouth-blown, satin finish, or plastic, shockproof, opal, satin finish. Canopy: plastic, white. Power supply cable: white. Single-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Available colour: 2 = white



Reference number	Dimensions	Lamp	dimmable	EEC	
Pendant luminaires					Price Category 11
Glass sphere					
D 300 mm					
311009.002 .Q	D 300, H 300	1 x E27® 150 W	on/off	A,C,E A+	
D 350 mm					
311012.002	D 350, H 350	1 x E27® 200 W	on/off	A,C,E A+	
D 400 mm					
311015.002 .Q	D 400, H 400	1 x E27® 200 W	on/off	A,C,E A+	
Plastic sphere					
D 300 mm					
311047.002	D 300, H 300	1 x E27® 150 W	on/off	A,C,E A+	
D 350 mm					
311050.002	D 350, H 350	1 x E27® 200 W	on/off	A,C,E A+	
D 400 mm					
311053.002	D 400, H 400	1 x E27® 200 W	on/off	A,C,E A+	
Replacement glasses					Price Category 13
05-311009.002	D 300, H 287				
05-311012.002	D 350, H 331				
05-311015.002	D 400, H 384				
Replacement diffusers					Price Category 13
08-311047.012	D 300, H 291	Plastic (polyethylene)			
08-311050.012	D 350, H 331	Plastic (polyethylene)			
08-311053.012	D 400, H 380	Plastic (polyethylene)			

Pendant luminaires | Series: Basic Ball

 Type of Protection: **IP 40**

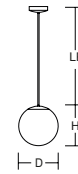
Protection Class: I

Impact Protection: IK02 (Glass sphere), IK10 (Plastic sphere)

Canopy: metal, chrome-plated. Sphere: opal glass, mouth-blown, satin finish, or plastic, shockproof, opal, satin finish.

Modular design: Pendant tube must be ordered separately!

Available colour: 2 = white



Reference number	Dimensions	Lamp	dimmable	EEC	
Pendant luminaires					Price Category 11
Glass sphere					
D 300 mm					
311344.002 .Q	D 300, H 300	1 x E27 [®] 150 W	on/off	A,C,E A+	
D 350 mm					
311347.002	D 350, H 350	1 x E27 [®] 200 W	on/off	A,C,E A+	
D 400 mm					
311350.002	D 400, H 400	1 x E27 [®] 200 W	on/off	A,C,E A+	
Plastic sphere					
D 300 mm					
311363.002	D 300, H 300	1 x E27 [®] 150 W	on/off	A,C,E A+	
D 350 mm					
311366.002	D 350, H 350	1 x E27 [®] 200 W	on/off	A,C,E A+	
D 400 mm					
311369.002	D 400, H 400	1 x E27 [®] 200 W	on/off	A,C,E A+	



Canopy with pendant tube

Pendant tube (can be shortened on site)					Price Category 21
To be ordered separately					
981221.0044	D 25, LP 1000				
981151.0044	D 25, LP 1500				
981152.0044	D 25, LP 2000				



Adaptor, aluminium					Price Category 21
981222.000	D 35, H 15	For mounting a pendant tube shortened on site (incl. mounting material)			



Connection sleeve, M13 x 1, chrome-plated, for pendant tube extension					Price Category 21
981230.0044	D 18, H 40	Accessories for connecting two pendant tubes			



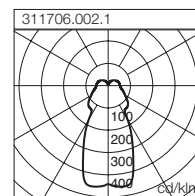
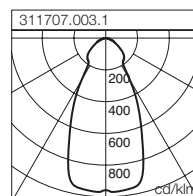
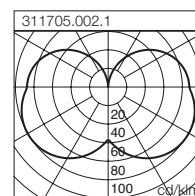
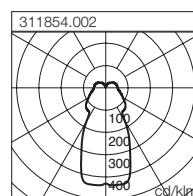
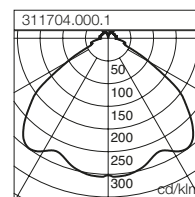


CYLIO

Pendant luminaires

- A sleekly designed surface or pendant mount ceiling luminaire for indoor lighting
- Made of top-notch components:
 - Base and canopy made of anodised aluminium with brushed stainless steel finish
 - Handmade glass elements
- Two different light colours 830 and 840
- Also available with 3-phase track adapter

- Each glass fixture is a unique element. The following versions are available:
 - Transparent crystal glass, partially frosted
 - White opal glass
 - White opal glass with transparent glass bottom
 - Two-tone opal glass "white in white"
 - Opal glass sphere, white
- Exceptionally good and uniform light distribution



Further luminaires of this series, see:
Indoor lighting | Ceiling luminaires

Pendant luminaires | Series: Cyllo

Type of Protection: IP 20

Protection Class: I

Impact Protection: IK06

Suspension Length: 800 mm

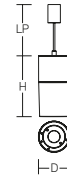
Base: anodised aluminium with brushed stainless steel finish.

Glass fastening: bayonet fixing. Suspension cord with integrated steel cable.

Canopy aluminium anodised.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmm-able	EEC
Pendant luminaires							Price Category 21
with canopy							
Base: D 100, Canopy: D 60, H 88 mm							
Opal glass, short, white							
311964.002	D 100, H 127	LED ⁽¹⁾	830	700 lm	14 W	on/off	A A
311964.002.1	D 100, H 127	LED ⁽¹⁾	840	750 lm	14 W	on/off	A A
Opal glass white							
311725.002	D 100, H 230	LED ⁽¹⁾	830	560 lm	14 W	on/off	A A
311725.002.1	D 100, H 230	LED ⁽¹⁾	840	590 lm	14 W	on/off	A A
311870.002	D 100, H 230	1 x QA60 (clear) 46 W				on/off	C,E A+
Opal glass white with transparent glass bottom							
311851.002	D 100, H 220	LED ⁽¹⁾	830	600 lm	14 W	on/off	A A
311851.002.1	D 100, H 220	LED ⁽¹⁾	840	620 lm	14 W	on/off	A A
311873.002	D 100, H 220	1 x QA60 (clear) 46 W				on/off	C,E A+
Opal glass "white in white" with transparent glass bottom							
311726.002	D 100, H 220	LED ⁽¹⁾	830	540 lm	14 W	on/off	A A
311726.002.1	D 100, H 220	LED ⁽¹⁾	840	570 lm	14 W	on/off	A A
311871.002	D 100, H 220	1 x QA60 (clear) 46 W				on/off	C,E A+
Opal glass sphere, white							
311966.002	D 180, H 252	LED ⁽¹⁾	830	910 lm	14 W	on/off	A A
311966.002.1	D 180, H 252	LED ⁽¹⁾	840	920 lm	14 W	on/off	A A
Replacement glasses							Price Category 13
05-1953.002	D 100, H 57	Short white opal glass					
05-1952.032	D 100, H 150	Opal glass "white in white" with transparent glass bottom					
05-1952.062	D 100, H 150	Opal glass white with transparent glass bottom					
05-1952.002	D 100, H 160	White opal glass					
05-1954.002	D 180, H 182	Opal glass sphere					

**Comparison
LED vs. conventional lamps**
LED 14 W ≈
 1 x 50 W QT12 (60 W e-transf.)


Short white opal glass



Opal glass white



Opal glass white with transparent glass bottom



Opal glass „white in white“ with transparent glass bottom



Opal glass sphere

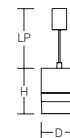
**Pendant luminaires | Series: Cyllo**

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK06
Suspension Length: 800 mm

Base: anodised aluminium with brushed stainless steel finish.
Glass fastening: bayonet fixing. Suspension cord with integrated steel cable.
Canopy aluminium anodised.

LED included.

Available colours: stainless steel, brushed


**Comparison
LED vs. conventional lamps**
LED 18 W ≈

1 x 50 W QT12 (60 W e-transf.)
1 x 75 W QT12 (105 W e-transf.)

Pendant luminaires**Price Category 21****with canopy****Base: D 150, Canopy: D 60, H 88 mm****Short white opal glass**

311970.002	D 150, H 155	LED ⁽¹⁾	830	1150 lm	18 W	on/off	A A+
311970.002.1	D 150, H 155	LED ⁽¹⁾	840	1150 lm	18 W	on/off	A+ A+

Opal glass white

311705.002	D 150, H 262	LED ⁽¹⁾	830	650 lm	18 W	on/off	A A+
311705.002.1	D 150, H 262	LED ⁽¹⁾	840	680 lm	18 W	on/off	A+ A+

Opal glass white with clear transparent bottom

311874.002	D 150, H 262	1 x QA60 (clear)	46 W			on/off	C,E A+
311877.002	D 150, H 257	1 x QA60 (clear)	46 W			on/off	C,E A+
311854.002	D 150, H 262	LED ⁽¹⁾	830	800 lm	18 W	on/off	A A+
311854.002.1	D 150, H 262	LED ⁽¹⁾	840	840 lm	18 W	on/off	A+ A+

Opal glass "white in white" with transparent glass bottom

311706.002	D 150, H 257	LED ⁽¹⁾	830	770 lm	18 W	on/off	A A+
311706.002.1	D 150, H 257	LED ⁽¹⁾	840	810 lm	18 W	on/off	A+ A+

Black cobalt glass with transparent glass bottom

311875.002	D 150, H 257	1 x QA60 (clear)	46 W			on/off	C,E A+
311707.003	D 150, H 258	LED ⁽¹⁾	830	350 lm	18 W	on/off	A A+
311707.003.1	D 150, H 258	LED ⁽¹⁾	840	360 lm	18 W	on/off	A+ A+

Crystal glass

311704.000	D 150, H 190	LED ⁽¹⁾	830	840 lm	18 W	on/off	A A+
311704.000.1	D 150, H 190	LED ⁽¹⁾	840	890 lm	18 W	on/off	A+ A+

Replacement glasses**Price Category 13**

05-1955.002	D 150, H 67	Short white opal glass
05-1937.000	D 150, H 102	Crystal glass
05-1939.022	D 150, H 167	Opal glass "white in white" with transparent glass bottom
05-1939.033	D 150, H 167	Black cobalt glass with transparent glass bottom
05-1940.022	D 150, H 167	Opal glass white with transparent glass bottom
05-1940.002	D 150, H 172	Opal glass white



Short white opal glass



Opal glass white



Opal glass white with transparent glass bottom



Opal glass „white in white“ with transparent glass bottom



Black cobalt glass with transparent glass bottom



Crystal glass

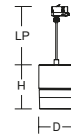
Pendant luminaires | Series: Cyllo Track

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK06
Suspension Length: 590 mm

Base: anodised aluminium with brushed stainless steel finish.
Glass fastening: bayonet fixing. Suspension cord with integrated steel cable.
With multi adaptor for 3-circuit tracks 230 V.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
with multi adaptor for 3-circuit tracks 230 V							
D 100 mm							
Opal glass white							
311835.002	D 100, H 230	LED ⁽¹⁾	830	560 lm	14 W	on/off	A A
311835.002.1	D 100, H 230	LED ⁽¹⁾	840	590 lm	14 W	on/off	A A
Opal glass white with transparent glass bottom							
311852.002	D 100, H 220	LED ⁽¹⁾	830	600 lm	14 W	on/off	A A
311852.002.1	D 100, H 220	LED ⁽¹⁾	840	620 lm	14 W	on/off	A A
Opal glass "white in white" with transparent glass bottom							
311836.002	D 100, H 220	LED ⁽¹⁾	830	540 lm	14 W	on/off	A A
311836.002.1	D 100, H 220	LED ⁽¹⁾	840	570 lm	14 W	on/off	A A

Replacement glasses							
Price Category 13							
05-1952.032	D 100, H 150	Opal glass "white in white" with transparent glass bottom					
05-1952.062	D 100, H 150	Opal glass white with transparent glass bottom					
05-1952.002	D 100, H 160	White opal bottom					

Comparison LED vs. conventional lamps

LED 14 W ≈
1 x 50 W QT12 (60 W e-transf.)

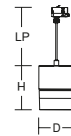
Pendant luminaires | Series: Cyllo Track

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK06
Suspension Length: 560 mm, 590 mm

Base: anodised aluminium with brushed stainless steel finish.
Glass fastening: bayonet fixing. Suspension cord with integrated steel cable.
With multi adaptor for 3-circuit tracks 230 V.

LED included.

Available colour: stainless steel, brushed



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
with multi adaptor for 3-circuit tracks 230 V							
D 150 mm							
Crystal glass							
311841.000	D 150, H 190	LED ⁽¹⁾	830	840 lm	18 W	on/off	A A+
311841.000.1	D 150, H 190	LED ⁽¹⁾	840	890 lm	18 W	on/off	A+ A+
Opal glass white							
311842.002	D 150, H 262	LED ⁽¹⁾	830	650 lm	18 W	on/off	A A+
311842.002.1	D 150, H 262	LED ⁽¹⁾	840	680 lm	18 W	on/off	A+ A+
Opal glass white with transparent glass bottom							
311855.002	D 150, H 257	LED ⁽¹⁾	830	800 lm	18 W	on/off	A A+
311855.002.1	D 150, H 257	LED ⁽¹⁾	840	840 lm	18 W	on/off	A+ A+
Opal glass "white in white" with transparent glass bottom							
311843.002	D 150, H 257	LED ⁽¹⁾	830	770 lm	18 W	on/off	A A+
311843.002.1	D 150, H 257	LED ⁽¹⁾	840	810 lm	18 W	on/off	A+ A+
Black cobalt glass with transparent glass bottom							
311844.003	D 150, H 258	LED ⁽¹⁾	830	350 lm	18 W	on/off	A A+
311844.003.1	D 150, H 258	LED ⁽¹⁾	840	360 lm	18 W	on/off	A+ A+

Replacement glasses							
Price Category 13							
05-1937.000	D 150, H 102	Crystal glass					
05-1939.022	D 150, H 167	Opal glass "white in white" with transparent glass bottom					
05-1939.033	D 150, H 167	Black cobalt glass with transparent glass bottom					
05-1940.022	D 150, H 167	Opal glass white with transparent glass bottom					
05-1940.002	D 150, H 172	Opal glass white					

Comparison LED vs. conventional lamps

LED 18 W ≈
1 x 75 W QT12 (105 W e-transf.)
1 x 50 W QT12 (60 W e-transf.)



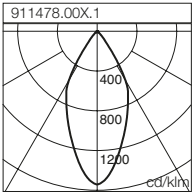
DEECOS P

Pendant luminaires

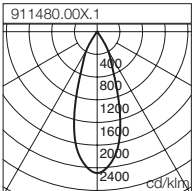
- High quality die-cast aluminium housing in two sizes
- Easy installation with transparent and adjustable 2 m pendant cable and canopy with magnetic attachment
- Excellent light quality thanks to flicker-free light, uniformity of the light cone, glare limitation and light colour quality
- Equally suitable for reflector and lens technologies
- MIRO-SILVER® reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone

- Black plastic ring with recessed LED for avoiding glare from the side
- Different light colours: 830, 840 with Ra 82
- Further light colours 927, 930, 935, 940 with Ra 92 available on request
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Converter with the best properties with respect to freedom from flicker and strobe effect
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, hexagonal dots, diffusers clear and frosted, white interchangeable plastic ring

911478.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,88	3454
2,0	1,76	863
3,0	2,63	384
4,0	3,51	216
5,0	4,39	138



911480.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,63	8084
2,0	1,26	2021
3,0	1,89	898
4,0	2,52	505
5,0	3,15	323



Further luminaires of this series, see:
 Indoor lighting | Recessed projectors
 Indoor lighting | Surface mounted projectors

Pendant luminaires | Series: Deecos P Mini

Type of Protection: IP 20

Protection Class: I

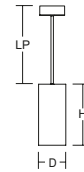
Impact Protection: IK06

Suspension Length: 2000 mm

Housing: pressure die-cast aluminium, powder-coated. Heat resistant plastic ring black.
With faceted aluminium reflector optical assembly or polycarbonate lens. Passive cooling.
Transparent pendant cable 2 m, can be shortened, with integrated steel cable. Canopy made of powder-coated sheet steel with magnetic attachment.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

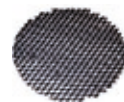


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimming	EEC
Pendant luminaires									
Including lens for best uniformity of the light cone									
911477.00X	D 87, H 195	LED	830	1700 lm	20 W	46°	16,2	on/off	A++ A++
911477.00X.76	D 87, H 195	LED	830	1700 lm	20 W	46°	16,2	DALI	A++ A++
911477.00X.1	D 87, H 195	LED	840	1750 lm	20 W	46°	16,3	on/off	A++ A++
911477.00X.1.76	D 87, H 195	LED	840	1750 lm	20 W	46°	16,3	DALI	A++ A++
911479.00X	D 87, H 195	LED	830	2400 lm	30 W	46°	17,4	on/off	A++ A++
911479.00X.76	D 87, H 195	LED	830	2400 lm	30 W	46°	17,4	DALI	A++ A++
911479.00X.1	D 87, H 195	LED	840	2450 lm	30 W	46°	17,5	on/off	A++ A++
911479.00X.1.76	D 87, H 195	LED	840	2450 lm	30 W	46°	17,5	DALI	A++ A++
Including reflector for maximum efficiency									
911476.00X	D 87, H 195	LED	830	1900 lm	20 W	47°	19,5	on/off	A++ A++
911476.00X.76	D 87, H 195	LED	830	1900 lm	20 W	47°	19,5	DALI	A++ A++
911476.00X.1	D 87, H 195	LED	840	1900 lm	20 W	47°	19,6	on/off	A++ A++
911476.00X.1.76	D 87, H 195	LED	840	1900 lm	20 W	47°	19,6	DALI	A++ A++
911478.00X	D 87, H 195	LED	830	2700 lm	30 W	47°	20,8	on/off	A++ A++
911478.00X.76	D 87, H 195	LED	830	2700 lm	30 W	47°	20,8	DALI	A++ A++
911478.00X.1	D 87, H 195	LED	840	2800 lm	30 W	47°	20,9	on/off	A++ A++
911478.00X.1.76	D 87, H 195	LED	840	2800 lm	30 W	47°	20,9	DALI	A++ A++

Ra > 90 options on request

Diffuser									
982370.000	D 75, H 3	Safety glass, clear							
982370.010	D 75, H 3	Safety glass, satin finish							

Anti-glare horizontal dots									
982371.003	D 74, H 3	Honeycomb louvre Mini							



Interchangeable plastic rings									
982419.002	D 82, H 20	White plastic ring for reflector							
982421.002	D 82, H 31	White plastic ring for lens							



Interchangeable optics									
982368.003	D 82, H 55	Reflector, narrow beam							
982368.013	D 82, H 55	Reflector, medium beam							
982368.023	D 82, H 55	Reflector, wide beam							
982369.003	D 82, H 55	Lens, narrow beam							
982369.013	D 82, H 55	Lens, medium beam							
982369.023	D 82, H 55	Lens, wide beam							
982369.033	D 82, H 55	Lens, very wide beam							
982369.043	D 82, H 55	Lens with oval light distribution for corridor							





Comparison LED vs. conventional lamps

LED 38 W ≈
1 x 70 W HIT (84 W CB)

Pendant luminaires | Series: Deecos P Maxi

Type of Protection: IP 20

Protection Class: I

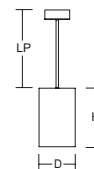
Impact Protection: IK06

Suspension Length: 2000 mm

Housing: pressure die-cast aluminium, powder-coated. Heat resistant plastic ring black. With optical set MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Transparent pendant cable 2 m, can be shortened, with integrated steel cable. Canopy made of powder-coated sheet steel with magnetic attachment.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dimmable	EEC
Pendant luminaires									Price Category 21
Including lens for best uniformity of the light cone									
911481.00X	D 123, H 181	LED	830	3150 lm	38 W	41°	14,4	on/off	A++ A++
911481.00X.76	D 123, H 181	LED	830	3150 lm	38 W	41°	14,4	DALI	A++ A++
911481.00X.1	D 123, H 181	LED	840	3350 lm	38 W	41°	14,6	on/off	A++ A++
911481.00X.1.76	D 123, H 181	LED	840	3350 lm	38 W	41°	14,6	DALI	A++ A++
Including reflector for maximum efficiency									
911480.00X	D 123, H 181	LED	830	3800 lm	38 W	35°	14,7	on/off	A++ A++
911480.00X.76	D 123, H 181	LED	830	3800 lm	38 W	35°	14,7	DALI	A++ A++
911480.00X.1	D 123, H 181	LED	840	4050 lm	38 W	35°	14,9	on/off	A++ A++
911480.00X.1.76	D 123, H 181	LED	840	4050 lm	38 W	35°	14,9	DALI	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request

Diffuser									Price Category 21
982374.000	D 111, H 3	Safety glass, clear							
982374.010	D 111, H 3	Safety glass, satin finish							



Anti-glare horizontal dots									Price Category 21
982375.003	D 111, H 3	Honeycomb louvre Maxi							



Interchangeable plastic rings									Price Category 21
982420.002	D 118, H 20	White plastic ring for reflector							
982422.002	D 118, H 33	White plastic ring for lens							



Interchangeable opticals									Price Category 21
982372.003	D 118, H 83	Reflector, narrow beam							
982372.013	D 118, H 83	Reflector, medium beam							
982372.023	D 118, H 83	Reflector, wide beam							
982372.033	D 118, H 83	Reflector, very wide beam							
982373.003	D 118, H 83	Lens, narrow beam							
982373.013	D 118, H 83	Lens, medium beam							
982373.023	D 118, H 83	Lens with oval light distribution for corridor							





FLAT POLYMERO® KREIS SLIM

Pendant luminaires

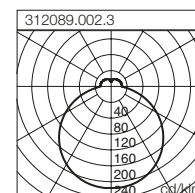
- New: Featuring the new superflat diffuser, this luminaire rounds out our Flat Polymero® Kreis family
- Uniform lighting achieved by the use of LED surface modules
- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffuser
- Different diameters available



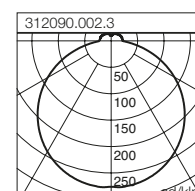
Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

- With patented locking technology
- Luminaire can be opened without tools
- LED exchangeable
- PMMA diffuser:
 - sturdy, scratch resistant (replacement for glass)
 - UV-resistant (non fade - no yellowing)
 - totally weatherproof
- PC diffuser:
 - hard, stiff, shatterproof, extremely shockproof
 - UV-stabilised
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- On/Off with integrated phase cut dimming

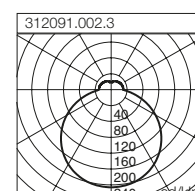
312089.002.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	13



312090.002.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	13



312091.002.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	8



Pendant luminaires | Series: Flat Polymero® Kreis Slim

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

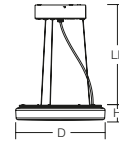
Suspension Length: 200-1300 mm, 350-1300 mm

Base and canopy: metal, powder-coated, white. Canopy Ø 205 mm, h 55 mm. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Diffuser: plastic (PMMA)							
Diameter D 360 mm, LP 200-1300 mm							
312089.002.1 *	D 360, H 60	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
312089.002.1.76	D 360, H 60	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
312089.002.3 *	D 360, H 60	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
312089.002.3.76	D 360, H 60	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+
Diameter D 460 mm, LP 200-1300 mm							
312090.002.1 *	D 460, H 65	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
312090.002.1.76	D 460, H 65	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
312090.002.3 *	D 460, H 65	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
312090.002.3.76	D 460, H 65	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+
312241.002.1 *	D 460, H 65	LED ⁽¹⁾	830	2650 lm	27 W	on/off	A+ A+
312241.002.3 *	D 460, H 65	LED ⁽¹⁾	840	2750 lm	27 W	on/off	A+ A+
Diameter D 515 mm, LP 350-1300 mm							
312091.002.1	D 515, H 65	LED ⁽¹⁾	830	3100 lm	33 W	on/off	A+ A+
312091.002.3	D 515, H 65	LED ⁽¹⁾	840	3200 lm	33 W	on/off	A+ A+
Diffuser: plastic (polycarbonate)							
Diameter D 360 mm, LP 200-1300 mm							
312089.002.2 *	D 360, H 60	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
312089.002.2.76	D 360, H 60	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
312089.002.4 *	D 360, H 60	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
312089.002.4.76	D 360, H 60	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
Diameter D 460 mm, LP 200-1300 mm							
312090.002.2 *	D 460, H 65	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
312090.002.2.76	D 460, H 65	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
312090.002.4 *	D 460, H 65	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
312090.002.4.76	D 460, H 65	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
312241.002.2 *	D 460, H 65	LED ⁽¹⁾	830	2900 lm	27 W	on/off	A+ A+
312241.002.4 *	D 460, H 65	LED ⁽¹⁾	840	3000 lm	27 W	on/off	A+ A+
Diameter D 515 mm, LP 350-1300 mm							
312091.002.2	D 515, H 65	LED ⁽¹⁾	830	3400 lm	33 W	on/off	A+ A+
312091.002.4	D 515, H 65	LED ⁽¹⁾	840	3500 lm	33 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement diffusers			Price Category 13				
08-312085.002	D 360, H 61	Plastic (PMMA)					
08-312085.012	D 360, H 61	Plastic (polycarbonate)					
08-312086.002	D 460, H 68	Plastic (PMMA)					
08-312086.012	D 460, H 68	Plastic (polycarbonate)					
08-312087.002	D 515, H 69	Plastic (PMMA)					
08-312087.012	D 515, H 69	Plastic (polycarbonate)					

Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

Applies to versions with **.76**

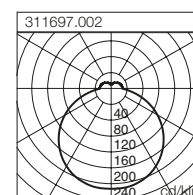


FLAT POLYMERO® KREIS

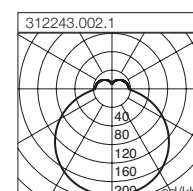
Pendant luminaires

- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffuser
- Uniform lighting achieved by the use of LED surface modules
- Different diameters available
- Numerous customized solutions are available
- Can also be used as ready-to-install luminous ceiling with minor setup and maintenance costs
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- On/Off with integrated phase cut dimming

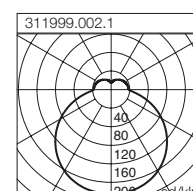
311697.002		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
1	2	3



311999.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	9



312243.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	9



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

Pendant luminaires | Series: Flat Polymero® Kreis XXL

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK07 (PMMA), IK10 (polycarbonate)

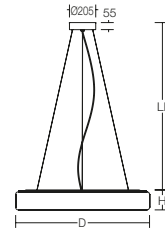
Suspension Length: 600-1300 mm

Base and canopy: metal, powder-coated, white. Canopy Ø 205 mm, h 55 mm. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
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Pendant luminaires

Price Category 21

Diffuser: plastic (PMMA) D 1040 mm

311697.002	D 1040, H 150	LED	830	9650 lm	100 W	on/off	A++ A++
311697.002.76	D 1040, H 150	LED	830	9650 lm	100 W	DALI	A++ A++
311697.002.1	D 1040, H 150	LED	840	10500 lm	100 W	on/off	A++ A++
311697.002.1.76	D 1040, H 150	LED	840	10500 lm	100 W	DALI	A++ A++



Diffuser: plastic (polycarbonate) D 1040 mm

311697.002.2	D 1040, H 150	LED	830	10500 lm	100 W	on/off	A++ A++
311697.002.2.76	D 1040, H 150	LED	830	10500 lm	100 W	DALI	A++ A++
311697.002.3	D 1040, H 150	LED	840	11400 lm	100 W	on/off	A++ A++
311697.002.3.76	D 1040, H 150	LED	840	11400 lm	100 W	DALI	A++ A++

Replacement diffusers

Price Category 13

08-311292.002	D 1040, H 150	Plastic (PMMA)
08-311292.012	D 1040, H 150	Plastic (polycarbonate)

Comparison

LED vs. conventional lamps

LED 100 W ≈

4 x 55 W TC-L (232 W EB)





Pendant luminaires | Series: Flat Polymero® Kreis

Type of Protection: **IP 40**

Protection Class: I

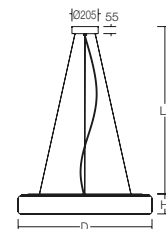
Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

Suspension Length: 200-1300 mm, 350-1300 mm

Base and canopy: metal, powder-coated, white. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. Canopy Ø 205 mm, h 55 mm. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

DALI



Applies to
versions
with .76

Pendant luminaires

Price Category 11

Diffuser: plastic (PMMA)

D 360 mm, LP 200-1300 mm

311978.002.3 *	D 360, H 87	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
311978.002.3.76	D 360, H 87	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
311978.002.1 *	D 360, H 87	LED ⁽¹⁾	840	2050 lm	21 W	on/off	A+ A+
311978.002.1.76	D 360, H 87	LED ⁽¹⁾	840	2050 lm	21 W	DALI	A+ A+

D 460 mm, LP 200-1300 mm

311979.002.3 *	D 460, H 93	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
311979.002.3.76	D 460, H 93	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
311979.002.1 *	D 460, H 93	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
311979.002.1.76	D 460, H 93	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
312243.002.3 *	D 460, H 93	LED ⁽¹⁾	830	2800 lm	27 W	on/off	A+ A+
312243.002.1 *	D 460, H 93	LED ⁽¹⁾	840	2900 lm	27 W	on/off	A+ A+

D 515 mm, LP 350-1300 mm

311999.002.3	D 515, H 98	LED ⁽¹⁾	830	3200 lm	33 W	on/off	A+ A+
311999.002.1	D 515, H 98	LED ⁽¹⁾	840	3200 lm	33 W	on/off	A+ A+

Diffuser: plastic (polycarbonate)

D 360 mm, LP 200-1300 mm

311978.002.4 *	D 360, H 87	LED ⁽¹⁾	830	2050 lm	21 W	on/off	A+ A+
311978.002.4.76	D 360, H 87	LED ⁽¹⁾	830	2050 lm	21 W	DALI	A+ A+
311978.002.2 *	D 360, H 87	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
311978.002.2.76	D 360, H 87	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+

D 460 mm, LP 200-1300 mm

311979.002.4 *	D 460, H 93	LED ⁽¹⁾	830	2050 lm	21 W	on/off	A+ A+
311979.002.4.76	D 460, H 93	LED ⁽¹⁾	830	2050 lm	21 W	DALI	A+ A+
311979.002.2 *	D 460, H 93	LED ⁽¹⁾	840	2150 lm	21 W	on/off	A+ A+
311979.002.2.76	D 460, H 93	LED ⁽¹⁾	840	2150 lm	21 W	DALI	A+ A+
312243.002.4 *	D 460, H 93	LED ⁽¹⁾	830	3000 lm	27 W	on/off	A+ A+
312243.002.2 *	D 460, H 93	LED ⁽¹⁾	840	3100 lm	27 W	on/off	A+ A+

D 515 mm, LP 350-1300 mm

311999.002.4	D 515, H 98	LED ⁽¹⁾	830	3400 lm	33 W	on/off	A+ A+
311999.002.2	D 515, H 98	LED ⁽¹⁾	840	3400 lm	33 W	on/off	A+ A+

* With integrated phase cut dimming

Replacement diffusers

Price Category 13

08-311595.002	D 360, H 81	Plastic (PMMA)
08-311595.012	D 360, H 81	Plastic (polycarbonate)
08-311600.002	D 460, H 88	Plastic (PMMA)
08-311600.012	D 460, H 87	Plastic (polycarbonate)
08-311604.002	D 515, H 93	Plastic (PMMA)
08-311604.012	D 515, H 92	Plastic (polycarbonate)





FLAT POLYMERO®

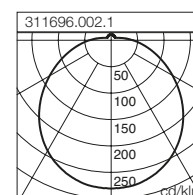
Pendant luminaires

- A range with outstanding variety of types, consisting of:
 - Pendant luminaires
 - Ceiling and wall luminaires
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffuser
- Uniform lighting achieved by the use of LED surface modules
- Different diameters available - from 360 mm to 1700 mm
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)

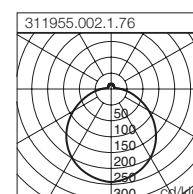


Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

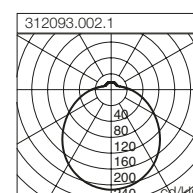
311696.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	1	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
1	2	3



311955.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	1	1
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
1	1	2



312093.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	9



Pendant luminaires | Series: Flat Polymero® Super XXL

 Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK10

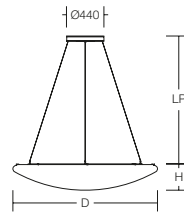
Suspension Length: 1500-4500 mm

Base and canopy: metal, powder-coated, white. Canopy Ø 440 mm, h 63 mm. 4-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Diffuser: plastic (PMMA), opal. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Diffuser: plastic (PMMA) D 1700 mm							
311955.002.76	D 1700, H 300	LED	830	20300 lm	280 W	DALI	A++ A++
311955.002.1.76	D 1700, H 300	LED	840	22100 lm	280 W	DALI	A++ A++

Price Category 21

Replacement diffusers							
08-311270.002	D 1700, H 300	Plastic (PMMA)					

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 280 W ≈
12 x 36 W TC-L (468 W CB)

Pendant luminaires | Series: Flat Polymero® XXL

 Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK10

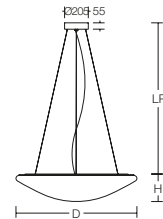
Suspension Length: 600-1300 mm

Base and canopy: metal, powder-coated, white. Canopy Ø 205 mm, h 55 mm. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Diffuser: plastic (PMMA) D 1040 mm							
311696.002	D 1040, H 230	LED	830	9500 lm	100 W	on/off	A++ A++
311696.002.76	D 1040, H 230	LED	830	9500 lm	100 W	DALI	A++ A++
311696.002.1	D 1040, H 230	LED	840	10300 lm	100 W	on/off	A++ A++
311696.002.1.76	D 1040, H 230	LED	840	10300 lm	100 W	DALI	A++ A++

Price Category 21

Diffuser: plastic (polycarbonate) D 1040 mm							
311696.002.2	D 1040, H 230	LED	830	10000 lm	100 W	on/off	A++ A++
311696.002.2.76	D 1040, H 230	LED	830	10000 lm	100 W	DALI	A++ A++
311696.002.3	D 1040, H 230	LED	840	10900 lm	100 W	on/off	A++ A++
311696.002.3.76	D 1040, H 230	LED	840	10900 lm	100 W	DALI	A++ A++

Replacement diffusers							
08-311183.022	D 1040, H 230	Plastic (PMMA)					
08-311183.032	D 1040, H 230	Plastic (polycarbonate)					

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 100 W ≈
4 x 55 W TC-L (232 W EB)




Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 37 W ≈

4 x 26 W TC-D (136 W CB)

DALI



Applies to
versions
with .76

Pendant luminaires | Series: Flat Polymero®

Type of Protection: IP 40

Protection Class: I

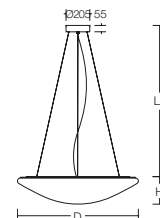
Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

Suspension Length: 200-1300 mm, 350-1300 mm

Base and canopy: metal, powder-coated, white. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. Canopy Ø 205 mm, h 55 mm. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Pendant luminaires							
Diffuser: plastic (PMMA)							
D 360 mm, LP 200-1300 mm							
311974.002.3 *	D 360, H 100	LED ⁽¹⁾	830	1850 lm	21 W	on/off	A+ A+
311974.002.3.76	D 360, H 100	LED ⁽¹⁾	830	1850 lm	21 W	DALI	A+ A+
311974.002.1 *	D 360, H 100	LED ⁽¹⁾	840	1950 lm	21 W	on/off	A+ A+
311974.002.1.76	D 360, H 100	LED ⁽¹⁾	840	1950 lm	21 W	DALI	A+ A+
D 460 mm, LP 200-1300 mm							
311975.002.3 *	D 460, H 120	LED ⁽¹⁾	830	1950 lm	21 W	on/off	A+ A+
311975.002.3.76	D 460, H 120	LED ⁽¹⁾	830	1950 lm	21 W	DALI	A+ A+
311975.002.1 *	D 460, H 120	LED ⁽¹⁾	840	2050 lm	21 W	on/off	A+ A+
311975.002.1.76	D 460, H 120	LED ⁽¹⁾	840	2050 lm	21 W	DALI	A+ A+
312245.002.3 *	D 460, H 120	LED ⁽¹⁾	830	2800 lm	27 W	on/off	A+ A+
312245.002.1 *	D 460, H 120	LED ⁽¹⁾	840	2900 lm	27 W	on/off	A+ A+
D 515 mm, LP 350-1300 mm							
311976.002.3 *	D 515, H 150	LED ⁽¹⁾	830	1950 lm	21 W	on/off	A+ A+
311976.002.3.76	D 515, H 150	LED ⁽¹⁾	830	1950 lm	21 W	DALI	A+ A+
311976.002.1 *	D 515, H 150	LED ⁽¹⁾	840	2050 lm	21 W	on/off	A+ A+
311976.002.1.76	D 515, H 150	LED ⁽¹⁾	840	2050 lm	21 W	DALI	A+ A+
312093.002.1	D 515, H 150	LED ⁽¹⁾	840	3200 lm	33 W	on/off	A+ A+
312093.002.3	D 515, H 150	LED ⁽¹⁾	830	3200 lm	33 W	on/off	A+ A+
D 620 mm, LP 350-1300 mm							
312097.002.3	D 620, H 160	LED ⁽¹⁾	830	3250 lm	33 W	on/off	A+ A+
312097.002.1	D 620, H 160	LED ⁽¹⁾	840	3250 lm	33 W	on/off	A+ A+
311924.002.3	D 620, H 160	LED	830	4050 lm	37 W	on/off	A++ A++
311924.002.3.76	D 620, H 160	LED	830	4050 lm	37 W	DALI	A++ A++
311924.002.1	D 620, H 160	LED	840	4050 lm	37 W	on/off	A++ A++
311924.002.1.76	D 620, H 160	LED	840	4050 lm	37 W	DALI	A++ A++
Diffuser: plastic (polycarbonate)							
D 360 mm, LP 200-1300 mm							
311974.002.4 *	D 360, H 100	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
311974.002.4.76	D 360, H 100	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
311974.002.2 *	D 360, H 100	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
311974.002.2.76	D 360, H 100	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+
D 460 mm, LP 200-1300 mm							
311975.002.4 *	D 460, H 120	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
311975.002.4.76	D 460, H 120	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
311975.002.2 *	D 460, H 120	LED ⁽¹⁾	840	2100 lm	21 W	on/off	A+ A+
311975.002.2.76	D 460, H 120	LED ⁽¹⁾	840	2100 lm	21 W	DALI	A+ A+
312245.002.4 *	D 460, H 120	LED ⁽¹⁾	830	2950 lm	27 W	on/off	A+ A+
312245.002.2 *	D 460, H 120	LED ⁽¹⁾	840	2950 lm	27 W	on/off	A+ A+
D 515 mm, LP 350-1300 mm							
311976.002.4 *	D 515, H 150	LED ⁽¹⁾	830	2000 lm	21 W	on/off	A+ A+
311976.002.4.76	D 515, H 150	LED ⁽¹⁾	830	2000 lm	21 W	DALI	A+ A+
311976.002.2 *	D 515, H 150	LED ⁽¹⁾	840	2150 lm	21 W	on/off	A+ A+
311976.002.2.76	D 515, H 150	LED ⁽¹⁾	840	2150 lm	21 W	DALI	A+ A+
312093.002.2	D 515, H 150	LED ⁽¹⁾	840	3250 lm	33 W	on/off	A+ A+
312093.002.4	D 515, H 150	LED ⁽¹⁾	830	3250 lm	33 W	on/off	A+ A+
D 620 mm, LP 350-1300 mm							
312097.002.4	D 620, H 160	LED ⁽¹⁾	830	3300 lm	33 W	on/off	A+ A+
312097.002.2	D 620, H 160	LED ⁽¹⁾	840	3300 lm	33 W	on/off	A+ A+
311924.002.4	D 620, H 160	LED	830	4250 lm	37 W	on/off	A++ A++
311924.002.4.76	D 620, H 160	LED	830	4250 lm	37 W	DALI	A++ A++
311924.002.2	D 620, H 160	LED	840	4250 lm	37 W	on/off	A++ A++
311924.002.2.76	D 620, H 160	LED	840	4250 lm	37 W	DALI	A++ A++

* With integrated phase cut dimming

Replacement diffusers			Price Category 13
08-311161.012	D 360, H 88	Plastic (PMMA)	
08-311161.022	D 360, H 88	Plastic (polycarbonate)	
08-311165.012	D 460, H 113	Plastic (PMMA)	
08-311165.022	D 460, H 113	Plastic (polycarbonate)	
08-311170.012	D 515, H 137	Plastic (PMMA)	
08-311170.022	D 515, H 137	Plastic (polycarbonate)	
08-311173.012	D 620, H 150	Plastic (PMMA)	
08-311173.022	D 620, H 150	Plastic (polycarbonate)	





LESS IS MORE® 27 KRISTALL

Pendant luminaires

- LED luminaire with accentuated slim design and high-quality crystal glass cover
- Power supply through the suspension cable
- Improved luminous flux thanks to the latest LED technology
- LED rated life 60,000 h (L80, B10)
- Light colours: 3000 K and 4000 K

Pendant luminaires | Series: Less is more® 27 Kristall

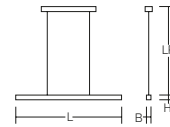
Type of Protection: IP 20

Protection Class: I

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser (direct light emission): made by hand from tempered crystal glass, coated white (opal) on one side. Diffuser (indirect light emission): plastic (non-yellowing PMMA), opal. Power supply through suspension cable. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Converter integrated in the canopy.

LED included.

Available colours: 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Pendant luminaires

Price Category 21

Length L 909 mm

312246.0045	L 909, B 28, H 54	LED	830	1550 lm	35 W	19,4	on/off	A+,A++ A+
312246.0045.76	L 909, B 28, H 54	LED	830	1550 lm	35 W	19,4	DALI	A+,A++ A+
312246.0045.1	L 909, B 28, H 54	LED	840	1550 lm	31 W	19,2	on/off	A++ A++
312246.0045.1.76	L 909, B 28, H 54	LED	840	1550 lm	31 W	19,2	DALI	A++ A++

Length L 1409 mm

312247.0045	L 1409, B 28, H 54	LED	830	2600 lm	58 W	19,5	on/off	A+,A++ A+
312247.0045.76	L 1409, B 28, H 54	LED	830	2600 lm	58 W	19,5	DALI	A+,A++ A+
312247.0045.1	L 1409, B 28, H 54	LED	840	2600 lm	52 W	21,0	on/off	A++ A++
312247.0045.1.76	L 1409, B 28, H 54	LED	840	2600 lm	52 W	21,0	DALI	A++ A++



Power supply through the suspension cable



End caps overlap the profile



High-quality crystal glass cover
(coated white on the inside)



Indirect illumination with side light effect



LAVANO® | LAVANO® WING | LAVANO® UNO

Pendant luminaires

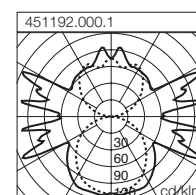
- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- The technical features of these luminaires with their LEDs and two diffusers for dual light direction guarantee high levels of visual comfort and lighting intensity.

- The special design of the diffuser generates brightly sparkling direct light along the contour of the ellipse.
- The choice of high-quality materials, the finish and the energy-efficient use of LEDs all aim to ensure a long service life.
- LED rated life 50,000 h (L90, B10)

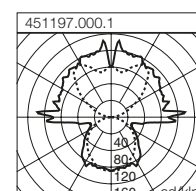


Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

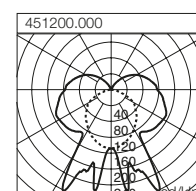
451192.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



451197.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



451200.000		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



Pendant luminaires | Series: Lavano®

 Type of Protection: **IP 40**

Protection Class: I

UGR: < 19

Impact Protection: IK02

Suspension Length: 500-1200 mm

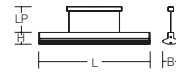
Extruded aluminium profile base, brushed. End caps: aluminium. Diffuser: plastic, opal, allows for brilliant glittering light along the lines of the ellipse. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Available colour for decorative board:

aluminium, brushed (.1)

LED included.

Available colour: 0 = stainless steel, brushed


**Comparison
LED vs. conventional lamps**

LED 47 W ≈
1 x 80 W T16 (86 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Price Category 21							
451192.000.1	L 1140, B 109, H 80	LED	830	5200 lm	47 W	on/off	A+ A+
451192.000.1.76	L 1140, B 109, H 80	LED	830	5200 lm	47 W	DALI	A+ A+

Pendant luminaires | Series: Lavano® Wing

 Type of Protection: **IP 40**

Protection Class: I

UGR: < 16

Impact Protection: IK03

Suspension Length: 500-1200 mm

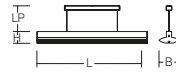
Extruded aluminium profile base, brushed. End caps: aluminium. Diffuser (tapering at the sides): plastic (PMMA), opal, allows for brilliant glittering light. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Available colour for decorative board:

aluminium, brushed (.1)

LED included.

Available colour: 0 = stainless steel, brushed


**Comparison
LED vs. conventional lamps**

LED 47 W ≈
1 x 80 W T16 (86 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Price Category 21							
451197.000.1	L 1140, B 150, H 180	LED	830	5700 lm	47 W	on/off	A+ A+
451197.000.1.76	L 1140, B 150, H 180	LED	830	5700 lm	47 W	DALI	A+ A+

Pendant luminaires | Series: Lavano® Uno

 Type of Protection: **IP 40**

Protection Class: I

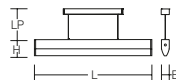
Impact Protection: IK02

Suspension Length: 1200 mm

Extruded aluminium profile base, brushed. End caps: aluminium. Diffuser: plastic, opal, allows for brilliant glittering light along the lines of the ellipse. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 0 = stainless steel, brushed


**Comparison
LED vs. conventional lamps**

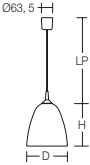
LED 23 W ≈
1 x 36 W T26 (43 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pendant luminaires							
Price Category 21							
451200.000	L 1140, B 40, H 83	LED	830	2550 lm	23 W	on/off	A+ A+
451200.000.76	L 1140, B 40, H 83	LED	830	2550 lm	23 W	DALI	A+ A+



Pendant luminaires | Series: Tholus

Type of Protection: IP 20
 Protection Class: II
 Suspension Length: 2000 mm
 Diffuser: mouth-blown opal glass, satin finish. Canopy: plastic, white.
 Available colour: 2 = white



Reference number	Dimensions	Lamp	dimmable	EEC
Pendant luminaires				
Cone				
311987.002	D 220, H 180	1 x QA60 (clear) 77 W	on/off	A,C,E A+
311988.002	D 300, H 245	1 x QA60 (clear) 77 W	on/off	A,C,E A+
Dome				
311985.002	D 230, H 240	1 x QA60 (clear) 77 W	on/off	A,C,E A+
311986.002	D 240, H 303	1 x QA60 (clear) 77 W	on/off	A,C,E A+
Replacement glasses				
05-311987.012	D 220, H 180			
05-311988.012	D 220, H 245			
05-311985.012	D 230, H 240			
05-311986.012	D 240, H 303			

Price Category 11

Price Category 13



Pendant luminaires | Series: Glasdownlight

Type of Protection: IP 20

Protection Class: I

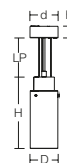
Impact Protection: IK02

Suspension Length: 500-1250 mm

Base: aluminium, powder-coated. Diffuser: mouth-blown opal glass, satin finish. Glass fastening: retaining screws. Canopy: aluminium, powder-coated 3-point steel cable suspension, steplessly adjustable. Special lengths available on request.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Pendant luminaires							
Diameter D 120 mm, canopy Ø 122 mm, h 50 mm							
931181.002	D 120, H 300	LED	830	1400 lm	14 W	on/off	A++ A++
931181.002.1	D 120, H 300	LED	840	1450 lm	14 W	on/off	A++ A++
931182.002	D 120, H 470	LED	830	2750 lm	27 W	on/off	A+ A+
931182.002.1	D 120, H 470	LED	840	2850 lm	27 W	on/off	A+ A+
Diameter D 150 mm, canopy Ø 122 mm, h 50 mm							
931183.002	D 150, H 300	LED	830	2900 lm	32 W	on/off	A++ A++
931183.002.1	D 150, H 300	LED	840	2900 lm	32 W	on/off	A++ A++
931184.002	D 150, H 470	LED	830	3250 lm	30 W	on/off	A+ A+
931184.002.1	D 150, H 470	LED	840	3250 lm	30 W	on/off	A+ A+
Replacement glasses							
05-931174.012	D 120, H 250						
05-931176.012	D 120, H 420						
05-931177.012	D 150, H 250						
05-931179.012	D 150, H 420						

Price Category 11

Comparison LED vs. conventional lamps

LED 14 W ≈

1 x 32 W TC-TEL (36 W EB)
1 x 150 W GLS (150 W)

LED 27 / 30 / 32 W ≈

1 x 57 W TC-TEL (59 W EB)



The application image shows:
Sidelite® ECO

© Unus Lintner



Sidelite® ECO
198-201

Sidelite® ECO 35
202-203

Sonis EVO
204-207

Toledo Flat
208-209

Parledo®
210-211

Econe®
212-213



SIDELITE® ECO

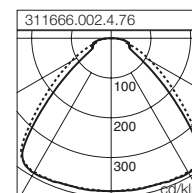
Recessed ceiling luminaires, Lay-in luminaires

- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall, recessed or suspended lighting solutions for interiors
- Ideal for office areas ($UGR \leq 19$) and environments with computer screens in accordance with DIN EN 12464-1
- Suitable for use in the food and drink industry
- Lightguide and diffuser made of non-yellowing PMMA with microprismatic
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h (L70, B10)
- Up to 109 lm per watt
- Flicker < 5%
- Extremely shallow installation depth (10 mm)
- External driver with simple plug-in locking system and extended converter connecting cable to the luminaire
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download

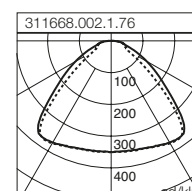


Further luminaires of this series, see:
Indoor lighting | Modular luminaires: surface mounted or pendant mounted
Emergency lighting

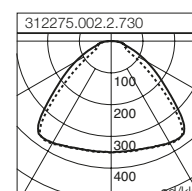
311666.002.4.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



311668.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312275.002.2.730		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



Recessed ceiling luminaires | Series: Sidelite® ECO

Type of Protection: **IP 40**

Protection Class: II

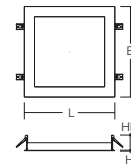
Ceiling Thickness: 1-25 mm

Impact Protection: IK03

Luminaire frame: aluminium, powder coated. Recessed mounting frame: sheet steel, powder-coated. Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Recessed ceiling luminaires

Price Category 21

cut out LA 315 x BA 315 mm

Diffuser: plastic (PMMA), opal

312143.002.Q	L 324, B 324, H 2, HE 51	LED	830	1850 lm	23 W	23,9	on/off	A+ A+
312143.002.76	L 324, B 324, H 2, HE 51	LED	830	1850 lm	23 W	23,9	DALI	A+ A+
312143.002.1.Q	L 324, B 324, H 2, HE 51	LED	840	2100 lm	23 W	23,9	on/off	A+ A+
312143.002.1.76	L 324, B 324, H 2, HE 51	LED	840	2100 lm	23 W	23,9	DALI	A+ A+



Comparison LED vs. conventional lamps

LED 23 W ≈
2 x 26 W TC-D (68 W CB)

Lay-in luminaires | Series: Sidelite® ECO

Type of Protection: **IP 40**

Protection Class: II

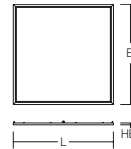
Impact Protection: IK03

Frame: aluminium, powder-coated. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Lay-in luminaires for grid ceilings

Price Category 21

Module 600

Diffuser: plastic (PMMA), opal

311665.002.3	L 595, B 595, HE 45	LED	830	3500 lm	34 W	20,7	on/off	A+ A+
311665.002.3.76	L 595, B 595, HE 45	LED	830	3500 lm	34 W	20,7	DALI	A+ A+
311665.002.4.Q	L 595, B 595, HE 45	LED	840	3700 lm	34 W	20,9	on/off	A+ A+
311665.002.4.76	L 595, B 595, HE 45	LED	840	3700 lm	34 W	20,9	DALI	A+ A+

Tunable White - 2700 K to 6500 K

312272.002.2.730	L 595, B 595, HE 65	LED	827-865	3000 lm	33 W	20,8	smart+free	A+ A+
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Diffuser plastic (PMMA) micro prismatic

311666.002.3	L 595, B 595, HE 45	LED	830	3500 lm	34 W	18,5	on/off	A+ A+
311666.002.3.76	L 595, B 595, HE 45	LED	830	3500 lm	34 W	18,5	DALI	A+ A+
311666.002.4.Q	L 595, B 595, HE 45	LED	840	3700 lm	34 W	18,6	on/off	A+ A+
311666.002.4.76	L 595, B 595, HE 45	LED	840	3700 lm	34 W	18,6	DALI	A+ A+

Tunable White - 2700 K to 6500 K

312273.002.2.730	L 595, B 595, HE 65	LED	827-865	3000 lm	33 W	17,5	smart+free	A+ A+
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Accessories | Recessed mounting frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

Recessed mounting frame

Price Category 21

cut out LA 610 x BA 610 mm

981941.002	L 624, B 624, H 2, HE 94
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Surface mounting frame

Price Category 21

982187.022	L 602, B 602, H 47
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not suitable for tunable white version

Ceiling surface mounting kit

Price Category 21

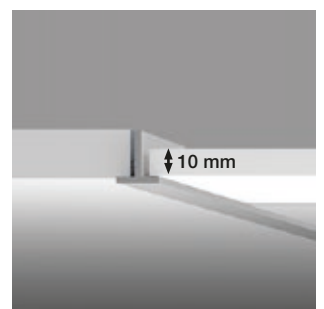
981980.012	consisting of 4 cylindrical spacers (Ø 30, H 38)
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not suitable for tunable white version

Pendant kit

Price Category 21

981978.000	LP 1500	consisting of 4 steel ropes (L 1500) and ceiling mounting sets for quick adjustment of the ropes
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**Recessed ceiling luminaires, Lay-in luminaires | Series: Sidelite® ECO**Type of Protection: **IP 40**Protection Class: **II**

Ceiling Thickness: 10-25 mm

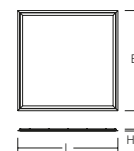
Impact Protection: **IK03**

Frame: aluminium, powder-coated. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

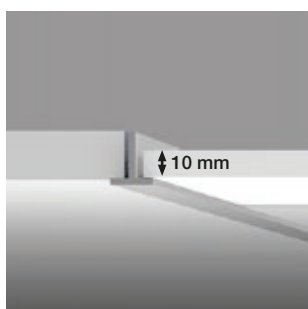
Available colour: 2 = white

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.

**Comparison
LED vs. conventional lamps****LED 33 / 34 W ≈**

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)


 610
x
610
Z
Lay-in luminaires for grid ceilings / Recessed ceiling luminaires **Price Category 21****Module 625, cut out LA 610 x BA 610 mm****Diffuser: plastic (PMMA), opal**

311667.002.Q*	L 622, B 622, HE 45	LED	830	3500 lm	34 W	20,5	on/off	✓	✓	A+ A+
311667.002.76 *	L 622, B 622, HE 45	LED	830	3500 lm	34 W	20,5	DALI			A+ A+
311667.002.1 *	L 622, B 622, HE 45	LED	840	3700 lm	34 W	20,3	on/off	✓	✓	A+ A+
311667.002.1.76 *	L 622, B 622, HE 45	LED	840	3700 lm	34 W	20,3	DALI			A+ A+

Tunable White - 2700 K to 6500 K

312274.002.2.730	L 622, B 622, HE 65	LED	827-865	3000 lm	33 W	20,6	smart+free			A+ A+
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Diffuser plastic (PMMA) micro prismatic

311668.002.Q*	L 622, B 622, HE 45	LED	830	3500 lm	34 W	18,2	on/off	✓	✓	A+ A+
311668.002.76 *	L 622, B 622, HE 45	LED	830	3500 lm	34 W	18,2	DALI			A+ A+
311668.002.1.Q*	L 622, B 622, HE 45	LED	840	3700 lm	34 W	18,3	on/off	✓	✓	A+ A+
311668.002.1.76 *	L 622, B 622, HE 45	LED	840	3700 lm	34 W	18,3	DALI			A+ A+

Tunable White - 2700 K to 6500 K

312275.002.2.730	L 622, B 622, HE 65	LED	827-865	3000 lm	33 W	17,2	smart+free			A+ A+
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* Springs for recessed ceiling installation are included (ceiling thickness: 10-25 mm)

Accessories | Recessed mounting frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

Recessed mounting frame**cut out LA 635 x BA 635 mm**

981942.002	L 649, B 649, H 2, HE 94
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Price Category 21**Surface mounting frame**

982292.012	L 627, B 627, H 47
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Price Category 21

not suitable for tunable white version

Lay-in luminaires | Series: Sidelite® ECO

Type of Protection: IP 40

Protection Class: II

Impact Protection: IK03

Frame: aluminium, powder-coated. Diffuser: plastic (PMMA), opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Lay-in luminaires for grid ceilings
Price Category 21
Module 1200
Diffuser: plastic (PMMA), opal

311770.002.Q	L 1195, B 295, HE 45	LED	830	3600 lm	39 W	21,1	on/off	A+ A+
311770.002.76	L 1195, B 295, HE 45	LED	830	3600 lm	39 W	21,1	DALI	A+ A+
311770.002.1.Q	L 1195, B 295, HE 45	LED	840	3600 lm	39 W	21,4	on/off	A+ A+
311770.002.1.76	L 1195, B 295, HE 45	LED	840	3600 lm	39 W	21,4	DALI	A+ A+

Diffuser plastic (PMMA) micro prismatic

311771.002.Q	L 1195, B 295, HE 45	LED	830	3600 lm	39 W	18,2	on/off	A+ A+
311771.002.76	L 1195, B 295, HE 45	LED	830	3600 lm	39 W	18,2	DALI	A+ A+
311771.002.1	L 1195, B 295, HE 45	LED	840	3600 lm	39 W	18,2	on/off	A+ A+
311771.002.1.76	L 1195, B 295, HE 45	LED	840	3600 lm	39 W	18,2	DALI	A+ A+

Accessories | Installation frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings.

Recessed mounting frame
Price Category 21
cut out LA 1210 x BA 310 mm

982106.002 L 1224, B 324, H 2, HE 94

Surface mounting frame
Price Category 21

982190.022 L 1202, B 302, H 47

Ceiling surface mounting kit
Price Category 21

981980.012 consisting of 4 cylindrical spacers (Ø 30, H 38)

Pendant kit
Price Category 21

982035.002 Y-pendant set with canopy, LP 1500 mm

Recessed ceiling luminaires, Lay-in luminaires | Series: Sidelite® ECO

Type of Protection: IP 20

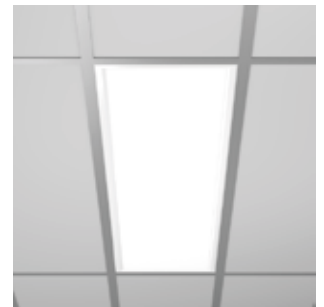
Protection Class: II

Impact Protection: IK03

Frame: aluminium, powder-coated. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Lay-in luminaires for grid ceilings / Recessed ceiling luminaires
Price Category 21
Module 1250, cut out LA 1233 x BA 296 mm
Diffuser: plastic (PMMA), opal

311981.002 *	L 1245, B 308, HE 45	LED	830	3200 lm	35 W	20,7	on/off	A+ A+
311981.002.76 *	L 1245, B 308, HE 45	LED	830	3200 lm	35 W	20,7	DALI	A+ A+
311981.002.1 *	L 1245, B 308, HE 45	LED	840	3400 lm	35 W	20,9	on/off	A+ A+
311981.002.1.76 *	L 1245, B 308, HE 45	LED	840	3400 lm	35 W	20,9	DALI	A+ A+

Diffuser plastic (PMMA) micro prismatic

311982.002 *	L 1245, B 308, HE 45	LED	830	3100 lm	35 W	17,5	on/off	A+ A+
311982.002.76 *	L 1245, B 308, HE 45	LED	830	3100 lm	35 W	17,5	DALI	A+ A+
311982.002.1 *	L 1245, B 308, HE 45	LED	840	3150 lm	35 W	17,6	on/off	A+ A+
311982.002.1.76 *	L 1245, B 308, HE 45	LED	840	3150 lm	35 W	17,6	DALI	A+ A+

* Springs for recessed ceiling installation are included (ceiling thickness: 10-25 mm)

Surface mounting frame
Price Category 21

982295.002 L 1252, B 315, H 47

 1233
x
296
mm

Comparison
LED vs. conventional lamps
LED 35 W ≈

2 x 28 W T16 (61 W EB)
4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)



SIDELITE® ECO 35

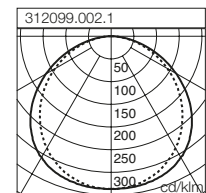
Lay-in luminaires

- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall, recessed or suspended lighting solutions for interiors
- Ideal for office areas (UGR ≤ 19) and environments with computer screens in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h
- Extremely shallow installation depth (10 mm)
- External converter with simple plug-in locking system

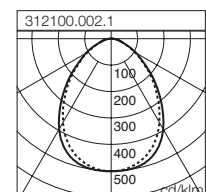


Further luminaires of this series, see:
Indoor lighting | Modular luminaires: surface mounted or pendant mounted

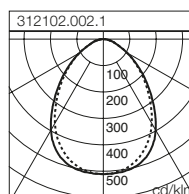
312099.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



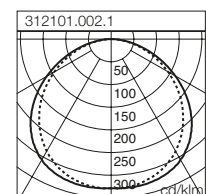
312100.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312102.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312101.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Lay-in luminaires | Series: Sidelite® ECO 35

Type of Protection: **IP 40**

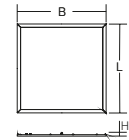
Protection Class: II

Impact Protection: IK03

Frame: aluminium, powder-coated. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Lay-in luminaires for grid ceilings

Price Category 21

Module 600

Diffuser: plastic (PMMA), opal

312099.002.3	L 595, B 595, HE 42	LED	830	3500 lm	35 W	21,5	on/off	A+ A+
312099.002.3.76	L 595, B 595, HE 42	LED	830	3500 lm	35 W	21,5	DALI	A+ A+
312099.002.4	L 595, B 595, HE 42	LED	840	3500 lm	35 W	21,1	on/off	A+ A+
312099.002.4.76	L 595, B 595, HE 42	LED	840	3500 lm	35 W	21,1	DALI	A+ A+

Diffuser plastic (PMMA) micro prismatic

312100.002.3	L 595, B 595, HE 42	LED	830	3500 lm	35 W	17,5	on/off	A+ A+
312100.002.3.76	L 595, B 595, HE 42	LED	830	3500 lm	35 W	17,5	DALI	A+ A+
312100.002.4	L 595, B 595, HE 42	LED	840	3500 lm	35 W	17,6	on/off	A+ A+
312100.002.4.76	L 595, B 595, HE 42	LED	840	3500 lm	35 W	17,6	DALI	A+ A+

Recessed mounting frame

cut out LA 610 x BA 610 mm

Price Category 21

981941.002	L 624, B 624, H 2, HE 94
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Surface mounting frame

Price Category 21

982187.022	L 602, B 602, H 47
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Ceiling surface mounting kit

Price Category 21

981980.012	consisting of 4 cylindrical spacers (Ø 30, H 38)
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Pendant kit

Price Category 21

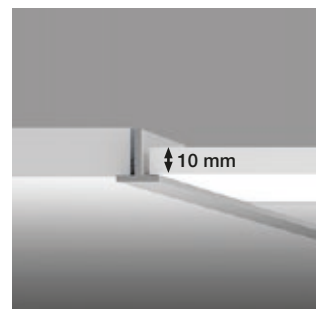
981978.000	LP 1500	consisting of 4 steel ropes (L 1500) and ceiling mounting sets for quick adjustment of the ropes
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Comparison LED vs. conventional lamps

LED 35 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)



Lay-in luminaires | Series: Sidelite® ECO 35

Type of Protection: **IP 40**

Protection Class: II

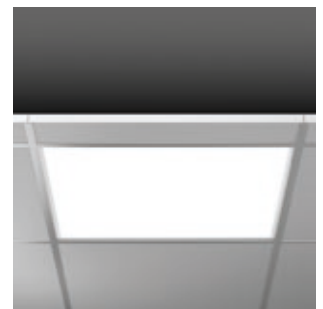
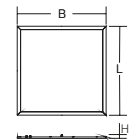
Ceiling Thickness: 10-25 mm

Impact Protection: IK03

Frame: aluminium, powder-coated. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Lay-in luminaires for grid ceilings

Price Category 21

Module 625

Diffuser: plastic (PMMA), opal

312101.002 .Q	L 622, B 622, HE 42	LED	830	3500 lm	35 W	21,2	on/off	A+ A+
312101.002.76	L 622, B 622, HE 42	LED	830	3500 lm	35 W	21,2	DALI	A+ A+
312101.002.1 .Q	L 622, B 622, HE 42	LED	840	3600 lm	35 W	21,4	on/off	A+ A+
312101.002.1.76	L 622, B 622, HE 42	LED	840	3600 lm	35 W	21,4	DALI	A+ A+

Diffuser plastic (PMMA) micro prismatic

312102.002 .Q	L 622, B 622, HE 42	LED	830	3500 lm	35 W	17,7	on/off	A+ A+
312102.002.76	L 622, B 622, HE 42	LED	830	3500 lm	35 W	17,7	DALI	A+ A+
312102.002.1 .Q	L 622, B 622, HE 42	LED	840	3750 lm	35 W	18,0	on/off	A+ A+
312102.002.1.76	L 622, B 622, HE 42	LED	840	3750 lm	35 W	18,0	DALI	A+ A+

Spring system set

Price Category 21

981979.000	Consisting of 4 installation springs
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Recessed mounting frame

cut out LA 635 x BA 635 mm

Price Category 21

981942.002	L 649, B 649, H 2, HE 94
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Surface mounting frame

Price Category 21

982292.012	L 627, B 627, H 47
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Comparison LED vs. conventional lamps

LED 35 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

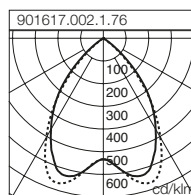


SONIS EVO

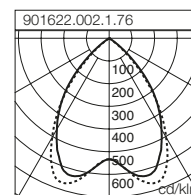
Recessed ceiling luminaires, Lay-in luminaires

- Highly efficient LED luminaire
- Suitable for installation in grid ceilings with visible mounting tracks module 600/625
- Alea optical system for glare-free light at the workstation (UGR ≤ 19)
- Narrow beam, brilliant luminous effect
- LED rated life 50,000 h (L80, B10)
- Luminous efficiency up to 125 lm/W

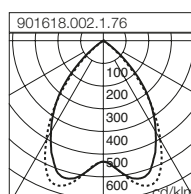
901617.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



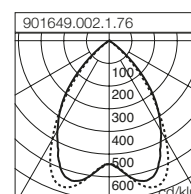
901622.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901618.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901649.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	2	3



Further luminaires of this series, see:
 Indoor lighting | Modular luminaires: surface mounted or pendant mounted
 Emergency lighting

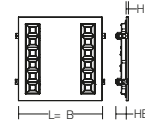
Recessed ceiling luminaires | Series: Sonis EVO

Type of Protection: IP 20
Protection Class: I, II
Ceiling Thickness: 1-20 mm
Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm).

LED included.

Available colour: 2 = white

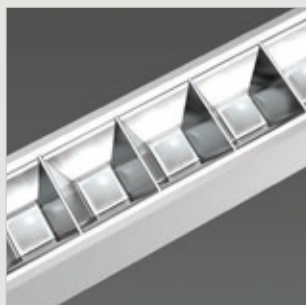


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Recessed ceiling luminaires								
cut out LA 280 x BA 255 mm								
901638.002	L 295, B 295, H 8, HE 37	LED	830	1500 lm	12 W	18,3	on/off	A+ A+
901638.002.76	L 295, B 295, H 8, HE 37	LED	830	1500 lm	12 W	18,3	DALI	A+ A+
901638.002.1	L 295, B 295, H 8, HE 37	LED	840	1500 lm	12 W	18,5	on/off	A+ A+
901638.002.1.76	L 295, B 295, H 8, HE 37	LED	840	1500 lm	12 W	18,5	DALI	A+ A+
901639.002	L 295, B 295, H 8, HE 37	LED	830	2000 lm	16 W	19,3	on/off	A+ A+
901639.002.76	L 295, B 295, H 8, HE 37	LED	830	2000 lm	16 W	19,3	DALI	A+ A+
901639.002.1	L 295, B 295, H 8, HE 37	LED	840	2000 lm	16 W	19,5	on/off	A+ A+
901639.002.1.76	L 295, B 295, H 8, HE 37	LED	840	2000 lm	16 W	19,5	DALI	A+ A+
Recessed mounting frame								
cut out LA 315 x BA 315 mm								
981987.012	L 324, B 324, H 2, HE 51							
Surface mounting frame								
982357.012	L 300, B 300, H 47							

Comparison LED vs. conventional lamps

LED 12 W ≈
2 x 18 W TC-D (52 W CB)

LED 16 W ≈
2 x 26 W TC-D (68 W CB)

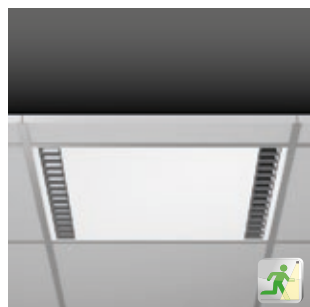


ALEA OPTICAL SYSTEM

A brilliant example of the power of innovation:

The Alea optical system in the Sonis Evo combines square reflector elements with a linear structure.

The integrated opal diffuser reduces direct glare, ensures excellent light quality and protects the highly efficient LEDs.



Comparison LED vs. conventional lamps

LED 30 W ≈

4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)

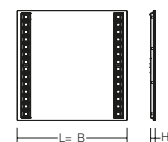
Lay-in luminaires | Series: Sonis EVO

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimm-able	EB	CB	EEC
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Lay-in luminaires for grid ceilings

Price Category 21

Module 600

901617.002.Q	L 596, B 596, HE 27	LED	830	3300 lm	30 W	18,3	on/off	✓	✓	A+ A+
901617.002.76	L 596, B 596, HE 27	LED	830	3300 lm	30 W	18,3	DALI			A+ A+
901617.002.1.Q	L 596, B 596, HE 27	LED	840	3500 lm	30 W	18,5	on/off	✓	✓	A+ A+
901617.002.1.76	L 596, B 596, HE 27	LED	840	3500 lm	30 W	18,5	DALI			A+ A+

Accessories | Recessed mounting frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

Recessed mounting frame

Price Category 21

cut out LA 610 x BA 610 mm

981941.002	L 624, B 624, H 2, HE 94
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Surface mounting frame

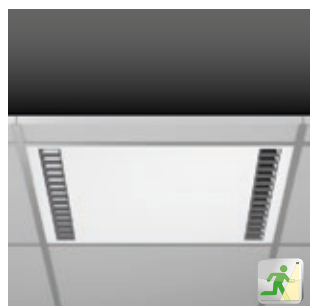
Price Category 21

982187.012	L 602, B 602, H 47
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Pendant frame

Price Category 21

982290.012	L 602, B 602, H 33, LP 1500
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Comparison LED vs. conventional lamps

LED 30 W ≈

4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)

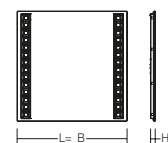
Lay-in luminaires | Series: Sonis EVO

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimm-able	EB	CB	EEC
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Lay-in luminaires for grid ceilings

Price Category 21

Module 625

901618.002.Q	L 621, B 621, HE 27	LED	830	3300 lm	30 W	18,3	on/off	✓	✓	A+ A+
901618.002.76	L 621, B 621, HE 27	LED	830	3300 lm	30 W	18,3	DALI			A+ A+
901618.002.1.Q	L 621, B 621, HE 27	LED	840	3500 lm	30 W	18,5	on/off	✓	✓	A+ A+
901618.002.1.76.Q	L 621, B 621, HE 27	LED	840	3500 lm	30 W	18,5	DALI			A+ A+

Accessories | Recessed mounting frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

Recessed mounting frame

Price Category 21

cut out LA 635 x BA 635 mm

981942.002	L 649, B 649, H 2, HE 94
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Surface mounting frame

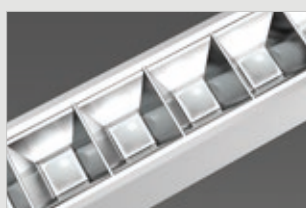
Price Category 21

982292.002	L 627, B 627, H 47	for module 625
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Pendant frame

Price Category 21

982291.002	L 627, B 627, H 33, LP 1500
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ALEA OPTICAL SYSTEM

A brilliant example of the power of innovation:

The Alea optical system in the Sonis Evo combines square reflector elements with a linear structure.

The integrated opal diffuser reduces direct glare, ensures excellent light quality and protects the highly efficient LEDs.

Lay-in luminaires | Series: Sonis EVO

Type of Protection: IP 20

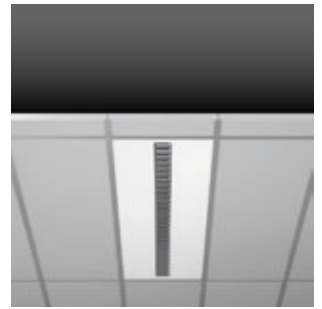
Protection Class: I

Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Lay-in luminaires for grid ceilings**Price Category 21****Module 1200, Single row Alea optical system**

901622.002.Q	L 1197, B 297, HE 27	LED	830	3300 lm	30 W	18,3	on/off	A+ A+
901622.002.76	L 1197, B 297, HE 27	LED	830	3300 lm	30 W	18,3	DALI	A+ A+
901622.002.1.Q	L 1197, B 297, HE 27	LED	840	3500 lm	30 W	18,5	on/off	A+ A+
901622.002.1.76	L 1197, B 297, HE 27	LED	840	3500 lm	30 W	18,5	DALI	A+ A+

Module 1200, Double row Alea optical system

901648.002	L 1197, B 297, HE 27	LED	830	6200 lm	56 W	18,5	on/off	A+ A+
901648.002.76	L 1197, B 297, HE 27	LED	830	6200 lm	56 W	18,5	DALI	A+ A+
901648.002.1	L 1197, B 297, HE 27	LED	840	6500 lm	56 W	18,6	on/off	A+ A+
901648.002.1.76	L 1197, B 297, HE 27	LED	840	6500 lm	56 W	18,6	DALI	A+ A+

Accessories | Installation frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings.

Recessed mounting frame**Price Category 21****cut out LA 1210 x BA 310 mm**

982106.002	L 1224, B 324, H 2, HE 94
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Surface mounting frame**Price Category 21**

982190.012	L 1202, B 302, H 47	for Single row Alea optical system
982190.032	L 1202, B 302, H 47	for Double row Alea optical system

Pendant frame**Price Category 21**

982293.012	L 1202, B 302, H 33, LP 1500
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**Comparison
LED vs. conventional lamps****LED 30 W ≈**

1 x 58 W T26 (67 W CB)

LED 56 W ≈

2 x 58 W T26 (134 W CB)

**Lay-in luminaires | Series: Sonis EVO**

Type of Protection: IP 20

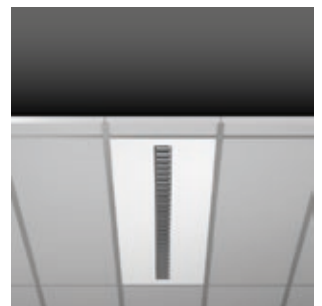
Protection Class: I

Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Lay-in luminaires for grid ceilings**Price Category 21****Module 1250, Single row Alea optical system**

901623.002.Q	L 1247, B 310, HE 27	LED	830	3300 lm	30 W	18,3	on/off	A+ A+
901623.002.76	L 1247, B 310, HE 27	LED	830	3300 lm	30 W	18,3	DALI	A+ A+
901623.002.1.Q	L 1247, B 310, HE 27	LED	840	3500 lm	30 W	18,5	on/off	A+ A+
901623.002.1.76	L 1247, B 310, HE 27	LED	840	3500 lm	30 W	18,5	DALI	A+ A+

Module 1250, Double row Alea optical system

901649.002	L 1247, B 310, HE 27	LED	830	6200 lm	56 W	18,5	on/off	A+ A+
901649.002.76	L 1247, B 310, HE 27	LED	830	6200 lm	56 W	18,5	DALI	A+ A+
901649.002.1	L 1247, B 310, HE 27	LED	840	6500 lm	56 W	18,6	on/off	A+ A+
901649.002.1.76	L 1247, B 310, HE 27	LED	840	6500 lm	56 W	18,6	DALI	A+ A+

Accessories | Installation frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings.

Recessed mounting frame**Price Category 21****cut out LA 1260 x BA 325 mm**

982426.002	L 1274, B 337, H 2, HE 94
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Surface mounting frame**Price Category 21**

982295.012	L 1252, B 315, H 47
982295.022	L 1252, B 315, H 47

Pendant frame**Price Category 21**

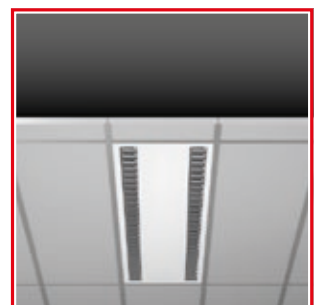
982294.002	L 1252, B 315, H 33, LP 1500
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**Comparison
LED vs. conventional lamps****LED 30 W ≈**

1 x 58 W T26 (67 W CB)

LED 56 W ≈

2 x 58 W T26 (134 W KVG)



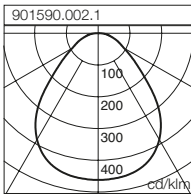


TOLEDO FLAT

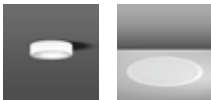
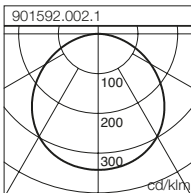
Lay-in luminaires

- Extension of the highly successful LED downlight range as recessed luminaire for grid ceilings
- Extra flat design
- Plastic cover made of non-yellowing PMMA, opal matt or micro prismatic
- LED rated life 50,000 h (L70, B10)
- Colour rendering index Ra > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Colour temperature 3,000 K and 4,000 K
- Separate converter box with connecting cable
- Converter for standard (on/off) or DALI dimmable
- DALI converter is compatible with DC, suitable for central emergency power supply purposes
- Areas of application: Offices, meeting rooms, corridors, side rooms

901590.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901592.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Further luminaires of this series, see:
 Indoor lighting | Surface mounted downlights
 Indoor lighting | Recessed downlights

Lay-in luminaires | Series: Toledo Flat

Type of Protection: **IP 40**

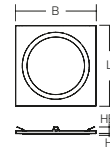
Protection Class: **II**

Impact Protection: **IK06**

Recessed frame: sheet steel, powder coated. Housing: die-cast aluminium. Plastic cover made of non-yellowing PMMA, choice of opal matt or prismatic. Separate LED converter with connecting cable 250 mm.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Lay-in luminaires for grid ceilings

Price Category 21

Module 600

Diffuser: plastic (PMMA), opal

901591.002	L 595, B 595, H 6, HE 43	LED	830	3600 lm	35 W	113° 23,9	on/off	A+ A+
901591.002.76	L 595, B 595, H 6, HE 43	LED	830	3600 lm	35 W	113° 23,9	DALI	A+ A+
901591.002.1	L 595, B 595, H 6, HE 43	LED	840	3600 lm	35 W	113° 23,9	on/off	A+ A+
901591.002.1.76	L 595, B 595, H 6, HE 43	LED	840	3600 lm	35 W	113° 23,9	DALI	A+ A+

Diffuser: plastic (PMMA), transparent micropismatic

901589.002	L 595, B 595, H 6, HE 43	LED	830	3500 lm	35 W	88° 21,1	on/off	A+ A+
901589.002.76	L 595, B 595, H 6, HE 43	LED	830	3500 lm	35 W	88° 21,1	DALI	A+ A+
901589.002.1	L 595, B 595, H 6, HE 43	LED	840	3600 lm	35 W	88° 21,4	on/off	A+ A+
901589.002.1.76	L 595, B 595, H 6, HE 43	LED	840	3600 lm	35 W	88° 21,4	DALI	A+ A+

Module 625

Diffuser: plastic (PMMA), opal

901592.002	L 622, B 622, H 6, HE 43	LED	830	3600 lm	35 W	113° 23,9	on/off	A+ A+
901592.002.76	L 622, B 622, H 6, HE 43	LED	830	3600 lm	35 W	113° 23,9	DALI	A+ A+
901592.002.1	L 622, B 622, H 6, HE 43	LED	840	3600 lm	35 W	113° 23,9	on/off	A+ A+
901592.002.1.76	L 622, B 622, H 6, HE 43	LED	840	3600 lm	35 W	113° 23,9	DALI	A+ A+

Diffuser: plastic (PMMA), transparent micropismatic

901590.002	L 622, B 622, H 6, HE 43	LED	830	3500 lm	35 W	88° 21,1	on/off	A+ A+
901590.002.76	L 622, B 622, H 6, HE 43	LED	830	3500 lm	35 W	88° 21,1	DALI	A+ A+
901590.002.1	L 622, B 622, H 6, HE 43	LED	840	3600 lm	35 W	88° 21,4	on/off	A+ A+
901590.002.1.76	L 622, B 622, H 6, HE 43	LED	840	3600 lm	35 W	88° 21,4	DALI	A+ A+

Comparison

LED vs. conventional lamps

LED 35 W ≈

3 x 26 W TC-D (102 W CB)

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Accessories | Chintz decorative cylinder Toledo Flat

Standard colour covering surface: 66.8003.01 white

Other colours (see illustration) available at the same price. Please include the colour code in your order.

Can be retrofitted without tools to the recessed downlight.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



with diffuser



without diffuser

Reference number	Dimensions
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Chintz lampshades

Price Category 21

982323.002	D 500, H 60	Chintz decorative cylinder for Toledo Flat Round D 495
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Cannot be fitted with surface mount housing

Satin finish polycarbonate diffuser (optional)

Price Category 21

Can be installed on the decorative cylinder without any tools

982328.002	D 498, H 4	Accessories for chintz decorative cylinder D 500
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Fabric lampshades chintz

Price Category 21

Colour chart

W06630	Chintz lampshades are available in more than 70 different colours
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For other versions and colour table with over 70 colours, see the chapter on fabric lampshade luminaires

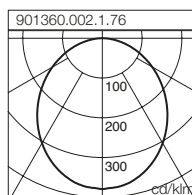


PARLEDO®

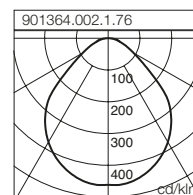
Lay-in luminaires

- Rimless appearance
- Unique lighting solution for circadian light
- Suitable for use in the food and drink industry
- Same luminaire flux with all types
- Plastic cover made of non-yellowing PMMA
- Suitable for grid ceilings (module 600/625) and recessed ceiling installations (with accessories)
- Type of protection IP 54 (from bottom and top) - terminal box IP 20
- Ideal for office areas ($UGR \leq 19$) and environments with computer screens in accordance with DIN EN 12464-1
- LED and converter changeable
- LED rated life 50,000 h (L80, B30)

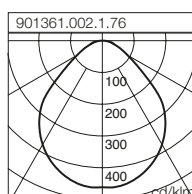
901360.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



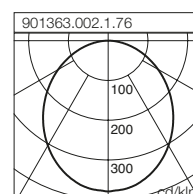
901364.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901361.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901363.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Lay-in luminaires | Series: Parledo®Type of Protection: **IP 54** (IP 20 rated terminal box)

Protection Class: I

Ceiling Thickness: 1-30 mm

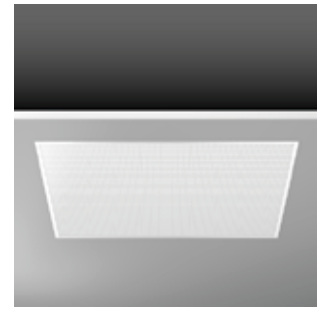
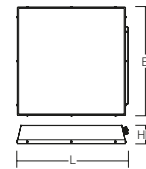
Impact Protection: IK07

Housing: powder-coated metal. Diffuser: plastic (non-yellowing PMMA). Diffuser: PMMA plastic, opal or microprismatic/opal (Suitable for use in environments with computer screens in accordance with EN 12464-1). Converter in separate housing.

If not connected to the DALI line, the luminaire can be operated in ON/OFF mode.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Recessed ceiling luminaires for visible mounting rails								
Module 600, HE 100 mm								
Diffuser: plastic, opal								
901360.002.76	L 596, B 596, HE 100	LED	830	3700 lm	34 W	20,7	DALI	A+ A+
901360.002.1.76	L 596, B 596, HE 100	LED	840	3600 lm	33 W	20,6	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
901362.002.76	L 596, B 596, HE 100	LED	827-865	8800 lm	99 W	23,9	DALI	A+ A+
Diffuser: plastic, microprismatic/opal								
901361.002.76	L 596, B 596, HE 100	LED	830	3600 lm	38 W	17,6	DALI	A+ A+
901361.002.1.76	L 596, B 596, HE 100	LED	840	3600 lm	38 W	17,5	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
901372.002.76	L 596, B 596, HE 100	LED	827-865	7850 lm	108 W	20,4	DALI	A+ A+

Accessories | Recessed mounting frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

Recessed mounting frame**cut out LA 610 x BA 610 mm**

981941.002 L 624, B 624, H 2, HE 94

**Comparison
LED vs. conventional lamps****LED 33 / 34 / 38 W ≈**

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Lay-in luminaires | Series: Parledo®Type of Protection: **IP 54** (IP 20 rated terminal box)

Protection Class: I

Ceiling Thickness: 1-30 mm

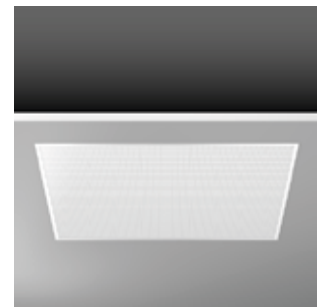
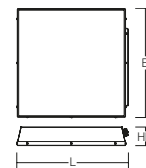
Impact Protection: IK07

Housing: powder-coated metal. Diffuser: plastic (non-yellowing PMMA). Diffuser: PMMA plastic, opal or microprismatic/opal (Suitable for use in environments with computer screens in accordance with EN 12464-1). Converter in separate housing.

If not connected to the DALI line, the luminaire can be operated in ON/OFF mode.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Recessed ceiling luminaires for visible mounting rails								
Module 625, HE 100 mm								
Diffuser: plastic, opal								
901363.002.76	L 622, B 622, HE 100	LED	830	3700 lm	34 W	20,7	DALI	A+ A+
901363.002.1.76	L 622, B 622, HE 100	LED	840	3600 lm	33 W	20,6	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
901365.002.76	L 622, B 622, HE 100	LED	827-865	8800 lm	99 W	23,9	DALI	A+ A+
Diffuser: plastic, microprismatic/opal								
901364.002.76	L 622, B 622, HE 100	LED	830	3600 lm	38 W	17,6	DALI	A+ A+
901364.002.1.76	L 622, B 622, HE 100	LED	840	3600 lm	38 W	17,5	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
901373.002.76	L 622, B 622, HE 100	LED	827-865	7850 lm	108 W	20,4	DALI	A+ A+

Accessories | Recessed mounting frame

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

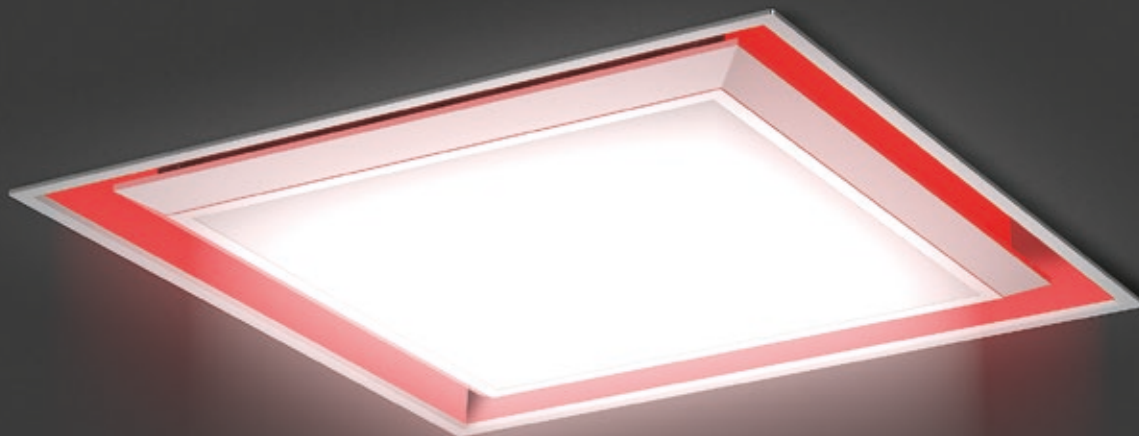
Recessed mounting frame**cut out LA 635 x BA 635 mm**

981942.002 L 649, B 649, H 2, HE 94

**Comparison
LED vs. conventional lamps****LED 33 / 34 W ≈**

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)



ECONE®

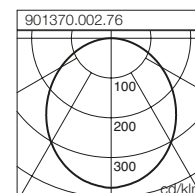
Recessed ceiling and wall luminaires

- Effective LED wide field luminaire for interior use
- Comprehensive range consisting of:
 - Recessed luminaires
 - Surface mounted luminaires
 - Pendant versions
- Ideally suited to health and care facilities, recommended for office, work, common and conference rooms
- Plastic light frame available in transparent or white with LED light channel warm white or LED colour light channel (RZB)
- Plastic cover made of non-yellowing PMMA
- Suitable for circadian light gradient: Two separate light rooms and the dynamic mixture of the light colours used enable the daylight simulation
- Intelligent and simple control (Plug & Play) with light control +³ Professional
- Recessed version for small recessed depth (14 cm)

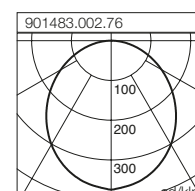


Further luminaires of this series, see:
Indoor lighting | Modular luminaires: surface mounted or pendant mounted

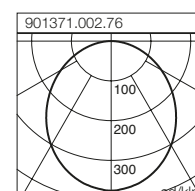
901370.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



901483.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



901371.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Recessed ceiling and wall luminaires | Series: Econe®

Type of Protection: IP 20

Protection Class: I

Ceiling Thickness: 42-80 mm

Impact Protection: IK02

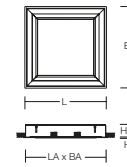
Housing: sheet steel, powder-coated. Diffuser: plastic (non-yellowing PMMA), opal.

Light frame: plastic, white, with RGB LED band. Driver included. Support for recessed installation in walls and ceilings: metal.

 Can be controlled via our **light control +³ Professional** light management system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light output	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed ceiling and wall luminaires									
cut out LA 835 x BA 835 mm, HE 125 mm									
Light frame: RGB									
901370.002.76	L 855, B 855, H 5	LED	direct light channel RGB	840	3450 lm	108 W	19,5	DALI	A+ A+
901483.002.76	L 855, B 855, H 5	LED	direct light channel RGB	827-865	7850 lm	164 W	20,5	DALI	A+ A+

Price Category 21

Recessed ceiling and wall luminaires | Series: Econe®

Type of Protection: IP 20

Protection Class: I

Ceiling Thickness: 42-80 mm

Impact Protection: IK02

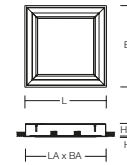
Housing: sheet steel, powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. Light

frame: plastic, white, with warm-white LED band. Driver included. Support for recessed installation in walls and ceilings: metal.

 Can be controlled via our **light control +³ Professional** light management system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light output	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed ceiling and wall luminaires									
cut out LA 835 x BA 835 mm, HE 125 mm									
Light frame: white									
901371.002.76	L 855, B 855, H 5	LED	direct light channel 830	840	3450 lm 1700 lm	108 W	20,1	DALI	A+ A+

Price Category 21


AKUSTIK >

KONTAKTLIN
ANPASS

The application image shows:
Sidelite® ECO



Sidelite®
216-219

Sidelite® ECO
220-223

Sidelite® ECO
224-225

Sidelite® ECO
226-227

Sidelite® ECO 35
228-229

Sonis A
230-231

Sonis EVO
232-235

Econe®
236-239



SIDELITE®

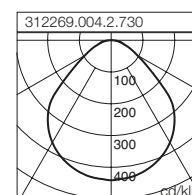
Ceiling and wall luminaires, Pendant luminaires

- Aesthetically pleasing low profile luminaires that integrate advanced LED technology
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h (L70, B10)
- Smooth diffuser with fine microstructure for glare-free light at the workplace (UGR ≤ 19)
- Lightguide and diffuser made of non-yellowing PMMA
- Steplessly adjustable 2-point steel cable suspension

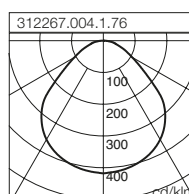
- Easy plug-in installation

- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download

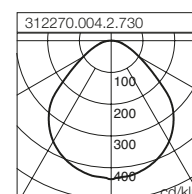
312269.004.2.730		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



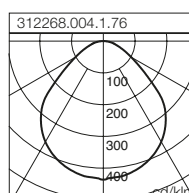
312267.004.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



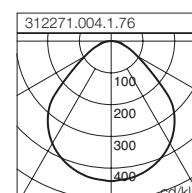
312270.004.2.730		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



312268.004.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



312271.004.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



Further luminaires of this series, see:
Indoor lighting | Free-standing luminaires

Ceiling and wall luminaires | Series: Sidelite®

 Type of Protection: **IP 40**

Protection Class: I

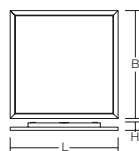
Impact Protection: IK03

Base: metal, powder-coated. Anodised aluminium frame. Lightguide and diffuser made of non-yellowing PMMA. Diffuser with microstructure (Suitable for use in environments with computer screens in accordance with EN 12464-1). Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: 4 = aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling and wall luminaires								
Length L 298 mm x Width B 298 mm								
312267.004	L 298, B 298, H 49	LED	830	2000 lm	20 W	21,6	on/off	A+ A+
312267.004.76	L 298, B 298, H 49	LED	830	2000 lm	20 W	21,6	DALI	A+ A+
312267.004.1	L 298, B 298, H 49	LED	840	2150 lm	20 W	21,8	on/off	A+ A+
312267.004.1.76	L 298, B 298, H 49	LED	840	2150 lm	20 W	21,8	DALI	A+ A+
Length L 598 mm x Width B 598 mm								
312268.004	L 598, B 598, H 49	LED	830	3850 lm	33 W	17,7	on/off	A+ A+
312268.004.76	L 598, B 598, H 49	LED	830	3850 lm	33 W	17,7	DALI	A+ A+
312268.004.1	L 598, B 598, H 49	LED	840	4350 lm	33 W	18,4	on/off	A+ A+
312268.004.1.76	L 598, B 598, H 49	LED	840	4350 lm	33 W	18,4	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
312268.004.2.730	L 598, B 598, H 49	LED	827-865	3400 lm	33 W	17,4	smart+free	A+ A+

**Comparison
LED vs. conventional lamps**
LED 20 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 W ≈

4 x 24 W T16 (98 W EB)

4 x 14 W T16 (68 W EB)

3 x 24 W T16 (75 W EB)

Pendant luminaires | Series: Sidelite®

 Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

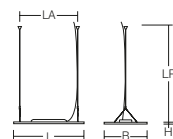
Suspension Length: 300-3000 mm

Cover: sheet steel, powder-coated. Anodised aluminium frame. Lightguide and diffuser made of non-yellowing PMMA. Diffuser with microstructure (Suitable for use in environments with computer screens in accordance with EN 12464-1). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: 4 = aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires								
Price Category 21								
312270.004	L 598, B 598, H 49	LED	830	3850 lm	33 W	17,7	on/off	A+ A+
312270.004.76	L 598, B 598, H 49	LED	830	3850 lm	33 W	17,7	DALI	A+ A+
312270.004.1	L 598, B 598, H 49	LED	840	4350 lm	33 W	18,4	on/off	A+ A+
312270.004.1.76	L 598, B 598, H 49	LED	840	4350 lm	33 W	18,4	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
312270.004.2.730	L 598, B 598, H 49	LED	827-865	3400 lm	33 W	17,4	smart+free	A+ A+
Accessories								
Price Category 21								
981947.002	L 186, B 42, H 29	Canopy for DALI version (5 pole)						
981948.002	L 186, B 42, H 29	Canopy for standard version (3 pole)						

**Comparison
LED vs. conventional lamps**
LED 33 W ≈

4 x 24 W T16 (98 W EB)

4 x 14 W T16 (68 W EB)

3 x 24 W T16 (75 W EB)



Ceiling and wall luminaires | Series: Sidelite®

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

Base: metal, powder-coated. Anodised aluminium frame. Lightguide and diffuser made of non-yellowing PMMA. Diffuser with microstructure (Suitable for use in environments with computer screens in accordance with EN 12464-1). Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: 4 = aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Comparison LED vs. conventional lamps

LED 33 W ≈

4 x 24 W T16 (98 W EB)

4 x 14 W T16 (68 W EB)

3 x 24 W T16 (75 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Ceiling and wall luminaires								
312269.004	L 1198, B 298, H 49	LED	830	3950 lm	33 W	17,7	on/off	A+ A+
312269.004.76	L 1198, B 298, H 49	LED	830	3950 lm	33 W	17,7	DALI	A+ A+
312269.004.1	L 1198, B 298, H 49	LED	840	4100 lm	33 W	18,0	on/off	A+ A+
312269.004.1.76	L 1198, B 298, H 49	LED	840	4100 lm	33 W	18,0	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
312269.004.2.730	L 1198, B 298, H 49	LED	827-865	3550 lm	33 W	17,3	smart+free	A+ A+



Pendant luminaires | Series: Sidelite®

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

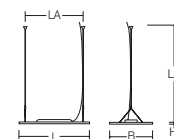
Suspension Length: 300-3000 mm

Cover: sheet steel, powder-coated. Anodised aluminium frame. Lightguide and diffuser made of non-yellowing PMMA. Diffuser with microstructure (Suitable for use in environments with computer screens in accordance with EN 12464-1). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Integral driver. Lateral light emission thanks to LED.

LED included.

Available colour: 4 = aluminium, anodised

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Comparison LED vs. conventional lamps

LED 33 W ≈

4 x 24 W T16 (98 W EB)

4 x 14 W T16 (68 W EB)

3 x 24 W T16 (75 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Pendant luminaires								
312271.004	L 1198, B 298, H 49	LED	830	3950 lm	33 W	17,7	on/off	A+ A+
312271.004.76	L 1198, B 298, H 49	LED	830	3950 lm	33 W	17,7	DALI	A+ A+
312271.004.1	L 1198, B 298, H 49	LED	840	4100 lm	33 W	18,0	on/off	A+ A+
312271.004.1.76	L 1198, B 298, H 49	LED	840	4100 lm	33 W	18,0	DALI	A+ A+
Tunable White - 2700 K to 6500 K								
312271.004.2.730	L 1198, B 298, H 49	LED	827-865	3550 lm	33 W	17,3	smart+free	A+ A+

Accessories								
981947.002	L 186, B 42, H 29	Canopy for DALI version (5 pole)						
981948.002	L 186, B 42, H 29	Canopy for standard version (3 pole)						





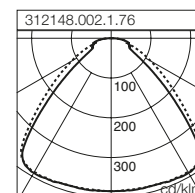
SIDELITE® ECO

Ceiling and wall luminaires

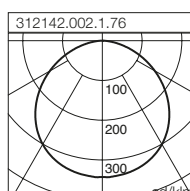
- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall, recessed or suspended lighting solutions for interiors
- Ideal for office areas (UGR ≤ 19) and computer workstations in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA with fine micro prisma
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h (L70, B10)

- Up to 109 lm per watt
- Flicker < 5%
- Very simple converter installation by turn-and-plug system and extended converter connecting cable to the luminaire

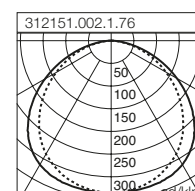
312148.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



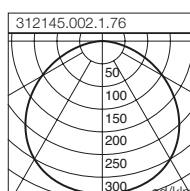
312142.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



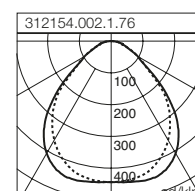
312151.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



312145.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



312154.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires

Ceiling and wall luminaires | Series: Sidelite® ECO

 Type of Protection: **IP 40**

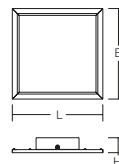
Protection Class: II

Impact Protection: IK02

Luminaire frame: aluminium, powder coated. Surface mounted housing: sheet steel, powder coated. Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic (PMMA), opal. Lateral light emission thanks to LED. Integral driver.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling and wall luminaires								
Diffuser: plastic (PMMA), opal								
312142.002	L 295, B 295, H 49	LED	830	1850 lm	23 W	23,9	on/off	A+ A+
312142.002.76	L 295, B 295, H 49	LED	830	1850 lm	23 W	23,9	DALI	A+ A+
312142.002.1	L 295, B 295, H 49	LED	840	2100 lm	23 W	23,9	on/off	A+ A+
312142.002.1.76	L 295, B 295, H 49	LED	840	2100 lm	23 W	23,9	DALI	A+ A+

Price Category 21
**Comparison
LED vs. conventional lamps**

LED 23 W ≈
2 x 26 W TC-D (68 W CB)

Ceiling luminaires | Series: Sidelite® ECO

 Type of Protection: **IP 40**

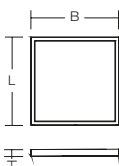
Protection Class: II

Impact Protection: IK02

Luminaire frame: aluminium, powder coated. Mounting frame powder coated metal. Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or micro-prismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. Integral driver.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling luminaires								
Diffuser: plastic (PMMA), opal								
312145.002	L 602, B 602, H 47	LED	830	3500 lm	34 W	20,5	on/off	A+ A+
312145.002.76	L 602, B 602, H 47	LED	830	3500 lm	34 W	20,5	DALI	A+ A+
312145.002.1	L 602, B 602, H 47	LED	840	3700 lm	34 W	20,9	on/off	A+ A+
312145.002.1.76	L 602, B 602, H 47	LED	840	3700 lm	34 W	20,9	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312148.002	L 602, B 602, H 47	LED	830	3500 lm	34 W	18,5	on/off	A+ A+
312148.002.76	L 602, B 602, H 47	LED	830	3500 lm	34 W	18,5	DALI	A+ A+
312148.002.1	L 602, B 602, H 47	LED	840	3700 lm	34 W	18,2	on/off	A+ A+
312148.002.1.76	L 602, B 602, H 47	LED	840	3700 lm	34 W	18,2	DALI	A+ A+

Price Category 21
**Comparison
LED vs. conventional lamps**

LED 34 W ≈
4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)

Ceiling and wall luminaires | Series: Sidelite® ECO

 Type of Protection: **IP 40**

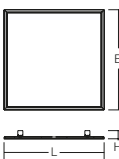
Protection Class: II

Impact Protection: IK02

Luminaire frame: aluminium, powder coated. Mounting cylinder powder coated metal. Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or micro-prismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling and wall luminaires								
Diffuser: plastic (PMMA), opal								
312144.002	L 595, B 595, H 50	LED	830	3500 lm	34 W	20,5	on/off	A+ A+
312144.002.76	L 595, B 595, H 50	LED	830	3500 lm	34 W	20,5	DALI	A+ A+
312144.002.1	L 595, B 595, H 50	LED	840	3700 lm	34 W	20,9	on/off	A+ A+
312144.002.1.76	L 595, B 595, H 50	LED	840	3700 lm	34 W	20,9	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312147.002	L 595, B 595, H 50	LED	830	3500 lm	34 W	18,5	on/off	A+ A+
312147.002.76	L 595, B 595, H 50	LED	830	3500 lm	34 W	18,5	DALI	A+ A+
312147.002.1	L 595, B 595, H 50	LED	840	3700 lm	34 W	18,2	on/off	A+ A+
312147.002.1.76	L 595, B 595, H 50	LED	840	3700 lm	34 W	18,2	DALI	A+ A+

Price Category 21
**Comparison
LED vs. conventional lamps**

LED 34 W ≈
4 x 14 W T16 (68 W EB)
4 x 18 W T26 (104 W CB)

**Ceiling luminaires | Series: Sidelite® ECO**Type of Protection: **IP 40**

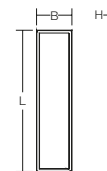
Protection Class: II

Impact Protection: IK02

Luminaire frame: aluminium, powder coated. Mounting frame powder coated metal.
 Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or micro-prismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. Integral driver.

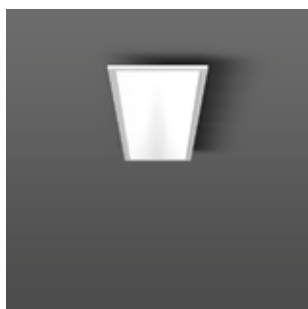
LED included.

Available colour: 2 = white

**Comparison
LED vs. conventional lamps****LED 39 W ≈**

2 x 28 W T16 (61 W EB)
 4 x 14 W T16 (68 W EB)
 4 x 18 W T26 (104 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Ceiling luminaires								
Diffuser: plastic (PMMA), opal								
312151.002	L 1202, B 302, H 47	LED	830	3600 lm	39 W	21,1	on/off	A+ A+
312151.002.76	L 1202, B 302, H 47	LED	830	3600 lm	39 W	21,1	DALI	A+ A+
312151.002.1	L 1202, B 302, H 47	LED	840	3600 lm	39 W	21,4	on/off	A+ A+
312151.002.1.76	L 1202, B 302, H 47	LED	840	3600 lm	39 W	21,4	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312154.002	L 1202, B 302, H 47	LED	830	3600 lm	39 W	18,2	on/off	A+ A+
312154.002.76	L 1202, B 302, H 47	LED	830	3600 lm	39 W	18,2	DALI	A+ A+
312154.002.1	L 1202, B 302, H 47	LED	840	3600 lm	39 W	18,2	on/off	A+ A+
312154.002.1.76	L 1202, B 302, H 47	LED	840	3600 lm	39 W	18,2	DALI	A+ A+

Price Category 21**Ceiling and wall luminaires | Series: Sidelite® ECO**Type of Protection: **IP 40**

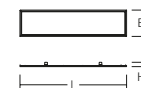
Protection Class: II

Impact Protection: IK02

Luminaire frame: aluminium, powder coated. Mounting cylinder powder coated metal.
 Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or micro-prismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white

**Comparison
LED vs. conventional lamps****LED 39 W ≈**

2 x 28 W T16 (61 W EB)
 4 x 14 W T16 (68 W EB)
 4 x 18 W T26 (104 W CB)

Ceiling and wall luminaires								
Diffuser: plastic (PMMA), opal								
312150.002	L 1195, B 295, H 50	LED	830	3600 lm	39 W	21,1	on/off	A+ A+
312150.002.76	L 1195, B 295, H 50	LED	830	3600 lm	39 W	21,1	DALI	A+ A+
312150.002.1	L 1195, B 295, H 50	LED	840	3600 lm	39 W	21,4	on/off	A+ A+
312150.002.1.76	L 1195, B 295, H 50	LED	840	3600 lm	39 W	21,4	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312153.002	L 1195, B 295, H 50	LED	830	3600 lm	39 W	18,2	on/off	A+ A+
312153.002.76	L 1195, B 295, H 50	LED	830	3600 lm	39 W	18,2	DALI	A+ A+
312153.002.1	L 1195, B 295, H 50	LED	840	3600 lm	39 W	18,2	on/off	A+ A+
312153.002.1.76	L 1195, B 295, H 50	LED	840	3600 lm	39 W	18,2	DALI	A+ A+

Price Category 21





SIDELITE® ECO

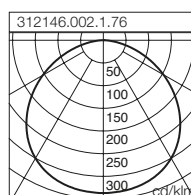
Pendant luminaires

- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall, recessed or suspended lighting solutions for interiors
- Ideal for office areas (UGR ≤ 19) and computer workstations in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA with fine micro prisma
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h (L70, B10)
- Up to 109 lm per watt
- Flicker < 5%
- Very simple converter installation by turn-and-plug system and extended converter connecting cable to the luminaire

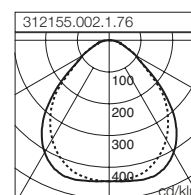


Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires

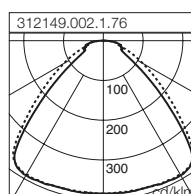
312146.002.1.76		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



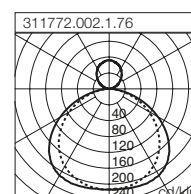
312155.002.1.76		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



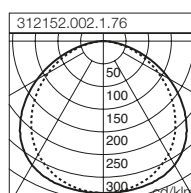
312149.002.1.76		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



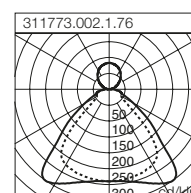
311772.002.1.76		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



312152.002.1.76		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



311773.002.1.76		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Pendant luminaires | Series: Sidelite® ECO

Type of Protection: **IP 40**

Protection Class: II

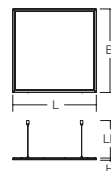
Impact Protection: IK02

Suspension Length: 300-1500 mm

Frame: aluminium, powder-coated. Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. External driver (Height 32 mm). 4-point steel cable suspension, steplessly adjustable.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires								
Diffuser: plastic (PMMA), opal								
312146.002	L 595, B 595, H 10	LED	830	3500 lm	34 W	20,5	on/off	A+ A+
312146.002.76	L 595, B 595, H 10	LED	830	3500 lm	34 W	20,5	DALI	A+ A+
312146.002.1	L 595, B 595, H 10	LED	840	3700 lm	34 W	20,9	on/off	A+ A+
312146.002.1.76	L 595, B 595, H 10	LED	840	3700 lm	34 W	20,9	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312149.002	L 595, B 595, H 10	LED	830	3500 lm	34 W	18,5	on/off	A+ A+
312149.002.76	L 595, B 595, H 10	LED	830	3500 lm	34 W	18,5	DALI	A+ A+
312149.002.1	L 595, B 595, H 10	LED	840	3700 lm	34 W	18,2	on/off	A+ A+
312149.002.1.76	L 595, B 595, H 10	LED	840	3700 lm	34 W	18,2	DALI	A+ A+

Comparison

LED vs. conventional lamps

LED 34 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Pendant luminaires | Series: Sidelite® ECO

Type of Protection: **IP 40**

Protection Class: II

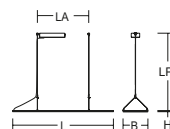
Impact Protection: IK02

Suspension Length: 300-1500 mm

Frame: aluminium, powder-coated. Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. Converter in the canopy. 2-point steel cable suspension, steplessly adjustable.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires								
Direct light emission								
Diffuser: plastic (PMMA), opal								
312152.002	L 1195, B 295, H 10	LED	830	3600 lm	39 W	21,1	on/off	A+ A+
312152.002.76	L 1195, B 295, H 10	LED	830	3600 lm	39 W	21,1	DALI	A+ A+
312152.002.1	L 1195, B 295, H 10	LED	840	3600 lm	39 W	21,4	on/off	A+ A+
312152.002.1.76	L 1195, B 295, H 10	LED	840	3600 lm	39 W	21,4	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312155.002	L 1195, B 295, H 10	LED	830	3600 lm	39 W	18,2	on/off	A+ A+
312155.002.76	L 1195, B 295, H 10	LED	830	3600 lm	39 W	18,2	DALI	A+ A+
312155.002.1	L 1195, B 295, H 10	LED	840	3600 lm	39 W	18,2	on/off	A+ A+
312155.002.1.76	L 1195, B 295, H 10	LED	840	3600 lm	39 W	18,2	DALI	A+ A+
Direct 80% - indirect 20% light emission								
Diffuser: plastic (PMMA), opal								
311772.002 .Q	L 1195, B 295, H 12	LED	830	3600 lm	34 W	19,4	on/off	A+ A+
311772.002.76	L 1195, B 295, H 12	LED	830	3600 lm	34 W	19,4	DALI	A+ A+
311772.002.1 .Q	L 1195, B 295, H 12	LED	840	3600 lm	34 W	19,5	on/off	A+ A+
311772.002.1.76	L 1195, B 295, H 12	LED	840	3600 lm	34 W	19,5	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
311773.002 .Q	L 1195, B 295, H 12	LED	830	3600 lm	34 W	17,2	on/off	A+ A+
311773.002.76 .Q	L 1195, B 295, H 12	LED	830	3600 lm	34 W	17,2	DALI	A+ A+
311773.002.1 .Q	L 1195, B 295, H 12	LED	840	3600 lm	34 W	17,1	on/off	A+ A+
311773.002.1.76	L 1195, B 295, H 12	LED	840	3600 lm	34 W	17,1	DALI	A+ A+

Comparison

LED vs. conventional lamps

LED 34 / 39 W ≈

2 x 28 W T16 (61 W EB)

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

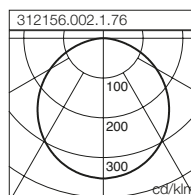


SIDELITE® ECO

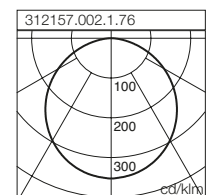
Ceiling and wall luminaires, Pendant luminaires

- Transparent and opal versions available
- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall and suspended lighting solutions for interiors
- Ideal for office areas ($UGR \leq 19$) and computer workstations in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA with fine micro prisma
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h (L70, B10)
- Extremely shallow installation depth (15 mm)
- External converter with simple plug-in locking system

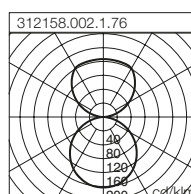
312156.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



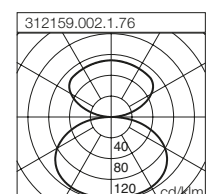
312157.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



312158.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	9



312159.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	8



Ceiling and wall luminaires | Series: Sidelite® ECO

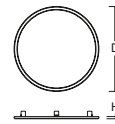
 Type of Protection: **IP 40**

Protection Class: II

Frame: aluminium, powder-coated. Mounting cylinder powder coated metal. Diffuser: plastic (PMMA), opal. Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC	Price Category 21
Ceiling and wall luminaires									
Diffuser: plastic (PMMA), opal									
312156.002	D 580, H 52	LED	830	3100 lm	39 W	21,5	on/off	A+ A+	
312156.002.76	D 580, H 52	LED	830	3100 lm	39 W	21,5	DALI	A+ A+	
312156.002.1	D 580, H 52	LED	840	3100 lm	39 W	21,6	on/off	A+ A+	
312156.002.1.76	D 580, H 52	LED	840	3100 lm	39 W	21,6	DALI	A+ A+	


**Comparison
LED vs. conventional lamps**
LED 39 W ≈

1 x 60 W T16-R (65 W EB)

2 x 32 W T16-R (69 W EB)

Pendant luminaires | Series: Sidelite® ECO

 Type of Protection: **IP 40**

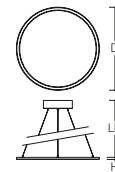
Protection Class: II

Suspension Length: 300-1500 mm

Frame: aluminium, powder-coated. Lightguide and diffuser made of non-yellowing PMMA. Choice of opal or transparent plastic (PMMA) diffuser. Lateral light emission thanks to LED. Converter in the canopy. 3-point steel cable suspension, steplessly adjustable.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC	Price Category 21
Pendant luminaires									
Direct light emission									
Diffuser: plastic (PMMA), opal									
312157.002	D 580, H 15	LED	830	3100 lm	39 W	21,5	on/off	A+ A+	
312157.002.76	D 580, H 15	LED	830	3100 lm	39 W	21,5	DALI	A+ A+	
312157.002.1	D 580, H 15	LED	840	3100 lm	39 W	21,6	on/off	A+ A+	
312157.002.1.76	D 580, H 15	LED	840	3100 lm	39 W	21,6	DALI	A+ A+	

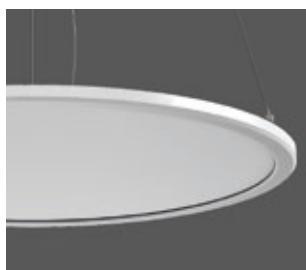

Direct 50% - indirect 50% light emission

Diffuser: plastic (PMMA), opal									
312158.002	D 580, H 15	LED	830	3300 lm	39 W	15,8	on/off	A+ A+	
312158.002.76	D 580, H 15	LED	830	3300 lm	39 W	15,8	DALI	A+ A+	
312158.002.1	D 580, H 15	LED	840	3300 lm	39 W	15,8	on/off	A+ A+	
312158.002.1.76	D 580, H 15	LED	840	3300 lm	39 W	15,8	DALI	A+ A+	
Diffuser: plastic (PMMA), transparent									
312159.002	D 580, H 15	LED	830	3500 lm	39 W	19,4	on/off	A+ A+	
312159.002.76	D 580, H 15	LED	830	3500 lm	39 W	19,4	DALI	A+ A+	
312159.002.1	D 580, H 15	LED	840	3550 lm	39 W	19,7	on/off	A+ A+	
312159.002.1.76	D 580, H 15	LED	840	3550 lm	39 W	19,7	DALI	A+ A+	

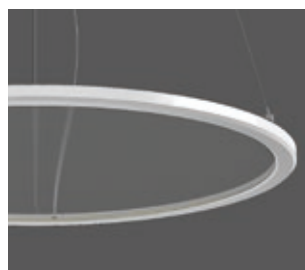

**Comparison
LED vs. conventional lamps**
LED 39 W ≈

1 x 60 W T16-R (65 W EB)

2 x 32 W T16-R (69 W EB)



Diffuser: opal



Diffuser: transparent (off)



Diffuser: transparent (on)

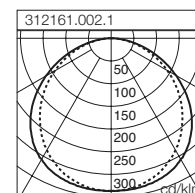


SIDELITE® ECO 35

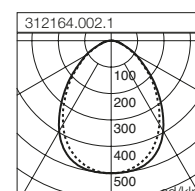
Ceiling and wall luminaires, Pendant luminaires

- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall, recessed or suspended lighting solutions for interiors
- Ideal for office areas (UGR ≤ 19) and computer workstations in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- LED rated life 50,000 h
- Extremely shallow installation depth (10 mm)
- External converter with simple plug-in locking system

312161.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



312164.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires

Ceiling luminaires | Series: Sidelite® ECO 35

 Type of Protection: **IP 40**

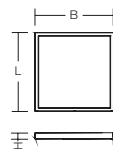
Protection Class: II

Impact Protection: IK03

Luminaire frame: aluminium, powder coated. Mounting frame powder coated metal.
 Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or micro-prismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. Integral driver.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling luminaires								
Diffuser: plastic (PMMA), opal								
312161.002	L 602, B 602, H 47	LED	830	3500 lm	35 W	21,5	on/off	A+ A+
312161.002.76	L 602, B 602, H 47	LED	830	3500 lm	35 W	21,5	DALI	A+ A+
312161.002.1	L 602, B 602, H 47	LED	840	3500 lm	35 W	21,1	on/off	A+ A+
312161.002.1.76	L 602, B 602, H 47	LED	840	3500 lm	35 W	21,1	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312164.002	L 602, B 602, H 47	LED	830	3500 lm	35 W	17,5	on/off	A+ A+
312164.002.76	L 602, B 602, H 47	LED	830	3500 lm	35 W	17,5	DALI	A+ A+
312164.002.1	L 602, B 602, H 47	LED	840	3500 lm	35 W	17,6	on/off	A+ A+
312164.002.1.76	L 602, B 602, H 47	LED	840	3500 lm	35 W	17,6	DALI	A+ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 35 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Ceiling and wall luminaires | Series: Sidelite® ECO 35

 Type of Protection: **IP 40**

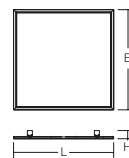
Protection Class: II

Impact Protection: IK03

Luminaire frame: aluminium, powder coated. Mounting cylinder powder coated metal.
 Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or micro-prismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. External driver (Height 32 mm).

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling and wall luminaires								
Diffuser: plastic (PMMA), opal								
312160.002	L 595, B 595, H 50	LED	830	3500 lm	35 W	21,5	on/off	A+ A+
312160.002.76	L 595, B 595, H 50	LED	830	3500 lm	35 W	21,5	DALI	A+ A+
312160.002.1	L 595, B 595, H 50	LED	840	3500 lm	35 W	21,1	on/off	A+ A+
312160.002.1.76	L 595, B 595, H 50	LED	840	3500 lm	35 W	21,1	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312163.002	L 595, B 595, H 50	LED	830	3500 lm	35 W	17,5	on/off	A+ A+
312163.002.76	L 595, B 595, H 50	LED	830	3500 lm	35 W	17,5	DALI	A+ A+
312163.002.1	L 595, B 595, H 50	LED	840	3500 lm	35 W	17,6	on/off	A+ A+
312163.002.1.76	L 595, B 595, H 50	LED	840	3500 lm	35 W	17,6	DALI	A+ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 35 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Pendant luminaires | Series: Sidelite® ECO 35

 Type of Protection: **IP 40**

Protection Class: II

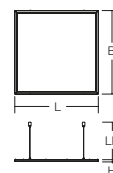
Impact Protection: IK03

Suspension Length: 300-1500 mm

Frame: aluminium, powder-coated. Lightguide and diffuser made of non-yellowing PMMA. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lateral light emission thanks to LED. External driver (Height 32 mm). 4-point steel cable suspension, steplessly adjustable.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires								
Diffuser: plastic (PMMA), opal								
312162.002	L 595, B 595, H 10	LED	830	3500 lm	35 W	21,5	on/off	A+ A+
312162.002.76	L 595, B 595, H 10	LED	830	3500 lm	35 W	21,5	DALI	A+ A+
312162.002.1	L 595, B 595, H 10	LED	840	3500 lm	35 W	21,1	on/off	A+ A+
312162.002.1.76	L 595, B 595, H 10	LED	840	3500 lm	35 W	21,1	DALI	A+ A+
Diffuser plastic (PMMA) micro prismatic								
312165.002	L 595, B 595, H 10	LED	830	3500 lm	35 W	17,5	on/off	A+ A+
312165.002.76	L 595, B 595, H 10	LED	830	3500 lm	35 W	17,5	DALI	A+ A+
312165.002.1	L 595, B 595, H 10	LED	840	3500 lm	35 W	17,6	on/off	A+ A+
312165.002.1.76	L 595, B 595, H 10	LED	840	3500 lm	35 W	17,6	DALI	A+ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 35 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)



Comparison
LED vs. conventional lamps

LED 46 W ≈
1 x 80 W T16 (86 W EB)

Ceiling luminaires | Series: Sonis A Asym

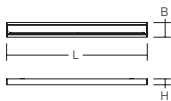
Type of Protection: IP 20
Protection Class: I

Housing: powder-coated metal. Parabolic reflector for asymmetrical light distribution.
Reflector material: **MIRO®** Highly polished aluminium.

Ideal for school blackboards illumination.

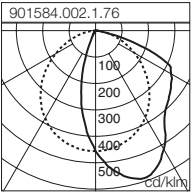
LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling luminaires								Price Category 21
901584.002	L 1484, B 155, H 62	LED	830	5500 lm	46 W	26,1	on/off	A++ A++
901584.002.76	L 1484, B 155, H 62	LED	830	5500 lm	46 W	26,1	DALI	A++ A++
901584.002.1	L 1484, B 155, H 62	LED	840	5800 lm	46 W	26,3	on/off	A++ A++
901584.002.1.76	L 1484, B 155, H 62	LED	840	5800 lm	46 W	26,3	DALI	A++ A++

901584.002.1.76		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
1	2	3
Roum 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4





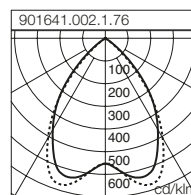


SONIS EVO

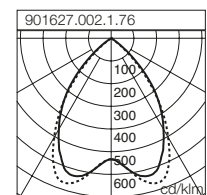
Ceiling luminaires, Pendant luminaires

- Highly efficient LED luminaire
- Alea optical system for glare-free light at the workstation (UGR ≤ 19)
- Narrow beam, brilliant luminous effect
- LED rated life 50,000 h (L80, B10)
- Luminous efficiency up to 125 lm/W

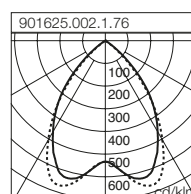
901641.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	10



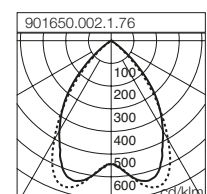
901627.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901625.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901650.002.1.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	2	3



Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires

Ceiling luminaires | Series: Sonis EVO

Type of Protection: IP 20

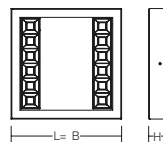
Protection Class: I, II

Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Integral driver.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Ceiling luminaires								
Price Category 21								
901640.002	L 300, B 300, H 47	LED	830	1500 lm	12 W	18,3	on/off	A+ A+
901640.002.76	L 300, B 300, H 47	LED	830	1500 lm	12 W	18,3	DALI	A+ A+
901640.002.1	L 300, B 300, H 47	LED	840	1500 lm	12 W	18,5	on/off	A+ A+
901640.002.1.76	L 300, B 300, H 47	LED	840	1500 lm	12 W	18,5	DALI	A+ A+
901641.002	L 300, B 300, H 47	LED	830	2000 lm	16 W	19,3	on/off	A+ A+
901641.002.76	L 300, B 300, H 47	LED	830	2000 lm	16 W	19,3	DALI	A+ A+
901641.002.1	L 300, B 300, H 47	LED	840	2000 lm	16 W	19,5	on/off	A+ A+
901641.002.1.76	L 300, B 300, H 47	LED	840	2000 lm	16 W	19,5	DALI	A+ A+

**Comparison
LED vs. conventional lamps**
LED 12 W ≈

2 x 18 W TC-D (52 W CB)

LED 16 W ≈

2 x 26 W TC-D (68 W CB)

Ceiling luminaires | Series: Sonis EVO

Type of Protection: IP 20

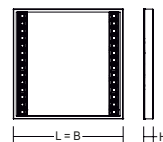
Protection Class: I

Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Integral driver.

LED included.

Available colour: 2 = white

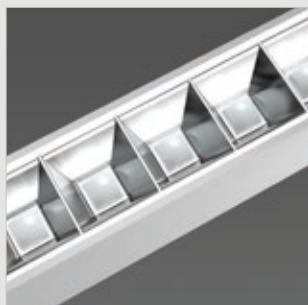


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Ceiling luminaires								
Price Category 21								
901625.002	L 602, B 602, H 47	LED	830	3300 lm	30 W	18,3	on/off	A+ A+
901625.002.76	L 602, B 602, H 47	LED	830	3300 lm	30 W	18,3	DALI	A+ A+
901625.002.1	L 602, B 602, H 47	LED	840	3500 lm	30 W	18,5	on/off	A+ A+
901625.002.1.76	L 602, B 602, H 47	LED	840	3500 lm	30 W	18,5	DALI	A+ A+

**Comparison
LED vs. conventional lamps**
LED 30 W ≈

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)


ALEA OPTICAL SYSTEM

A brilliant example of the power of innovation:

The Alea optical system in the Sonis Evo combines square reflector elements with a linear structure.

The integrated opal diffuser reduces direct glare, ensures excellent light quality and protects the highly efficient LEDs.



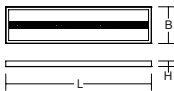
Ceiling luminaires | Series: Sonis EVO

Type of Protection: IP 20
Protection Class: I
Impact Protection: IK03

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Integral driver.

LED included.

Available colour: 2 = white



Comparison
LED vs. conventional lamps

LED 30 W ≈
1 x 58 W T26 (67 W CB)

LED 56 W ≈
2 x 58 W T26 (134 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling luminaires								
Single row Alea optical system								
901627.002	L 1202, B 302, H 47	LED	830	3300 lm	30 W	18,3	on/off	A+ A+
901627.002.76	L 1202, B 302, H 47	LED	830	3300 lm	30 W	18,3	DALI	A+ A+
901627.002.1	L 1202, B 302, H 47	LED	840	3500 lm	30 W	18,5	on/off	A+ A+
901627.002.1.76	L 1202, B 302, H 47	LED	840	3500 lm	30 W	18,5	DALI	A+ A+
Double row Alea optical system								
901650.002	L 1202, B 302, H 47	LED	830	6200 lm	56 W	18,5	on/off	A+ A+
901650.002.76	L 1202, B 302, H 47	LED	830	6200 lm	56 W	18,5	DALI	A+ A+
901650.002.1	L 1202, B 302, H 47	LED	840	6500 lm	56 W	18,6	on/off	A+ A+
901650.002.1.76	L 1202, B 302, H 47	LED	840	6500 lm	56 W	18,6	DALI	A+ A+



The application image shows:
Sonis EVO

Pendant luminaires | Series: Sonis EVO

Type of Protection: IP 20

Protection Class: I

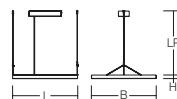
Impact Protection: IK03

Suspension Length: 1500 mm

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm). 2-point steel cable suspension, steplessly adjustable.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC	
Pendant luminaires									Price Category 21
901624.002	L 602, B 602, H 33	LED	830	3300 lm	30 W	18,3	on/off	A+ A+	
901624.002.76	L 602, B 602, H 33	LED	830	3300 lm	30 W	18,3	DALI	A+ A+	
901624.002.1	L 602, B 602, H 33	LED	840	3500 lm	30 W	18,5	on/off	A+ A+	
901624.002.1.76	L 602, B 602, H 33	LED	840	3500 lm	30 W	18,5	DALI	A+ A+	

**Comparison
LED vs. conventional lamps****LED 30 W ≈**

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Pendant luminaires | Series: Sonis EVO

Type of Protection: IP 20

Protection Class: I

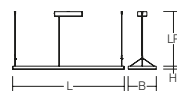
Impact Protection: IK03

Suspension Length: 1500 mm

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). Converter integrated, DALI converter external (height 32 mm). 2-point steel cable suspension, steplessly adjustable.

LED included.

Available colour: 2 = white



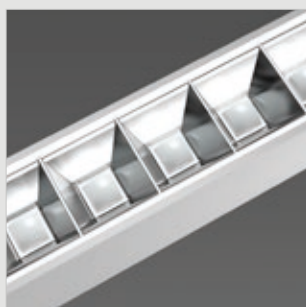
Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC	
Pendant luminaires									Price Category 21
Single row Alea optical system									
901626.002	L 1202, B 302, H 33	LED	830	3300 lm	30 W	18,3	on/off	A+ A+	
901626.002.76	L 1202, B 302, H 33	LED	830	3300 lm	30 W	18,3	DALI	A+ A+	
901626.002.1	L 1202, B 302, H 33	LED	840	3500 lm	30 W	18,5	on/off	A+ A+	
901626.002.1.76	L 1202, B 302, H 33	LED	840	3500 lm	30 W	18,5	DALI	A+ A+	
Double row Alea optical system									
901651.002	L 1202, B 302, H 33	LED	830	6200 lm	56 W	18,5	on/off	A+ A+	
901651.002.76	L 1202, B 302, H 33	LED	830	6200 lm	56 W	18,5	DALI	A+ A+	
901651.002.1	L 1202, B 302, H 33	LED	840	6500 lm	56 W	18,6	on/off	A+ A+	
901651.002.1.76	L 1202, B 302, H 33	LED	840	6500 lm	56 W	18,6	DALI	A+ A+	

**Comparison
LED vs. conventional lamps****LED 30 W ≈**

1 x 58 W T26 (67 W CB)

LED 56 W ≈

2 x 58 W T26 (134 W CB)

**ALEA OPTICAL SYSTEM**

A brilliant example of the power of innovation:

The Alea optical system in the Sonis Evo combines square reflector elements with a linear structure.

The integrated opal diffuser reduces direct glare, ensures excellent light quality and protects the highly efficient LEDs.



ECONE®

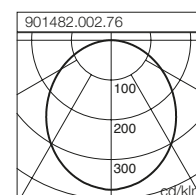
Ceiling and wall luminaires, Pendant luminaires

- Effective LED wide field luminaire for interior use
- Comprehensive range consisting of:
 - Recessed luminaires
 - Surface mounted luminaires
 - Pendant versions
- Ideally suited to health and care facilities, recommended for office, work, common and conference rooms
- Plastic light frame available in transparent or white with LED light channel warm white or LED colour light channel (RZB)
- Plastic cover made of non-yellowing PMMA
- Suitable for circadian light gradient: Two separate light rooms and the dynamic mixture of the light colours used enable the daylight simulation
- Intelligent and simple control (Plug & Play) with light control +3 Professional

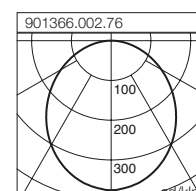


Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires

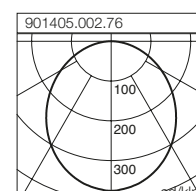
901482.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	2	3



901366.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



901405.002.76		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Ceiling and wall luminaires | Series: Econe®

Type of Protection: IP 20

Protection Class: I

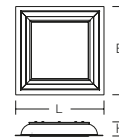
Impact Protection: IK02

Housing: sheet steel, powder-coated. Diffuser: plastic (PMMA), opal. Light frame: plastic, transparent or white, with RGB LED band. Integral driver.

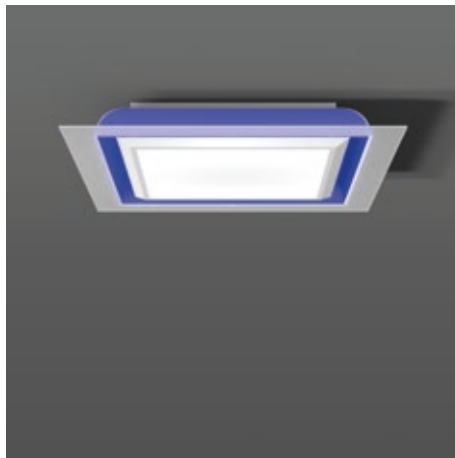
 Can be controlled via our **light control +³ Professional** light management system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light output	Light colour	Luminaire flux	System-leistung	UGR	dimmable	EEC
Ceiling and wall luminaires									
Price Category 21									
Light frame: transparent									
901368.002.76	L 1000, B 1000, H 125	LED	direct light	840 RGB	3450 lm	108 W	19,5	DALI	A+ A+
901482.002.76	L 1000, B 1000, H 125	LED	direct light	827-865 RGB	7850 lm	164 W	20,5	DALI	A+ A+
Light frame: white									
901410.002.76	L 1000, B 1000, H 125	LED	direct light	840 RGB	3450 lm	108 W	19,5	DALI	A+ A+



Light frame: transparent



Light frame: white

Ceiling and wall luminaires | Series: Econe®

Type of Protection: IP 20

Protection Class: I

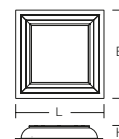
Impact Protection: IK02

Housing: sheet steel, powder-coated. Diffuser: plastic (PMMA), opal. Light frame transparent or white plastic with warm white light channel. Integral driver.

 Can be controlled via our **light control +³ Professional** light management system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light output	Light colour	Luminaire flux	System-leistung	UGR	dimmable	EEC
Ceiling and wall luminaires									
Price Category 21									
Light frame: transparent									
901369.002.76	L 1000, B 1000, H 125	LED	direct light	840 830	3450 lm 2000 lm	108 W	19,5	DALI	A+ A+
Light frame: white									
901412.002.76	L 1000, B 1000, H 125	LED	direct light	840 830	3450 lm 1700 lm	108 W	19,5	DALI	A+ A+

**Pendant luminaires | Series: Econe®**

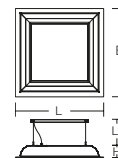
Type of Protection: IP 20
Protection Class: I
Impact Protection: IK02
Suspension Length: 100-2000 mm

Housing: sheet steel, powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. Light frame transparent or white plastic with RZB LED light channel. Indirect light emission as an aesthetic appreciation for ceiling illumination. Driver included. 4-point steel cable suspension, steplessly adjustable. Special lengths available on request.

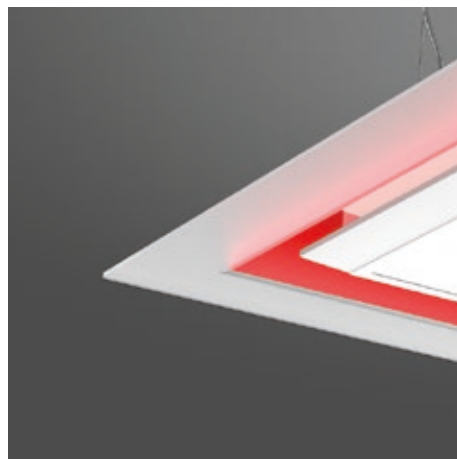
Can be controlled via our **light control +³ Professional** light management system.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light output	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Pendant luminaires									Price Category 21
Light frame: transparent									
901366.002.76	L 1000, B 1000, H 125	LED	direct light channel indirect	840 RGB 850	3450 lm 2000 lm 5100 lm	168 W	16,8	DALI	A+,A++ A++
901450.002.76	L 1000, B 1000, H 125	LED	direct light channel indirect	827-865 RGB 850	7850 lm 2000 lm 5100 lm	224 W	14,5	DALI	A++ A++
Light frame: white									
901403.002.76	L 1000, B 1000, H 125	LED	direct light channel indirect	840 RGB 850	3450 lm 2000 lm 5100 lm	168 W	19,5	DALI	A+,A++ A++



Light frame: transparent



Light frame: white

**Pendant luminaires | Series: Econe®**

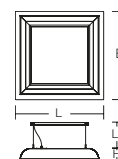
Type of Protection: IP 20
Protection Class: I
Impact Protection: IK02
Suspension Length: 100-2000 mm

Housing: sheet steel, powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. Light frame transparent or white plastic with warm white light channel. Indirect light emission as an aesthetic appreciation for ceiling illumination. Driver included. 4-point steel cable suspension, steplessly adjustable. Special lengths available on request.

Can be controlled via our **light control +³ Professional** light management system.

LED included.

Available colour: 2 = white

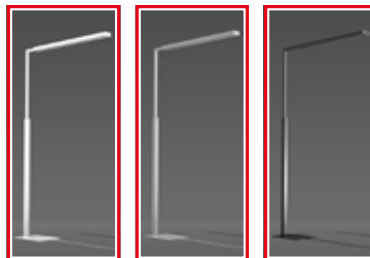


Reference number	Dimensions	Lamp	Light output	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Pendant luminaires									Price Category 21
Light frame: transparent									
901367.002.76	L 1000, B 1000, H 125	LED	direct light channel indirect	840 830 850	3450 lm 2000 lm 5100 lm	168 W	11,8	DALI	A+,A++ A++
Light frame: white									
901405.002.76	L 1000, B 1000, H 125	LED	direct light channel indirect	840 830 850	3450 lm 1700 lm 5100 lm	168 W	19,5	DALI	A+,A++ A++





The application image shows:
Sidelite®



244

244

244

Less is more® 27
242-245

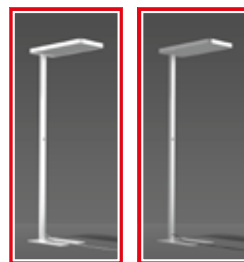


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248

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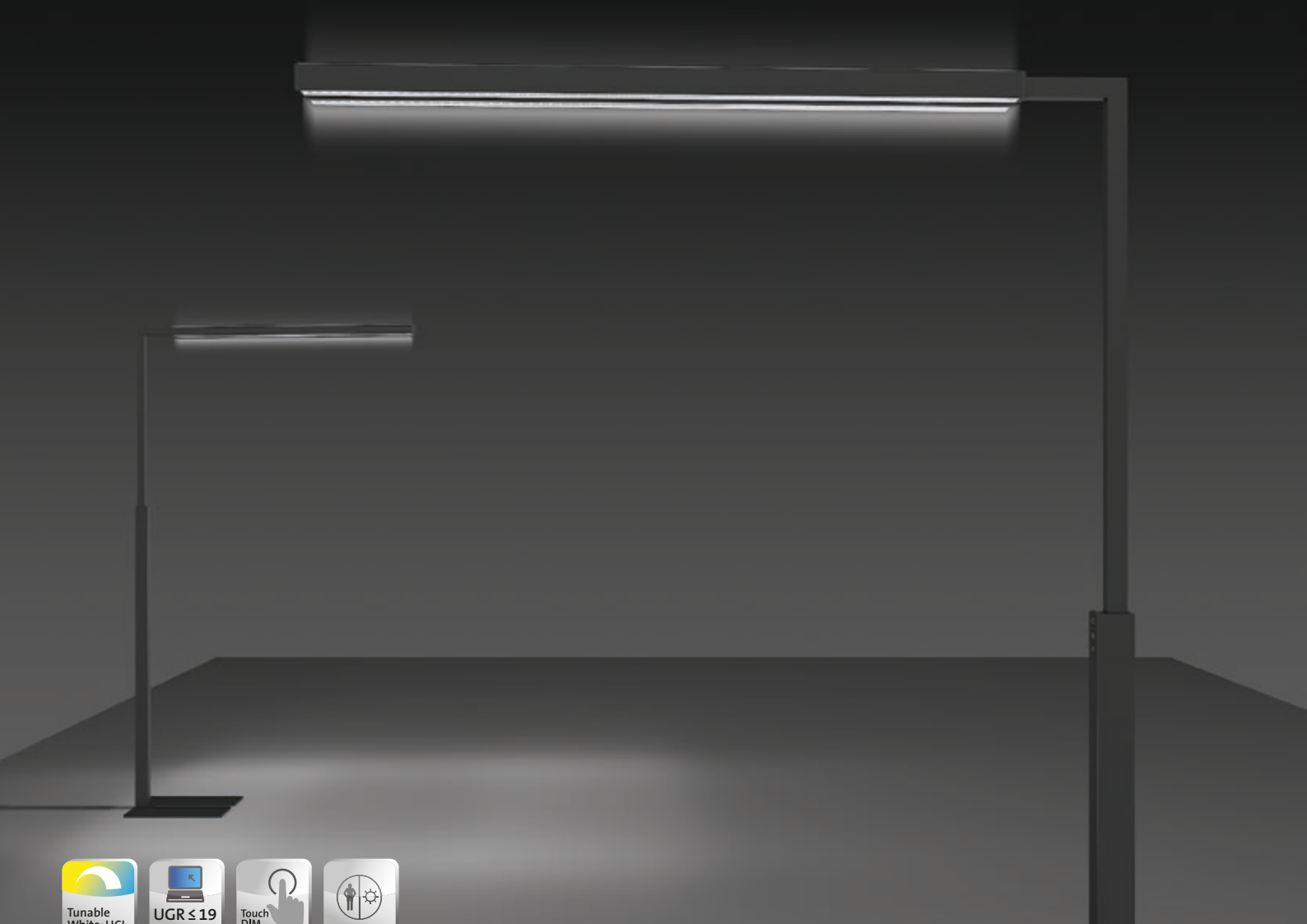
Sidelite®
246-249



251

251

Sidelite® ECO
250-251



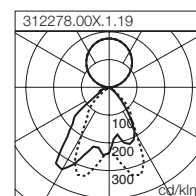
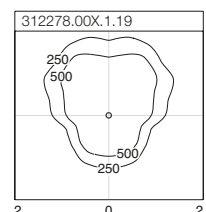
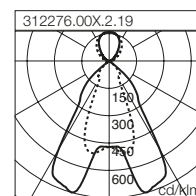
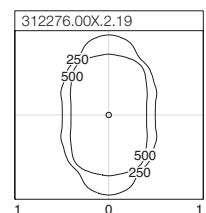
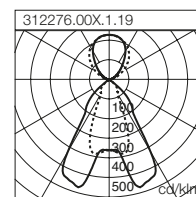
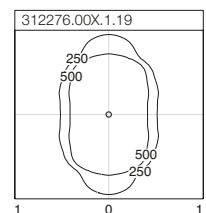
LESS IS MORE® 27

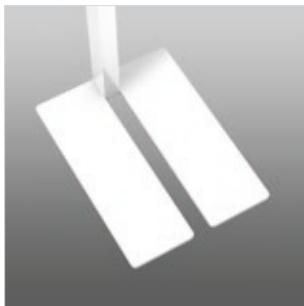
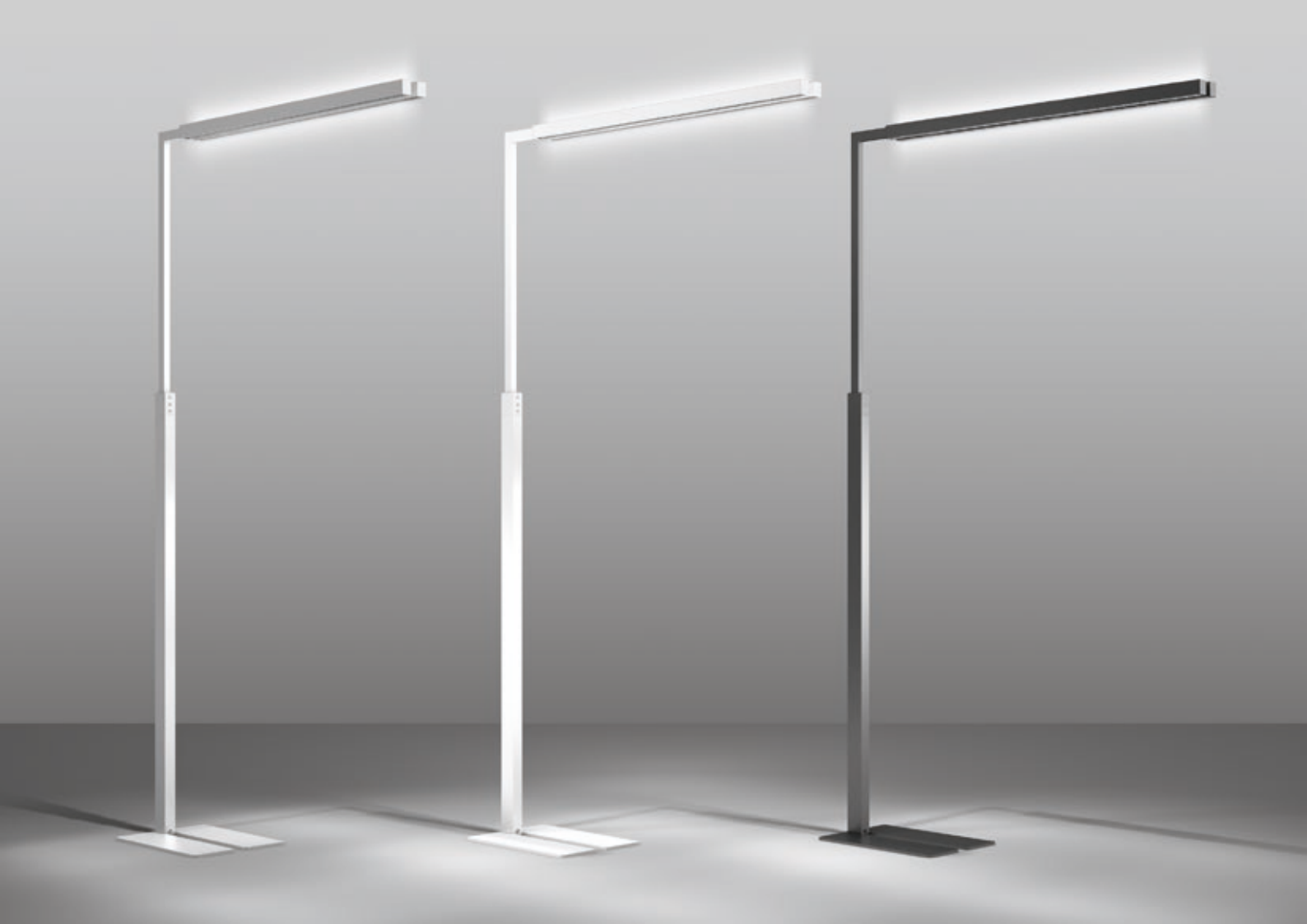
Free-standing luminaires

- LED free-standing luminaires for single and double workplaces
- Versions with intelligent presence control and brightness sensors
- Version with asymmetrical light characteristics for high degree of uniformity in the workplace
- Ideal for office areas (UGR ≤ 19) and environments with computer screens in accordance with DIN EN 12464-1
- Extremely narrow luminaire top
- With integrated converter
- Direct and indirect light output
- LED rated life 60,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Flush membrane switch for easy operation
- Versions with wide opening in the base plate especially for double workplaces



Further luminaires of this series, see:
Indoor lighting | LED linear systems





Base plate (405 x 300 mm) with narrow opening (35 mm)



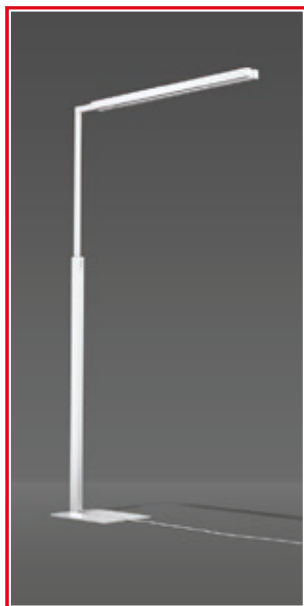
Base plate (450 x 340 mm) with wide opening (150 mm)



Flush membrane switch for easy operation



Versions with intelligent presence control and brightness sensors



Comparison LED vs. conventional lamps

LED 83 / 90 W ≈
3 x 58 W T26 (201 W CB)

Free-standing luminaires | Series: Less is more® 27

Type of Protection: IP 20

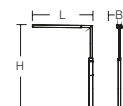
Protection Class: I

LED free-standing luminaires for single and double workplaces, optionally with intelligent presence control and brightness sensors (.19). Converter integrated in the post. Direct/indirect emission in 60:40 ratio. Direct light control via aluminium micro-grid in smooth finish (screen-compliant according to EN-12464-1). Indirect light control via satin-finish plastic diffuser in non-yellowing PMMA, flat steel base plate for high stability and space-saving positioning with office furniture. Top and column made of aluminium. Luminaire powder coated in white, white aluminium and black. Pushbutton ergonomically integrated in the luminaire column.

LED included.

Dimensions of luminaire top: (2x) 1013 x 37 x 28 mm. Height/luminaire: 2033 mm (top edge of luminaire). Cable 2.0 m in 0.75 mm² with safety plug (Schuko).

Available colours (X): 2 = white, 3 = black, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
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Free-standing luminaires, Direct/indirect - can be switched together

Price Category 21



Base plate with narrow opening

Symmetrical light distribution

312248.00X	L 1170, B 300, H 2033	LED	830	8700 lm	90 W	16,3	Touch-Dim	A+ A+
312248.00X.19	L 1170, B 300, H 2033	LED	830	8700 lm	90 W	16,3	Sensor	A+ A+
312248.00X.1	L 1170, B 300, H 2033	LED	840	8700 lm	90 W	16,3	Touch-Dim	A++ A++
312248.00X.1.19	L 1170, B 300, H 2033	LED	840	8700 lm	90 W	16,3	Sensor	A++ A++

Base plate with wide opening

Symmetrical light distribution

312249.00X	L 1170, B 340, H 2033	LED	830	8700 lm	90 W	16,3	Touch-Dim	A+ A+
312249.00X.19	L 1170, B 340, H 2033	LED	830	8700 lm	90 W	16,3	Sensor	A+ A+
312249.00X.1	L 1170, B 340, H 2033	LED	840	8700 lm	90 W	16,3	Touch-Dim	A++ A++
312249.00X.1.19	L 1170, B 340, H 2033	LED	840	8700 lm	90 W	16,3	Sensor	A++ A++

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
------------------	------------	------	--------------	----------------	--------------	-----	------------	-----

Free-standing luminaires, Direct/indirect - can be switched separately

Price Category 21



Base plate with narrow opening

Symmetrical light distribution

312276.00X	L 1170, B 300, H 2033	LED	830	8700 lm	90 W	14,9	Touch-Dim	A+ A+
312276.00X.19	L 1170, B 300, H 2033	LED	830	8700 lm	90 W	14,9	Sensor	A+ A+
312276.00X.1	L 1170, B 300, H 2033	LED	840	8700 lm	90 W	14,9	Touch-Dim	A++ A++
312276.00X.1.19	L 1170, B 300, H 2033	LED	840	8700 lm	90 W	14,9	Sensor	A++ A++

Tunable White - 2700 K to 6500 K

312276.00X.2	L 1170, B 300, H 2033	LED	827-865	6500 lm	83 W	16,3	Touch-Dim	A+ A+
312276.00X.2.19	L 1170, B 300, H 2033	LED	827-865	6500 lm	83 W	16,3	Sensor	A+ A+



Asymmetrical light distribution

312278.00X	L 1170, B 300, H 2033	LED	830	8700 lm	90 W	14,9	Touch-Dim	A+ A+
312278.00X.19	L 1170, B 300, H 2033	LED	830	8700 lm	90 W	14,9	Sensor	A+ A+
312278.00X.1	L 1170, B 300, H 2033	LED	840	8700 lm	90 W	14,9	Touch-Dim	A++ A++
312278.00X.1.19	L 1170, B 300, H 2033	LED	840	8700 lm	90 W	14,9	Sensor	A++ A++

Tunable White - 2700 K to 6500 K

312278.00X.2	L 1170, B 300, H 2033	LED	827-865	6500 lm	83 W	16,3	Touch-Dim	A+ A+
312278.00X.2.19	L 1170, B 300, H 2033	LED	827-865	6500 lm	83 W	16,3	Sensor	A+ A+



Base plate with wide opening

Symmetrical light distribution

312277.00X	L 1170, B 340, H 2033	LED	830	8700 lm	90 W	14,9	Touch-Dim	A+ A+
312277.00X.19	L 1170, B 340, H 2033	LED	830	8700 lm	90 W	14,9	Sensor	A+ A+
312277.00X.1	L 1170, B 340, H 2033	LED	840	8700 lm	90 W	14,9	Touch-Dim	A++ A++
312277.00X.1.19	L 1170, B 340, H 2033	LED	840	8700 lm	90 W	14,9	Sensor	A++ A++

Tunable White - 2700 K to 6500 K

312277.00X.2	L 1170, B 340, H 2033	LED	827-865	6500 lm	83 W	16,3	Touch-Dim	A+ A+
312277.00X.2.19	L 1170, B 340, H 2033	LED	827-865	6500 lm	83 W	16,3	Sensor	A+ A+



Asymmetrical light distribution

312279.00X	L 1170, B 340, H 2033	LED	830	8700 lm	90 W	14,9	Touch-Dim	A+ A+
312279.00X.19	L 1170, B 340, H 2033	LED	830	8700 lm	90 W	14,9	Sensor	A+ A+
312279.00X.1	L 1170, B 340, H 2033	LED	840	8700 lm	90 W	14,9	Touch-Dim	A++ A++
312279.00X.1.19	L 1170, B 340, H 2033	LED	840	8700 lm	90 W	14,9	Sensor	A++ A++

Tunable White - 2700 K to 6500 K

312279.00X.2	L 1170, B 340, H 2033	LED	827-865	6500 lm	83 W	16,3	Touch-Dim	A+ A+
312279.00X.2.19	L 1170, B 340, H 2033	LED	827-865	6500 lm	83 W	16,3	Sensor	A+ A+

Specimen product performance comparison with direct and indirect light emission

Single workplace

Double workplace

Length 4.0 m | Width 3.50 m | Height 2.80 m | Maintenance factor 0.80 | Working plane 0.75 m | Mounting Height 2.0 m



Reference number 312276.002.1.19

Reference number 312278.002.1.19



Wattage

LED 90 W / 8700 lm

LED 90 W / 8700 lm

Number of luminaires

1

1



Average illuminance

Em 990 lx



Em 903 lx

High uniformity of light distribution by means of asymmetrical light emittance.

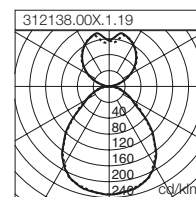
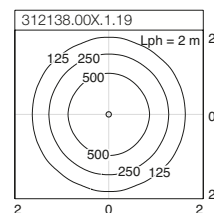




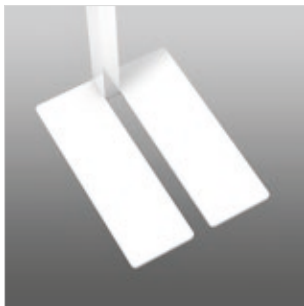
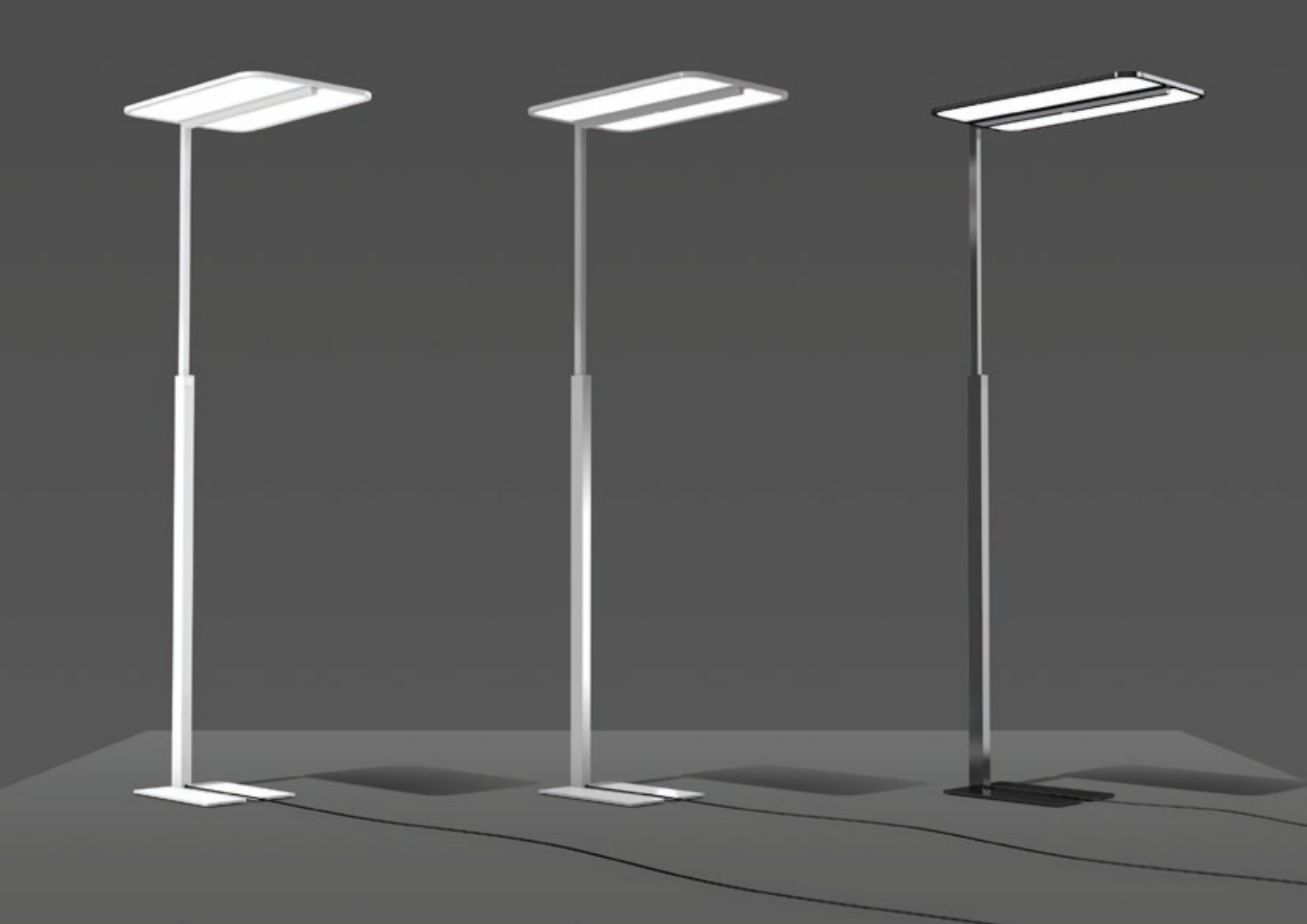
SIDELITE®

Free-standing luminaires

- LED free-standing luminaires for single and double workplaces
- Versions with intelligent presence control and brightness sensors
- Ideal for office areas ($UGR \leq 19$) and environments with computer screens in accordance with DIN EN 12464-1
- Extremely flat luminaire top
- With integrated converter
- Direct and indirect light output
- LED rated life 50,000 h (L70, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Flush membrane switch for easy operation
- Versions with wide opening in the base plate especially for double workplaces



Further luminaires of this series, see:
 Indoor lighting | Recessed modular and linear luminaires
 Indoor lighting | Modular luminaires: surface mounted or pendant mounted



Base plate (405 x 300 mm) with narrow opening (35 mm)



Base plate (450 x 340 mm) with wide opening (150 mm)



Flush membrane switch for easy operation



Versions with intelligent presence control and brightness sensors



Free-standing luminaires | Series: Sidelite®

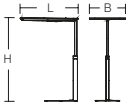
Type of Protection: IP 20
Protection Class: I

LED free-standing luminaires for single and double workplaces, optionally with intelligent presence control and brightness sensors (.19). Converter integrated in the post. Direct/indirect emission in 60:40 ratio. Direct light control via micro prismatic plastic diffuser (screen-compliant according to EN-12464-1), indirect light control via opal plastic diffuser, diffusers and light guide made of non-yellowing PMA, flat steel base plate for high stability and space-saving positioning with office furniture. Top and column made of aluminium. Luminaire powder coated in white, white aluminium and black. Pushbutton ergonomically integrated in the luminaire column.

LED included.

Dimensions of luminaire top: 440 x 715 x 15 mm. Height/luminaire: 2037 mm (top edge of luminaire). Cable 2.0 m in 0.75 mm² with safety plug (Schuko).

Available colours (X): 2 = white, 3 = black, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Free-standing luminaires								
Base plate with narrow opening								
312138.00X	L 715, B 440, H 2037	LED	830	7300 lm	70 W	17,2	Touch-Dim	A++ A+
312138.00X.19	L 715, B 440, H 2037	LED	830	7300 lm	70 W	17,2	Sensor	A++ A+
312138.00X.1	L 715, B 440, H 2037	LED	840	7300 lm	70 W	17,3	Touch-Dim	A++ A+
312138.00X.1.19	L 715, B 440, H 2037	LED	840	7300 lm	70 W	17,3	Sensor	A++ A+
Base plate with wide opening								
312139.00X	L 715, B 440, H 2037	LED	830	7300 lm	70 W	17,2	Touch-Dim	A++ A+
312139.00X.19	L 715, B 440, H 2037	LED	830	7300 lm	70 W	17,2	Sensor	A++ A+
312139.00X.1	L 715, B 440, H 2037	LED	840	7300 lm	70 W	17,3	Touch-Dim	A++ A+
312139.00X.1.19	L 715, B 440, H 2037	LED	840	7300 lm	70 W	17,3	Sensor	A++ A+

Comparison
LED vs. conventional lamps

LED 70 W ≈
2 x 58 W T26 (134 W CB)

Specimen product performance comparison with direct and indirect light emission

Single workplace

Length 4.0 m | Width 3.50 m | Height 2.80 m | Maintenance factor 0.80 | Working plane 0.75 m | Mounting Height 2.0 m

Double workplace

	Reference number 312138.002.1	Reference number 312139.002.1
Wattage	LED 70 W / 7300 lm	LED 70 W / 7300 lm
Number of luminaires	1	1



Average illuminance
Em 662 lx



Em 603 lx

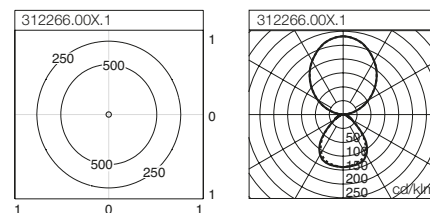




SIDELITE® ECO

Free-standing luminaires

- LED free-standing luminaires for single and double workplaces
- Ideal for office areas ($UGR \leq 19$) and environments with computer screens in accordance with DIN EN 12464-1
- Flat luminaire head
- With integrated converter
- Direct and indirect light output
- LED rated life 40,000 h (L80, B10)



Further luminaires of this series, see:
 Indoor lighting | Recessed modular and linear luminaires
 Indoor lighting | Modular luminaires: surface mounted or pendant mounted

Free-standing luminaires | Series: Sidelite® ECO

Type of Protection: IP 20
Protection Class: I

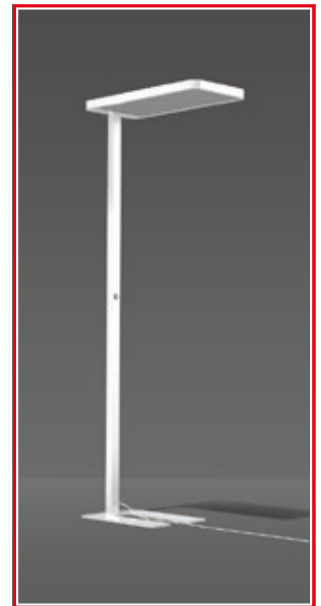
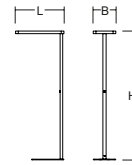
LED floor luminaire for single workplace. Converter integrated in the post. Beam characteristics direct 40% / indirect 60%. Direct light control using plastic micro-prismatic diffuser (screen-compliant in accordance with EN 12464-1). Indirect light control using clear plastic diffuser. Diffusers and light guide made of non-yellowing PMMA. Flat base plate made of steel for a high level of stability and space-saving positioning with office furniture. Base plate with narrow opening 115 mm. Top and column made of aluminium. Luminaire powder-coated. Pushbutton ergonomically integrated in the luminaire column. With cable 2 m, 0.75 mm² including safety plug.

Lamp (LED) included.

Dimensions of luminaire head: 750 x 350 x 40 mm

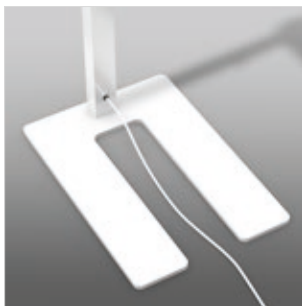
Luminaire height: 2000 mm (top edge of luminaire)

Available colours (X): 2 = white, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Free-standing luminaires								
312266.00X.1	L 750, B 350, H 2000	LED	840	10600 lm	90 W	13,6	Touch-Dim	A+ A+

Price Category 21



Base plate (350 x 500 mm) with opening (150 mm)



Micro-prismatic diffuser

Comparison LED vs. conventional lamps

LED 90 W ≈
3 x 54 W T16 (174 W EB)

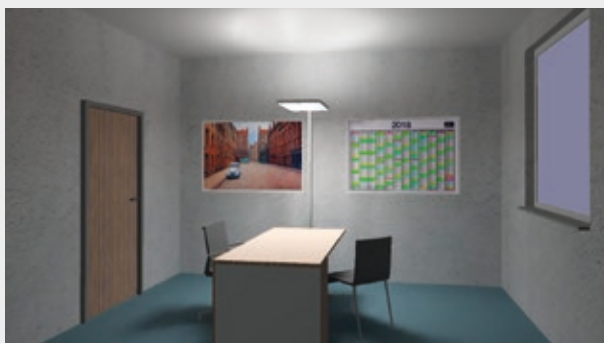
Specimen product performance comparison with direct and indirect light emission

Single workplace

Length 4.0 m | Width 3.50 m | Height 2.80 m | Maintenance factor 0.80 | Working plane 0.75 m | Mounting Height 2.0 m

Double workplace

	Reference number 312266.002.1	Reference number 312266.002.1
Wattage	LED 90 W / 10500 lm	LED 90 W / 10500 lm
Number of luminaires	1	1



Average illuminance

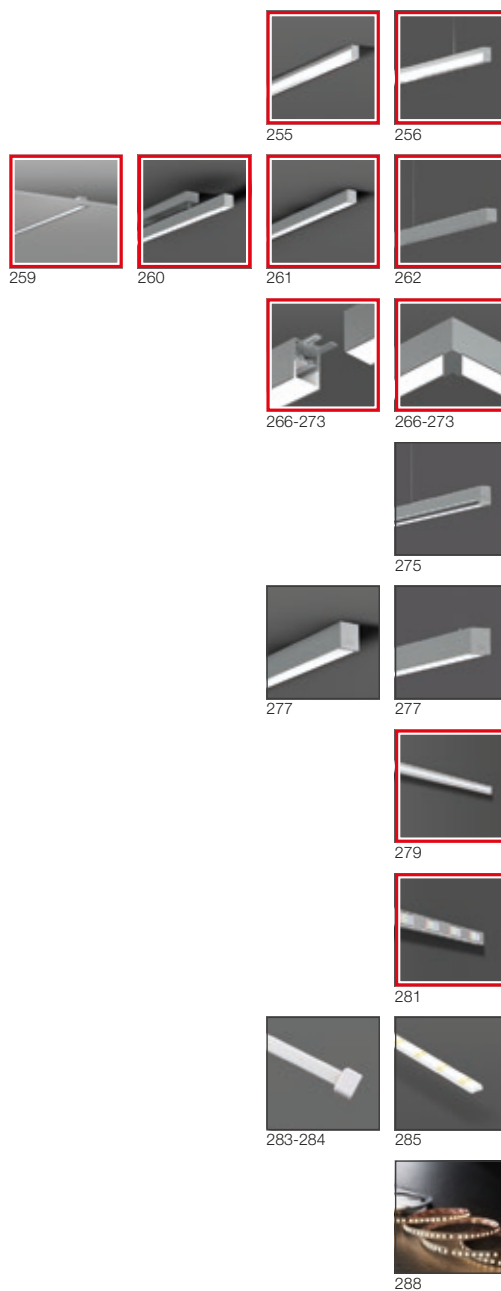
Em 751 lx



Em 698 lx



The application image shows:
Less is more® 27
GSUN® D
Sidelite® ECO



Less is more® 21
254-257

Less is more® 27
258-265

Less is more® 27 - Systems
266-273

Less is more® 27 Kristall
274-275

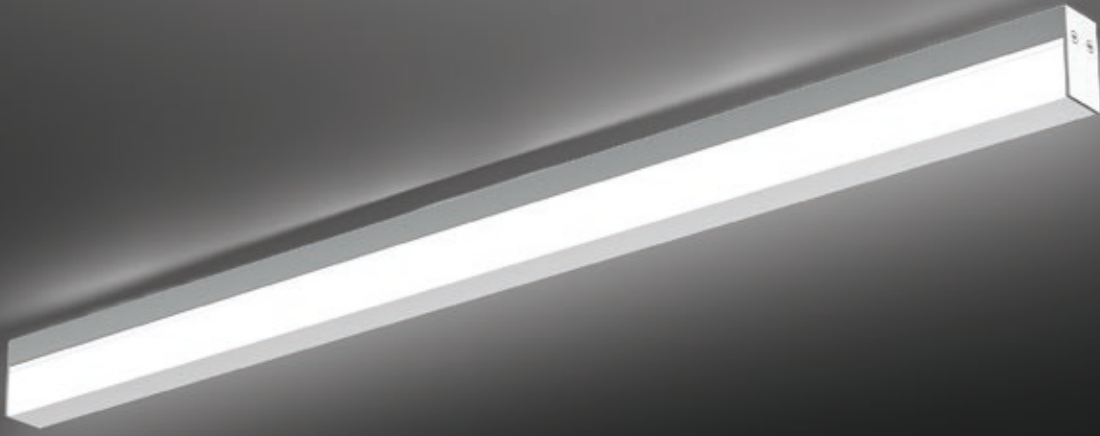
Less is more® 50
276-277

Linear System
278-279

High Power
280-281

LED it Strip
282-285

Less is more® Flex
286-293



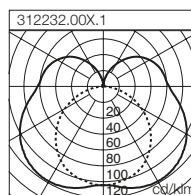
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LESS IS MORE® 21

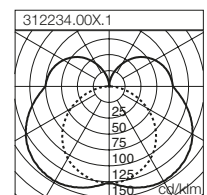
Ceiling and wall luminaires, Pendant luminaires

- LED luminaire with a minimalist design with light emission on three sides
- Profiles's surface made of anodised aluminium or white
- LED rated life 60,000 h (L80, B10)
- Improved efficiency, up to 102 lm/W
- Colour temperature 3000 K or 4000 K
- Diffuser made of non-yellowing plastic (PMMA) opal
- As aesthetically sophisticated general lighting (corridors, hotel, shops, private areas) or accentuated lighting

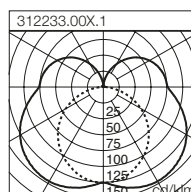
312232.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
12	18	24
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
17	25	42



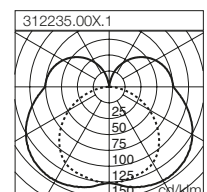
312234.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	7	9
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
7	10	17



312233.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	9	12
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
8	12	20



312235.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



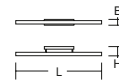
Ceiling and wall luminaires | Series: Less is more® 21

Type of Protection: IP 20
Protection Class: I

Housing extruded aluminium profile anodised or powder-coated. End cap anodised aluminium or powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. Converter integrated in the canopy.

LED included.

Available colours (X): 0 = aluminium, anodised, 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Ceiling and wall luminaires with canopy								
Price Category 21								
Length L 608 mm								
312232.00X	L 608, B 42, H 85	LED	830	1000 lm	11 W	24,5	on/off	A++ A++
312232.00X.76	L 608, B 42, H 85	LED	830	1000 lm	11 W	24,5	DALI	A++ A++
312232.00X.1	L 608, B 42, H 85	LED	840	1000 lm	11 W	24,4	on/off	A++ A++
312232.00X.1.76	L 608, B 42, H 85	LED	840	1000 lm	11 W	24,4	DALI	A++ A++
Length L 1008 mm								
312233.00X	L 1008, B 42, H 85	LED	830	1700 lm	17 W	24,6	on/off	A++ A++
312233.00X.76	L 1008, B 42, H 85	LED	830	1700 lm	17 W	24,6	DALI	A++ A++
312233.00X.1	L 1008, B 42, H 85	LED	840	1700 lm	17 W	24,4	on/off	A++ A++
312233.00X.1.76	L 1008, B 42, H 85	LED	840	1700 lm	17 W	24,4	on/off	A++ A++
Length L 1208 mm								
312234.00X	L 1208, B 42, H 85	LED	830	2050 lm	20 W	24,5	on/off	A++ A++
312234.00X.76	L 1208, B 42, H 85	LED	830	2050 lm	20 W	24,5	DALI	A++ A++
312234.00X.1	L 1208, B 42, H 85	LED	840	2050 lm	20 W	24,5	on/off	A++ A++
312234.00X.1.76	L 1208, B 42, H 85	LED	840	2050 lm	20 W	24,5	DALI	A++ A++
Length L 1508 mm								
312235.00X	L 1508, B 42, H 85	LED	830	2550 lm	25 W	24,5	on/off	A++ A++
312235.00X.76	L 1508, B 42, H 85	LED	830	2550 lm	25 W	24,5	DALI	A++ A++
312235.00X.1	L 1508, B 42, H 85	LED	840	2550 lm	25 W	24,5	on/off	A++ A++
312235.00X.1.76	L 1508, B 42, H 85	LED	840	2550 lm	25 W	24,5	DALI	A++ A++

**Comparison
LED vs. conventional lamps**

LED 11 W ≈
1 x 18 W T26 (26 W CB)

LED 17 W ≈
2 x 18 W T26 (52 W CB)

LED 20 W ≈
1 x 36 W T26 (43 W CB)

LED 25 W ≈
1 x 58 W T26 (67 W CB)

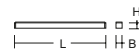
Ceiling and wall luminaires | Series: Less is more® 21

Type of Protection: IP 20
Protection Class: II

Housing extruded aluminium profile anodised or powder-coated. End cap anodised aluminium or powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. External driver with connecting cable.

LED included.

Available colours (X): 0 = aluminium, anodised, 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
Ceiling and wall luminaires without canopy								
Price Category 21								
Length L 608 mm								
312236.00X	L 608, B 21, H 36	LED	830	1000 lm	11 W	24,5	on/off	A++ A++
312236.00X.76	L 608, B 21, H 36	LED	830	1000 lm	11 W	24,5	DALI	A++ A++
312236.00X.1	L 608, B 21, H 36	LED	840	1000 lm	11 W	24,4	on/off	A++ A++
312236.00X.1.76	L 608, B 21, H 36	LED	840	1000 lm	11 W	24,4	DALI	A++ A++
Length L 1008 mm								
312237.00X	L 1008, B 21, H 36	LED	830	1700 lm	17 W	24,6	on/off	A++ A++
312237.00X.76	L 1008, B 21, H 36	LED	830	1700 lm	17 W	24,6	DALI	A++ A++
312237.00X.1	L 1008, B 21, H 36	LED	840	1700 lm	17 W	24,4	on/off	A++ A++
312237.00X.1.76	L 1008, B 21, H 36	LED	840	1700 lm	17 W	24,4	DALI	A++ A++
Length L 1208 mm								
312238.00X	L 1208, B 21, H 36	LED	830	2050 lm	20 W	24,5	on/off	A++ A++
312238.00X.76	L 1208, B 21, H 36	LED	830	2050 lm	20 W	24,5	DALI	A++ A++
312238.00X.1	L 1208, B 21, H 36	LED	840	2050 lm	20 W	24,5	on/off	A++ A++
312238.00X.1.76	L 1208, B 21, H 36	LED	840	2050 lm	20 W	24,5	DALI	A++ A++
Length L 1508 mm								
312239.00X	L 1508, B 21, H 36	LED	830	2550 lm	25 W	24,5	on/off	A++ A++
312239.00X.76	L 1508, B 21, H 36	LED	830	2550 lm	25 W	24,5	DALI	A++ A++
312239.00X.1	L 1508, B 21, H 36	LED	840	2550 lm	25 W	24,5	on/off	A++ A++
312239.00X.1.76	L 1508, B 21, H 36	LED	840	2550 lm	25 W	24,5	DALI	A++ A++

**Comparison
LED vs. conventional lamps**

LED 11 W ≈
1 x 18 W T26 (26 W CB)

LED 17 W ≈
2 x 18 W T26 (52 W CB)

LED 20 W ≈
1 x 36 W T26 (43 W CB)

LED 25 W ≈
1 x 58 W T26 (67 W CB)



Comparison LED vs. conventional lamps

LED 17 W ≈

2 x 18 W T26 (52 W CB)

LED 20 W ≈

1 x 36 W T26 (43 W CB)

LED 25 W ≈

1 x 58 W T26 (67 W CB)

Pendant luminaires | Series: Less is more® 21

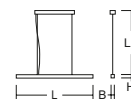
Type of Protection: IP 20

Protection Class: I

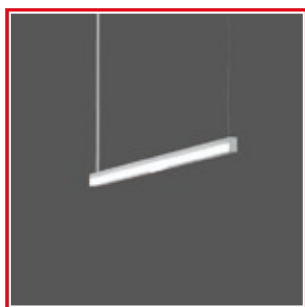
Housing extruded aluminium profile anodised or powder-coated. End cap anodised aluminium or powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Converter integrated in the canopy.

LED included.

Available colours (X): 0 = aluminium, anodised, 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires with canopy								
Price Category 21								
Length L 1008 mm								
312226.00X	L 1008, B 21, H 36	LED	830	1700 lm	17 W	24,6	on/off	A++ A++
312226.00X.76	L 1008, B 21, H 36	LED	830	1700 lm	17 W	24,6	DALI	A++ A++
312226.00X.1	L 1008, B 21, H 36	LED	840	1700 lm	17 W	24,4	on/off	A++ A++
312226.00X.1.76	L 1008, B 21, H 36	LED	840	1700 lm	17 W	24,4	DALI	A++ A++
Length L 1208 mm								
312227.00X	L 1208, B 21, H 36	LED	830	2050 lm	20 W	24,5	on/off	A++ A++
312227.00X.76	L 1208, B 21, H 36	LED	830	2050 lm	20 W	24,5	DALI	A++ A++
312227.00X.1	L 1208, B 21, H 36	LED	840	2050 lm	20 W	24,5	on/off	A++ A++
312227.00X.1.76	L 1208, B 21, H 36	LED	840	2050 lm	20 W	24,5	DALI	A++ A++
Length L 1508 mm								
312228.00X	L 1508, B 21, H 36	LED	830	2550 lm	25 W	24,5	on/off	A++ A++
312228.00X.76	L 1508, B 21, H 36	LED	830	2550 lm	25 W	24,5	DALI	A++ A++
312228.00X.1	L 1508, B 21, H 36	LED	840	2550 lm	25 W	24,5	on/off	A++ A++
312228.00X.1.76	L 1508, B 21, H 36	LED	840	2550 lm	25 W	24,5	DALI	A++ A++



Pendant luminaires | Series: Less is more® 21

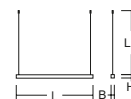
Type of Protection: IP 20

Protection Class: II

Housing extruded aluminium profile anodised or powder-coated. End cap anodised aluminium or powder-coated. Diffuser: plastic (non-yellowing PMMA), opal. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. External driver with connecting cable.

LED included.

Available colours (X): 0 = aluminium, anodised, 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires without canopy								
Price Category 21								
Length L 1008 mm								
312229.00X	L 1008, B 21, H 36	LED	830	1700 lm	17 W	24,6	on/off	A++ A++
312229.00X.76	L 1008, B 21, H 36	LED	830	1700 lm	17 W	24,6	DALI	A++ A++
312229.00X.1	L 1008, B 21, H 36	LED	840	1700 lm	17 W	24,4	on/off	A++ A++
312229.00X.1.76	L 1008, B 21, H 36	LED	840	1700 lm	17 W	24,4	DALI	A++ A++
Length L 1208 mm								
312230.00X	L 1208, B 21, H 36	LED	830	2050 lm	20 W	24,5	on/off	A++ A++
312230.00X.76	L 1208, B 21, H 36	LED	830	2050 lm	20 W	24,5	DALI	A++ A++
312230.00X.1	L 1208, B 21, H 36	LED	840	2050 lm	20 W	24,5	on/off	A++ A++
312230.00X.1.76	L 1208, B 21, H 36	LED	840	2050 lm	20 W	24,5	DALI	A++ A++
Length L 1508 mm								
312231.00X	L 1508, B 21, H 36	LED	830	2550 lm	25 W	24,5	on/off	A++ A++
312231.00X.76	L 1508, B 21, H 36	LED	830	2550 lm	25 W	24,5	DALI	A++ A++
312231.00X.1	L 1508, B 21, H 36	LED	840	2550 lm	25 W	24,5	on/off	A++ A++
312231.00X.1.76	L 1508, B 21, H 36	LED	840	2550 lm	25 W	24,5	DALI	A++ A++

Comparison LED vs. conventional lamps

LED 17 W ≈

2 x 18 W T26 (52 W CB)

LED 20 W ≈

1 x 36 W T26 (43 W CB)

LED 25 W ≈

1 x 58 W T26 (67 W CB)





LESS IS MORE® 27

Recessed ceiling and wall luminaires, Ceiling and wall luminaires, Pendant luminaires

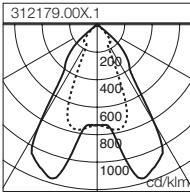
- LED luminaire with slim design
- Three colours available: white aluminium, white, black
- LED rated life 60,000 h (L80, B10)
- Improved luminous flux thanks to the latest LED technology
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Light colours: 3000 K and 4000 K

- Diffuser made of non-yellowing plastic (PMMA) opal, micro prismatic or high polish aluminium micro-grid
- Version with micro-grid is suitable for office workplaces (UGR ≤19) and computer workstations in accordance with DIN EN 12464-1
- As aesthetically sophisticated general lighting (corridors, office and conference rooms, shops) or accentuated lighting

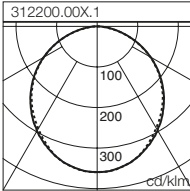


Further luminaires of this series, see:
Indoor lighting | Free-standing luminaires

312179.00X.1		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312200.00X.1		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



Recessed ceiling and wall luminaires | Series: Less is more® 27

Type of Protection: IP 20

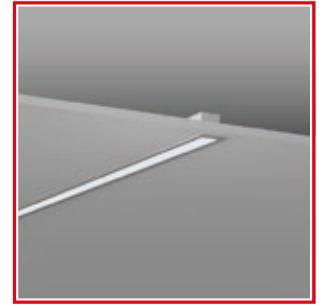
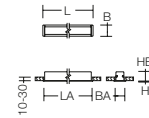
Protection Class: II

Ceiling Thickness: 10-30 mm

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal or high polish aluminium micro-grid (suitable for use in environments with computer screens in accordance with EN 12464-1). External driver with connecting cable.

LED included.

Available colours (X): 2 = white, 3 = black, 45 = white aluminium


Recessed ceiling and wall luminaires
Price Category 21
Diffuser: plastic (PMMA), opal
Length L 1014 mm, LA 1006 x BA 30 mm, HE 45 mm

1011 X 30	312176.00X.1	L 1014, B 38, H 2	LED	840	1600 lm	25 W	27,2	on/off	A++ A++
	312176.00X.1.76	L 1014, B 38, H 2	LED	840	1600 lm	25 W	27,2	DALI	A++ A++
	312176.00X	L 1014, B 38, H 2	LED	830	1600 lm	29 W	27,3	on/off	A+ A+
	312176.00X.76	L 1014, B 38, H 2	LED	830	1600 lm	29 W	27,4	DALI	A+ A+

Length L 1514 mm, LA 1506 x BA 30 mm, HE 45 mm

1511 X 30	312178.00X.1	L 1514, B 38, H 2	LED	840	2400 lm	39 W	27,2	on/off	A++ A++
	312178.00X.1.76	L 1514, B 38, H 2	LED	840	2400 lm	39 W	27,2	DALI	A++ A++
	312178.00X	L 1514, B 38, H 2	LED	830	2400 lm	43 W	27,3	on/off	A+ A+
	312178.00X.76	L 1514, B 38, H 2	LED	830	2400 lm	43 W	27,4	DALI	A+ A+

Aluminium micro-grid
Length L 1014 mm, LA 1006 x BA 30 mm, HE 45 mm

1011 X 30	312177.00X.1	L 1014, B 38, H 2	LED	840	2400 lm	25 W	18,8	on/off	A++ A++
	312177.00X.1.76	L 1014, B 38, H 2	LED	840	2400 lm	25 W	18,8	DALI	A++ A++
	312177.00X	L 1014, B 38, H 2	LED	830	2400 lm	29 W	19,0	on/off	A+ A+
	312177.00X.76	L 1014, B 38, H 2	LED	830	2400 lm	29 W	19,0	DALI	A+ A+

Length L 1514 mm, LA 1506 x BA 30 mm, HE 45 mm

1511 X 30	312179.00X.1	L 1514, B 38, H 2	LED	840	3600 lm	39 W	18,8	on/off	A++ A++
	312179.00X.1.76	L 1514, B 38, H 2	LED	840	3600 lm	39 W	18,8	DALI	A++ A++
	312179.00X	L 1514, B 38, H 2	LED	830	3600 lm	43 W	19,0	on/off	A+ A+
	312179.00X.76	L 1514, B 38, H 2	LED	830	3600 lm	43 W	19,0	DALI	A+ A+



Diffuser (non-yellowing PMMA), opal

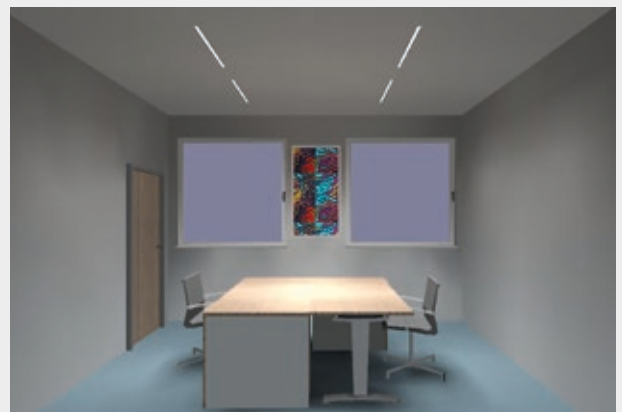


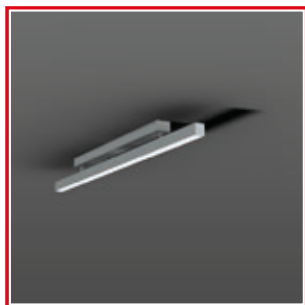
Aluminium micro-grid

Specimen product performance comparison
Office

Length 4,0 m | Width 3,50 m | Height 2,80 m | Maintenance factor 0,80 | Working plane 0,75 m

	Reference number 312177.0045.1.76
Luminaire flux	2400 lm
Number of luminaires	4
Total luminaire flux of all luminaires	9600 lm
Average illuminance	Em 533 lx





Ceiling and wall luminaires | Series: Less is more® 27

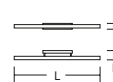
Type of Protection: IP 20

Protection Class: I

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal or micro prismatic. Converter integrated in the canopy.

LED included.

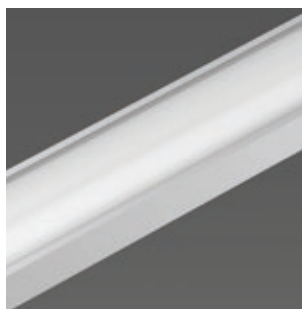
Available colours (X): 2 = white, 3 = black, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmm-able	EEC
Ceiling and wall luminaires with canopy								
Diffuser: plastic (PMMA), opal								
Length L 1012 mm								
312190.00X	L 1012, B 42, H 88	LED	830	1600 lm	29 W	27,3	on/off	A+ A+
312190.00X.76	L 1012, B 42, H 88	LED	830	1600 lm	29 W	27,3	DALI	A+ A+
312190.00X.1	L 1012, B 42, H 88	LED	840	1600 lm	25 W	27,2	on/off	A++ A++
312190.00X.1.76	L 1012, B 42, H 88	LED	840	1600 lm	25 W	27,2	DALI	A++ A++
Length L 1212 mm								
312192.00X	L 1212, B 42, H 88	LED	830	1900 lm	35 W	26,9	on/off	A+ A+
312192.00X.76	L 1212, B 42, H 88	LED	830	1900 lm	35 W	26,9	DALI	A+ A+
312192.00X.1	L 1212, B 42, H 88	LED	840	1900 lm	31 W	26,7	on/off	A++ A++
312192.00X.1.76	L 1212, B 42, H 88	LED	840	1900 lm	31 W	26,7	DALI	A++ A++
Length L 1512 mm								
312194.00X	L 1512, B 42, H 88	LED	830	2400 lm	43 W	27,3	on/off	A+ A+
312194.00X.76	L 1512, B 42, H 88	LED	830	2400 lm	43 W	27,3	DALI	A+ A+
312194.00X.1	L 1512, B 42, H 88	LED	840	2400 lm	39 W	27,2	on/off	A++ A++
312194.00X.1.76	L 1512, B 42, H 88	LED	840	2400 lm	39 W	27,2	DALI	A++ A++
Diffuser plastic (PMMA) micro prismatic (only ceiling luminaire)								
Length L 1012 mm								
312191.00X	L 1012, B 42, H 88	LED	830	1800 lm	29 W	24,1	on/off	A+ A+
312191.00X.76	L 1012, B 42, H 88	LED	830	1800 lm	29 W	24,1	DALI	A+ A+
312191.00X.1	L 1012, B 42, H 88	LED	840	1800 lm	26 W	24,0	on/off	A++ A++
312191.00X.1.76	L 1012, B 42, H 88	LED	840	1800 lm	26 W	24,0	DALI	A++ A++
Length L 1212 mm								
312193.00X	L 1212, B 42, H 88	LED	830	2200 lm	34 W	24,1	on/off	A+ A+
312193.00X.76	L 1212, B 42, H 88	LED	830	2200 lm	34 W	24,1	DALI	A+ A+
312193.00X.1	L 1212, B 42, H 88	LED	840	2200 lm	31 W	24,0	on/off	A++ A++
312193.00X.1.76	L 1212, B 42, H 88	LED	840	2200 lm	31 W	24,0	DALI	A++ A++
Length L 1512 mm								
312195.00X	L 1512, B 42, H 88	LED	830	2750 lm	43 W	24,1	on/off	A+ A+
312195.00X.76	L 1512, B 42, H 88	LED	830	2750 lm	43 W	24,1	DALI	A+ A+
312195.00X.1	L 1512, B 42, H 88	LED	840	2750 lm	39 W	24,0	on/off	A++ A++
312195.00X.1.76	L 1512, B 42, H 88	LED	840	2750 lm	39 W	24,0	DALI	A++ A++



Diffuser (non-yellowing PMMA), opal



Diffuser (non-yellowing PMMA), micro prismatic

Ceiling and wall luminaires | Series: Less is more® 27

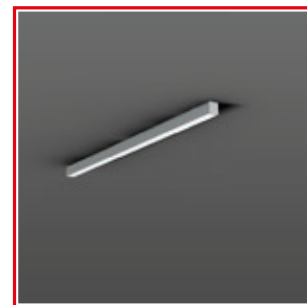
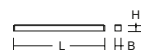
Type of Protection: IP 20

Protection Class: II

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal or micro prismatic. External driver with connecting cable.

LED included.

Available colours (X): 2 = white, 3 = black, 45 = white aluminium


Ceiling and wall luminaires without canopy
Price Category 21
Diffuser: plastic (PMMA), opal
Length L 1012 mm

312196.00X	L 1012, B 28, H 38	LED	830	1600 lm	29 W	27,3	on/off	A+ A+
312196.00X.76	L 1012, B 28, H 38	LED	830	1600 lm	29 W	27,4	DALI	A+ A+
312196.00X.1	L 1012, B 28, H 38	LED	840	1600 lm	25 W	27,2	on/off	A++ A++
312196.00X.1.76	L 1012, B 28, H 38	LED	840	1600 lm	25 W	27,2	DALI	A++ A++

Length L 1212 mm

312198.00X	L 1212, B 28, H 38	LED	830	1900 lm	35 W	26,9	on/off	A+ A+
312198.00X.76	L 1212, B 28, H 38	LED	830	1900 lm	35 W	26,9	DALI	A+ A+
312198.00X.1	L 1212, B 28, H 38	LED	840	1900 lm	31 W	26,7	on/off	A++ A++
312198.00X.1.76	L 1212, B 28, H 38	LED	840	1900 lm	31 W	26,7	DALI	A++ A++

Length L 1512 mm

312200.00X	L 1512, B 28, H 38	LED	830	2400 lm	43 W	27,3	on/off	A+ A+
312200.00X.76	L 1512, B 28, H 38	LED	830	2400 lm	43 W	27,4	DALI	A+ A+
312200.00X.1	L 1512, B 28, H 38	LED	840	2400 lm	39 W	27,2	on/off	A++ A++
312200.00X.1.76	L 1512, B 28, H 38	LED	840	2400 lm	39 W	27,2	DALI	A++ A++

Diffuser plastic (PMMA) micro prismatic (only ceiling luminaire)
Length L 1012 mm

312197.00X	L 1012, B 28, H 38	LED	830	1800 lm	29 W	24,1	on/off	A+ A+
312197.00X.76	L 1012, B 28, H 38	LED	830	1800 lm	29 W	24,1	DALI	A+ A+
312197.00X.1	L 1012, B 28, H 38	LED	840	1800 lm	26 W	24,0	on/off	A++ A++
312197.00X.1.76	L 1012, B 28, H 38	LED	840	1800 lm	26 W	24,0	DALI	A++ A++

Length L 1212 mm

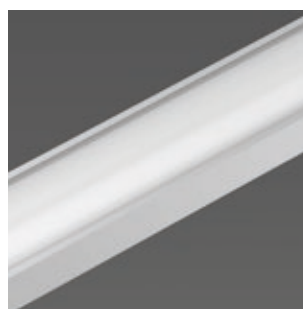
312199.00X	L 1212, B 28, H 38	LED	830	2200 lm	34 W	24,1	on/off	A+ A+
312199.00X.76	L 1212, B 28, H 38	LED	830	2200 lm	34 W	24,1	DALI	A+ A+
312199.00X.1	L 1212, B 28, H 38	LED	840	2200 lm	31 W	24,0	on/off	A++ A++
312199.00X.1.76	L 1212, B 28, H 38	LED	840	2200 lm	31 W	24,0	DALI	A++ A++

Length L 1512 mm

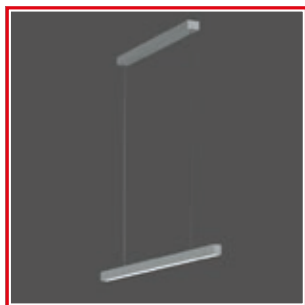
312201.00X	L 1512, B 28, H 38	LED	830	2750 lm	43 W	24,1	on/off	A+ A+
312201.00X.76	L 1512, B 28, H 38	LED	830	2750 lm	43 W	24,1	DALI	A+ A+
312201.00X.1	L 1512, B 28, H 38	LED	840	2750 lm	39 W	24,0	on/off	A++ A++
312201.00X.1.76	L 1512, B 28, H 38	LED	840	2750 lm	39 W	24,0	DALI	A++ A++



Diffuser (non-yellowing PMMA), opal



Diffuser (non-yellowing PMMA), micro prismatic



Pendant luminaires | Series: Less is more® 27

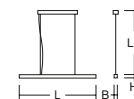
Type of Protection: IP 20

Protection Class: I

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal, micro prismatic or high polish aluminium micro-grid (suitable for use in environments with computer screens in accordance with EN 12464-1). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Converter integrated in the canopy.

LED included.

Available colours (X): 2 = white, 3 = black, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Pendant luminaires with canopy

Price Category 21



Direct light emission

Diffuser: plastic (PMMA), opal

Length L 1012 mm

312202.00X	L 1012, B 28, H 38	LED	830	1600 lm	29 W	27,3	on/off	A+ A+
312202.00X.76	L 1012, B 28, H 38	LED	830	1600 lm	29 W	27,3	DALI	A+ A+
312202.00X.1	L 1012, B 28, H 38	LED	840	1600 lm	25 W	27,2	on/off	A++ A++
312202.00X.1.76	L 1012, B 28, H 38	LED	840	1600 lm	25 W	27,2	DALI	A++ A++

Length L 1512 mm

312204.00X	L 1512, B 28, H 38	LED	830	2400 lm	43 W	27,3	on/off	A+ A+
312204.00X.76	L 1512, B 28, H 38	LED	830	2400 lm	43 W	27,3	DALI	A+ A+
312204.00X.1	L 1512, B 28, H 38	LED	840	2400 lm	39 W	27,2	on/off	A++ A++
312204.00X.1.76	L 1512, B 28, H 38	LED	840	2400 lm	39 W	27,2	DALI	A++ A++

Diffuser plastic (PMMA) micro prismatic

Length L 1012 mm

312203.00X	L 1012, B 28, H 38	LED	830	1800 lm	29 W	24,1	on/off	A+ A+
312203.00X.76	L 1012, B 28, H 38	LED	830	1800 lm	29 W	24,1	DALI	A+ A+
312203.00X.1	L 1012, B 28, H 38	LED	840	1800 lm	25 W	24,0	DALI	A++ A++
312203.00X.1.76	L 1012, B 28, H 38	LED	840	1800 lm	25 W	24,0	DALI	A++ A++

Length L 1512 mm

312205.00X	L 1512, B 28, H 38	LED	830	2750 lm	43 W	24,1	on/off	A+ A+
312205.00X.76	L 1512, B 28, H 38	LED	830	2750 lm	43 W	24,1	DALI	A+ A+
312205.00X.1	L 1512, B 28, H 38	LED	840	2750 lm	39 W	24,0	on/off	A++ A++
312205.00X.1.76	L 1512, B 28, H 38	LED	840	2750 lm	39 W	24,0	DALI	A++ A++

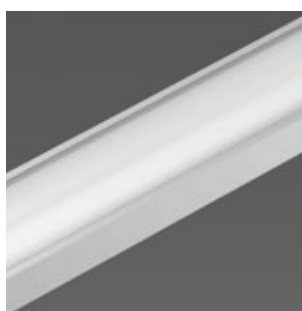
Aluminium micro-grid

Length L 1512 mm

312206.00X	L 1512, B 28, H 38	LED	830	1650 lm	17 W	16,0	on/off	A++ A++
312206.00X.76	L 1512, B 28, H 38	LED	830	1650 lm	17 W	16,0	DALI	A++ A++
312206.00X.1	L 1512, B 28, H 38	LED	840	1650 lm	17 W	16,0	on/off	A++ A++
312206.00X.1.76	L 1512, B 28, H 38	LED	840	1650 lm	17 W	16,0	DALI	A++ A++
312207.00X	L 1512, B 28, H 38	LED	830	2600 lm	26 W	17,5	on/off	A++ A++
312207.00X.76	L 1512, B 28, H 38	LED	830	2600 lm	26 W	17,5	DALI	A++ A++
312207.00X.1	L 1512, B 28, H 38	LED	840	2600 lm	26 W	17,5	on/off	A++ A++
312207.00X.1.76	L 1512, B 28, H 38	LED	840	2600 lm	26 W	17,5	DALI	A++ A++



Diffuser (non-yellowing PMMA), opal



Diffuser (non-yellowing PMMA), micro prismatic



Aluminium micro-grid

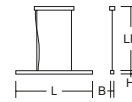
Pendant luminaires | Series: Less is more® 27

Type of Protection: IP 20
Protection Class: I

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal, micro prismatic or high polish aluminium micro-grid (suitable for use in environments with computer screens in accordance with EN 12464-1). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Converter integrated in the canopy.

LED included.

Available colours (X): 2 = white, 3 = black, 45 = white aluminium


Pendant luminaires with canopy
Price Category 21
Direct 60% - indirect 40% light emission (312212.00X: direct 50% - indirect 50%)
Diffuser: plastic (PMMA), opal
Length L 1012 mm

312208.00X	L 1012, B 28, H 38	LED	830	2300 lm	37 W	22,0	on/off	A+,A++ A+
312208.00X.76	L 1012, B 28, H 38	LED	830	2300 lm	37 W	22,0	DALI	A+,A++ A+
312208.00X.1	L 1012, B 28, H 38	LED	840	2300 lm	34 W	21,9	on/off	A++ A++
312208.00X.1.76	L 1012, B 28, H 38	LED	840	2300 lm	34 W	21,9	DALI	A++ A++

Length L 1512 mm

312210.00X	L 1512, B 28, H 38	LED	830	3450 lm	56 W	22,1	on/off	A+,A++ A+
312210.00X.76	L 1512, B 28, H 38	LED	830	3450 lm	56 W	22,1	DALI	A+,A++ A+
312210.00X.1	L 1512, B 28, H 38	LED	840	3450 lm	51 W	21,9	on/off	A++ A++
312210.00X.1.76	L 1512, B 28, H 38	LED	840	3450 lm	51 W	21,9	DALI	A++ A++

Diffuser plastic (PMMA) micro prismatic
Length L 1012 mm

312209.00X	L 1012, B 28, H 38	LED	830	2550 lm	37 W	19,6	on/off	A+,A++ A+
312209.00X.76	L 1012, B 28, H 38	LED	830	2550 lm	37 W	19,6	DALI	A+,A++ A+
312209.00X.1	L 1012, B 28, H 38	LED	840	2550 lm	34 W	19,4	on/off	A++ A++
312209.00X.1.76	L 1012, B 28, H 38	LED	840	2550 lm	34 W	19,4	DALI	A++ A++

Length L 1512 mm

312211.00X	L 1512, B 28, H 38	LED	830	3850 lm	56 W	19,6	on/off	A+,A++ A+
312211.00X.76	L 1512, B 28, H 38	LED	830	3850 lm	56 W	19,6	DALI	A+,A++ A+
312211.00X.1	L 1512, B 28, H 38	LED	840	3850 lm	51 W	19,5	on/off	A++ A++
312211.00X.1.76	L 1512, B 28, H 38	LED	840	3850 lm	51 W	19,5	DALI	A++ A++

Aluminium micro-grid
Length L 1512 mm

312212.00X	L 1512, B 28, H 38	LED	830	2800 lm	33 W	12,3	on/off	A++ A++
312212.00X.76	L 1512, B 28, H 38	LED	830	2800 lm	33 W	12,3	DALI	A++ A++
312212.00X.1	L 1512, B 28, H 38	LED	840	2800 lm	33 W	12,2	on/off	A++ A++
312212.00X.1.76	L 1512, B 28, H 38	LED	840	2800 lm	33 W	12,2	DALI	A++ A++
312213.00X	L 1512, B 28, H 38	LED	830	3700 lm	39 W	14,8	on/off	A++ A++
312213.00X.76	L 1512, B 28, H 38	LED	830	3700 lm	39 W	14,8	DALI	A++ A++
312213.00X.1	L 1512, B 28, H 38	LED	840	3700 lm	39 W	14,4	on/off	A++ A++
312213.00X.1.76	L 1512, B 28, H 38	LED	840	3700 lm	39 W	14,4	DALI	A++ A++

Specimen product performance comparison with direct light emission
Single workplace
Double workplace

Length 4,0 m | Width 3,50 m | Height 2,80 m | Maintenance factor 0,80 | Working plane 0,75 m | Mounting Height 1,8 m


Reference number 312207.0045.1.76
Reference number 312213.0045.1.76

Luminaire flux

2600 lm

3700 lm

Number of luminaires

1

1


Average illuminance
Em 552 lx

Em 596 lx



Pendant luminaires | Series: Less is more® 27

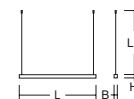
Type of Protection: IP 20

Protection Class: II

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal, micro prismatic or high polish aluminium micro-grid (suitable for use in environments with computer screens in accordance with EN 12464-1). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. External driver with connecting cable.

LED included.

Available colours (X): 2 = white, 3 = black, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
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Pendant luminaires without canopy

Price Category 21



Direct light emission

Diffuser: plastic (PMMA), opal

Length L 1012 mm

312214.00X	L 1012, B 28, H 38	LED	830	1600 lm	29 W	27,3	on/off	A+ A+
312214.00X.76	L 1012, B 28, H 38	LED	830	1600 lm	29 W	27,4	DALI	A+ A+
312214.00X.1	L 1012, B 28, H 38	LED	840	1600 lm	25 W	27,2	on/off	A++ A++
312214.00X.1.76	L 1012, B 28, H 38	LED	840	1600 lm	25 W	27,2	DALI	A++ A++

Length L 1512 mm

312216.00X	L 1512, B 28, H 38	LED	830	2400 lm	43 W	27,3	on/off	A+ A+
312216.00X.76	L 1512, B 28, H 38	LED	830	2400 lm	43 W	27,4	DALI	A+ A+
312216.00X.1	L 1512, B 28, H 38	LED	840	2400 lm	39 W	27,2	on/off	A++ A++
312216.00X.1.76	L 1512, B 28, H 38	LED	840	2400 lm	39 W	27,2	DALI	A++ A++

Diffuser plastic (PMMA) micro prismatic

Length L 1012 mm

312215.00X	L 1012, B 28, H 38	LED	830	1800 lm	29 W	24,1	on/off	A+ A+
312215.00X.76	L 1012, B 28, H 38	LED	830	1800 lm	29 W	24,1	DALI	A+ A+
312215.00X.1	L 1012, B 28, H 38	LED	840	1800 lm	25 W	24,0	on/off	A++ A++
312215.00X.1.76	L 1012, B 28, H 38	LED	840	1800 lm	25 W	24,0	DALI	A++ A++

Length L 1512 mm

312217.00X	L 1512, B 28, H 38	LED	830	2750 lm	43 W	24,1	on/off	A+ A+
312217.00X.76	L 1512, B 28, H 38	LED	830	2750 lm	43 W	24,1	DALI	A+ A+
312217.00X.1	L 1512, B 28, H 38	LED	840	2750 lm	39 W	24,0	on/off	A++ A++
312217.00X.1.76	L 1512, B 28, H 38	LED	840	2750 lm	39 W	24,0	DALI	A++ A++

Aluminium micro-grid

Length L 1512 mm

312218.00X	L 1512, B 28, H 38	LED	830	1650 lm	17 W	16,0	on/off	A++ A++
312218.00X.76	L 1512, B 28, H 38	LED	830	1650 lm	17 W	16,0	DALI	A++ A++
312218.00X.1	L 1512, B 28, H 38	LED	840	1650 lm	17 W	16,0	on/off	A++ A++
312218.00X.1.76	L 1512, B 28, H 38	LED	840	1650 lm	17 W	16,0	DALI	A++ A++
312219.00X	L 1512, B 28, H 38	LED	830	2600 lm	26 W	17,5	on/off	A++ A++
312219.00X.76	L 1512, B 28, H 38	LED	830	2600 lm	26 W	17,5	DALI	A++ A++
312219.00X.1	L 1512, B 28, H 38	LED	840	2600 lm	26 W	17,5	on/off	A++ A++
312219.00X.1.76	L 1512, B 28, H 38	LED	840	2600 lm	26 W	17,5	DALI	A++ A++



Diffuser (non-yellowing PMMA), opal



Diffuser (non-yellowing PMMA), micro prismatic



Aluminium micro-grid

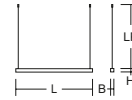
Pendant luminaires | Series: Less is more® 27

Type of Protection: IP 20
Protection Class: II

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser made of non-yellowing plastic (PMMA) opal, micro prismatic or high polish aluminium micro-grid (suitable for use in environments with computer screens in accordance with EN 12464-1). 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. External driver with connecting cable.

LED included.

Available colours (X): 2 = white, 3 = black, 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Pendant luminaires without canopy

Price Category 21

Direct 60% - indirect 40% light emission (312224.00X: direct 50% - indirect 50%)

Diffuser: plastic (PMMA), opal

Length L 1012 mm

312220.00X	L 1012, B 28, H 38	LED	830	2300 lm	37 W	22,0	on/off	A+,A++ A+
312220.00X.76	L 1012, B 28, H 38	LED	830	2300 lm	37 W	22,0	DALI	A+,A++ A+
312220.00X.1	L 1012, B 28, H 38	LED	840	2300 lm	34 W	21,9	on/off	A++ A++
312220.00X.1.76	L 1012, B 28, H 38	LED	840	2300 lm	34 W	21,8	DALI	A++ A++

Length L 1512 mm

312222.00X	L 1512, B 28, H 38	LED	830	3450 lm	56 W	22,1	on/off	A+,A++ A+
312222.00X.76	L 1512, B 28, H 38	LED	830	3450 lm	56 W	22,0	DALI	A+,A++ A+
312222.00X.1	L 1512, B 28, H 38	LED	840	3450 lm	51 W	21,9	on/off	A++ A++
312222.00X.1.76	L 1512, B 28, H 38	LED	840	3450 lm	51 W	21,9	DALI	A++ A++

Diffuser plastic (PMMA) micro prismatic

Length L 1012 mm

312221.00X	L 1012, B 28, H 38	LED	830	2550 lm	37 W	19,6	on/off	A+,A++ A+
312221.00X.76	L 1012, B 28, H 38	LED	830	2550 lm	37 W	19,6	DALI	A+,A++ A+
312221.00X.1	L 1012, B 28, H 38	LED	840	2550 lm	34 W	19,4	on/off	A++ A++
312221.00X.1.76	L 1012, B 28, H 38	LED	840	2550 lm	34 W	19,5	DALI	A++ A++

Length L 1512 mm

312223.00X	L 1512, B 28, H 38	LED	830	3850 lm	56 W	19,6	on/off	A+,A++ A+
312223.00X.76	L 1512, B 28, H 38	LED	830	3850 lm	56 W	19,4	DALI	A+,A++ A+
312223.00X.1	L 1512, B 28, H 38	LED	840	3850 lm	51 W	19,5	on/off	A++ A++
312223.00X.1.76	L 1512, B 28, H 38	LED	840	3850 lm	51 W	19,5	DALI	A++ A++

Aluminium micro-grid

Length L 1512 mm

312224.00X	L 1512, B 28, H 38	LED	830	2800 lm	33 W	12,3	on/off	A++ A++
312224.00X.76	L 1512, B 28, H 38	LED	830	2800 lm	33 W	12,4	DALI	A++ A++
312224.00X.1	L 1512, B 28, H 38	LED	840	2800 lm	33 W	12,2	on/off	A++ A++
312224.00X.1.76	L 1512, B 28, H 38	LED	840	2800 lm	33 W	12,2	DALI	A++ A++
312225.00X	L 1512, B 28, H 38	LED	830	3700 lm	39 W	14,8	on/off	A++ A++
312225.00X.76	L 1512, B 28, H 38	LED	830	3700 lm	39 W	14,9	DALI	A++ A++
312225.00X.1	L 1512, B 28, H 38	LED	840	3700 lm	39 W	14,4	on/off	A++ A++
312225.00X.1.76	L 1512, B 28, H 38	LED	840	3700 lm	39 W	14,3	DALI	A++ A++

Specimen product performance comparison with direct light emission

Single workplace

Double workplace

Length 4,0 m | Width 3,50 m | Height 2,80 m | Maintenance factor 0,80 | Working plane 0,75 m | Mounting Height 1,8 m



	Reference number 312219.0045.1.76	Reference number 312225.0045.1.76
Luminaire flux	2600 lm	3700 lm
Number of luminaires	1	1



Average illuminance

Em 552 lx



Em 596 lx

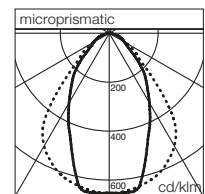
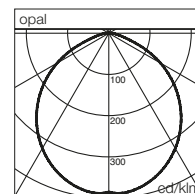


DALI

LESS IS MORE® 27 - SYSTEMS

Pendant luminaires, recessed ceiling and wall luminaires, ceiling and wall luminaires

- LED system with slim design
- Uninterrupted light line without light leakage
- Gapless, mechanical and electrical connection
- Configurator for planning linear luminaire systems
- Three colours available: white aluminium, white, black
- Different forms can be configured
- LED rated life 60,000 h (L80, B10)
- Diffuser made of plastic (non-yellowing PMMA) with an opal or microprismatic finish
- Colour temperature 3000 K or 4000 K
- As aesthetically sophisticated general lighting (corridors, hotel, shops, private areas) or accentuated lighting



With the RZB configurator you can plan your luminaire system quickly, safely and creatively.

- ✓ Free configuration of your luminaire system
- ✓ Direct price information and material configuration
- ✓ Including an installation drawing of your luminaire system in DXF format

Contact us, or go
[Start playing: rzb.de/loui](https://www.rzb.de/loui)





TYPES OF INSTALLATION

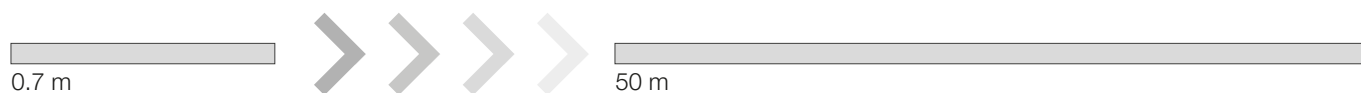
PENDANT | SURFACE MOUNTED AND RECESSED



The three types of installation, pendant, surface mounting and flush mounting, offer very much freedom of design in your planning.

MODULES

VARIABLE FROM 0.7 TO 50 METERS



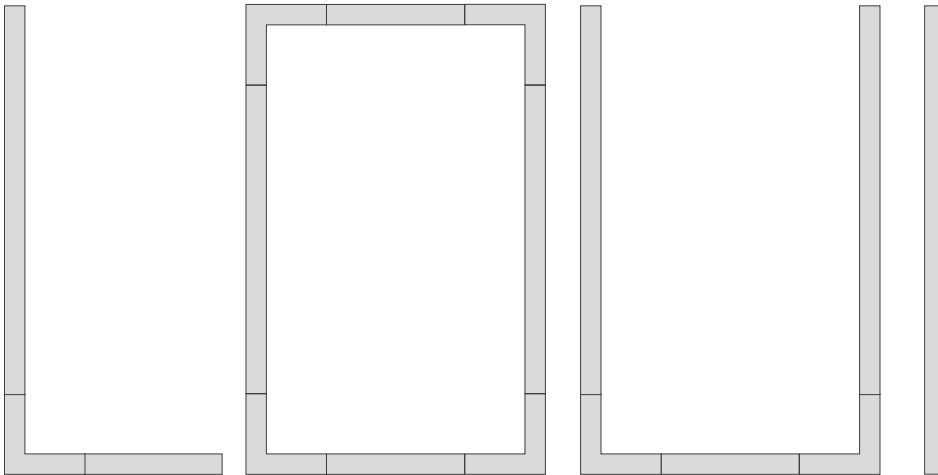
Through sub-modules, which are available from 700 - 2,000 mm, all system sizes (divisible every 100 mm) can be put together to a total length of 50 m.

This would always offer you the desired length in the project.



CONFIGURATOR

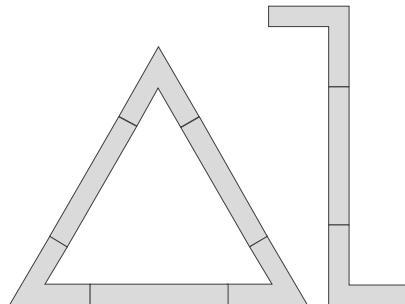
DESIGN EXAMPLES



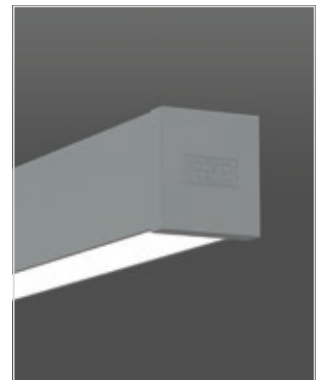
The configuration of your system is effected for you by our configurator. On the basis of the basic shapes **L, O, U** and **I** you can quickly and easily configure your luminaire system to suit your purposes.

FURTHER FORMS

Further forms available on request (e.g. 60° angle for triangle or 90° for S form)



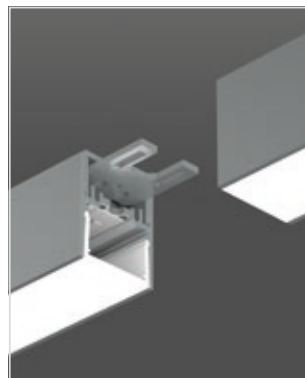
Since the end cap is suitable for all profiles and covers, your system has a finish without any light leakage.



END CAP

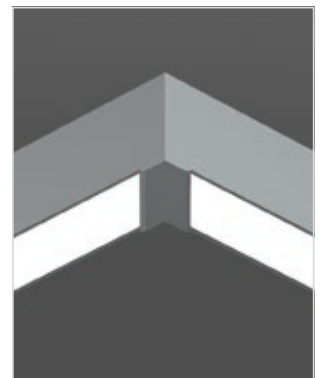
GAPLESS, MECHANICAL AND ELECTRICAL CONNECTION

The mechanical connection between the individual profiles guarantees stability and safety. This is invisibly integrated in the profile, so that an uninterrupted light line without light leakage is created.



CROSS-PROFILE CORNER MOUNTING

The prefabricated corner element with an aluminium ridge across all covers prevents light leakage and thus guarantees a harmonious and fully illuminated corner situation.



EQUIPMENT

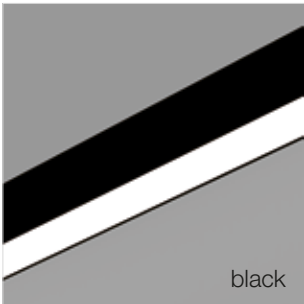
COLOUR



white aluminium



white



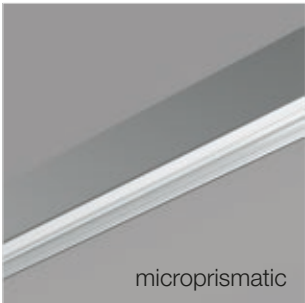
black

Surface finish in white aluminium, white or black, powder-coated

COVER

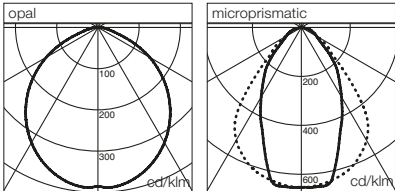


opal

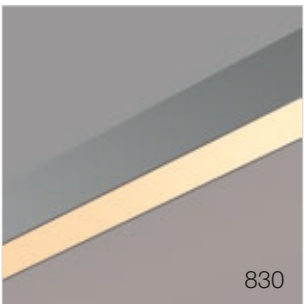


microprismatic

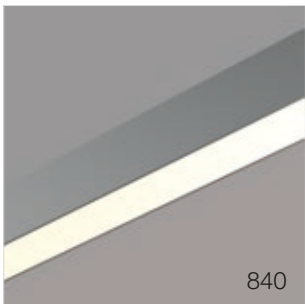
The cover is made of plastic (non-yellowing PMMA) with an opal or microprismatic finish



LIGHT COLOURS



830



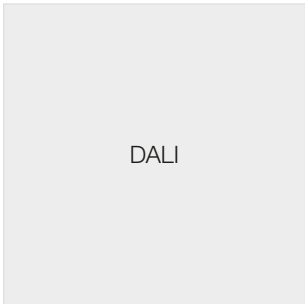
840

As far as light colours are concerned, there is a choice of 830 and 840

SWITCHING MODES



ON
OFF

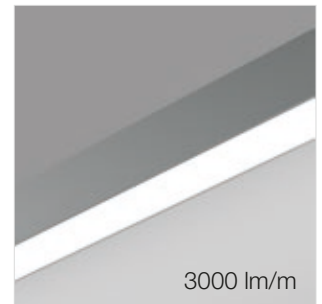
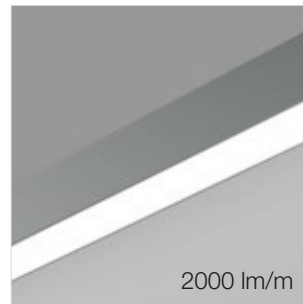


DALI

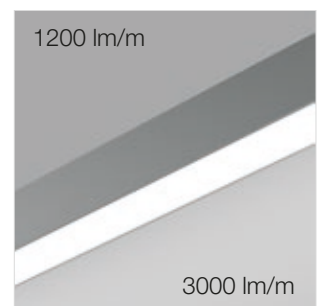
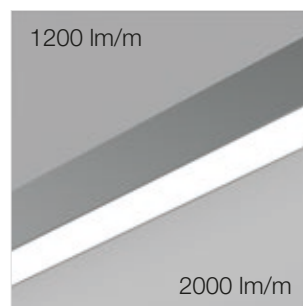
A switch-selectable version (On/Off) as well as a DALI dimmable version are available for your planning

EQUIPMENT

LED WATTAGE | DIRECT



LED WATTAGE | DIRECT / INDIRECT



The selection of different LED power levels and ways of mounting offers you a variety of options in your lighting planning.



PLANNING WAS NEVER SO EASY!

With the RZB configurator you can plan your luminaire system quickly, safely and creatively.

- ✓ Free configuration of your luminaire system
- ✓ Direct price information and material configuration
- ✓ Including an installation drawing of your luminaire system in DXF format

Contact us, or go

▶ **Start playing:** [rzb.de/loui](https://www.rzb.de/loui)









LESS IS MORE® 27 KRISTALL

Pendant luminaires

- LED luminaire with accentuated slim design with high-quality crystal glass cover
- Power supply through the suspension cable
- Improved luminous flux thanks to the latest LED technology
- LED rated life 60,000 h (L80, B10)
- Light colours: 3000 K and 4000 K

Pendant luminaires | Series: Less is more® 27 Kristall

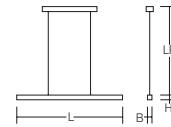
Type of Protection: IP 20

Protection Class: I

Housing: aluminium extrusion profile, powder-coated. End cap aluminium powder-coated. Diffuser (direct light emission): made by hand from tempered crystal glass, coated white (opal) on one side. Diffuser (indirect light emission): plastic (non-yellowing PMMA), opal. Power supply through suspension cable. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Converter integrated in the canopy.

LED included.

Available colours: 45 = white aluminium



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
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Pendant luminaires

Price Category 21

Length L 909 mm

312246.0045	L 909, B 28, H 54	LED	830	1550 lm	35 W	19,4	on/off	A+,A++ A+
312246.0045.76	L 909, B 28, H 54	LED	830	1550 lm	35 W	19,4	DALI	A+,A++ A+
312246.0045.1	L 909, B 28, H 54	LED	840	1550 lm	31 W	19,2	on/off	A++ A++
312246.0045.1.76	L 909, B 28, H 54	LED	840	1550 lm	31 W	19,2	DALI	A++ A++

Length L 1409 mm

312247.0045	L 1409, B 28, H 54	LED	830	2600 lm	58 W	19,5	on/off	A+,A++ A+
312247.0045.76	L 1409, B 28, H 54	LED	830	2600 lm	58 W	19,5	DALI	A+,A++ A+
312247.0045.1	L 1409, B 28, H 54	LED	840	2600 lm	52 W	21,0	on/off	A++ A++
312247.0045.1.76	L 1409, B 28, H 54	LED	840	2600 lm	52 W	21,0	DALI	A++ A++



Power supply through the suspension cable



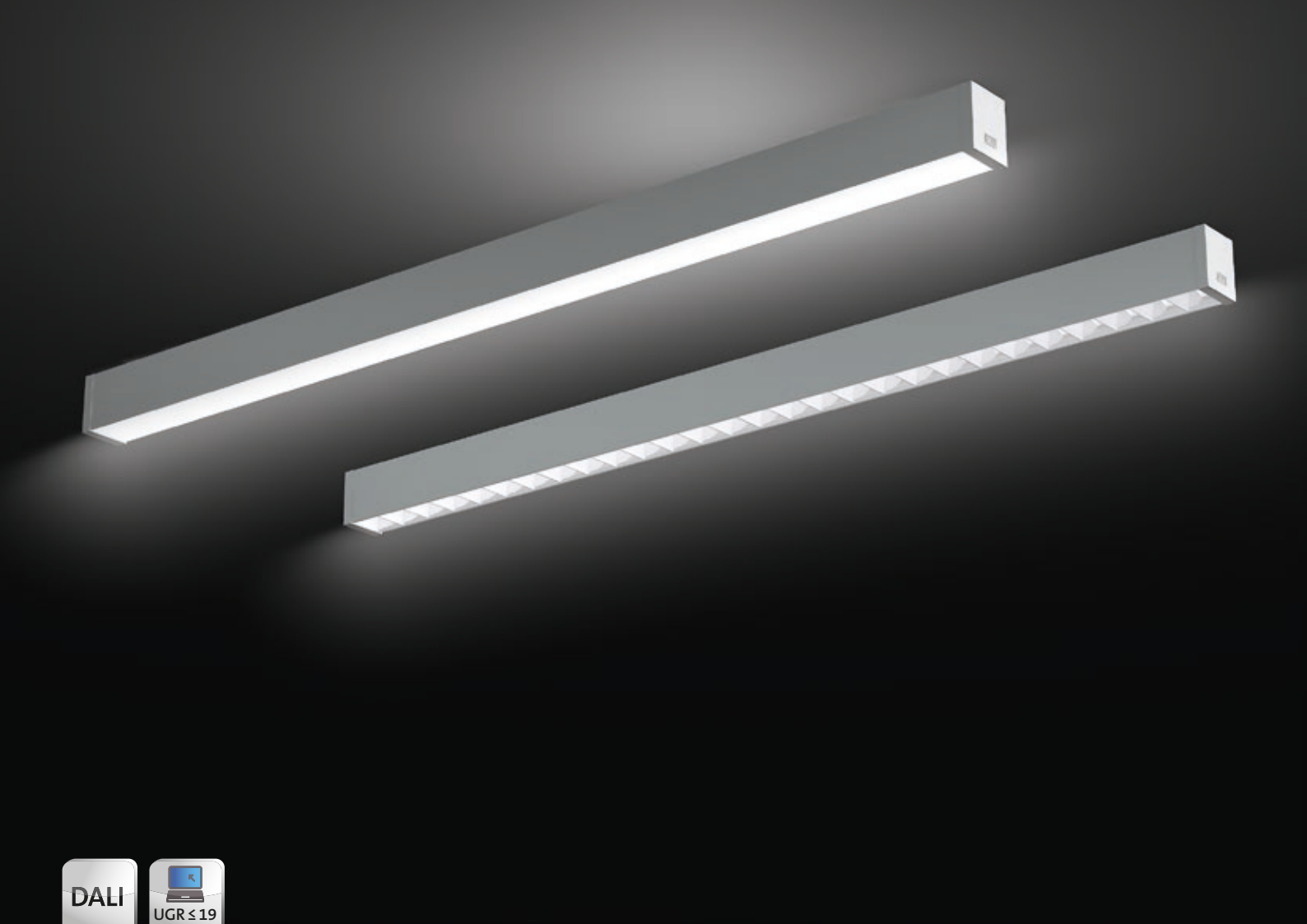
End caps overlap the profile



High-quality crystal glass cover
(coated white on the inside)



Indirect illumination with side light effect

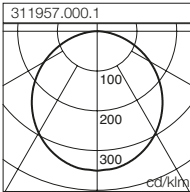


LESS IS MORE® 50

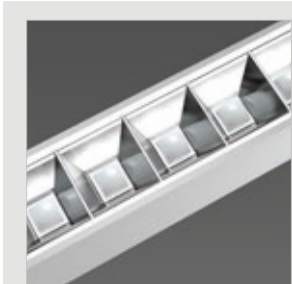
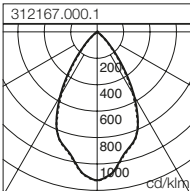
Ceiling luminaires, Pendant luminaires

- With integrated converter
- Replaceable LED unit
- LED rated life 50,000 h (L80, B10)
- Diffuser made of non-yellowing plastic (PMMA) opal or Alea Optical system
- Narrow beam version with Alea optical system ideal for office areas ($UGR \leq 19$) and computer workstations in accordance with DIN EN 12464-1
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Light colours: 3000 K and 4000 K
- As aesthetically sophisticated general lighting (corridors, hotel, office and conference rooms, shops, private areas)

311957.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



312167.000.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



ALEA OPTICAL SYSTEM

A brilliant example of the power of innovation:
 The Alea optical system in the Less is more® 50 combines square reflector elements with a linear structure.
 The integrated opal diffuser reduces direct glare, ensures excellent light quality and protects the highly efficient LEDs.

Ceiling luminaires | Series: Less is more® 50

Type of Protection: IP 20

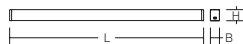
Protection Class: I

Impact Protection: IK00

Housing: extruded anodised aluminium profile. End caps: plastic. Diffuser made of non-yellowing plastic (PMMA) opal or **Alea Optical system**: Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (suitable for use in environments with computer screens in accordance with EN 12464-1). LED unit with integrated converter interchangeable and removable.

LED included.

Available colour: 0 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Ceiling luminaires								
Diffuser: plastic (PMMA), opal								
Length L 1140 mm								
311956.000	L 1140, B 53, H 65	LED	830	3200 lm	39 W	26,0	on/off	A+ A+
311956.000.76	L 1140, B 53, H 65	LED	830	3200 lm	39 W	26,0	DALI	A+ A+
311956.000.1	L 1140, B 53, H 65	LED	840	3200 lm	39 W	26,1	on/off	A+ A+
311956.000.1.76	L 1140, B 53, H 65	LED	840	3200 lm	39 W	26,1	DALI	A+ A+
Length L 1420 mm								
311957.000	L 1420, B 53, H 65	LED	830	4000 lm	48 W	26,0	on/off	A+ A+
311957.000.76	L 1420, B 53, H 65	LED	830	4000 lm	48 W	26,0	DALI	A+ A+
311957.000.1	L 1420, B 53, H 65	LED	840	4000 lm	48 W	26,1	on/off	A+ A+
311957.000.1.76	L 1420, B 53, H 65	LED	840	4000 lm	48 W	26,1	DALI	A+ A+
Alea optical system								
Length L 1140 mm								
312166.000	L 1140, B 53, H 65	LED	830	3800 lm	37 W	16,0	on/off	A+ A+
312166.000.76	L 1140, B 53, H 65	LED	830	3800 lm	37 W	16,0	DALI	A+ A+
312166.000.1	L 1140, B 53, H 65	LED	840	3800 lm	37 W	16,2	on/off	A+ A+
312166.000.1.76	L 1140, B 53, H 65	LED	840	3800 lm	37 W	16,2	DALI	A+ A+
Length L 1420 mm								
312167.000	L 1420, B 53, H 65	LED	830	4650 lm	44 W	15,7	on/off	A+ A+
312167.000.76	L 1420, B 53, H 65	LED	830	4650 lm	44 W	15,7	DALI	A+ A+
312167.000.1	L 1420, B 53, H 65	LED	840	4650 lm	44 W	15,9	on/off	A+ A+
312167.000.1.76	L 1420, B 53, H 65	LED	840	4650 lm	44 W	15,9	DALI	A+ A+

Comparison LED vs. conventional lamps

LED 37 / 39 W ≈

1 x 54 W T16 (58 W EB)

LED 44 / 48 W ≈

1 x 80 W T16 (86 W EB)

Pendant luminaires | Series: Less is more® 50

Type of Protection: IP 20

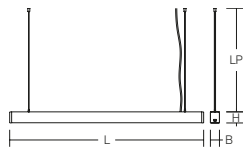
Protection Class: I

Suspension Length: 1500-2000 mm

Housing: extruded anodised aluminium profile. End caps: plastic. Diffuser made of non-yellowing plastic (PMMA) opal or **Alea Optical system**: Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (suitable for use in environments with computer screens in accordance with EN 12464-1). LED unit with integrated converter interchangeable and removable. 2-point steel cable suspension, steplessly adjustable. Special lengths available on request. Canopy aluminium anodised.

LED included.

Available colour: 0 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Pendant luminaires								
Diffuser: plastic (PMMA), opal								
Length L 1140 mm								
311983.000	L 1140, B 53, H 65	LED	830	3200 lm	39 W	26,0	on/off	A+ A+
311983.000.76	L 1140, B 53, H 65	LED	830	3200 lm	39 W	26,0	DALI	A+ A+
311983.000.1	L 1140, B 53, H 65	LED	840	3200 lm	39 W	26,1	on/off	A+ A+
311983.000.1.76	L 1140, B 53, H 65	LED	840	3200 lm	39 W	26,1	DALI	A+ A+
Length L 1420 mm								
311984.000	L 1420, B 53, H 65	LED	830	4000 lm	48 W	26,0	on/off	A+ A+
311984.000.76	L 1420, B 53, H 65	LED	830	4000 lm	48 W	26,0	DALI	A+ A+
311984.000.1	L 1420, B 53, H 65	LED	840	4000 lm	48 W	26,1	on/off	A+ A+
311984.000.1.76	L 1420, B 53, H 65	LED	840	4000 lm	48 W	26,1	DALI	A+ A+
Alea optical system								
Length L 1140 mm								
312168.000	L 1140, B 53, H 65	LED	830	3800 lm	37 W	16,0	on/off	A+ A+
312168.000.76	L 1140, B 53, H 65	LED	830	3800 lm	37 W	16,0	DALI	A+ A+
312168.000.1	L 1140, B 53, H 65	LED	840	3800 lm	37 W	16,2	on/off	A+ A+
312168.000.1.76	L 1140, B 53, H 65	LED	840	3800 lm	37 W	16,2	DALI	A+ A+
Length L 1420 mm								
312169.000	L 1420, B 53, H 65	LED	830	4650 lm	44 W	15,7	on/off	A+ A+
312169.000.76	L 1420, B 53, H 65	LED	830	4650 lm	44 W	15,7	DALI	A+ A+
312169.000.1	L 1420, B 53, H 65	LED	840	4650 lm	44 W	15,9	on/off	A+ A+
312169.000.1.76	L 1420, B 53, H 65	LED	840	4650 lm	44 W	15,9	DALI	A+ A+

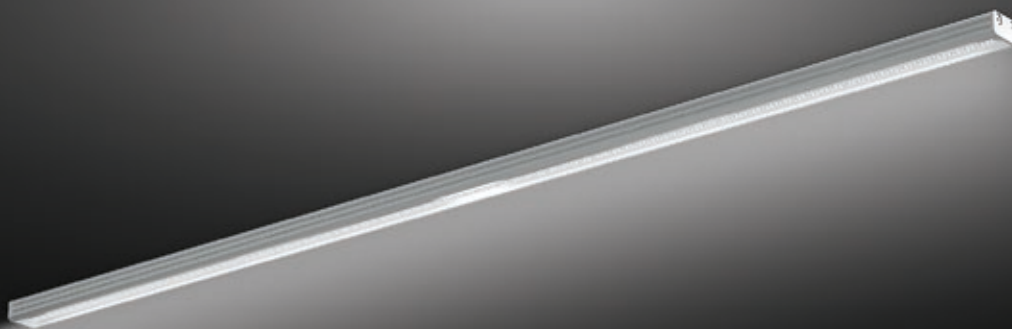
Comparison LED vs. conventional lamps

LED 37 / 39 W ≈

1 x 54 W T16 (58 W EB)

LED 44 / 48 W ≈

1 x 80 W T16 (86 W EB)

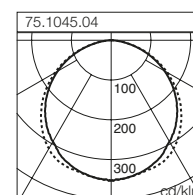


LINEAR SYSTEM

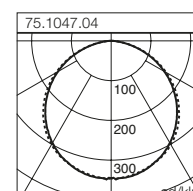
LED profile strip lights

- Can be made to order on a project specific basis
- Light colours: 3,000 K, 4,000 K, RGB and RGBW
- LED rated life 40,000 h (L80, B10)
- High type of protection: IP 67
- Provides powerful accent lighting (e.g. for vaults, handrails, shelves, counters) as well as background lighting for glass ceilings and walls
- We can implement individual customised solutions on request

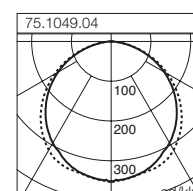
75.1045.04		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
16	24	32
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
23	35	58



75.1047.04		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
9	13	17
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
12	18	30



75.1049.04		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	9	12
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
9	13	21



LED profile strip lights | Series: Linear system

Type of Protection: / ballasts IP20

Protection Class: III

Impact Protection: IK02

Housing: extruded anodised aluminium profile. IP 67 resin coated LED element (clear resin coating for RGB, opaque resin coating for 3000/4000 K and RGBW). 1.5 m connection cable, double insulated, with open ends. Exit from behind via groove to the side, end cap without groove. End cap without groove. Fastening: M4 stainless steel nuts and two magnetic holders.

Modular design: driver for LED profiles to be ordered separately.

We can offer special project solutions according to customers` specifications.

The profiles can be manufactured in different lenghts, other light colours, with different controls such as DMX, DALI a.s.o. Please do not hesitate to contact us for information and individual planning advice.

Available colour: 4 = aluminium, anodised



Comparison LED vs. conventional lamps

LED 4 W ≈

1 x 8 W T16 (11 W EB)

LED 7 W ≈

1 x 13 W T16 (15 W EB)

LED 10 / 12 W ≈

1 x 18 W T26 (26 W CB)

LED 18 W ≈

1 x 24 W T16 (26 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		EEC
LED Linear System							Price Category 21
Length L 603 mm							
75.1039.04	L 603, B 18, H 10	LED	830	250 lm	4 W	112°	A+ A+
75.1040.04	L 603, B 18, H 10	LED	840	260 lm	4 W	112°	A+ A+
75.1041.04	L 603, B 18, H 10	LED	830	500 lm	7 W	112°	A+ A+
75.1042.04	L 603, B 18, H 10	LED	840	500 lm	7 W	112°	A+ A+
75.1043.04	L 603, B 18, H 10	LED	830	700 lm	10 W	112°	A+ A+
75.1044.04	L 603, B 18, H 10	LED	840	730 lm	10 W	112°	A+ A+
Length L 1003 mm							
75.1045.04	L 1003, B 18, H 10	LED	830	450 lm	7 W	112°	A+ A+
75.1046.04	L 1003, B 18, H 10	LED	840	450 lm	7 W	112°	A+ A+
75.1047.04	L 1003, B 18, H 10	LED	830	850 lm	12 W	112°	A+ A+
75.1048.04	L 1003, B 18, H 10	LED	840	850 lm	12 W	112°	A+ A+
75.1049.04	L 1003, B 18, H 10	LED	830	1250 lm	18 W	112°	A+ A+
75.1050.04	L 1003, B 18, H 10	LED	840	1250 lm	18 W	112°	A+ A+

Converter 24 V							Price Category 21
982233.002	L 188, B 30, H 21	max. 33 W					
982233.002.76	L 188, B 30, H 21	max. 33 W, TouchDim, DALI					



Reference number	Dimensions	Lamp	Light colour	System power		EEC
LED Linear System						Price Category 21
for RGB						
Length L 510 mm						
75.1004.04	L 510, B 18, H 10	LED	RGB	8 W	112°	A A
Length L 910 mm						
75.1009.04	L 910, B 18, H 10	LED	RGB	14 W	112°	A A
for RGBW						
Length L 510 mm						
75.1067.04	L 510, B 18, H 10	LED	RGBW	5 W	112	A A
Length L 910 mm						
75.1068.04	L 910, B 18, H 10	LED	RGBW	8 W	112	A A

Converter 24 V							Price Category 21
For RGB and RGBW control							
982097.002.76	L 220, B 47, H 44	max. 75 W, TouchDim, DALI					



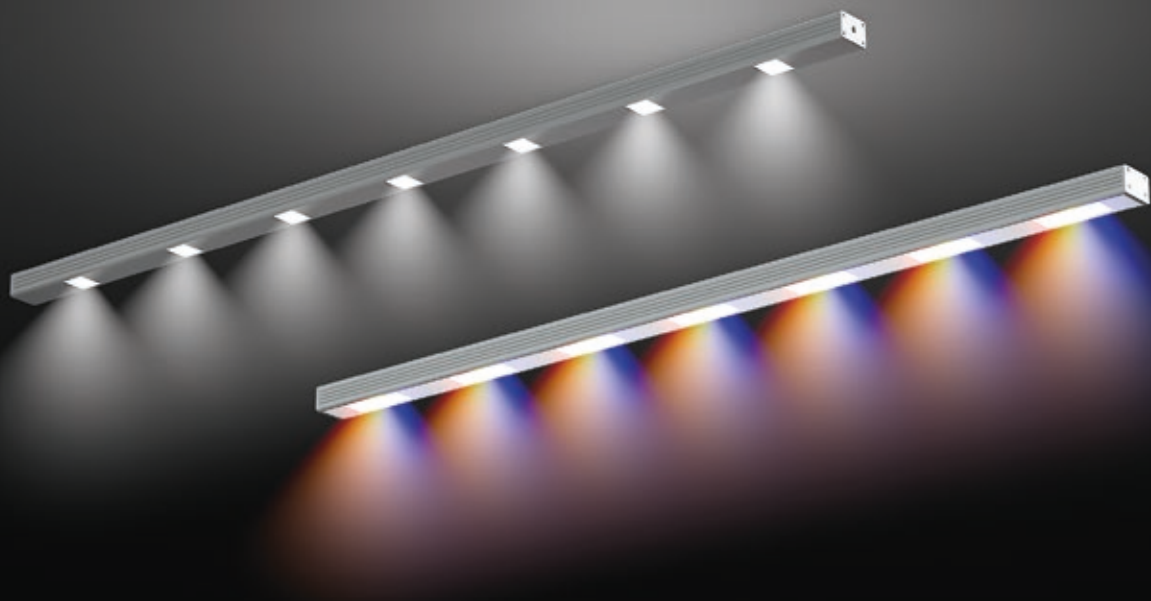
Accessories | pivoting element for LED track lighting luminaires

Mounting bracket: aluminium, for Linear System and High Power, ceiling and wall mounting; swivel range: 225°; flexibly adjustable on the profile.

We recommend to mount two pivoting elements per meter.

Pivoting element for LED profile							Price Category 21
75.1034.00	L 63, B 18, H 40						



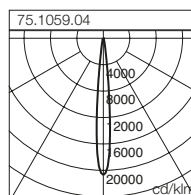


HIGH POWER

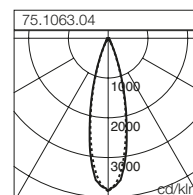
LED profile strip lights

- Can be made to order on a project specific basis
- Light colours: 3,000 K, 4,000 K or RGB
- LED rated life 40,000 h (L80, B10)
- High type of protection: IP 67
- Can be controlled via DMX or DALI
- Provides powerful accent lighting for facades, portals and objects, as well as background lighting for glass ceilings/walls and shelves
- We can implement individual customised solutions on request

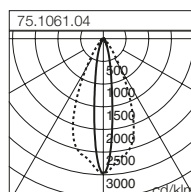
75.1059.04		
h [m]	Ø [m]	E [lx]
1,0	0,18	20554
2,0	0,36	5139
3,0	0,55	2284
4,0	0,73	1285
5,0	0,91	822



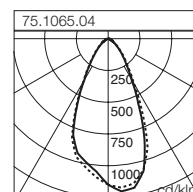
75.1063.04		
h [m]	Ø [m]	E [lx]
1,0	0,47	3839
2,0	0,95	960
3,0	1,42	427
4,0	1,89	240
5,0	2,36	154



75.1061.04		
h [m]	Ø [m]	E [lx]
1,0	0,27 / 0,87	2729
2,0	0,54 / 1,75	682
3,0	0,81 / 2,62	303
4,0	1,08 / 3,50	171
5,0	1,35 / 4,37	109



75.1065.04		
h [m]	Ø [m]	E [lx]
1,0	0,93	1057
2,0	1,86	264
3,0	2,79	117
4,0	3,71	66
5,0	4,64	42



LED profile strip lights | Series: High Power

Type of Protection: IP 20 incl. driver / **IP 67** and **IP 40** profile versions available

Protection Class: I = RGB, II

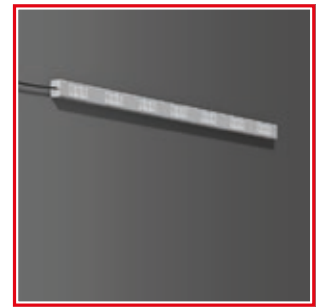
Impact Protection: IK02, IK03 (IP 67)

Housing element: anodised aluminium. LED element with 7 LED modules Resin coated for IP 67 version. End cap, fastening: M4 stainless steel nuts. Three magnetic holders for IP 40 version. Different optics, two light colours and RGB. **Ready for installation, including required driver and mains plug, with 1.5 m connection cable.** Connected cable between driver and LED profile: 1.5 m. Cable inlet: on the rear side (IP 67 version) / on the front side (IP 40 version).

We can offer special project solutions according to customers' specifications.

The profiles can be manufactured in different lengths, other light colours, with different controls such as DMX, DALI a.s.o. Please do not hesitate to contact us for information and individual planning advice.

Available colour: 4 = aluminium, anodised



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmi-able	EEC
High Power								
Type of protection: IP 40 (profile)								
75.1051.04	L 900, B 32, H 22	LED	830	1400 lm	15 W	10°	on/off	A+ A+
75.1053.04	L 900, B 32, H 22	LED	830	1400 lm	15 W	10°/50°	on/off	A+ A+
75.1055.04	L 900, B 32, H 22	LED	830	1400 lm	15 W	30°	on/off	A+ A+
75.1057.04	L 900, B 32, H 22	LED	830	1400 lm	15 W	60°	on/off	A+ A+
75.1052.04	L 900, B 32, H 22	LED	840	1400 lm	15 W	10°	on/off	A+ A+
75.1054.04	L 900, B 32, H 22	LED	840	1400 lm	15 W	10°/50°	on/off	A+ A+
75.1056.04	L 900, B 32, H 22	LED	840	1400 lm	15 W	30°	on/off	A+ A+
75.1058.04	L 900, B 32, H 22	LED	840	1400 lm	15 W	60°	on/off	A+ A+
Type of protection: IP 67 (profile)								
75.1059.04	L 900, B 32, H 20	LED	830	1400 lm	15 W	10°	on/off	A+ A+
75.1061.04	L 900, B 32, H 20	LED	830	1400 lm	15 W	10°/50°	on/off	A+ A+
75.1063.04	L 900, B 32, H 20	LED	830	1400 lm	15 W	30°	on/off	A+ A+
75.1065.04	L 900, B 32, H 20	LED	830	1400 lm	15 W	60°	on/off	A+ A+
75.1060.04	L 900, B 32, H 20	LED	840	1400 lm	15 W	10°	on/off	A+ A+
75.1062.04	L 900, B 32, H 20	LED	840	1400 lm	15 W	10°/50°	on/off	A+ A+
75.1064.04	L 900, B 32, H 20	LED	840	1400 lm	15 W	30°	on/off	A+ A+
75.1066.04	L 900, B 32, H 20	LED	840	1400 lm	15 W	60°	on/off	A+ A+
RGB version with sequencer for preset colour sequence								
Type of protection: IP 40 (profile)								
75.1012.04	L 900, B 32, H 22	LED	RGB		51 W	10°	on/off	A A
75.1021.04	L 900, B 32, H 22	LED	RGB		51 W	10°/50°	on/off	A A
75.1015.04	L 900, B 32, H 22	LED	RGB		51 W	30°	on/off	A A
75.1018.04	L 900, B 32, H 22	LED	RGB		51 W	60°	on/off	A A
Type of protection: IP 67 (profile)								
75.1024.04	L 900, B 32, H 20	LED	RGB		51 W	10°	on/off	A A
75.1033.04	L 900, B 32, H 20	LED	RGB		51 W	10°/50°	on/off	A A
75.1027.04	L 900, B 32, H 20	LED	RGB		51 W	30°	on/off	A A
75.1030.04	L 900, B 32, H 20	LED	RGB		51 W	60°	on/off	A A

Accessories | pivoting element for LED track lighting luminaires

Mounting bracket: aluminium, for Linear System and High Power, ceiling and wall mounting; swivel range: 225°; flexibly adjustable on the profile.

We recommend to mount two pivoting elements per meter.

Pivoting element for LED profile

Price Category 21

75.1034.00	L 63, B 18, H 40
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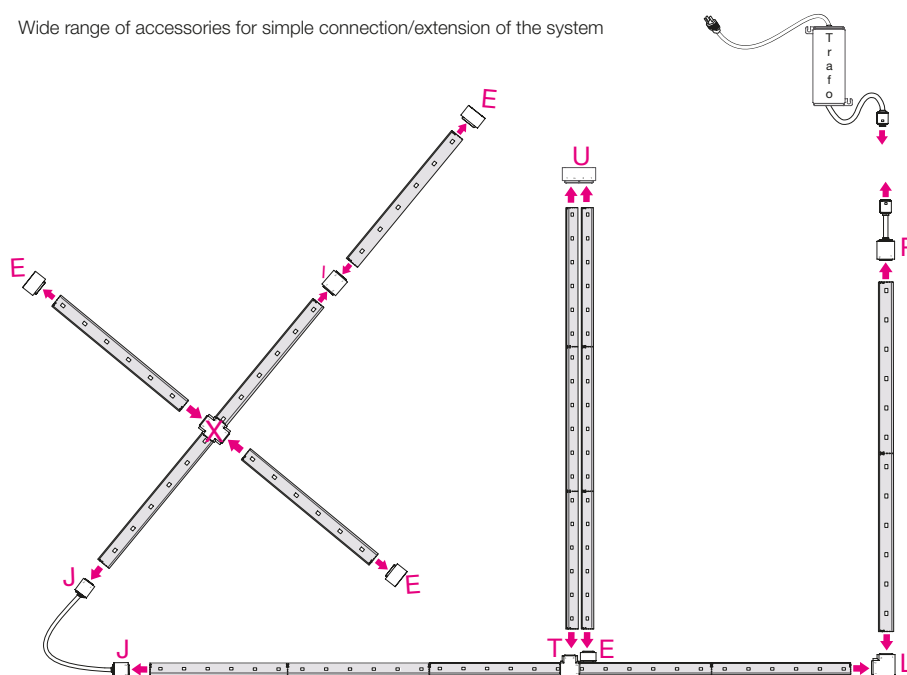


LED IT STRIP

LED strip

- Flexible LED strip on a roll
- Wide range of accessories for simple connection/extension of the system
- Very low mounting height of 6 mm
- No need to seal with silicone when shortening or lengthening
- No need to solder
- Connected using a standard pipe wrench by exerting pressure on the joining element
- 200 lm/m and 400 lm/m strips can be cut on site in 180 mm intervals, 1000 lm/m in 30 mm intervals
- Only one single driver for max. 25 metres continuous runs of 200 lm/m strips or 10 metres of 400 lm/m and 1000 lm/m strips
- Type of protection remains unchanged, even if connecting elements are applied

Wide range of accessories for simple connection/extension of the system



LED strip | Series: LED it Strip 200 lmType of Protection: **IP 65**

Protection Class: III

Flexible low voltage LED strip that can be cut to length, for indoor and outdoor applications. UV/IR resistant TPU strip. Easy plug-in connection allows LED strips to be joined or cut at 180 mm intervals. Distance between the individual LEDs: 30 mm. 33 LEDs of 3.2 W/meter. Beam angle: 110°. Operating temperature: -20°C to +50°C. Separate driver. Plug-in connectors between driver and LED strip.

Accessories: driver and connectors to be ordered separately.

Supply voltage: 24 V DC.

Available colour: 2 = white



OPTILED

Reference number	Dimensions	Lamp	Light colour	Luminous flux per meter	Lamps rating per meter		EEC
LED light channel							
Length L 5000 mm							
4039303022	L 5000, B 12, H 6	LED	830	200 lm	3,2 W	110°	A+
4039653022	L 5000, B 12, H 6	LED	765	200 lm	3,2 W	110°	A+
Length L 15000 mm							
4039303032	L 15000, B 12, H 6	LED	830	200 lm	3,2 W	110°	A+
4039653032	L 15000, B 12, H 6	LED	765	200 lm	3,2 W	110°	A+
Length L 25000 mm							
4039303012	L 25000, B 12, H 6	LED	830	200 lm	3,2 W	110°	A+
4039653012	L 25000, B 12, H 6	LED	765	200 lm	3,2 W	110°	A+

Price Category 12

Accessories

Price Category 12

24 V converter, IP 67, Plug & Play

5421103005	L 145, B 45, H 35	Constant voltage converter, 30 W; max. system length: 8.5 m (200 lm/m)					
5422106005	L 185, B 53, H 40	Constant voltage converter, 60 W; max. system length: 17 m (200 lm/m)					
5423110005	L 185, B 53, H 40	Constant voltage converter, 100 W max. system length: 25 m (200 lm/m)					

Converter 24 V for light management**Converter 24 V, dimmable: 1-10 V**

982041.002	L 250, B 50, H 34	Constant voltage converter, 80 W; max. system length: 25 m (200 lm/m)					
982042.002	L 250, B 60, H 39	Constant voltage converter, 120 W; max. system length: 25 m (200 lm/m)					
982043.002	L 250, B 80, H 39	Constant voltage converter, 240 W; max. system length: 25 m (200 lm/m)					

Converter 24 V, dimmable: DALI

982097.002.76	L 220, B 47, H 44	Constant voltage converter, 75 W; max. system length: 22 m (200 lm/m)					
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Accessories

Price Category 12

Fasteners (bag of 10 pieces, 2 bags necessary for 5 m)

6401500105	L 10, B 14, H 9	K	Clip fixing
6401500205	L 10, B 32, H 7	B	Bow fixing
6401500305	L 15, B 21, H 7	Z	Clamp fixing

Electrical supply

6401401405	P	with 150 mm cable
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End cap (bag of 10 pieces)

6401400805	L 19, B 12, H 15	E	End cap
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Flexible connectors

6401402305	L 100, B 22, H 14	J	Flexible connector with 100 mm cable
6401402005	L 150, B 22, H 14	J	Flexible connector with 150 mm cable
6401402405	L 300, B 22, H 14	J	Flexible connector with 300 mm cable
6401402505	L 600, B 22, H 14	J	Flexible connector with 600 mm cable
6401700605	L 2000, B 16, H 10	V	Extension 2000 mm

Conduit

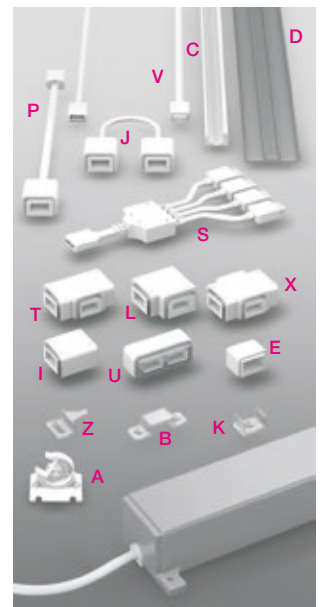
6200800603	L 1000, B 15, H 8	C	Flat duct system, white plastic, 2 units per pack
6401405305	L 1000, B 37, H 8	D	Double channel (natural aluminium colour)

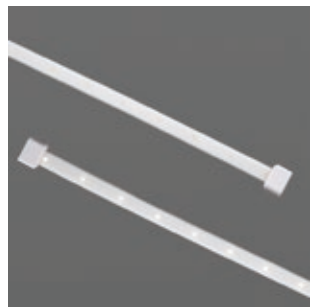
Duct mounting

6200800403	L 40, B 40, H 30	A	Duct mounting, ±60° adjustable stepwise
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Rigid joints

6401401605	L 15, B 38, H 14	U	U-shaped connector
6401401505	L 25, B 22, H 14	I	Longitudinal connector
6401401705	L 26, B 38, H 14	T	T-connector
6401401805	L 29, B 38, H 14	X	Cross connector
6401401905	L 30, B 30, H 14	L	L-shaped connector
6401403905	L 170, B 30, H 15	S	4-way-splitter





OPTILED

LED strip | Series: LED it Strip 400 lm

Type of Protection: IP 65

Protection Class: III

Flexible low voltage LED strip that can be cut to length, for indoor and outdoor applications. UV/IR resistant TPU strip. Easy plug-in connection allows LED strips to be joined or cut at 180 mm intervals. Distance between the individual LEDs: 30 mm. 33 LEDs 6.7 W/meter. Beam angle: 110°. Operating temperature: -20°C to +50°C. Separate driver. Plug-in connectors and driver for light strip system.

Accessories: driver and connectors to be ordered separately.

Supply voltage: 24 V DC.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous flux per meter	Lamps rating per meter		EEC
LED light channel							
Length L 5000 mm							
4037283021	L 5000, B 12, H 6	LED	827	400 lm	6,7 W	110°	A
4037653021	L 5000, B 12, H 6	LED	765	440 lm	6,7 W	110°	A
Length L 10000 mm							
4037283011 .Q	L 10000, B 12, H 6	LED	827	400 lm	6,7 W	110°	A
4037653011	L 10000, B 12, H 6	LED	765	440 lm	6,7 W	110°	A

Price Category 12

Accessories

Price Category 12

24 V converter, IP 67, Plug & Play

5421103005	L 145, B 45, H 35	Constant voltage converter, 30 W; max. system length: 4 m (400 lm/m)
5422106005	L 185, B 53, H 40	Constant voltage converter, 60 W; max. system length: 8 m (400 lm/m)
5423110005	L 185, B 53, H 40	Constant voltage converter, 100 W max. system length: 10 m (400 lm/m)

Converter 24 V for light management**Converter 24 V, dimmable: 1-10 V**

982041.002	L 250, B 50, H 34	Constant voltage converter, 80 W; max. system length: 10 m (400 lm/m)
982042.002	L 250, B 60, H 39	Constant voltage converter, 120 W; max. system length: 10 m (400 lm/m)
982043.002	L 250, B 80, H 39	Constant voltage converter, 240 W; max. system length: 10 m (400 lm/m)

Converter 24 V, dimmable: DALI

982097.002.76	L 220, B 47, H 44	Constant voltage converter, 75 W; max. system length: 10 m (400 lm/m)
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Accessories

Price Category 12

Fasteners (bag of 10 pieces, 2 bags necessary for 5 m)

6401500105	L 10, B 14, H 9	K	Clip fixing
6401500205	L 10, B 32, H 7	B	Bow fixing
6401500305	L 15, B 21, H 7	Z	Clamp fixing

Electrical supply

6401401405		P	with 150 mm cable
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End cap (bag of 10 pieces)

6401400805	L 19, B 12, H 15	E	End cap
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Flexible connectors

6401402305	L 100, B 22, H 14	J	Flexible connector with 100 mm cable
6401402005	L 150, B 22, H 14	J	Flexible connector with 150 mm cable
6401402405	L 300, B 22, H 14	J	Flexible connector with 300 mm cable
6401402505	L 600, B 22, H 14	J	Flexible connector with 600 mm cable
6401700605	L 2000, B 16, H 10	V	Extension 2000 mm

Conduit

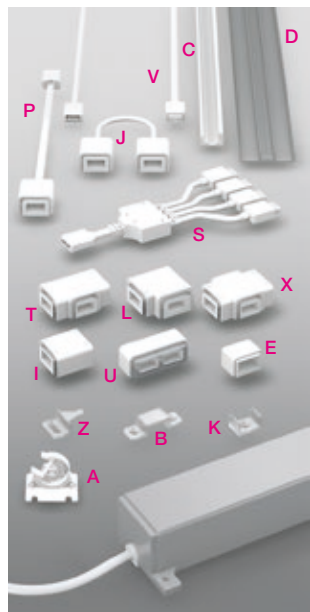
6200800603	L 1000, B 15, H 8	C	Flat duct system, white plastic, 2 units per pack
6401405305	L 1000, B 37, H 8	D	Double channel (natural aluminium colour)

Duct mounting

6200800403	L 40, B 40, H 30	A	Duct mounting, ±60° adjustable stepwise
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Rigid joints

6401401605	L 15, B 38, H 14	U	U-shaped connector
6401401505	L 25, B 22, H 14	I	Longitudinal connector
6401401705	L 26, B 38, H 14	T	T-connector
6401401805	L 29, B 38, H 14	X	Cross connector
6401401905	L 30, B 30, H 14	L	L-shaped connector
6401403905	L 170, B 30, H 15	S	4-way-splitter



LED strip | Series: LED it Strip 1000 lm/mType of Protection: **IP 65**

Protection Class: III

Flexible, divisible low-voltage LED channel for indoor and outdoor use. UV/IR-resistant TPU carrier.

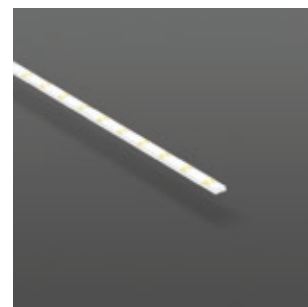
Simple, solderless connection technology. Compartmentalised track adjustment possible with system parts. LED channel can be cut to length every 30 mm. LED-distance 30 mm. 66 LEDs or 9.6 W/meter. Beam angle 110°. Operating temperature -20°C to +50°C. Separate driver.

Connections between driver and light channel system using the system connector.

Accessories: driver and connectors to be ordered separately.

Supply voltage 24 V DC.

Available colour: 2 = white



OPTILED

Reference number	Dimensions	Lamp	Light colour	Luminous flux per meter	Lamps rating per meter		EEC
LED light channel							
Length L 5000 mm							
2080273022	L 5000, B 12, H 6	LED	827	900 lm	9,6 W	110°	A+
2080403022	L 5000, B 12, H 6	LED	840	1000 lm	9,6 W	110°	A+
Length L 10000 mm							
2080273012	L 10000, B 12, H 6	LED	827	900 lm	9,6 W	110°	A+
2080403012	L 10000, B 12, H 6	LED	840	1000 lm	9,6 W	110°	A+

Price Category 12

Accessories

Price Category 12

24 V converter, IP 67, Plug & Play

5421103005	L 145, B 45, H 35	Constant voltage converter, 30 W; max. system length: 3 m (1000 lm/m)
5422106005	L 185, B 53, H 40	Constant voltage converter, 60 W; max. system length: 6 m (1000 lm/m)
5423110005	L 185, B 53, H 40	Constant voltage converter, 100 W max. system length: 10 m (1000 lm/m)

Converter 24 V for light management**Converter 24 V, dimmable: 1-10 V**

982041.002	L 250, B 50, H 34	Constant voltage converter, 80 W; max. system length: 7.8 m (1000 lm/m)
982042.002	L 250, B 60, H 39	Constant voltage converter, 120 W; max. system length: 10 m (1000 lm/m)
982043.002	L 250, B 80, H 39	Constant voltage converter, 240 W; max. system length: 10 m (1000 lm/m)

Converter 24 V, dimmable: DALI

982097.002.76	L 220, B 47, H 44	Constant voltage converter, 75 W; max. system length: 7.5 m (1000 lm/m)
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Accessories

Price Category 12

Fasteners (bag of 10 pieces, 2 bags necessary for 5 m)

6401500105	L 10, B 14, H 9	K Clip fixing
6401500205	L 10, B 32, H 7	B Bow fixing
6401500305	L 15, B 21, H 7	Z Clamp fixing

Electrical supply

6401401405	P with 150 mm cable
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End cap (bag of 10 pieces)

6401400805	L 19, B 12, H 15	E End cap
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Flexible connectors

6401402305	L 100, B 22, H 14	J Flexible connector with 100 mm cable
6401402005	L 150, B 22, H 14	J Flexible connector with 150 mm cable
6401402405	L 300, B 22, H 14	J Flexible connector with 300 mm cable
6401402505	L 600, B 22, H 14	J Flexible connector with 600 mm cable
6401700605	L 2000, B 16, H 10	V Extension 2000 mm

Conduit

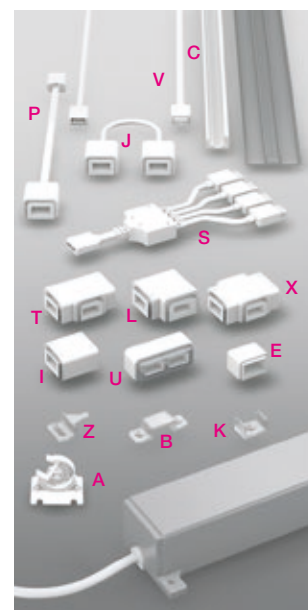
6200800603	L 1000, B 15, H 8	C Flat duct system, white plastic, 2 units per pack
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Duct mounting

6200800403	L 40, B 40, H 30	A Duct mounting, ±60° adjustable stepwise
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Rigid joints

6401401605	L 15, B 38, H 14	U U-shaped connector
6401401505	L 25, B 22, H 14	I Longitudinal connector
6401401705	L 26, B 38, H 14	T T-connector
6401401805	L 29, B 38, H 14	X Cross connector
6401401905	L 30, B 30, H 14	L L-shaped connector
6401403905	L 170, B 30, H 15	S 4-way-splitter





LESS IS MORE® FLEX

LED-Baukastensystem mit maximaler Flexibilität

- LED system in slim design:
 - Luminous efficiency up to 146 lm/W
 - LED modules available in 5 different light outputs (500 lm/m, 650 lm/m, 1000 lm/m, 2000 lm/m, 3000 lm/m)
 - LED modules in 6 different light colours (827, 830, 840, 865, Tunable White (TW) 827-850, RGB)
- Made in EU
- Extremely small LED strip with a width of 8 mm only
- Beam angle 120° (LED)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Plug & Play connectors (solderless connections)
- Heat conductive double-sided adhesive tape
- 6 different aluminium profiles
- 6 different plastic diffusers

LED Strip PRO

- Up to 146 lm/W
- Can be cut on site every 50 mm with standard tool
- LED rated life 60,000 h (L80, B10)
- Ambient temperature -20° bis +45°C
- Colour rendering index Ra 85
- IC control:
 - Constant current control for LED strip length of up to 9 m total
 - Continuously homogeneous light intensity
 - Protection against high thermal load

LED Strip ECO

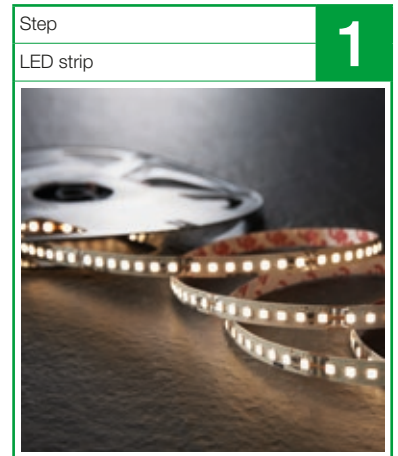
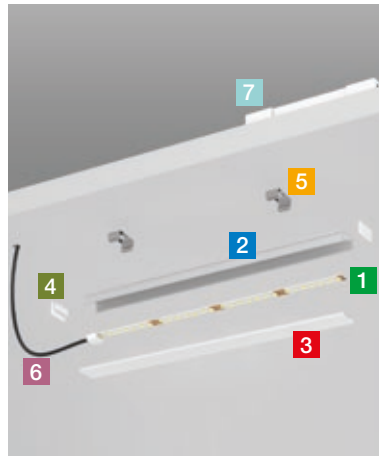
- Up to 116 lm/W
- Can be cut on site every 50 to 100 mm with standard tool
- LED rated life 60,000 h (L80, B10); RGB: 50,000 h (L80, B10)
- Ambient temperature -20° bis +45°C
- Colour rendering Ra 80 (TW Ra 85)
- Light control from 2700 K up to 5000 K (TW = Tunable White) and RGB

Modular system

Planning has never been so simple!

The colour-coded components in the LESS IS MORE® Flex system guide you to a complete luminaire system in just a few steps. You will need a maximum of seven components for your lighting solution:

- ☒ LED strip
- ☒ Aluminium profile
- ☒ Plastic diffuser
- ☒ End caps
- ☒ Mounting accessories
- ☒ Feeds and connectors
- ☒ Converters and light control



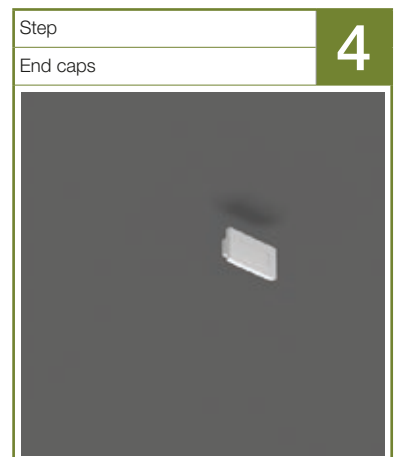
Page 288



Page 289



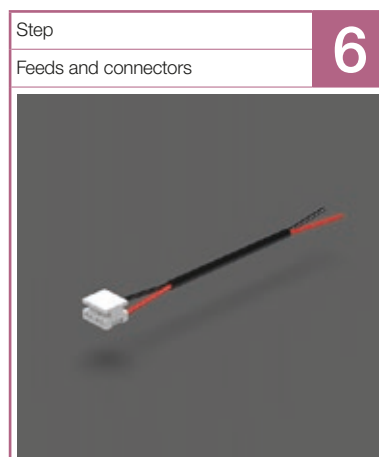
Page 290



Page 290



Page 291



Page 291



Page 292



1

LED strip | Series: Less is more® Flex PRO

Type of Protection: IP 00

Flexible LED strip on roller (5 m).
Mounting using thermal double-sided tape.
Voltage 24 V.
Can be cut every 50 mm.
140 LEDs per meter (LED Pitch 6,7 mm).
Constant lumen output and thermal protection via IC.

Reference number	Dimensions	Lamp	Light colour	Luminous flux per meter	Lamps rating per meter		EEC
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LED strip PRO**Price Category 21****5 W/m | 650 lm/m | 130 lm/W | max. LED strip length 9 m**

10-3213.1	L 5000, B 8, H 2	LED	827	650 lm	5 W	120°	A++
10-3213.2	L 5000, B 8, H 2	LED	830	650 lm	5 W	120°	A++
10-3213.3	L 5000, B 8, H 2	LED	840	650 lm	5 W	120°	A++
10-3213.4	L 5000, B 8, H 2	LED	865	650 lm	5 W	120°	A++

7 W/m | 1000 lm/m | 143 lm/W | max. LED strip length 7 m

10-3214.1	L 5000, B 8, H 2	LED	827	1000 lm	7 W	120°	A++
10-3214.2	L 5000, B 8, H 2	LED	830	1000 lm	7 W	120°	A++
10-3214.3	L 5000, B 8, H 2	LED	840	1000 lm	7 W	120°	A++
10-3214.4	L 5000, B 8, H 2	LED	865	1000 lm	7 W	120°	A++

14 W/m | 2000 lm/m | 143 lm/W | max. LED strip length 4,5 m

10-3215.1	L 5000, B 8, H 2	LED	827	2000 lm	14 W	120°	A++
10-3215.2	L 5000, B 8, H 2	LED	830	2000 lm	14 W	120°	A++
10-3215.3	L 5000, B 8, H 2	LED	840	2000 lm	14 W	120°	A++
10-3215.4	L 5000, B 8, H 2	LED	865	2000 lm	14 W	120°	A++

20,5 W/m | 3000 lm/m | 147 lm/W | max. LED strip length 3 m

10-3216.1	L 5000, B 8, H 2	LED	827	3000 lm	20,5 W	120°	A++
10-3216.2	L 5000, B 8, H 2	LED	830	3000 lm	20,5 W	120°	A++
10-3216.3	L 5000, B 8, H 2	LED	840	3000 lm	20,5 W	120°	A++
10-3216.4	L 5000, B 8, H 2	LED	865	3000 lm	20,5 W	120°	A++

LED strip must be operated on heat conducting surfaces only. You find the suitable aluminium profiles on page 289. Insufficient cooling may reduce the lifetime of the LED strip or lead to premature failure. Please refer to the enclosed instruction and operation manual.



1

LED strip | Series: Less is more® Flex ECO

Type of Protection: IP 00

Flexible LED strip on roller (5 m). Mounting using thermal double-sided tape. Voltage 24 V.

500 lm/m | 1000 lm/m

Can be cut every 100 mm. 60 LEDs per meter (LED Pitch 16.7 mm). Constant luminous flux by means of resistor.

2000 lm/m | Tunable White

Can be cut every 50 mm. 120 LEDs per meter (LED Pitch 8.3 mm). Constant luminous flux by means of resistor.

RGB

Can be cut every 100 mm. 60 LEDs per meter (LED Pitch 16.7 mm). Constant luminous flux by means of transistor.

Reference number	Dimensions	Lamp 1	Light colour	Luminous flux per meter	Lamps rating per meter		EEC
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LED strip ECO**Price Category 21****4,3 W/m | 500 lm/m | 117 lm/W | max. LED strip length 6 m**

10-3221.1	L 5000, B 8, H 2	LED	827	500 lm	4,3 W	120°	A++
10-3221.2	L 5000, B 8, H 2	LED	830	500 lm	4,3 W	120°	A++
10-3221.3	L 5000, B 8, H 2	LED	840	500 lm	4,3 W	120°	A++
10-3221.4	L 5000, B 8, H 2	LED	865	500 lm	4,3 W	120°	A++

9 W/m | 1000 lm/m | 112 lm/W | max. LED strip length 4 m

10-3222.1	L 5000, B 8, H 2	LED	827	1000 lm	9 W	120°	A+
10-3222.2	L 5000, B 8, H 2	LED	830	1000 lm	9 W	120°	A+
10-3222.3	L 5000, B 8, H 2	LED	840	1000 lm	9 W	120°	A+
10-3222.4	L 5000, B 8, H 2	LED	865	1000 lm	9 W	120°	A+

19,2 W/m | 2000 lm/m | 105 lm/W | max. LED strip length 2 m

10-3223.1	L 5000, B 8, H 2	LED	827	2000 lm	19,2 W	120°	A+
10-3223.2	L 5000, B 8, H 2	LED	830	2000 lm	19,2 W	120°	A+
10-3223.3	L 5000, B 8, H 2	LED	840	2000 lm	19,2 W	120°	A+
10-3223.4	L 5000, B 8, H 2	LED	865	2000 lm	19,2 W	120°	A+

Tunable White (TW) 13,5 W/m | 1500 lm/m | 112 lm/W | max. LED strip length 2 m

10-3224	L 5000, B 8, H 2	LED	827-865	1500 lm	13,5 W	120°	A+
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RGB 7,2 W/m | 360 lm/m | 50 lm/W | max. LED strip length 6 m

10-3225	L 5000, B 8, H 2	LED	RGB	360 lm	7,2 W	120°	B
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LED strip must be operated on heat conducting surfaces only. You find the suitable aluminium profiles on page 289. Insufficient cooling may reduce the lifetime of the LED strip or lead to premature failure. Please refer to the enclosed instruction and operation manual.

Less is more® Flex | Aluminium profiles

Housing: extruded anodised aluminium profile.

Available colour: 4 = aluminium, anodised

Reference
number

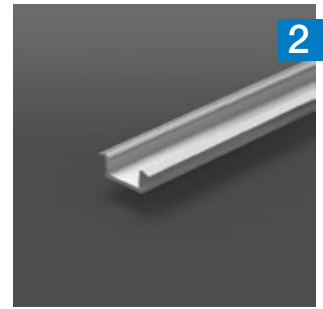
Dimensions

Price Category 21

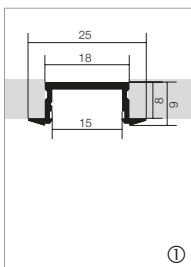
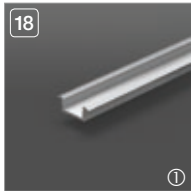
Aluminium profiles

Recessed profile 18		
① 925195.004	L 2500, B 25, H 2, HE 8	For lamp output of up to 12 W/m
Surface profile 18		
② 925196.004	L 2500, B 18, H 9	For lamp output of up to 12 W/m
Corner profile 18		
③ 925197.004	L 2500, B 25, H 15	For lamp output of up to 14 W/m
Pendant profile 18		
④ 925198.004	L 2500, B 18, H 25	For lamp output of up to 20 W/m
Recessed profile 65		
⑤ 925199.004	L 2500, B 81, H 2, HE 19	For lamp output of up to 30 W/m
Surface profile 23		
⑥ 925200.004	L 2500, B 23, H 13	For lamp output of up to 29 W/m

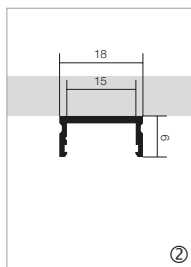
Please take into account that aluminium profiles are likely to expand by 0.5 mm per metre at most within a temperature deviation of 20°C.



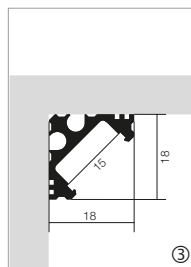
Recessed profile 18
up to 12 W/m



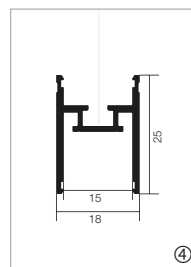
Surface profile 18
up to 12 W/m



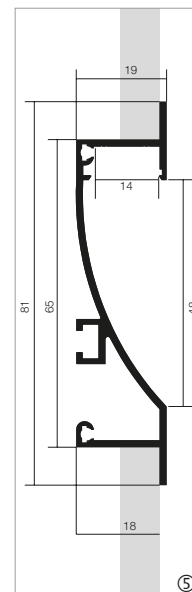
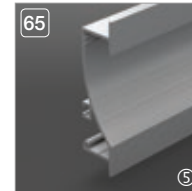
Corner profile 18
up to 14 W/m



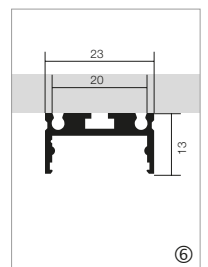
Pendant profile 18
up to 20 W/m



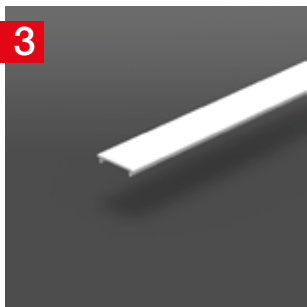
Recessed profile 65
up to 30 W/m



Surface profile 23
up to 29 W/m



3

**Less is more® Flex | Plastic diffusers**

For aluminium profile 18, 23 and 65.

Diffuser: plastic (non-yellowing PMMA).

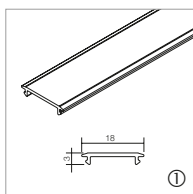
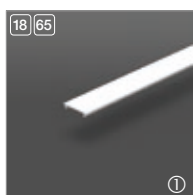
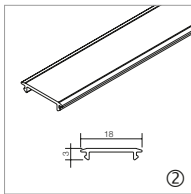
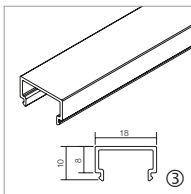
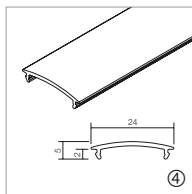
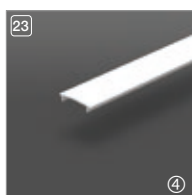
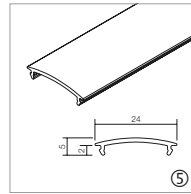
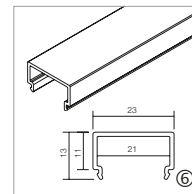
Reference number Dimensions

Diffusers plastic (PMMA)

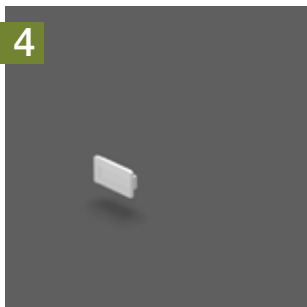
Price Category 21

plain opal		
① 925201.002	L 2500, B 17, H 3	Profile 18 Profile 65
plan transparent		
② 925201.000	L 2500, B 17, H 3	Profile 18 Profile 65
concave opal		
④ 925203.002	L 2500, B 24, H 5	Profile 23
concave transparent		
⑤ 925203.000	L 2500, B 24, H 5	Profile 23
U opal		
③ 925202.002	L 2500, B 18, H 10	Profile 18 Profile 65
⑥ 925204.002	L 2500, B 23, H 13	Profile 23

Please take into account that plastic diffusers are likely to expand by 1.4 mm per metre at most within a temperature deviation of 20°C.

**plain opal diffuser
for profiles 18 and 65****plan transparent dif.
for profiles 18 and 65****U opal diffuser
for profiles 18 and 65****concave opal diffuser
for profile 23****concave transparent
for profile 23****U opal diffuser
for profile 23**

4

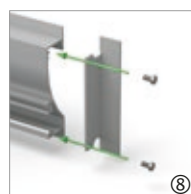
**Less is more® Flex | End caps**For aluminium profile 18, 23 and 65.
Package 1 piece.

Reference number Dimensions

End caps

Price Category 21

① 982198.000	L 25, B 10, H 8	Recessed profile 18
② 982196.002	L 18, B 10, H 5	Surface profile 18
③ 982197.000	L 18, B 16, H 5	Surface profile 18 with U-diffuser
④ 982204.000	L 25, B 16, H 5	Corner profile 18
⑤ 982199.000	L 26, B 18, H 6	Pendant profile 18
⑥ 982200.000	L 23, B 15, H 2	Surface profile 23 and U-diffuser
⑦ 982201.000	L 23, B 24, H 7	Surface profile 23 with U-diffuser
⑧ 982202.000	L 81, B 15, H 19	Recessed profile 65

**End cap
installation for
profile 65**

Less is more® Flex | Installation accessories

For aluminium profile 18, 23 and 65.
Package 1 piece.

Reference number Dimensions

Installation accessories

Price Category 21



5

Spring		
① 982209.000	L 129, B 20, H 8	Recessed profile 65
Spring clip		
② 982207.000	L 20, B 10, H 9	Recessed, surface and corner profile 18
③ 982208.000	L 24, B 10, H 9	Surface profile 23
Mounting connector 0-25°		
④ 982205.000	L 10, B 16, H 15	Surface profile 23
Adjustable connector 0-90°		
⑤ 982206.000	D 30, H 32	Surface profile 23
Suspension kit		
⑥ 982210.000	D 11, LP 2000	Pendant profile 18
Mechanical connector		
⑦ 982203.000	L 50, B 6, H 4	Pendant profile 18, recessed profile 65

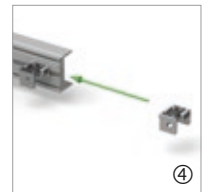
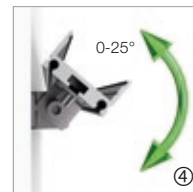


① - ⑥

A distance of 1.5 m between two mounting elements is recommended



Corner angle installation for profile 23



Less is more® Flex | Electrical connector

Type of protection: IP 20

For LED system PRO and ECO.

Package 1 piece.

Reference number Dimensions

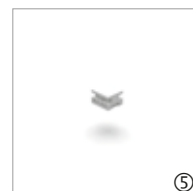
Feeds and connectors

Price Category 21

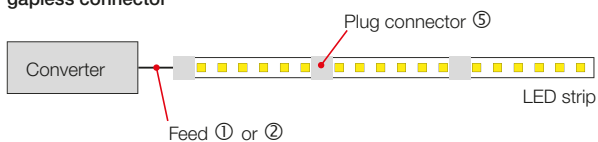
① 982212.002	L 2000, B 9, H 4	Feed 2-pole feeder for a single colour (male plug, open end)
② 982213.002	L 2000, B 9, H 4	Feed 4-pole feeder for RGB and TW (male plug, open end)
③ 982214.002	L 1000, B 9, H 4	Connector 2-pole for a single light colour (male plug, 2 sides)
④ 982215.002	L 2000, B 9, H 4	Connector 4-pole for RGB and TW (male plug, 2 sides)
⑤ 982211.002	L 8, B 9, H 6	Plug connector 2/4-pole (gapless) for a single light colour, RGB and TW



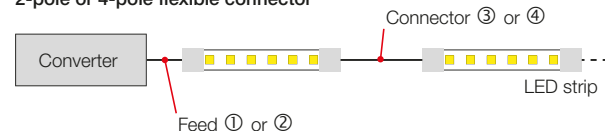
6



Example with gapless connector



Example with 2-pole or 4-pole flexible connector





Less is more® Flex | Converters

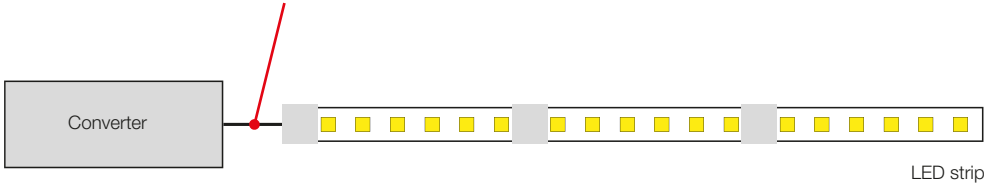
Type of Protection: IP 20
Protection Class: II
Constant current converters.
The converters must be installed externally.

Reference number	Dimensions		
Converter 24 V			Price Category 21
982232.002	L 153, B 30, H 21	max. 21 W	
982232.002.76	L 153, B 30, H 21	max. 21 W, TouchDim, DALI	
982233.002	L 188, B 30, H 21	max. 33 W	
982233.002.76	L 188, B 30, H 21	max. 33 W, TouchDim, DALI	
982234.002	L 240, B 30, H 21	max. 60 W	
982234.002.76	L 240, B 30, H 21	max. 60 W, TouchDim, DALI	
982235.002	L 305, B 30, H 24	max. 100 W	
982235.002.76	L 305, B 30, H 24	max. 100 W, TouchDim, DALI	
For RGB and tunable white (TW) control			
982097.002.76	L 220, B 47, H 44	max. 75 W, TouchDim, DALI	



The following chart gives an overview about the wiring from the LED strip to the converter and the required cable cross-sections only and is not meant to replace the conforming to local installation standards of the feed cables.
Chart to be read as follows:
For power of 21 W and a required cable length of 13 m the cable cross-section must be at least 0,5 mm².

Cable cross-section	Converter 24 V			
	21 W	33 W	60 W	100 W
0,50 mm²	13 m	10 m	6 m	3,5 m
0,75 mm²	20 m	15 m	9 m	5 m
1,00 mm²	26 m	20 m	12 m	7 m
1,50 mm²	40 m	30 m	17 m	10 m



Less is more® Flex: Planning example

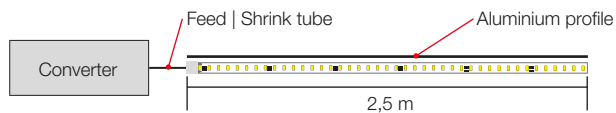
With the LESS IS MORE® FLEX system, for example, bathrooms can be easily and stylishly illuminated. To do this, a recessed aluminium profile is mounted on a ledge or on any other suitable location. An LED module with IP 66 CVD is ideally suited for use in a bathroom, and the 830 light colour guarantees a pleasantly warm atmosphere.



Reference number	Dimensions	Lamp power	Light colour	Luminaire flux	EEC	Quantity
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Example 1: Recessed mounting luminaire 2.5 m

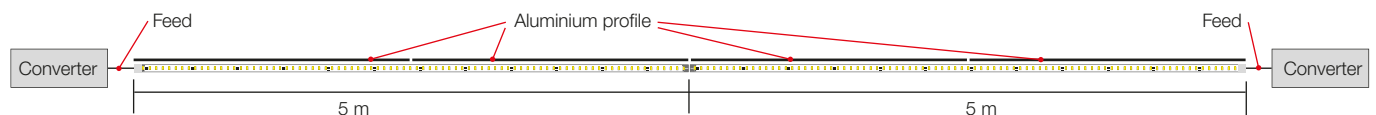
1	LED strip PRO						
	10-3214.2	L 5000, B 8, H 2	LED 5 W/m	830	650 lm/m	A++	1
2	Recessed profile 18						
	925195.004	L 2500, B 25, H 9					1
3	Plain opal diffuser for profile 18						
	925201.002	L 2500, B 18, H 3					1
4	End cap for recessed profile 18						
	982198.000	L 25, B 10, H 8					2
5	Spring clip						
	982207.000	L 20, B 10, H 9					2
6	Feed						
	982212.002	L 2000, B 9, H 4					1
7	Converter						
	982232.002.76	L 153, B 30, H 21	max. 21 W, TouchDim, DALI				1
	Light control						
	982253.002	L 80, B 80, H 50	DALI rotary potentiometer				1



Reference number	Dimensions	Lamp power	Light colour	Luminaire flux	EEC	Quantity
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Example 2: Recessed mounting luminaire 10 m

1	LED strip PRO						
	10-3214.2	L 5000, B 8, H 2	LED 5 W/m	830	650 lm/m	A++	2
2	Recessed profile 18						
	925195.004	L 2500, B 25, H 9					4
3	Plain opal diffuser for profile 18						
	925201.002	L 2500, B 18, H 3					4
4	End cap for recessed profile 18						
	982198.000	L 25, B 10, H 8					2
5	Spring clip						
	982207.000	L 20, B 10, H 9					8
6	Feed						
	982212.002	L 2000, B 9, H 4					2
	Connector						
	982211.002	L 8, B 9, H 6	Connector gapless				1
7	Converter						
	982234.002.76	L 305, B 30, H 24	max. 60 W, TouchDim, DALI				2
	Light control						
	982253.002	L 80, B 80, H 50	DALI rotary potentiometer				1

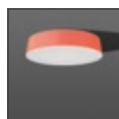


For questions regarding **light planning** kindly contact our support team:

+49 951.79 09-375
lichtplanung@rzb-leuchten.de



The application image shows:
Flatliner



297



298



302



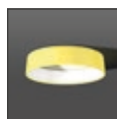
304



308



310



313

Flatliner
296-299

Flatliner Slim
300-305

Toledo Flatliner
306-311

Toledo Flat
312-313

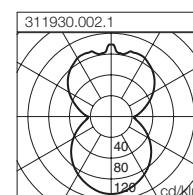


FLATLINER

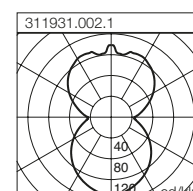
Fabric lampshade luminaires

- Decorative fabric lampshade luminaire for room design
- More than 70 different standard colours to choose for the fabric lampshade
- Standard shapes cylinder and cuboid
- Material of fabric lampshade chintz or optionally also hardly fabric in compliance with B1
- Use of energy saving LED creates an energy efficient decorative luminaire
- Ceiling or pendant mounting
- Fabric lampshades can be retrofitted to the basic luminaire without tools
- **Customised solutions are available on request. Huge choice of shapes, fabrics and prints.**

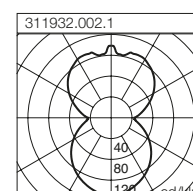
311930.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
7	10	13
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
9	13	22



311931.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



311932.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



Fabric lampshade luminaires | Series: Flatliner

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02

Base: metal, white, powder-coated. Lampshades can be mounted without tools.

The lampshades are closed at the bottom. Ceiling mounting.

Standard colour covering surface Chintz fabric lampshade: 66.8003.01 white

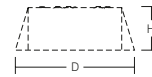
Standard bottom lampshade colour: 66.8003.01 white

Further colours (see illus. on page 299) are available at the same price. Other colours for lampshade and diffuser must be indicated separately. Other lamp shade dimensions are available upon request.

Modular design: The lampshades need to be ordered separately for each luminaire.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 19 W ≈
2 x 26 W TC-D (68 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner 550							
311933.002	D 460, H 120	LED	830	1450 lm	19 W	on/off	A++ A++
311933.002.76	D 460, H 120	LED	830	1450 lm	19 W	DALI	A++ A++
311933.002.1	D 460, H 120	LED	840	1450 lm	19 W	on/off	A++ A++
311933.002.1.76	D 460, H 120	LED	840	1450 lm	19 W	DALI	A++ A++

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Flatliner 550							
981867.002	D 550, H 250	Shape: cylinder					
981870.002	L 550, B 550, H 250	Shape: cuboid					



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner 700							
311934.002	D 620, H 160	LED	830	2800 lm	38 W	on/off	A++ A++
311934.002.76	D 620, H 160	LED	830	2800 lm	38 W	DALI	A++ A++
311934.002.1	D 620, H 160	LED	840	2800 lm	38 W	on/off	A++ A++
311934.002.1.76	D 620, H 160	LED	840	2800 lm	38 W	DALI	A++ A++

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Flatliner 700							
981868.002	D 700, H 250	Shape: cylinder					
981871.002	L 700, B 700, H 250	Shape: cuboid					



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner 1100							
311935.002	D 1040, H 230	LED	830	7000 lm	100 W	on/off	A++ A++
311935.002.76	D 1040, H 230	LED	830	7000 lm	100 W	DALI	A++ A++
311935.002.1	D 1040, H 230	LED	840	7300 lm	100 W	on/off	A++ A++
311935.002.1.76	D 1040, H 230	LED	840	7300 lm	100 W	DALI	A++ A++

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Flatliner 1100							
981869.002	D 1100, H 250	Shape: cylinder					
981872.002	L 1100, B 1100, H 250	Shape: cuboid					



Fabric lampshades chintz							Price Category 21
Colour chart							
W06630	Chintz lampshades are available in more than 70 different colours						





Comparison LED vs. conventional lamps

LED 19 W ≈
2 x 26 W TC-D (68 W CB)



Comparison LED vs. conventional lamps

LED 38 W ≈
4 x 26 W TC-D (136 W CB)



Comparison LED vs. conventional lamps

LED 100 W ≈
4 x 55 W TC-L (232 W EB)



Fabric lampshade luminaires | Series: Flatliner

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK02

Suspension Length: 200-3500 mm

Base and canopy: metal, powder-coated, white. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request. Transparent connecting cable. Lampshades can be mounted without tools. The lampshades are closed at the bottom.

Standard colour covering surface Chintz fabric lampshade: 66.8003.01 white

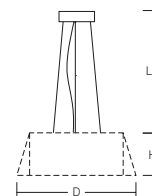
Standard bottom lampshade colour: 66.8003.01 white

Further colours (see illus. on page 299) are available at the same price. Other colours for lampshade and diffuser must be indicated separately. Other lamp shade dimensions are available upon request.

Modular design: The lampshades need to be ordered separately for each luminaire.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmi-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner 550, Pendant length 200-3500 mm							
311930.002	D 460, H 120	LED	830	1450 lm	19 W	on/off	A++ A++
311930.002.76	D 460, H 120	LED	830	1450 lm	19 W	DALI	A++ A++
311930.002.1	D 460, H 120	LED	840	1450 lm	19 W	on/off	A++ A++
311930.002.1.76	D 460, H 120	LED	840	1450 lm	19 W	DALI	A++ A++

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Flatliner 550							
981867.002	D 550, H 250	Shape: cylinder					
981870.002	L 550, B 550, H 250	Shape: cuboid					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmi-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner 700, Pendant length 350-3500 mm							
311931.002	D 620, H 160	LED	830	2800 lm	38 W	on/off	A++ A++
311931.002.76	D 620, H 160	LED	830	2800 lm	38 W	DALI	A++ A++
311931.002.1	D 620, H 160	LED	840	2800 lm	38 W	on/off	A++ A++
311931.002.1.76	D 620, H 160	LED	840	2800 lm	38 W	DALI	A++ A++

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Flatliner 700							
981868.002	D 700, H 250	Shape: cylinder					
981871.002	L 700, B 700, H 250	Shape: cuboid					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmi-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner 1100: Pendant length 600-3500 mm							
311932.002	D 1040, H 230	LED	830	7000 lm	100 W	on/off	A++ A++
311932.002.76	D 1040, H 230	LED	830	7000 lm	100 W	DALI	A++ A++
311932.002.1	D 1040, H 230	LED	840	7300 lm	100 W	on/off	A++ A++
311932.002.1.76	D 1040, H 230	LED	840	7300 lm	100 W	DALI	A++ A++

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Flatliner 1100							
981869.002	D 1100, H 250	Shape: cylinder					
981872.002	L 1100, B 1100, H 250	Shape: cuboid					

Fabric lampshades chintz							Price Category 21
Colour chart							
W06630	Chintz lampshades are available in more than 70 different colours						

Colour options of the chintz lampshades

Please include the colour code in your order.

	66.8003.01		66.8003.31		66.8003.76
	66.8003.02		66.8003.32		66.8003.77
	66.8003.03		66.8003.33		66.8003.79
	66.8003.04		66.8003.34		66.8003.80
	66.8003.07		66.8003.35		66.8003.81
	66.8003.08		66.8003.36		66.8003.82
	66.8003.09		66.8003.37		66.8003.83
	66.8003.10		66.8003.38		66.8003.84
	66.8003.11		66.8003.42		66.8003.85
	66.8003.12		66.8003.43		66.8003.86
	66.8003.13		66.8003.44		66.8003.87
	66.8003.14		66.8003.45		66.8003.88
	66.8003.15		66.8003.46		66.8003.90
	66.8003.17		66.8003.47		66.8003.91
	66.8003.18		66.8003.50		66.8003.92
	66.8003.19		66.8003.52		66.8003.93
	66.8003.20		66.8003.54		66.8003.94
	66.8003.21		66.8003.62		66.8003.95
	66.8003.22		66.8003.63		66.8003.96
	66.8003.23		66.8003.64		66.8003.97
	66.8003.24		66.8003.65		66.8003.99
	66.8003.25		66.8003.66		
	66.8003.27		66.8003.70		
	66.8003.28		66.8003.71		
	66.8003.29		66.8003.72		
	66.8003.30		66.8003.73		



FLATLINER SLIM

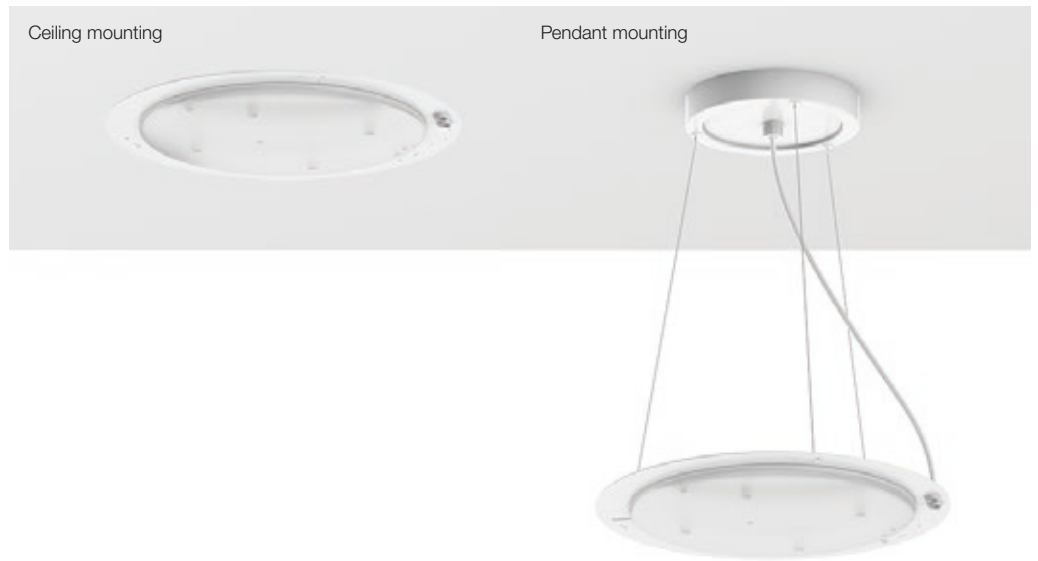
Fabric lampshade luminaires

- Decorative fabric lampshade luminaire for room design
- The basic luminaire for fabric lampshades is the Flatliner Slim series
- More than 70 different standard colours to choose for the fabric lampshade
- Material of fabric lampshade chintz or optionally also hardy fabric in compliance with B1
- Fabric lampshades can be fitted to the basic luminaire without tools
- Use of energy saving LED creates an energy efficient decorative luminaire
- LED rated life 50,000 h (L70, B10)
- Colour rendering index $R_a > 80$
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Ceiling or pendant mounting
- Very flat design with a height of only 60 mm

Modular design: Flatliner Slim

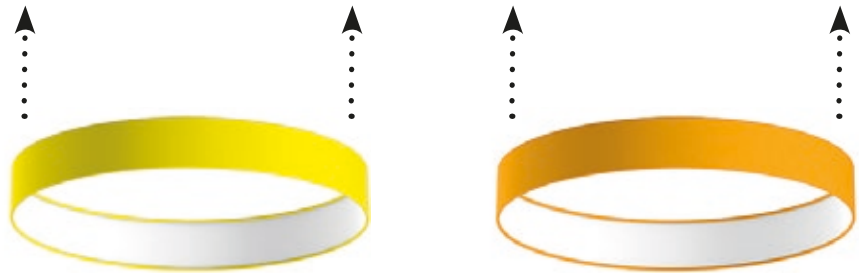
1. Basic luminaire

2 basic luminaires are available for selection



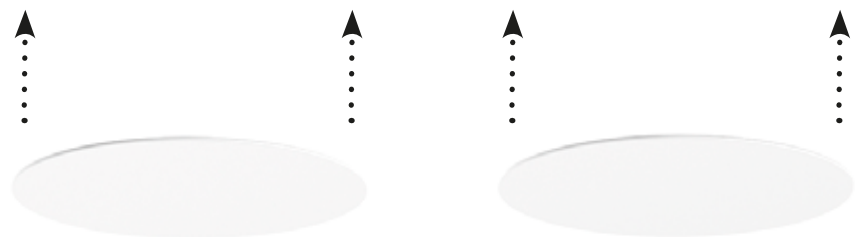
2. Chintz lampshades (always required)

More than 70 different colours for the chintz fabric lampshade.
See p. 299 for overview of colours



3. Diffuser (always required)

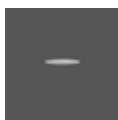
Satin finish diffusers made of polycarbonate





Comparison LED vs. conventional lamps

LED 13,5 W ≈
2 x 18 W TC-D (52 W CB)



Comparison LED vs. conventional lamps

LED 21 W ≈
2 x 26 W TC-D (68 W CB)



Fabric lampshade luminaires | Series: Flatliner Slim

Type of Protection: IP 20
Protection Class: I

Base: metal, white, powder-coated. Fabric lampshades and diffusers can be assembled without the use of tools. Ceiling mounting.

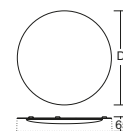
Standard colour covering surface Chintz fabric lampshade: 66.8003.01 white
Standard bottom lampshade colour: 66.8003.01 white

Further colours (see illus. on page 299) are available at the same price. Other colours must be indicated separately.

Modular design: A lamp shade and a diffuser must always be ordered separately for each basic luminaire.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 260, ceiling mounting							
312280.002 *	D 255, H 34	LED ⁽¹⁾	830	950 lm	13,5 W	on/off	A+ A+
312280.002.76	D 255, H 34	LED ⁽¹⁾	830	950 lm	13,5 W	DALI	A+ A+
312280.002.1 *	D 255, H 34	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off	A+ A+
312280.002.1.76	D 255, H 34	LED ⁽¹⁾	840	1050 lm	13,5 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

* With integrated phase cut dimming

Chintz lampshades							Price Category 21
982321.002	D 260, H 60	Chintz decorative cylinder for Flatliner Slim 260					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982326.002	D 258, H 4	Accessories for chintz decorative cylinder D 260					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 322, ceiling mounting							
312281.002 *	D 317, H 34	LED ⁽¹⁾	830	1600 lm	21 W	on/off	A+ A+
312281.002.76	D 317, H 34	LED ⁽¹⁾	830	1600 lm	21 W	DALI	A+ A+
312281.002.1 *	D 317, H 34	LED ⁽¹⁾	840	1700 lm	21 W	on/off	A+ A+
312281.002.1.76	D 317, H 34	LED ⁽¹⁾	840	1700 lm	21 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

* With integrated phase cut dimming

Chintz lampshades							Price Category 21
982322.002	D 322, H 60	Chintz decorative cylinder for Flatliner Slim 322					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982327.002	D 320, H 4	Accessories for chintz decorative cylinder D 322					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 422, ceiling mounting							
312283.002 *	D 418, H 34	LED ⁽¹⁾	830	2000 lm	27 W	on/off	A+ A+
312283.002.1 *	D 418, H 34	LED ⁽¹⁾	840	2100 lm	27 W	on/off	A+ A+
Indication of luminaire flux when using the white fabric lampshade.							
* With integrated phase cut dimming							

Chintz lampshades							Price Category 21
982441.002	D 422, H 60	Chintz decorative cylinder for Flatliner Slim 422					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982443.002	D 420, H 4	Diffuser for chintz decorative cylinder D 422					

Comparison LED vs. conventional lamps

LED 27 W ≈
2 x 26 W TC-D (68 W CB)



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 500, ceiling mounting							
312285.002	D 495, H 34	LED ⁽¹⁾	830	2500 lm	33 W	on/off	A+ A+
312285.002.1	D 495, H 34	LED ⁽¹⁾	840	2700 lm	33 W	on/off	A+ A+
Indication of luminaire flux when using the white fabric lampshade.							

Chintz lampshades							Price Category 21
982323.002	D 500, H 60	Chintz decorative cylinder for Flatliner Slim 500					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982328.002	D 498, H 4	Accessories for chintz decorative cylinder D 500					

Comparison LED vs. conventional lamps

LED 33 W ≈
3 x 26 W TC-D (102 W CB)



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 600, ceiling mounting							
312287.002	D 596, H 34	LED ⁽¹⁾	830	2500 lm	33 W	on/off	A+ A+
312287.002.1	D 596, H 34	LED ⁽¹⁾	840	2700 lm	33 W	on/off	A+ A+
Indication of luminaire flux when using the white fabric lampshade.							

Chintz lampshades							Price Category 21
982442.002	D 600, H 60	Chintz decorative cylinder for Flatliner Slim 600					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982444.002	D 598, H 4	Diffuser for chintz decorative cylinder D 600					

Comparison LED vs. conventional lamps

LED 33 W ≈
3 x 26 W TC-D (102 W CB)



Fabric lampshades chintz							Price Category 21
Colour chart							
W06630	Chintz lampshades are available in more than 70 different colours						





Fabric lampshade luminaires | Series: Flatliner Slim

Type of Protection: IP 20
Protection Class: I
Suspension Length: 200-1300 mm

Base and canopy: metal, powder-coated, white. 3-point steel cable suspension, steplessly adjustable. Special lengths available on request. Transparent connecting cable. Fabric lampshades and diffusers can be assembled without the use of tools. The lampshades are closed at the bottom.

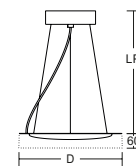
Standard colour covering surface Chintz fabric lampshade: 66.8003.01 white
Standard bottom lampshade colour: 66.8003.01 white

Further colours (see illus. on page 299) are available at the same price. Other colours must be indicated separately.

Modular design: A lamp shade and a diffuser must always be ordered separately for each basic luminaire.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 13,5 W ≈
2 x 18 W TC-D (52 W CB)



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 260: Pendant length 200-1300 mm							
312289.002 *	D 255, H 34	LED ⁽¹⁾	830	950 lm	13,5 W	on/off	A+ A+
312289.002.76	D 255, H 34	LED ⁽¹⁾	830	950 lm	13,5 W	DALI	A+ A+
312289.002.1 *	D 255, H 34	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off	A+ A+
312289.002.1.76	D 255, H 34	LED ⁽¹⁾	840	1050 lm	13,5 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

* With integrated phase cut dimming

Chintz lampshades							Price Category 21
982321.002	D 260, H 60	Chintz decorative cylinder for Flatliner Slim 260					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982326.002	D 258, H 4	Accessories for chintz decorative cylinder D 260					

Comparison LED vs. conventional lamps

LED 21 W ≈
2 x 26 W TC-D (68 W CB)



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Flatliner Slim 322: Pendant length 200-1300 mm							
312282.002 *	D 317, H 34	LED ⁽¹⁾	830	1600 lm	21 W	on/off	A+ A+
312282.002.76	D 317, H 34	LED ⁽¹⁾	830	1600 lm	21 W	DALI	A+ A+
312282.002.1 *	D 317, H 34	LED ⁽¹⁾	840	1700 lm	21 W	on/off	A+ A+
312282.002.1.76	D 317, H 34	LED ⁽¹⁾	840	1700 lm	21 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

* With integrated phase cut dimming

Chintz lampshades							Price Category 21
982322.002	D 322, H 60	Chintz decorative cylinder for Flatliner Slim 322					

Satin finish polycarbonate diffuser							Price Category 21
Can be installed on the decorative cylinder without any tools							
982327.002	D 320, H 4	Accessories for chintz decorative cylinder D 322					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							
Flatliner Slim 422: Pendant length 200-1300 mm							
312284.002 *	D 418, H 34	LED ⁽¹⁾	830	2000 lm	27 W	on/off	A+ A+
312284.002.1 *	D 418, H 34	LED ⁽¹⁾	840	2100 lm	27 W	on/off	A+ A+
Indication of luminaire flux when using the white fabric lampshade.							
* With integrated phase cut dimming							

Price Category 21

Comparison LED vs. conventional lamps

LED 27 W ≈
1 x 18 W TC-D (26 W CB)



Chintz lampshades			Price Category 21
982441.002	D 422, H 60	Chintz decorative cylinder for Flatliner Slim 422	
Satin finish polycarbonate diffuser			Price Category 21
Can be installed on the decorative cylinder without any tools			
982443.002	D 420, H 4	Diffuser for chintz decorative cylinder D 422	

Price Category 21

Price Category 21

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							
Flatliner Slim 500: Pendant length 350-1300 mm							
312286.002	D 495, H 34	LED ⁽¹⁾	830	2500 lm	33 W	on/off	A+ A+
312286.002.1	D 495, H 34	LED ⁽¹⁾	840	2700 lm	33 W	on/off	A+ A+
Indication of luminaire flux when using the white fabric lampshade.							

Price Category 21

Comparison LED vs. conventional lamps

LED 33 W ≈
3 x 26 W TC-D (102 W CB)



Chintz lampshades			Price Category 21
982323.002	D 500, H 60	Chintz decorative cylinder for Flatliner Slim 500	
Satin finish polycarbonate diffuser			Price Category 21
Can be installed on the decorative cylinder without any tools			
982328.002	D 498, H 4	Accessories for chintz decorative cylinder D 500	

Price Category 21

Price Category 21

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							
Flatliner Slim 600: Pendant length 350-1300 mm							
312288.002	D 596, H 34	LED ⁽¹⁾	830	2500 lm	33 W	on/off	A+ A+
312288.002.1	D 596, H 34	LED ⁽¹⁾	840	2700 lm	33 W	on/off	A+ A+
Indication of luminaire flux when using the white fabric lampshade.							

Price Category 21

Comparison LED vs. conventional lamps

LED 33 W ≈
3 x 26 W TC-D (102 W CB)



Chintz lampshades			Price Category 21
982442.002	D 600, H 60	Chintz decorative cylinder for Flatliner Slim 600	
Satin finish polycarbonate diffuser			Price Category 21
Can be installed on the decorative cylinder without any tools			
982444.002	D 598, H 4	Diffuser for chintz decorative cylinder D 600	

Price Category 21

Price Category 21

Fabric lampshades chintz							
Colour chart							
W06630	Chintz lampshades are available in more than 70 different colours						

Price Category 21



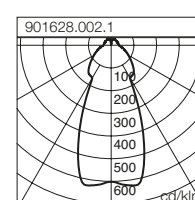


TOLEDO FLATLINER

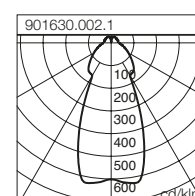
Fabric lampshade luminaires

- Decorative fabric lampshade luminaire for room design
- The basic luminaire for fabric lampshades is the Toledo Flat series
- More than 70 different standard colours to choose for the fabric lampshade
- Standard cylinder and cuboid shapes
- Material of fabric lampshade chintz or optionally also hardly fabric in compliance with B1
- Fabric lampshades can be retrofitted to the basic luminaire without tools
- Satin finish diffusers made of polycarbonate are optionally available
- Use of energy saving LED creates an energy efficient decorative luminaire
- LED rated life 50,000 h (L70, B10)
- Colour rendering index $R_a > 80$
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Colour temperature 3,000 K and 4,000 K
- Converter for standard (on/off) or DALI dimmable
- DALI converter is compatible with DC, suitable for central emergency power supply purposes
- Ceiling or pendant mounting
- **Customised solutions are available on request. Huge choice of shapes, fabrics and prints.**

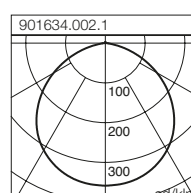
901628.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
21	32	42
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
31	46	76



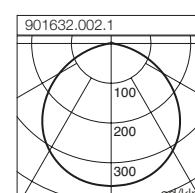
901630.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
10	15	20
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
14	21	36



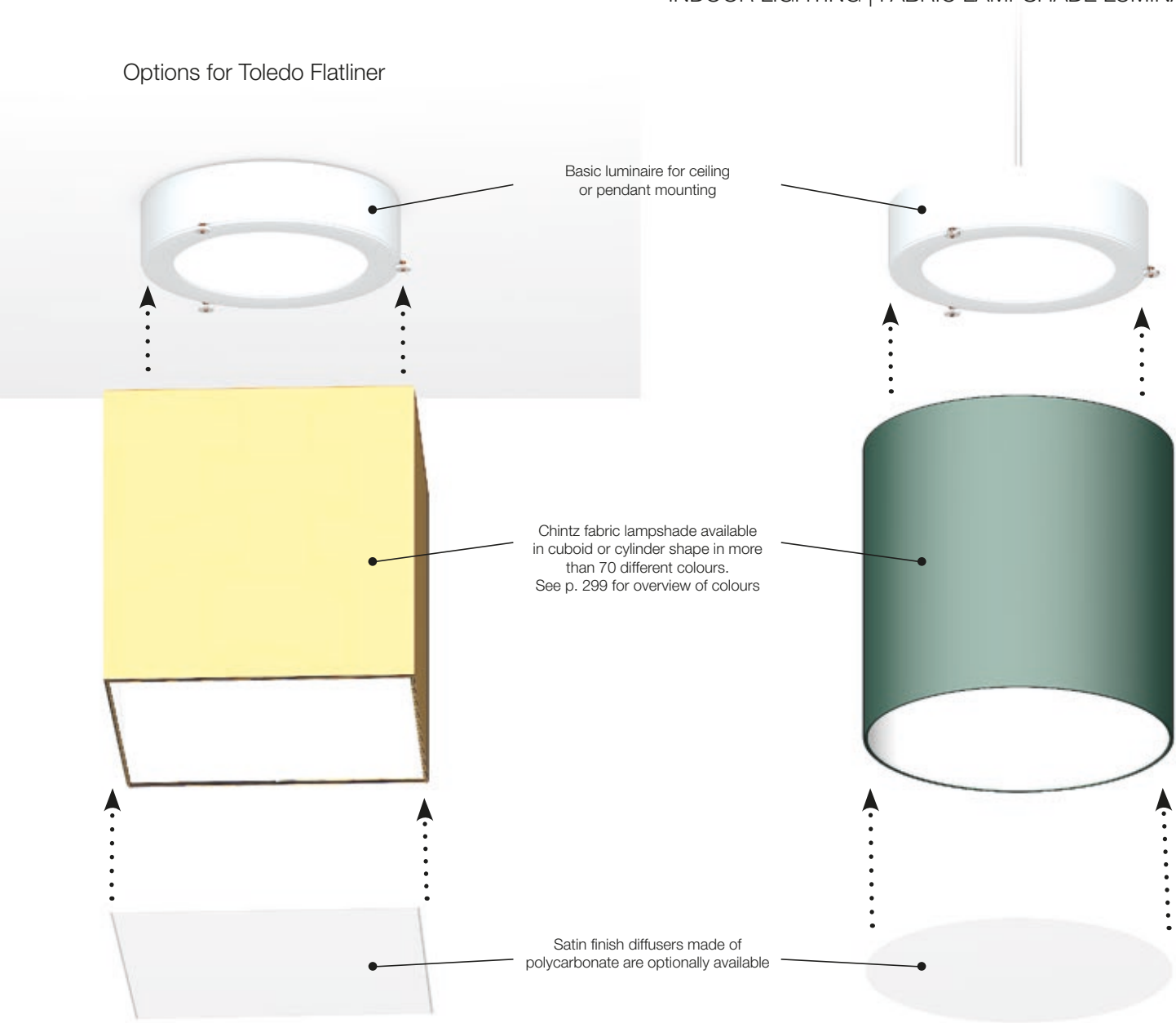
901634.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	12



901632.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	7	9
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
7	10	16



Options for Toledo Flatliner





Comparison LED vs. conventional lamps

LED 5 W ≈
1 x 10 W TC-D (16 W CB)



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 18 W TC-D (26 W CB)



Comparison LED vs. conventional lamps

LED 17,8 W ≈
2 x 18 W TC-D (52 W CB)



Fabric lampshade luminaires | Series: Toledo Flatliner

Type of Protection: IP 40

Protection Class: II

Basic luminaire: Cylinder housing: sheet steel, powder coated. Housing: die cast aluminium and sheet steel, powder coated. Bezel ring: die-cast aluminium, powder-coated. Light guide and plastic cover made of non-yellowing PMMA, opal matt. Lampshades can be mounted without tools. Ceiling mounting.

Standard colour covering surface Chintz fabric lampshade: 66.8003.01 white

Other colours (see illustration) available at the same price. Please include the colour code in your order.

Modular design: The lampshades need to be ordered separately for each luminaire. The use of the diffuser is optional.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Toledo Flatliner 200, ceiling mounting							
901628.002	D 160, H 65	LED	830	260 lm	5 W	on/off	A+ A+
901628.002.1	D 160, H 65	LED	840	300 lm	5 W	on/off	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Toledo Flatliner 200							
982299.002	D 200, H 300	Cylinder shape					
982309.002	L 200, B 200, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							Price Category 21
982304.002	D 198, H 5	Accessories for Toledo Flatliner 200 cylinder shape					
982314.002	L 198, B 198, H 5	Accessories for Toledo Flatliner 200 cuboid shape					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Toledo Flatliner 242, ceiling mounting							
901630.002	D 202, H 65	LED	830	530 lm	9 W	on/off	A+ A+
901630.002.76	D 202, H 65	LED	830	530 lm	9 W	DALI	A+ A+
901630.002.1	D 202, H 65	LED	840	650 lm	9 W	on/off	A+ A+
901630.002.1.76	D 202, H 65	LED	840	650 lm	9 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Toledo Flatliner 242							
982300.002	D 242, H 300	Cylinder shape					
982310.002	L 242, B 242, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							Price Category 21
982305.002	D 240, H 5	Accessories for Toledo Flatliner 242 cylinder shape					
982315.002	L 240, B 240, H 5	Accessories for Toledo Flatliner 242 cuboid shape					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							Price Category 21
Toledo Flatliner 307, ceiling mounting							
901632.002	D 268, H 70	LED	830	1250 lm	17,8 W	on/off	A+ A+
901632.002.76	D 268, H 70	LED	830	1250 lm	17,8 W	DALI	A+ A+
901632.002.1	D 268, H 70	LED	840	1400 lm	17,8 W	on/off	A+ A+
901632.002.1.76	D 268, H 70	LED	840	1400 lm	17,8 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

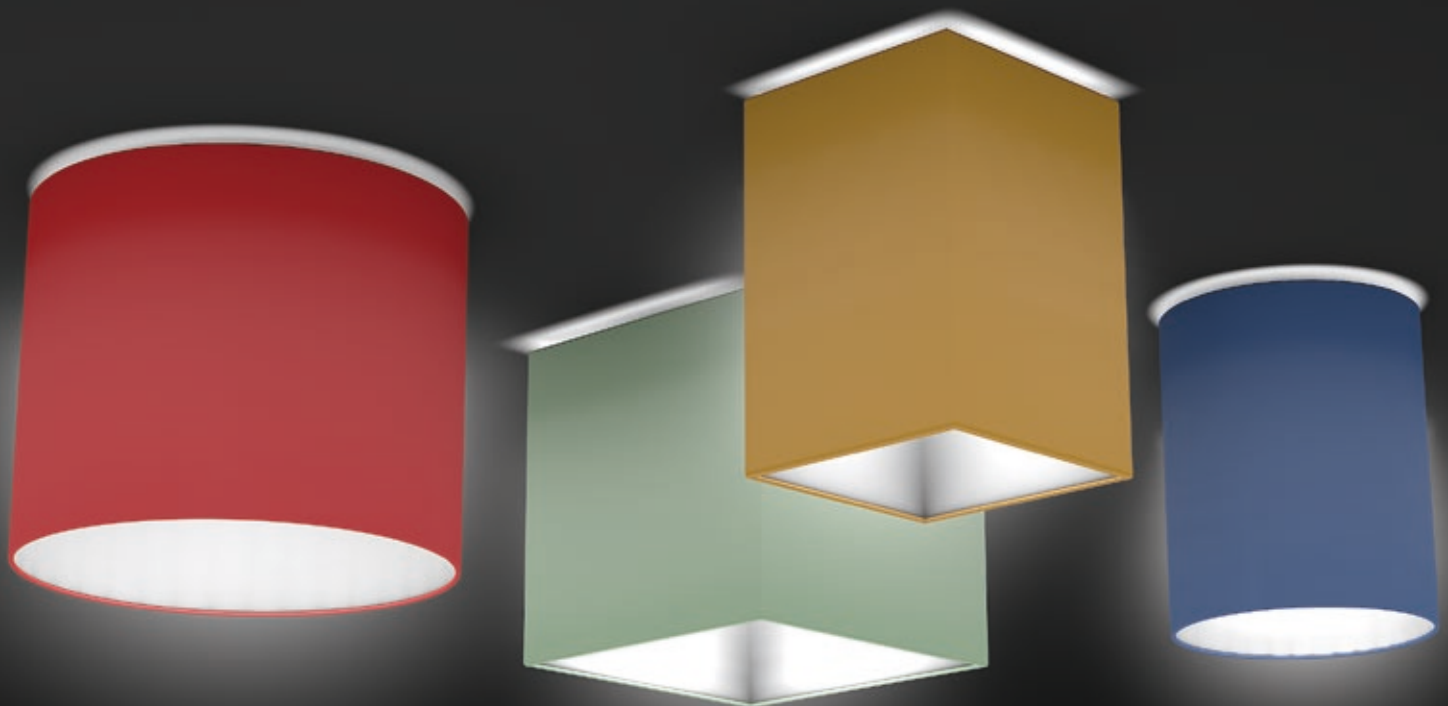
Chintz lampshades							Price Category 21
Toledo Flatliner 307							
982301.002	D 307, H 300	Cylinder shape					
982311.002	L 307, B 307, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							Price Category 21
982306.002	D 305, H 5	Accessories for Toledo Flatliner 307 cylinder shape					
982316.002	L 305, B 305, H 5	Accessories for Toledo Flatliner 307 cuboid shape					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	
Basic luminaire for lampshade attachment							Price Category 21	
Toledo Flatliner 369, ceiling mounting								
901634.002	D 330, H 70	LED	830	1750 lm	23 W	on/off	A+ A+	
901634.002.76	D 330, H 70	LED	830	1750 lm	23 W	DALI	A+ A+	
901634.002.1	D 330, H 70	LED	840	1950 lm	23 W	on/off	A+ A+	
901634.002.1.76	D 330, H 70	LED	840	1950 lm	23 W	DALI	A+ A+	
Indication of luminaire flux when using the white fabric lampshade.								
Chintz lampshades							Price Category 21	
Toledo Flatliner 369								
982302.002	D 369, H 300	Cylinder shape						
982312.002	L 369, B 369, H 300	Cuboid shape						
Satin finish polycarbonate diffuser (optional)							Price Category 21	
982307.002	D 367, H 5	Accessories for Toledo Flatliner 369 cylinder shape						
982317.002	L 367, B 367, H 5	Accessories for Toledo Flatliner 369 cuboid shape						
Fabric lampshades chintz								Price Category 21
Colour chart								
W06630	Chintz lampshades are available in more than 70 different colours							

**Comparison
LED vs. conventional lamps**

LED 23 W ≈
2 x 26 W TC-D (68 W CB)





Comparison LED vs. conventional lamps

LED 5 W ≈
1 x 10 W TC-D (16 W CB)



Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 18 W TC-D (26 W CB)



Comparison LED vs. conventional lamps

LED 17,8 W ≈
2 x 18 W TC-D (52 W CB)



Fabric lampshade luminaires | Series: Toledo Flatliner

Type of Protection: IP 20

Protection Class: I

Suspension Length: 2000 mm

Basic luminaire: Cylinder housing: sheet steel, powder coated. Housing: die cast aluminium and sheet steel, powder coated. Bezel ring: die-cast aluminium, powder-coated. Light guide and plastic cover made of non-yellowing PMMA, opal matt. Lampshades can be mounted without tools. Transparent suspension cable 2 m, can be shortened. Canopy: sheet steel, powder coated.

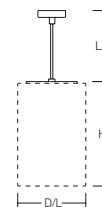
Standard colour covering surface Chintz fabric lampshade: 66.8003.01 white

Other colours (see illustration) available at the same price. Please include the colour code in your order.

Modular design: The lampshades need to be ordered separately for each luminaire. The use of the diffuser is optional.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Toledo Flatliner 200, pendant length LP 2000 mm							
901629.002	D 162, H 90	LED	830	260 lm	5 W	on/off	A+ A+
901629.002.1	D 162, H 90	LED	840	300 lm	5 W	on/off	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Toledo Flatliner 200							
982299.002	D 200, H 300	Cylinder shape					
982309.002	L 200, B 200, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							Price Category 21
982304.002	D 198, H 5	Accessories for Toledo Flatliner 200 cylinder shape					
982314.002	L 198, B 198, H 5	Accessories for Toledo Flatliner 200 cuboid shape					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Toledo Flatliner 242, pendant length LP 2000 mm							
901631.002	D 204, H 91	LED	830	530 lm	9 W	on/off	A+ A+
901631.002.76	D 204, H 91	LED	830	530 lm	9 W	DALI	A+ A+
901631.002.1	D 204, H 91	LED	840	650 lm	9 W	on/off	A+ A+
901631.002.1.76	D 204, H 91	LED	840	650 lm	9 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Toledo Flatliner 242							
982300.002	D 242, H 300	Cylinder shape					
982310.002	L 242, B 242, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							Price Category 21
982305.002	D 240, H 5	Accessories for Toledo Flatliner 242 cylinder shape					
982315.002	L 240, B 240, H 5	Accessories for Toledo Flatliner 242 cuboid shape					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Basic luminaire for lampshade attachment							Price Category 21
Toledo Flatliner 307, pendant length LP 2000 mm							
901633.002	D 270, H 96	LED	830	1250 lm	17,8 W	on/off	A+ A+
901633.002.76	D 270, H 96	LED	830	1250 lm	17,8 W	DALI	A+ A+
901633.002.1	D 270, H 96	LED	840	1400 lm	17,8 W	on/off	A+ A+
901633.002.1.76	D 270, H 96	LED	840	1400 lm	17,8 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							Price Category 21
Toledo Flatliner 307							
982301.002	D 307, H 300	Cylinder shape					
982311.002	L 307, B 307, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							Price Category 21
982306.002	D 305, H 5	Accessories for Toledo Flatliner 307 cylinder shape					
982316.002	L 305, B 305, H 5	Accessories for Toledo Flatliner 307 cuboid shape					

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Basic luminaire for lampshade attachment							
Toledo Flatliner 369, pendant length LP 2000 mm							
901635.002	D 331, H 96	LED	830	1750 lm	23 W	on/off	A+ A+
901635.002.1	D 331, H 96	LED	840	1950 lm	23 W	on/off	A+ A+
901635.002.76	D 331, H 98	LED	830	1750 lm	23 W	DALI	A+ A+
901635.002.1.76	D 331, H 98	LED	840	1950 lm	23 W	DALI	A+ A+

Indication of luminaire flux when using the white fabric lampshade.

Chintz lampshades							
Toledo Flatliner 369							
982302.002	D 369, H 300	Cylinder shape					
982312.002	L 369, B 369, H 300	Cuboid shape					

Satin finish polycarbonate diffuser (optional)							
982307.002	D 367, H 5	Accessories for Toledo Flatliner 369 cylinder shape					
982317.002	L 367, B 367, H 5	Accessories for Toledo Flatliner 369 cuboid shape					

Fabric lampshades chintz							
Colour chart							
W06630	Chintz lampshades are available in more than 70 different colours						

Comparison LED vs. conventional lamps

LED 23 W ≈
2 x 26 W TC-D (68 W CB)





TOLEDO FLAT

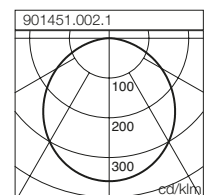
Recessed downlights

- Ultra thin recessed LED downlight
- Lightguide and diffuser made of non-yellowing PMMA
- Shallow recessed depth
- LED rated life 50,000 h (L70, B10)
- Colour rendering index Ra > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Colour temperature 3,000 K and 4,000 K
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Easy to install thanks to tool-free spring fastening system
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Can be directly covered with thermal insulation material (does not apply for D 495 mm diameter)
- Separate converter box with connecting cable
- Converter for standard (on/off) or DALI dimmable
- DALI converter is compatible with DC, suitable for central emergency power supply purposes
- Surface mounted housing as accessory for all sizes
- Retrofittable decorative cylinders made of chintz fabric as accessory, optional with satin finish polycarbonate diffuser
- Applications:
Corridors, side rooms, hotels, restaurants, conference rooms, private rooms

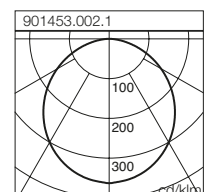


Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires
Indoor lighting | Surface mounted downlights
Emergency lighting

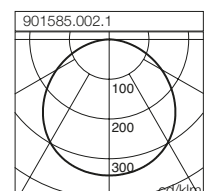
901451.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
16	24	32
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
23	35	58



901453.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	9	14



901585.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Recessed downlights | Series: Toledo Flat Round

Type of Protection: IP 40

Protection Class: II

Ceiling Thickness: 1-20 mm

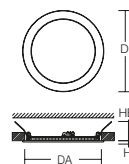
Impact Protection: IK06

Housing: die-cast aluminium. Lightguide and diffuser made of non-yellowing PMMA.
Ceiling installation with spring system. Mounting depth depends on ceiling strength.
Separate LED converter with connecting cable 250 mm.

LED and LED converter included.

Available colour: 2 = white

Versions with smart+free Bluetooth control for wireless network and operation using
Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EB	CB	EEC
Recessed downlights										Price Category 21
Diffuser: plastic, opal										
Ceiling cut out DA 128 mm										
901451.002	D 148, H 2, HE 27-53	LED	830	390 lm	5 W	110°	26,4 on/off	✓	✓	A+ A+
901451.002.76	D 148, H 2, HE 31-53	LED	830	390 lm	5 W	110°	26,4 DALI			A+ A+
901451.002.1.Q	D 148, H 2, HE 27-53	LED	840	410 lm	5 W	110°	26,4 on/off	✓	✓	A+ A+
901451.002.1.76	D 148, H 2, HE 31-53	LED	840	410 lm	5 W	110°	26,4 DALI			A+ A+
Ceiling cut out DA 170 mm										
901452.002	D 190, H 3, HE 27-53	LED	830	740 lm	9 W	110°	26,2 on/off	✓	✓	A+ A+
901452.002.76.Q	D 190, H 3, HE 31-53	LED	830	740 lm	9 W	110°	26,2 DALI			A+ A+
901452.002.1.Q	D 190, H 3, HE 27-53	LED	840	840 lm	9 W	110°	26,6 on/off	✓	✓	A+ A+
901452.002.1.76.Q	D 190, H 3, HE 31-53	LED	840	840 lm	9 W	110°	26,6 DALI			A+ A+
Ceiling cut out DA 234 mm										
901453.002	D 255, H 3, HE 30-56	LED	830	1650 lm	17,8 W	110°	26,5 on/off	✓	✓	A+ A+
901453.002.76.Q	D 255, H 3, HE 31-56	LED	830	1650 lm	17,8 W	110°	26,5 DALI			A+ A+
901453.002.1.Q	D 255, H 3, HE 30-56	LED	840	1700 lm	17,8 W	110°	26,6 on/off	✓	✓	A+ A+
901453.002.1.76.Q	D 255, H 3, HE 31-56	LED	840	1700 lm	17,8 W	110°	26,6 DALI			A+ A+
Tunable White - 2700 K to 6500 K										
901666.002.730	D 255, H 3, HE 30-56	LED	827-865	1550 lm	19,2 W	110°	26,5 smart+free			A+ A+
Ceiling cut out DA 288 mm										
901484.002	D 317, H 3, HE 31-54	LED	830	2200 lm	23 W	108°	25,6 on/off	✓	✓	A+ A+
901484.002.76.Q	D 317, H 3, HE 31-54	LED	830	2200 lm	23 W	108°	25,6 DALI			A+ A+
901484.002.1.Q	D 317, H 3, HE 31-54	LED	840	2300 lm	23 W	108°	25,7 on/off	✓	✓	A+ A+
901484.002.1.76.Q	D 317, H 3, HE 31-54	LED	840	2300 lm	23 W	108°	25,7 DALI			A+ A+
Tunable White - 2700 K to 6500 K										
901667.002.730	D 317, H 3, HE 31-54	LED	827-865	2250 lm	25 W	108°	25,6 smart+free			A+ A+
Ceiling cut out DA 470 mm										
901585.002	D 495, H 6, HE 40-59	LED	830	3600 lm	35 W	113°	23,9 on/off			A+ A+
901585.002.76	D 495, H 6, HE 40-59	LED	830	3600 lm	35 W	113°	23,9 DALI			A+ A+
901585.002.1	D 495, H 6, HE 40-59	LED	840	3600 lm	35 W	113°	23,9 on/off			A+ A+
901585.002.1.76	D 495, H 6, HE 40-59	LED	840	3600 lm	35 W	113°	23,9 DALI			A+ A+
Tunable White - 2700 K to 6500 K										
901668.002.730	D 495, H 6, HE 55-75	LED	827-865	3050 lm	33 W	113°	23,9 smart+free			A+ A+

Comparison
LED vs. conventional lamps

LED 5 W ≈

1 x 10 W TC-D (16 W CB)

LED 9 W ≈

1 x 18 W TC-D (26 W CB)

LED 17,8 / 19,2 W ≈

1 x 32 W TC-D (36 W CB)

LED 23 / 25 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 / 35 W ≈

3 x 26 W TC-D (102 W CB)

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Accessories | Chintz decorative cylinder Toledo Flat

Standard colour covering surface: 66.8003.01 white

Other colours (see illustration on page 299) available at the same price. Please include the
colour code in your order.

Can be retrofitted without tools to the recessed downlight.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



with diffuser



without diffuser

Reference number	Dimensions	
Chintz lampshades		
982319.002	D 153, H 60	Chintz decorative cylinder for Toledo Flat Round D 148
982320.002	D 195, H 60	Chintz decorative cylinder for Toledo Flat Round D 190
982321.002	D 260, H 60	Chintz decorative cylinder for Toledo Flat Round D 255
982322.002	D 322, H 60	Chintz decorative cylinder for Toledo Flat Round D 317
982323.002	D 500, H 60	Chintz decorative cylinder for Toledo Flat Round D 495

Cannot be fitted with surface mount housing

Satin finish polycarbonate diffuser (optional)

Price Category 21

Can be installed on the decorative cylinder without any tools

982324.002	D 151, H 4	Accessories for chintz decorative cylinder D 153
982325.002	D 193, H 4	Accessories for chintz decorative cylinder D 195
982326.002	D 258, H 4	Accessories for chintz decorative cylinder D 260
982327.002	D 320, H 4	Accessories for chintz decorative cylinder D 322
982328.002	D 498, H 4	Accessories for chintz decorative cylinder D 500

Fabric lampshades chintz

Price Category 21

Colour chart

W06630 Chintz lampshades are available in more than 70 different colours









The application image shows:
Pascala®



PAR16

319

Levido

Levido Darklight

320-323

Arelo®

324-325

Energio Darklight

326-327

Heledon®

328-331

Pascala®

332-339

Ledona

340-345

Ledona ECO

346-347

Toledo Flat Square

348-351

Toledo Flat Round

348-351

Toledo

352-353

Quardo® LED 165

354-355



The application image shows:
PAR16
Pascala®



Recessed downlights | Series: PAR16

Type of Protection: **IP 23**

Protection Class: I

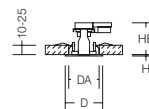
Ceiling Thickness: 10-25 mm

Impact Protection: IK02

Recessed ring and housing: metal, powder-coated.
Lampholder: GU10 with lamp changer. Housing: rigid.

Lamp not included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	UGR	dim-able	EEC
Recessed downlights					
Ceiling cut out DA 65 mm, HE 72 mm					
911004.002	D 81, H 3	1 x QPAR16 50 W	19,8	on/off	D A,A+





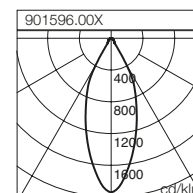
LEVIDO

Recessed downlights

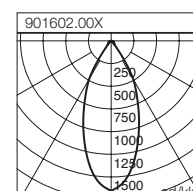
- Decorative LED downlight with daintily small dimensions
- Cover die-cast aluminium
- Alternative for low-voltage downlights 35 W and 50 W
- Protection type IP 44
- LED rated life 50,000 h (L70, B10)
- Three different light colours (2700 K, 3000 K, 4000 K)
- Colour rendering index Ra > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Plug connection between converter and luminaire

- Two different beam angles
- Very good glare limitation due to back-mounted LED
- Versions with dark light cover
- Safety glass cover to protect the LED
- Opal PMMA plastic cover included; can be fitted without tools
- Versions for DALI and phase cut dimming
- DALI converter is compatible with DC, suitable for central battery system

901596.002			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
6	8	11	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
8	12	20	



901602.002			
Floor 12 x 2,5 x 3m (0,2m)			
100 lx	150 lx	200 lx	
6	8	11	
Room 6 x 4 x 3 m (0,75 m)			
200 lx	300 lx	500 lx	
8	12	20	



Opal PMMA plastic cover included

Recessed downlights | Series: Levado Round

Type of Protection: **IP 44**

Protection Class: II

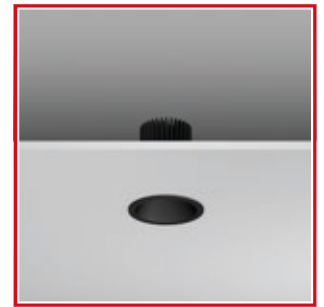
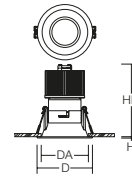
Ceiling Thickness: 1-20 mm

Impact Protection: IK06

Die-cast aluminium cover, powder-coated. Extruded aluminium heat sink. Reflector: aluminium, highly polished anodised finish. With safety glass. Ceiling installation with spring system. Separate LED converter with connecting cable 250 mm. Passive cooling. Opal PMMA plastic cover included as accessory.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimming	EEC
Recessed downlights									
Ceiling cutout DA 78 mm, HE 120 mm									
901593.002.2	D 91, H 2	LED	827	580 lm	8 W	24°	17,8	on/off	A+ A+
901593.003.2	D 91, H 2	LED	827	480 lm	8 W	24°	7,2	on/off	A+ A+
901594.002.2	D 91, H 2	LED	827	550 lm	8 W	40°	18,0	on/off	A+ A+
901594.003.2	D 91, H 2	LED	827	460 lm	8 W	40°	7,4	on/off	A+ A+
901593.002	D 91, H 2	LED	830	580 lm	8 W	24°	17,8	on/off	A+ A+
901593.003	D 91, H 2	LED	830	480 lm	8 W	24°	7,2	on/off	A+ A+
901594.002	D 91, H 2	LED	830	550 lm	8 W	40°	18,0	on/off	A+ A+
901594.003	D 91, H 2	LED	830	460 lm	8 W	40°	7,4	on/off	A+ A+
901593.002.1	D 91, H 2	LED	840	610 lm	8 W	24°	18,0	on/off	A+ A+
901593.003.1	D 91, H 2	LED	840	510 lm	8 W	24°	7,4	on/off	A+ A+
901594.002.1	D 91, H 2	LED	840	570 lm	8 W	40°	18,1	on/off	A+ A+
901594.003.1	D 91, H 2	LED	840	480 lm	8 W	40°	7,5	on/off	A+ A+
901595.002.2	D 91, H 2	LED	827	900 lm	13 W	24°	19,5	on/off	A+ A+
901595.002.2.76 *	D 91, H 2	LED	827	900 lm	13 W	24°	19,5	DALI	A+ A+
901595.003.2	D 91, H 2	LED	827	760 lm	13 W	24°	8,5	on/off	A+ A+
901595.003.2.76 *	D 91, H 2	LED	827	760 lm	13 W	24°	8,5	DALI	A+ A+
901596.002.2	D 91, H 2	LED	827	880 lm	13 W	40°	19,5	on/off	A+ A+
901596.002.2.76 *	D 91, H 2	LED	827	880 lm	13 W	40°	19,5	DALI	A+ A+
901596.003.2	D 91, H 2	LED	827	740 lm	13 W	40°	9,3	on/off	A+ A+
901596.003.2.76 *	D 91, H 2	LED	827	740 lm	13 W	40°	9,3	DALI	A+ A+
901595.002	D 91, H 2	LED	830	900 lm	13 W	24°	19,5	on/off	A+ A+
901595.002.76 *	D 91, H 2	LED	830	900 lm	13 W	24°	19,5	DALI	A+ A+
901595.003	D 91, H 2	LED	830	760 lm	13 W	24°	8,5	on/off	A+ A+
901595.003.76 *	D 91, H 2	LED	830	760 lm	13 W	24°	8,5	DALI	A+ A+
901596.002..Q	D 91, H 2	LED	830	880 lm	13 W	40°	19,5	on/off	A+ A+
901596.002.76 *	D 91, H 2	LED	830	880 lm	13 W	40°	19,5	DALI	A+ A+
901596.003	D 91, H 2	LED	830	740 lm	13 W	40°	9,3	on/off	A+ A+
901596.003.76 *	D 91, H 2	LED	830	740 lm	13 W	40°	9,3	DALI	A+ A+
901595.002.1	D 91, H 2	LED	840	950 lm	13 W	24°	19,7	on/off	A+ A+
901595.002.1.76 *	D 91, H 2	LED	840	950 lm	13 W	24°	19,7	DALI	A+ A+
901595.003.1	D 91, H 2	LED	840	810 lm	13 W	24°	8,7	on/off	A+ A+
901595.003.1.76 *	D 91, H 2	LED	840	810 lm	13 W	24°	8,7	DALI	A+ A+
901596.002.1	D 91, H 2	LED	840	940 lm	13 W	40°	19,7	on/off	A+ A+
901596.002.1.76 *	D 91, H 2	LED	840	940 lm	13 W	40°	19,7	DALI	A+ A+
901596.003.1	D 91, H 2	LED	840	790 lm	13 W	40°	9,5	on/off	A+ A+
901596.003.1.76 *	D 91, H 2	LED	840	790 lm	13 W	40°	9,5	DALI	A+ A+
901597.002.2 **	D 91, H 2	LED	827	1000 lm	16 W	24°	19,8	Phase-cut	A+ A+
901597.003.2 **	D 91, H 2	LED	827	850 lm	16 W	24°	8,9	Phase-cut	A+ A+
901598.002.2 **	D 91, H 2	LED	827	970 lm	16 W	40°	19,8	Phase-cut	A+ A+
901598.003.2 **	D 91, H 2	LED	827	820 lm	16 W	40°	9,6	Phase-cut	A+ A+
901597.002 **	D 91, H 2	LED	830	1000 lm	16 W	24°	19,8	Phase-cut	A+ A+
901597.003 **	D 91, H 2	LED	830	850 lm	16 W	24°	8,9	Phase-cut	A+ A+
901598.002 **	D 91, H 2	LED	830	970 lm	16 W	40°	19,8	Phase-cut	A+ A+
901598.003 **	D 91, H 2	LED	830	820 lm	16 W	40°	9,6	Phase-cut	A+ A+
901597.002.1 **	D 91, H 2	LED	840	1150 lm	16 W	24°	20,0	Phase-cut	A+ A+
901597.003.1 **	D 91, H 2	LED	840	940 lm	16 W	24°	9,1	Phase-cut	A+ A+
901598.002.1 **	D 91, H 2	LED	840	1050 lm	16 W	40°	20,0	Phase-cut	A+ A+
901598.003.1 **	D 91, H 2	LED	840	870 lm	16 W	40°	9,8	Phase-cut	A+ A+

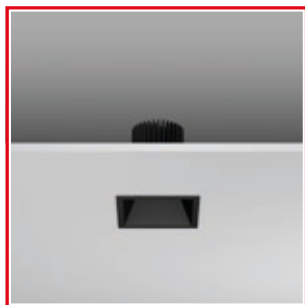
* DALI converter is compatible with DC for central battery system | ** Suitable for phase cut dimming

Comparison
LED vs. conventional lamps

LED 8 W ≈
1 x 35 W QR-CB (39 W CB)

LED 13 / 16 W ≈
1 x 50 W QR51 (55 W CB)





Recessed downlights | Series: Levido Square

Type of Protection: **IP 44**

Protection Class: II

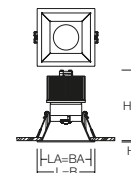
Ceiling Thickness: 1-20 mm

Impact Protection: IK06

Die-cast aluminium cover, powder-coated. Extruded aluminium heat sink. Reflector: aluminium, highly polished anodised finish. With safety glass. Ceiling installation with spring system. Separate LED converter with connecting cable 250 mm. Passive cooling. Opal PMMA plastic cover included as accessory.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black



Comparison LED vs. conventional lamps

LED 8 W ≈

1 x 35 W QR-CB (39 W CB)

LED 13 / 16 W ≈

1 x 50 W QR51 (55 W CB)



Recessed downlights

Ceiling cut out LA 86 x BA 86 mm, HE 120 mm

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
901599.002.2	L 98, B 98, H 2	LED	827	590 lm	8 W	24°	14,9 on/off	A+ A+
901599.003.2	L 98, B 98, H 2	LED	827	520 lm	8 W	24°	11,8 on/off	A+ A+
901600.002.2	L 98, B 98, H 2	LED	827	570 lm	8 W	40°	15,2 on/off	A+ A+
901600.003.2	L 98, B 98, H 2	LED	827	500 lm	8 W	40°	11,6 on/off	A+ A+
901599.002	L 98, B 98, H 2	LED	830	590 lm	8 W	24°	14,9 on/off	A+ A+
901599.003	L 98, B 98, H 2	LED	830	520 lm	8 W	24°	11,8 on/off	A+ A+
901600.002	L 98, B 98, H 2	LED	830	570 lm	8 W	40°	15,2 on/off	A+ A+
901600.003	L 98, B 98, H 2	LED	830	500 lm	8 W	40°	11,6 on/off	A+ A+
901599.002.1	L 98, B 98, H 2	LED	840	620 lm	8 W	24°	15,1 on/off	A+ A+
901599.003.1	L 98, B 98, H 2	LED	840	540 lm	8 W	24°	11,9 on/off	A+ A+
901600.002.1	L 98, B 98, H 2	LED	840	590 lm	8 W	40°	15,3 on/off	A+ A+
901600.003.1	L 98, B 98, H 2	LED	840	510 lm	8 W	40°	11,8 on/off	A+ A+
901601.002.2	L 98, B 98, H 2	LED	827	920 lm	13 W	24°	16,5 on/off	A+ A+
901601.002.2.76 *	L 98, B 98, H 2	LED	827	920 lm	13 W	24°	16,5 DALI	A+ A+
901601.003.2	L 98, B 98, H 2	LED	827	820 lm	13 W	24°	13,4 on/off	A+ A+
901601.003.2.76 *	L 98, B 98, H 2	LED	827	820 lm	13 W	24°	13,4 DALI	A+ A+
901602.002.2	L 98, B 98, H 2	LED	827	900 lm	13 W	40°	16,8 on/off	A+ A+
901602.002.2.76 *	L 98, B 98, H 2	LED	827	900 lm	13 W	40°	16,8 DALI	A+ A+
901602.003.2	L 98, B 98, H 2	LED	827	790 lm	13 W	40°	13,3 on/off	A+ A+
901602.003.2.76 *	L 98, B 98, H 2	LED	827	790 lm	13 W	40°	13,3 DALI	A+ A+
901601.002	L 98, B 98, H 2	LED	830	920 lm	13 W	24°	16,5 on/off	A+ A+
901601.002.76 *	L 98, B 98, H 2	LED	830	920 lm	13 W	24°	16,5 DALI	A+ A+
901601.003	L 98, B 98, H 2	LED	830	820 lm	13 W	24°	13,4 on/off	A+ A+
901601.003.76 *	L 98, B 98, H 2	LED	830	820 lm	13 W	24°	13,4 DALI	A+ A+
901602.002	L 98, B 98, H 2	LED	830	900 lm	13 W	40°	16,8 on/off	A+ A+
901602.002.76 *	L 98, B 98, H 2	LED	830	900 lm	13 W	40°	16,8 DALI	A+ A+
901602.003	L 98, B 98, H 2	LED	830	790 lm	13 W	40°	13,3 on/off	A+ A+
901602.003.76 *	L 98, B 98, H 2	LED	830	790 lm	13 W	40°	13,3 DALI	A+ A+
901601.002.1	L 98, B 98, H 2	LED	840	980 lm	13 W	24°	16,7 on/off	A+ A+
901601.002.1.76 *	L 98, B 98, H 2	LED	840	980 lm	13 W	24°	16,7 DALI	A+ A+
901601.003.1	L 98, B 98, H 2	LED	840	870 lm	13 W	24°	13,6 on/off	A+ A+
901601.003.1.76 *	L 98, B 98, H 2	LED	840	870 lm	13 W	24°	13,6 DALI	A+ A+
901602.002.1	L 98, B 98, H 2	LED	840	960 lm	13 W	40°	17,0 on/off	A+ A+
901602.002.1.76 *	L 98, B 98, H 2	LED	840	960 lm	13 W	40°	17,0 DALI	A+ A+
901602.003.1	L 98, B 98, H 2	LED	840	840 lm	13 W	40°	13,5 on/off	A+ A+
901602.003.1.76 *	L 98, B 98, H 2	LED	840	840 lm	13 W	40°	13,5 DALI	A+ A+
901603.002.2 **	L 98, B 98, H 2	LED	827	1050 lm	16 W	24°	16,8 Phase-cut	A+ A+
901603.003.2 **	L 98, B 98, H 2	LED	827	900 lm	16 W	24°	13,7 Phase-cut	A+ A+
901604.002.2 **	L 98, B 98, H 2	LED	827	990 lm	16 W	40°	17,1 Phase-cut	A+ A+
901604.003.2 **	L 98, B 98, H 2	LED	827	870 lm	16 W	40°	13,6 Phase-cut	A+ A+
901603.002 **	L 98, B 98, H 2	LED	830	1050 lm	16 W	24°	16,8 Phase-cut	A+ A+
901603.003 **	L 98, B 98, H 2	LED	830	900 lm	16 W	24°	13,7 Phase-cut	A+ A+
901604.002 **	L 98, B 98, H 2	LED	830	990 lm	16 W	40°	17,1 Phase-cut	A+ A+
901604.003 **	L 98, B 98, H 2	LED	830	870 lm	16 W	40°	13,6 Phase-cut	A+ A+
901603.002.1 **	L 98, B 98, H 2	LED	840	1150 lm	16 W	24°	17,0 Phase-cut	A+ A+
901603.003.1 **	L 98, B 98, H 2	LED	840	950 lm	16 W	24°	13,9 Phase-cut	A+ A+
901604.002.1 **	L 98, B 98, H 2	LED	840	1100 lm	16 W	40°	17,4 Phase-cut	A+ A+
901604.003.1 **	L 98, B 98, H 2	LED	840	930 lm	16 W	40°	13,8 Phase-cut	A+ A+

* DALI converter is compatible with DC for central battery system | ** Suitable for phase cut dimming

Recessed downlights | Series: Levido Round Darklight

Type of Protection: **IP 44**

Protection Class: II

Ceiling Thickness: 1-20 mm

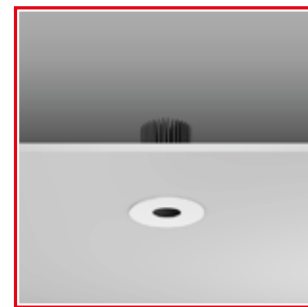
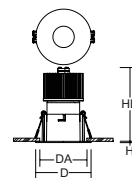
Impact Protection: IK06

Die-cast aluminium cover, powder-coated. Extruded aluminium heat sink. Reflector: aluminium, highly polished anodised finish. With safety glass. Internal sleeve black plastic.

Ceiling installation with spring system. Separate LED converter with connecting cable 250 mm. Passive cooling. Opal PMMA plastic cover included as accessory.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimming	EEC
Recessed downlights								
Ceiling cutout DA 78 mm, HE 120 mm								
901642.00X.2	D 91, H 2	LED	827	200 lm	8 W	27°	10,4 on/off	A+ A+
901642.00X	D 91, H 2	LED	830	200 lm	8 W	27°	10,4 on/off	A+ A+
901642.00X.1	D 91, H 2	LED	830	200 lm	8 W	27°	8,8 on/off	A+ A+
901643.00X.2	D 91, H 2	LED	827	310 lm	13 W	27°	12,0 on/off	A+ A+
901643.00X.2.76 *	D 91, H 2	LED	827	310 lm	13 W	27°	12,0 DALI	A+ A+
901643.00X	D 91, H 2	LED	830	310 lm	13 W	27°	12,0 on/off	A+ A+
901643.00X.76 *	D 91, H 2	LED	830	310 lm	13 W	27°	12,0 DALI	A+ A+
901643.00X.1	D 91, H 2	LED	840	320 lm	13 W	27°	12,1 on/off	A+ A+
901643.00X.1.76 *	D 91, H 2	LED	840	320 lm	13 W	27°	12,1 DALI	A+ A+
901644.00X.2 **	D 91, H 2	LED	827	350 lm	16 W	27°	12,3 Phase-cut	A+ A+
901644.00X **	D 91, H 2	LED	830	350 lm	16 W	27°	12,3 Phase-cut	A+ A+
901644.00X.1 **	D 91, H 2	LED	840	360 lm	16 W	27°	12,4 Phase-cut	A+ A+

* DALI converter is compatible with DC for central battery system | ** Suitable for phase cut dimming

Comparison LED vs. conventional lamps

LED 8 W ≈

1 x 35 W QR-CB (39 W CB)

LED 13 / 16 W ≈

1 x 50 W QR51 (55 W CB)

Recessed downlights | Series: Levido Square Darklight

Type of Protection: **IP 44**

Protection Class: II

Ceiling Thickness: 1-20 mm

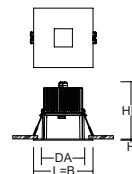
Impact Protection: IK06

Die-cast aluminium cover, powder-coated. Extruded aluminium heat sink. Reflector: aluminium, highly polished anodised finish. With safety glass. Internal sleeve black plastic.

Ceiling installation with spring system. Separate LED converter with connecting cable 250 mm. Passive cooling. Opal PMMA plastic cover included as accessory.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimming	EEC
Recessed downlights								
Ceiling cutout DA mm, HE 120 mm								
901646.00X.2	L 98, B 98, H 2	LED	827	300 lm	13 W	26°	12,2 on/off	A+ A+
Ceiling cutout DA 78 mm, HE 120 mm								
901645.00X.2	L 98, B 98, H 2	LED	827	190 lm	8 W	26°	10,6 on/off	A+ A+
901645.00X	L 98, B 98, H 2	LED	830	190 lm	8 W	26°	10,6 on/off	A+ A+
901645.00X.1	L 98, B 98, H 2	LED	840	190 lm	8 W	26°	10,7 on/off	A+ A+
901646.00X.2	L 98, B 98, H 2	LED	827	300 lm	13 W	26°	10,6 on/off	A+ A+
901646.00X.2.76 *	L 98, B 98, H 2	LED	827	300 lm	13 W	26°	12,2 DALI	A+ A+
901646.00X	L 98, B 98, H 2	LED	830	300 lm	13 W	26°	12,2 on/off	A+ A+
901646.00X.76 *	L 98, B 98, H 2	LED	830	300 lm	13 W	26°	12,2 DALI	A+ A+
901646.00X.1	L 98, B 98, H 2	LED	840	300 lm	13 W	26°	12,3 on/off	A+ A+
901646.00X.1.76 *	L 98, B 98, H 2	LED	840	300 lm	13 W	26°	12,3 DALI	A+ A+
901647.00X.2 **	L 98, B 98, H 2	LED	827	330 lm	16 W	26°	12,5 Phase-cut	A+ A+
901647.00X **	L 98, B 98, H 2	LED	830	330 lm	16 W	26°	12,5 Phase-cut	A+ A+
901647.00X.1 **	L 98, B 98, H 2	LED	840	340 lm	16 W	26°	12,7 Phase-cut	A+ A+

* DALI converter is compatible with DC for central battery system | ** Suitable for phase cut dimming

Comparison LED vs. conventional lamps

LED 8 W ≈

1 x 35 W QR-CB (39 W CB)

LED 13 / 16 W ≈

1 x 50 W QR51 (55 W CB)



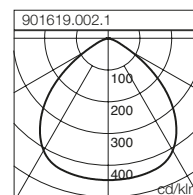
DALI

ARELO®

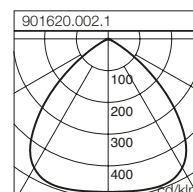
Recessed downlights

- High efficiency recessed LED downlight with faceted reflector in three sizes
- Housing made of shockproof, UV-resistant polycarbonate
- Aluminium faceted reflector, highly polished anodised finish for brilliant illumination
- Satin finish LED diffuser to reduce direct glare
- Highly homogeneous light distribution through the combination of the reflector and the satin finish LED diffuser
- Protection type IP 44
- Luminous efficiency up to 116 lm/W
- LED rated life 50,000 h (L70, B50)
- Colour temperature 2700 K or 4000 K
- CRI > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Suitable for through-wiring
- Easy to install thanks to tool-free spring fastening system

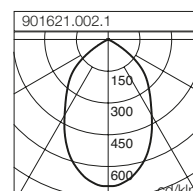
901619.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
7	11	14
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
10	15	25



901620.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	10



901621.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Recessed downlights | Series: Arelo®

Type of Protection: **IP 44**

Protection Class: II

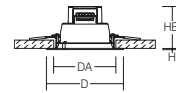
Ceiling Thickness: 1-25 mm

Impact Protection: IK05

Bezel ring: die-cast aluminium, powder-coated. Housing: plastic (UV resistant polycarbonate). Aluminium faceted reflector, highly polished anodised finish. LED diffuser, satin finish (UV-resistant polycarbonate), shockproof. Spring fastening system. Passive cooling. Suitable for through-wiring. On/off version with integrated converter. DALI version with separate converter.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dim-able	EEC
Recessed downlights									
Price Category 21									
105									
Ceiling cut out DA 105 mm, HE 100 mm									
901619.002	D 130, H 2	LED	827	740 lm	8 W	99°	25,0	on/off	A+ A+
901619.002.1	D 130, H 2	LED	840	840 lm	8 W	99°	25,3	on/off	A+ A+
Ceiling cut out DA 105 mm, HE 140 mm									
901619.002.76	D 130, H 2	LED	827	740 lm	9 W	99°	25,0	DALI	A+ A+
901619.002.1.76	D 130, H 2	LED	840	840 lm	9 W	99°	25,3	DALI	A+ A+
150									
Ceiling cut out DA 150 mm, HE 140 mm									
901620.002	D 172, H 2	LED	827	1750 lm	17 W	94°	23,5	on/off	A+ A+
901620.002.1 .Q	D 172, H 2	LED	840	1950 lm	17 W	94°	23,9	on/off	A+ A+
901620.002.76	D 172, H 2	LED	827	1750 lm	18 W	94°	23,5	DALI	A+ A+
901620.002.1.76	D 172, H 2	LED	840	1950 lm	18 W	94°	23,9	DALI	A+ A+
200									
Ceiling cut out DA 200 mm, HE 140 mm									
901621.002	D 225, H 4	LED	827	2650 lm	26 W	71°	22,5	on/off	A+ A+
901621.002.1	D 225, H 4	LED	840	3000 lm	26 W	71°	22,9	on/off	A+ A+
901621.002.76	D 225, H 4	LED	827	2650 lm	27 W	71°	22,5	DALI	A+ A+
901621.002.1.76	D 225, H 4	LED	840	3000 lm	27 W	71°	22,9	DALI	A+ A+

Comparison LED vs. conventional lamps

LED 8 / 9 W ≈

1 x 18 W TC-D (26 W CB)

LED 17 / 18 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 / 27 W ≈

2 x 32 W TC-TEL (69 W EB)





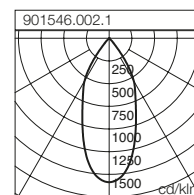
DALI

ENERGO® DARKLIGHT

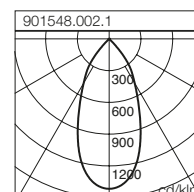
Recessed downlights

- High quality recessed downlight
- Die cast aluminium ring with trumpet reflector
- Trumpet reflector creates a darklight effect, i.e. when switched on, the luminaire appears dark (when seen from the side), no longer any need for (turbo) louvre to create this effect
- Harmonised lighting
- Excellent glare suppression
- Luminous efficiency up to 116 lm/W
- Uses up to 65% less energy than conventional fluorescent downlights
- Three sizes
- Passive cooling system
- Four different LED lumen packages
- Colour temperature 3000 K or 4000 K
- Ra 85 as standard, optionally Ra 95 also possible
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- The converter is compatible with DC, making it ideal for central battery systems
- Easy to install thanks to tool-free spring fastening system

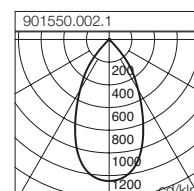
901546.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7



901548.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



901550.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



Recessed downlights | Series: Energo® Darklight

Type of Protection: IP 20

Protection Class: I, II

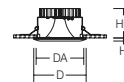
Ceiling Thickness: 3-18 mm, 1-18 mm, 1-20 mm

Impact Protection: IK03

Recessed and bezel ring: die-cast aluminium. Bezel ring with bayonet fixing. Recessed mounting frame: sheet steel, powder-coated. Heat sink made of black anodised extruded aluminium. Trumpet reflector: high purity aluminium, matt. Ceiling installation with spring system. LED converter in separate box. With connecting cable (L 400 mm). Passive cooling. Suitable for through-wiring. Converter connected for standard (on/off) or DALI dimmable. Compatible with DC, ideal for central battery systems.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dim-able	EEC
Recessed downlights									
Price Category 21									
140	Ceiling cut out DA 140 mm, HE 154 mm, Ceiling thickness: 3-18 mm								
901545.002	D 156, H 9	LED	830	1200 lm	10 W	39°	15,8	on/off	A+ A+
901545.002.76	D 156, H 9	LED	830	1200 lm	10 W	39°	15,8	DALI	A+ A+
901545.002.1	D 156, H 9	LED	840	1200 lm	10 W	39°	15,8	on/off	A+ A+
901545.002.1.76	D 156, H 9	LED	840	1200 lm	10 W	39°	15,8	DALI	A+ A+
901546.002	D 156, H 9	LED	830	2100 lm	17,3 W	43°	18,3	on/off	A++ A++
901546.002.76	D 156, H 9	LED	830	2100 lm	17,3 W	43°	18,3	DALI	A++ A++
901546.002.1	D 156, H 9	LED	840	2200 lm	17,3 W	43°	18,4	on/off	A++ A++
901546.002.1.76	D 156, H 9	LED	840	2200 lm	17,3 W	43°	18,4	DALI	A++ A++
175	Ceiling cut out DA 175 mm, HE 160 mm, Ceiling thickness: 1-18 mm								
901547.002	D 195, H 9	LED	830	2200 lm	17,3 W	48°	17,1	on/off	A++ A++
901547.002.76	D 195, H 9	LED	830	2200 lm	17,3 W	48°	17,1	DALI	A++ A++
901547.002.1	D 195, H 9	LED	840	2300 lm	17,3 W	47°	17,1	on/off	A++ A++
901547.002.1.76	D 195, H 9	LED	840	2300 lm	17,3 W	47°	17,1	DALI	A++ A++
901548.002	D 195, H 9	LED	830	3100 lm	26 W	48°	18,3	on/off	A++ A++
901548.002.76	D 195, H 9	LED	830	3100 lm	26 W	48°	18,3	DALI	A++ A++
901548.002.1	D 195, H 9	LED	840	3250 lm	26 W	47°	18,3	on/off	A++ A++
901548.002.1.76	D 195, H 9	LED	840	3250 lm	26 W	47°	18,3	DALI	A++ A++
210	Ceiling cut out DA 210 mm, HE 175 mm, Ceiling thickness: 1-20 mm								
901549.002	D 230, H 9	LED	830	3150 lm	26 W	54°	17,0	on/off	A++ A++
901549.002.76	D 230, H 9	LED	830	3150 lm	26 W	54°	17,0	DALI	A++ A++
901549.002.1	D 230, H 9	LED	840	3200 lm	26 W	53°	16,8	on/off	A++ A++
901549.002.1.76	D 230, H 9	LED	840	3200 lm	26 W	53°	16,8	DALI	A++ A++
901550.002	D 230, H 9	LED	830	3850 lm	33 W	54°	17,7	on/off	A++ A++
901550.002.76	D 230, H 9	LED	830	3850 lm	33 W	54°	17,7	DALI	A++ A++
901550.002.1	D 230, H 9	LED	840	3950 lm	33 W	53°	17,6	on/off	A++ A++
901550.002.1.76	D 230, H 9	LED	840	3950 lm	33 W	53°	17,6	DALI	A++ A++

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

1 x 26 W TC-D (34 W CB)

LED 17,3 W ≈

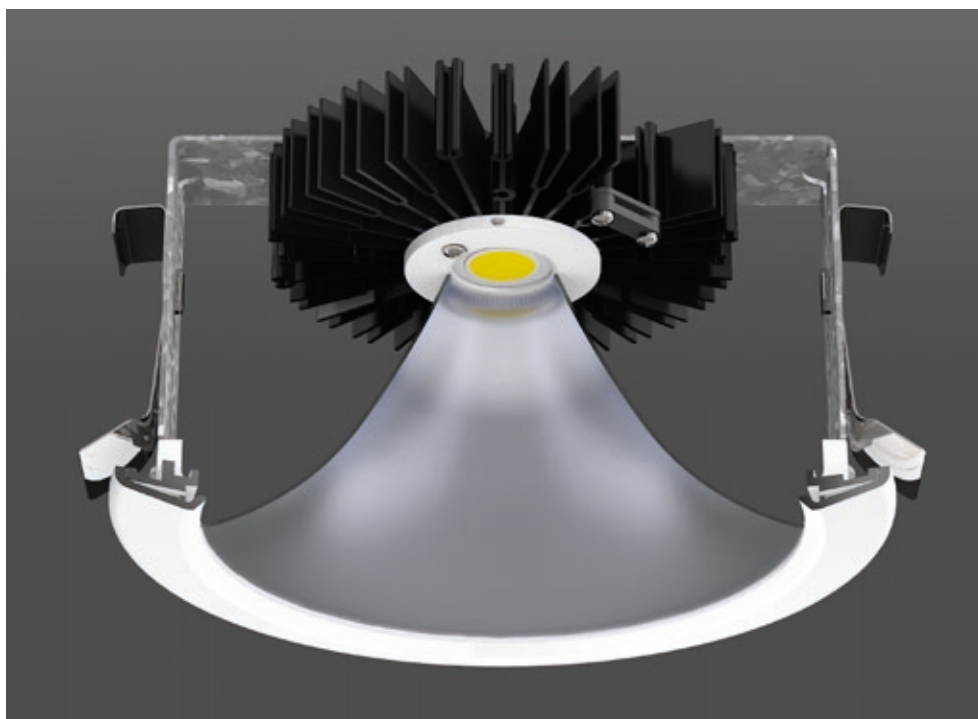
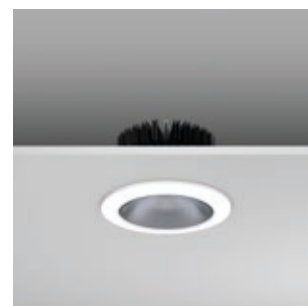
1 x 42 W TC-TEL (47 W EB)

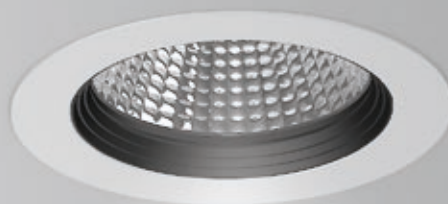
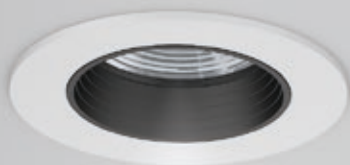
LED 26 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)


Trumpet reflector for darklight effect




HELEDON®

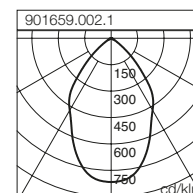
Recessed downlights

- High quality die-cast aluminium housing in two sizes
- Excellent light quality without flickering, uniformity of the light cone, glare control and light colour quality
- Equally suitable for reflector and lens technologies
- MIRO-SILVER® reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone
- Different lenses, also with very wide light distribution and corridor oval as standard
- Interchangeable lenses with different beam angles
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering and stroboscopic effect
- Separate converter box with connecting cable
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, diffusers clear and frosted, white interchangeable plastic ring

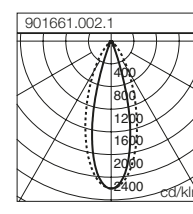
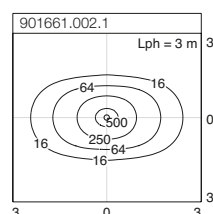
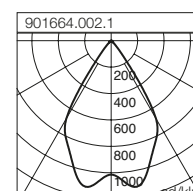


Further luminaires of this series, see:
Indoor lighting | Surface mounted downlights

901659.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901664.002.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



Recessed downlights | Series: Heledon® Mini

Type of Protection: IP 20

Protection Class: II

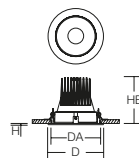
Ceiling Thickness: 1-20 mm

Housing: pressure die-cast aluminium, powder-coated. Heat resistant plastic ring black.

Installation without tools thanks to spring fastening system. With faceted aluminium reflector optical assembly or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimmi-able	EEC
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Recessed downlights

Price Category 21



Ceiling cut out DA 114 mm, HE 120 mm

Including lens for best uniformity of the light cone

901656.002	D 124, H 3	LED	830	2050 lm	20 W	71°	24,8	on/off	A++ A++
901656.002.76	D 124, H 3	LED	830	2050 lm	20 W	71°	24,8	DALI	A++ A++
901656.002.1	D 124, H 3	LED	840	2100 lm	20 W	71°	24,9	on/off	A++ A++
901656.002.1.76	D 124, H 3	LED	840	2100 lm	20 W	71°	24,9	DALI	A++ A++
901659.002	D 124, H 3	LED	830	2850 lm	30 W	71°	25,9	on/off	A++ A++
901659.002.76	D 124, H 3	LED	830	2850 lm	30 W	71°	25,9	DALI	A++ A++
901659.002.1	D 124, H 3	LED	840	2900 lm	30 W	71°	26,1	on/off	A++ A++
901659.002.1.76	D 124, H 3	LED	840	2900 lm	30 W	71°	26,1	DALI	A++ A++

Including lens with oval light distribution for corridor

901658.002	D 124, H 3	LED	830	1700 lm	20 W	28°/40°	20,0	on/off	A++ A++
901658.002.76	D 124, H 3	LED	830	1700 lm	20 W	28°/40°	20,0	DALI	A++ A++
901658.002.1	D 124, H 3	LED	840	1750 lm	20 W	28°/40°	20,2	on/off	A++ A++
901658.002.1.76	D 124, H 3	LED	840	1750 lm	20 W	28°/40°	20,2	DALI	A++ A++
901661.002	D 124, H 3	LED	830	2400 lm	30 W	28°/40°	21,0	on/off	A++ A++
901661.002.76	D 124, H 3	LED	830	2400 lm	30 W	28°/40°	21,0	DALI	A++ A++
901661.002.1	D 124, H 3	LED	840	2500 lm	30 W	28°/40°	21,3	on/off	A++ A++
901661.002.1.76	D 124, H 3	LED	840	2500 lm	30 W	28°/40°	21,3	DALI	A++ A++

Including wide beam reflector

901657.002	D 124, H 3	LED	830	1900 lm	20 W	47°	19,5	on/off	A++ A++
901657.002.76	D 124, H 3	LED	830	1900 lm	20 W	47°	19,5	DALI	A++ A++
901657.002.1	D 124, H 3	LED	840	1900 lm	20 W	47°	19,6	on/off	A++ A++
901657.002.1.76	D 124, H 3	LED	840	1900 lm	20 W	47°	19,6	DALI	A++ A++
901660.002	D 124, H 3	LED	830	2700 lm	30 W	47°	20,8	on/off	A++ A++
901660.002.76	D 124, H 3	LED	830	2700 lm	30 W	47°	20,8	DALI	A++ A++
901660.002.1	D 124, H 3	LED	840	2800 lm	30 W	47°	20,9	on/off	A++ A++
901660.002.1.76	D 124, H 3	LED	840	2800 lm	30 W	47°	20,9	DALI	A++ A++

Ra > 90 options on request

Diffuser

Price Category 21

982370.000	D 75, H 3	Safety glass, clear
982370.010	D 75, H 3	Safety glass, satin finish

Anti-glare honeycomb louvre

Price Category 21

982371.003	D 74, H 3	Mini honeycomb louvre
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Interchangeable plastic rings

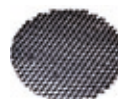
Price Category 21

982419.002	D 82, H 20	White plastic ring for reflector
982421.002	D 82, H 31	White plastic ring for lens

Interchangeable optics

Price Category 21

982368.003	D 82, H 55	Reflector, narrow beam
982368.013	D 82, H 55	Reflector, medium beam
982368.023	D 82, H 55	Reflector, wide beam
982369.003	D 82, H 55	Lens, narrow beam
982369.013	D 82, H 55	Lens, medium beam
982369.023	D 82, H 55	Lens, wide beam
982369.033	D 82, H 55	Lens, very wide beam
982369.043	D 82, H 55	Lens with oval light distribution for corridor





Recessed downlights | Series: Heledon® Maxi

Type of Protection: IP 20

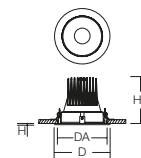
Protection Class: II

Ceiling Thickness: 1-20 mm

Housing: pressure die-cast aluminium, powder-coated. Heat resistant plastic ring black. Installation without tools thanks to spring fastening system. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED and LED converter included.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 27 W ≈

1 x 50 W HIT (60 W CB)

LED 38 W ≈

1 x 70 W HIT (84 W CB)



Recessed downlights

Price Category 21

Ceiling cut out DA 152 mm, HE 135 mm

Including lens for best uniformity of the light cone

901663.002	D 162, H 3	LED	830	2400 lm	27 W	41°	13,4	on/off	A++ A++
901663.002.76	D 162, H 3	LED	830	2400 lm	27 W	41°	13,4	DALI	A++ A++
901663.002.1	D 162, H 3	LED	840	2500 lm	27 W	41°	13,6	on/off	A++ A++
901663.002.1.76	D 162, H 3	LED	840	2500 lm	27 W	41°	13,6	DALI	A++ A++
901665.002	D 162, H 3	LED	830	3150 lm	38 W	41°	14,4	on/off	A++ A++
901665.002.76	D 162, H 3	LED	830	3150 lm	38 W	41°	14,4	DALI	A++ A++
901665.002.1	D 162, H 3	LED	840	3350 lm	38 W	41°	14,6	on/off	A++ A++
901665.002.1.76	D 162, H 3	LED	840	3350 lm	38 W	41°	14,6	DALI	A++ A++

Including reflector for maximum efficiency

901662.002	D 162, H 3	LED	830	3050 lm	27 W	63°	19,7	on/off	A++ A++
901662.002.76	D 162, H 3	LED	830	3050 lm	27 W	63°	19,7	DALI	A++ A++
901662.002.1	D 162, H 3	LED	840	3200 lm	27 W	63°	19,8	on/off	A++ A++
901662.002.1.76	D 162, H 3	LED	840	3200 lm	27 W	63°	19,8	DALI	A++ A++
901664.002	D 162, H 3	LED	830	4000 lm	38 W	63°	20,6	on/off	A++ A++
901664.002.76	D 162, H 3	LED	830	4000 lm	38 W	63°	20,6	DALI	A++ A++
901664.002.1	D 162, H 3	LED	840	4250 lm	38 W	63°	20,8	on/off	A++ A++
901664.002.1.76	D 162, H 3	LED	840	4250 lm	38 W	63°	20,8	DALI	A++ A++

Ra > 90 options on request

Diffuser

Price Category 21

982374.000	D 111, H 3	Safety glass, clear
982374.010	D 111, H 3	Safety glass, satin finish

Anti-glare honeycomb louvre

Price Category 21

982375.003	D 111, H 3	Maxi honeycomb louvre
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Interchangeable plastic rings

Price Category 21

982420.002	D 118, H 20	White plastic ring for reflector
982422.002	D 118, H 33	White plastic ring for lens



Interchangeable optics

Price Category 21

982372.003	D 118, H 83	Reflector, narrow beam
982372.013	D 118, H 83	Reflector, medium beam
982372.023	D 118, H 83	Reflector, wide beam
982372.033	D 118, H 83	Reflector, very wide beam
982373.003	D 118, H 83	Lens, narrow beam
982373.013	D 118, H 83	Lens, medium beam
982373.023	D 118, H 83	Lens, wide beam





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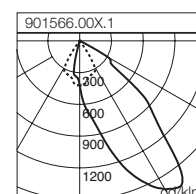
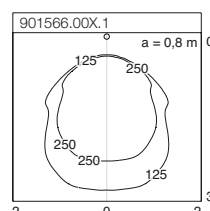
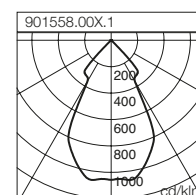
PASCALA®

Recessed downlights

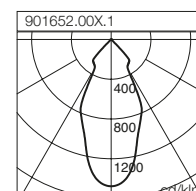
- Highly innovative recessed downlight with patented reflector made of MIRO-SILVER® in round design with total light reflection 98%
- Brilliantly luminous corona at the light-emitting surfaces thanks to use of a specially designed cast aluminium ring as a reflector closure
- LED rated life 50,000 h (L80, B10)
- Colour temperature 3000 K or 4000 K
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Converter standard (on/off) or DALI dimmable
- The converter is compatible with DC, making it ideal for central battery systems

- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Colour tolerances within 3 MacAdam ellipses (3 SDCM) with standard monochrome LED; 4 MacAdam ellipses (4 SDCM) with tunable white LED
- Large selection of decorative and functional accessory plates to be mounted additionally to the round versions
- IP 54 to be achieved with corresponding accessories

901558.00X.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



901652.00X.1		
Floor 12 x 2,5 x 3 m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	2	4







Recessed downlights | Series: Pascala® EVO Round LED

Type of Protection: IP 20, IP 54 with corresponding accessories

Protection Class: I, II

Ceiling Thickness: 6-35 mm

Impact Protection: IK03

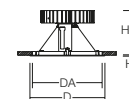
Mounting bracket: galvanised sheet steel. Inner and closure ring: die-cast aluminium.

Reflector: truncated-cone with cover plate. Reflector material: **MIRO-SILVER®** with 98 percent total light reflection. Spring fastening system. Passive cooling.

LED included. Connected converter included in separate gearbox.

Available colours (X): 2 = white, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Comparison LED vs. conventional lamps

LED 11,1 W ≈

1 x 26 W TC-D (34 W CB)

LED 18 W ≈

2 x 26 W TC-D (68 W CB)

LED 26 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 42 W ≈

1 x 70 W HIT (84 W CB)

3 x 32 W TC-TEL (105 W EVG)



Recessed downlights

Price Category 21

Ceiling cut out DA 228 mm, HE 141 mm

High efficiency standard LED included

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
901555.00X	D 241, H 2	LED	830	1250 lm	11,1 W 54°	14,7	on/off	A+ A+
901555.00X.76	D 241, H 2	LED	830	1250 lm	11,1 W 54°	14,7	DALI	A+ A+
901555.00X.1	D 241, H 2	LED	840	1300 lm	11,1 W 54°	14,8	on/off	A+ A+
901555.00X.1.76	D 241, H 2	LED	840	1300 lm	11,1 W 54°	14,8	DALI	A+ A+
901556.00X	D 241, H 2	LED	830	2300 lm	18 W 54°	16,9	on/off	A++ A++
901556.00X.76	D 241, H 2	LED	830	2300 lm	18 W 54°	17,0	DALI	A++ A++
901556.00X.1	D 241, H 2	LED	840	2350 lm	18 W 54°	17,1	on/off	A++ A++
901556.00X.1.76	D 241, H 2	LED	840	2350 lm	18 W 54°	17,1	DALI	A++ A++
901557.00X	D 241, H 2	LED	830	3250 lm	26 W 54°	18,1	on/off	A++ A++
901557.00X.76	D 241, H 2	LED	830	3250 lm	26 W 54°	18,1	DALI	A++ A++
901557.00X.1	D 241, H 2	LED	840	3350 lm	26 W 54°	18,3	on/off	A++ A++
901557.00X.1.76	D 241, H 2	LED	840	3350 lm	26 W 54°	18,3	DALI	A++ A++
901558.00X	D 241, H 2	LED	830	3950 lm	33 W 54°	18,8	on/off	A++ A++
901558.00X.76	D 241, H 2	LED	830	4000 lm	33 W 54°	18,9	DALI	A++ A++
901558.00X.1	D 241, H 2	LED	840	4050 lm	33 W 54°	19,0	on/off	A++ A++
901558.00X.1.76	D 241, H 2	LED	840	4100 lm	33 W 54°	19,0	DALI	A++ A++
901652.00X	D 241, H 2	LED	830	4750 lm	42 W 54°	19,0	on/off	A++ A++
901652.00X.76	D 241, H 2	LED	830	4850 lm	42 W 54°	19,0	DALI	A++ A++
901652.00X.1	D 241, H 2	LED	840	4900 lm	42 W 54°	19,1	on/off	A++ A++
901652.00X.1.76	D 241, H 2	LED	840	4950 lm	42 W 54°	19,1	DALI	A++ A++



Recessed downlights

Price Category 21

Ceiling cut out DA 228 mm, HE 141 mm

Tunable White - 2700 K to 6500 K

901557.00X.2.730	D 241, H 2	LED	827-865	2350 lm	31 W 54°	16,8	smart+free	A+ A+
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Recessed downlights | Series: Pascala® EVO Square LED

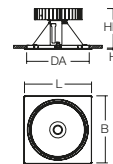
Type of Protection: IP 20
Protection Class: I, II
Ceiling Thickness: 6-35 mm
Impact Protection: IK03

Mounting bracket: galvanised sheet steel. Inner ring and square cover plate: die-cast aluminium. Reflector: truncated-cone with cover plate. Reflector material: **MIRO-SILVER®** with 98 percent total light reflection. Spring fastening system. Passive cooling.

LED included. Connected converter included in separate gearbox.

Available colours (X): 2 = white, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimmable	EEC
Recessed downlights									
Ceiling cut out DA 228 mm, HE 141 mm									
High efficiency standard LED included									
901559.00X	L 242, B 242, H 3	LED	830	1250 lm	11,1 W	54°	14,7	on/off	A+ A+
901559.00X.76	L 242, B 242, H 3	LED	830	1250 lm	11,1 W	54°	14,7	DALI	A+ A+
901559.00X.1	L 242, B 242, H 3	LED	840	1300 lm	11,1 W	54°	14,8	on/off	A+ A+
901559.00X.1.76	L 242, B 242, H 3	LED	840	1300 lm	11,1 W	54°	14,8	DALI	A+ A+
901560.00X	L 242, B 242, H 3	LED	830	2300 lm	18 W	54°	16,9	on/off	A++ A++
901560.00X.76	L 242, B 242, H 3	LED	830	2300 lm	18 W	54°	17,0	DALI	A++ A++
901560.00X.1	L 242, B 242, H 3	LED	840	2350 lm	18 W	54°	17,1	on/off	A++ A++
901560.00X.1.76	L 242, B 242, H 3	LED	840	2350 lm	18 W	54°	17,1	DALI	A++ A++
901561.00X	L 242, B 242, H 3	LED	830	3250 lm	26 W	54°	18,1	on/off	A++ A++
901561.00X.76	L 242, B 242, H 3	LED	830	3250 lm	26 W	54°	18,1	DALI	A++ A++
901561.00X.1	L 242, B 242, H 3	LED	840	3350 lm	26 W	54°	18,3	on/off	A++ A++
901561.00X.1.76	L 242, B 242, H 3	LED	840	3350 lm	26 W	54°	18,3	DALI	A++ A++
901562.00X	L 242, B 242, H 3	LED	830	3950 lm	33 W	54°	18,8	on/off	A++ A++
901562.00X.76	L 242, B 242, H 3	LED	830	4000 lm	33 W	54°	18,9	DALI	A++ A++
901562.00X.1	L 242, B 242, H 3	LED	840	4050 lm	33 W	54°	19,0	on/off	A++ A++
901562.00X.1.76	L 242, B 242, H 3	LED	840	4100 lm	33 W	54°	19,0	DALI	A++ A++
901654.00X	L 242, B 242, H 3	LED	830	4750 lm	42 W	54°	19,0	on/off	A++ A++
901654.00X.76	L 242, B 242, H 3	LED	830	4850 lm	42 W	54°	19,0	DALI	A++ A++
901654.00X.1	L 242, B 242, H 3	LED	840	4900 lm	42 W	54°	19,1	on/off	A++ A++
901654.00X.1.76	L 242, B 242, H 3	LED	840	4950 lm	42 W	54°	19,1	DALI	A++ A++

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimmable	EEC
Recessed downlights									
Ceiling cut out DA 228 mm, HE 141 mm									
Tunable White - 2700 K to 6500 K									
901561.00X.2.730	L 242, B 242, H 3	LED	827-865	2350 lm	31 W	54°	16,8	smart+free	A+ A+

Comparison

LED vs. conventional lamps

LED 11,1 W ≈

1 x 26 W TC-D (34 W CB)

LED 18 W ≈

2 x 26 W TC-D (68 W CB)

LED 26 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 42 W ≈

1 x 70 W HIT (84 W CB)

3 x 32 W TC-TEL (105 W EVG)

**Recessed downlights | Series: Pascala® EVO asymmetrical Round LED**

Type of Protection: IP 20, IP 54 with corresponding accessories

Protection Class: I, II

Ceiling Thickness: 6-35 mm

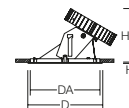
Impact Protection: IK03

Mounting bracket: galvanised sheet steel. Inner and closure ring: die-cast aluminium.
 Reflector asymmetrical. Reflector material: **MIRO-SILVER®** with 98 percent total light reflection. Spring fastening system. Passive cooling.

LED included. Connected converter included in separate gearbox.

Available colours (X): 2 = white, 4 = silver metallic

Versions with smart-free Bluetooth control for wireless network and operation using
 Android / iOS devices, free app available for download.

**Comparison
LED vs. conventional lamps****LED 11,1 W ≈**

1 x 26 W TC-D (34 W CB)

LED 18 W ≈

2 x 26 W TC-D (68 W CB)

LED 26 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

LED 42 W ≈

1 x 70 W HIT (84 W CB)

3 x 32 W TC-TEL (105 W EVG)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Recessed downlights							
Ceiling cut out DA 228 mm, HE 173 mm							
High efficiency standard LED included							
901563.00X	D 241, H 2	LED	830	1250 lm	11,1 W	on/off	A+ A+
901563.00X.76	D 241, H 2	LED	830	1250 lm	11,1 W	DALI	A+ A+
901563.00X.1	D 241, H 2	LED	840	1300 lm	11,1 W	on/off	A+ A+
901563.00X.1.76	D 241, H 2	LED	840	1300 lm	11,1 W	DALI	A+ A+
901564.00X	D 241, H 2	LED	830	2250 lm	18 W	on/off	A++ A++
901564.00X.76	D 241, H 2	LED	830	2250 lm	18 W	DALI	A++ A++
901564.00X.1	D 241, H 2	LED	840	2350 lm	18 W	on/off	A++ A++
901564.00X.1.76	D 241, H 2	LED	840	2350 lm	18 W	DALI	A++ A++
901565.00X	D 241, H 2	LED	830	3100 lm	26 W	on/off	A++ A++
901565.00X.76	D 241, H 2	LED	830	3100 lm	26 W	DALI	A++ A++
901565.00X.1	D 241, H 2	LED	840	3250 lm	26 W	on/off	A++ A++
901565.00X.1.76	D 241, H 2	LED	840	3250 lm	26 W	DALI	A++ A++
901566.00X	D 241, H 2	LED	830	3800 lm	33 W	on/off	A++ A++
901566.00X.76	D 241, H 2	LED	830	3800 lm	33 W	DALI	A++ A++
901566.00X.1	D 241, H 2	LED	840	4000 lm	33 W	on/off	A++ A++
901566.00X.1.76	D 241, H 2	LED	840	4000 lm	33 W	DALI	A++ A++
901653.00X	D 241, H 2	LED	830	4600 lm	42 W	on/off	A++ A++
901653.00X.76	D 241, H 2	LED	830	4600 lm	42 W	DALI	A++ A++
901653.00X.1	D 241, H 2	LED	840	4800 lm	42 W	on/off	A++ A++
901653.00X.1.76	D 241, H 2	LED	840	4850 lm	42 W	DALI	A++ A++

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Recessed downlights							
Ceiling cut out DA 228 mm, HE 173 mm							
Tunable White - 2700 K to 6500 K							
901565.00X.2.730	D 241, H 2	LED	827-865	2400 lm	31 W	smart+free	A+ A+

Recessed downlights | Series: Pascala® EVO asymmetrical Square LED

Type of Protection: IP 20

Protection Class: I, II

Ceiling Thickness: 6-35 mm

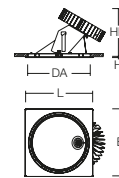
Impact Protection: IK03

Mounting bracket: galvanised sheet steel. Inner ring and square cover plate: die-cast aluminium. Reflector asymmetrical. Reflector material: **MIRO-SILVER®** with 98 percent total light reflection. Spring fastening system. Passive cooling.

LED included. Connected converter included in separate gearbox.

Available colours (X): 2 = white, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Recessed downlights							
Ceiling cut out DA 228 mm, HE 173 mm							
High efficiency standard LED included							
901567.00X	L 242, B 242, H 3	LED	830	1250 lm	11,1 W	on/off	A+ A+
901567.00X.76	L 242, B 242, H 3	LED	830	1250 lm	11,1 W	DALI	A+ A+
901567.00X.1	L 242, B 242, H 3	LED	840	1300 lm	11,1 W	on/off	A+ A+
901567.00X.1.76	L 242, B 242, H 3	LED	840	1300 lm	11,1 W	DALI	A+ A+
901568.00X	L 242, B 242, H 3	LED	830	2250 lm	18 W	on/off	A++ A++
901568.00X.76	L 242, B 242, H 3	LED	830	2250 lm	18 W	DALI	A++ A++
901568.00X.1	L 242, B 242, H 3	LED	840	2350 lm	18 W	on/off	A++ A++
901568.00X.1.76	L 242, B 242, H 3	LED	840	2350 lm	18 W	DALI	A++ A++
901569.00X	L 242, B 242, H 3	LED	830	3100 lm	26 W	on/off	A++ A++
901569.00X.76	L 242, B 242, H 3	LED	830	3100 lm	26 W	DALI	A++ A++
901569.00X.1	L 242, B 242, H 3	LED	840	3250 lm	26 W	on/off	A++ A++
901569.00X.1.76	L 242, B 242, H 3	LED	840	3250 lm	26 W	DALI	A++ A++
901570.00X	L 242, B 242, H 3	LED	830	3800 lm	33 W	on/off	A++ A++
901570.00X.76	L 242, B 242, H 3	LED	830	3800 lm	33 W	DALI	A++ A++
901570.00X.1	L 242, B 242, H 3	LED	840	4000 lm	33 W	on/off	A++ A++
901570.00X.1.76	L 242, B 242, H 3	LED	840	4000 lm	33 W	DALI	A++ A++
901655.00X	L 242, B 242, H 3	LED	830	4600 lm	42 W	on/off	A++ A++
901655.00X.76	L 242, B 242, H 3	LED	830	4600 lm	42 W	DALI	A++ A++
901655.00X.1	L 242, B 242, H 3	LED	840	4800 lm	42 W	on/off	A++ A++
901655.00X.1.76	L 242, B 242, H 3	LED	840	4850 lm	42 W	DALI	A++ A++

Comparison LED vs. conventional lamps
LED 11,1 W ≈

1 x 26 W TC-D (34 W CB)

LED 18 W ≈

2 x 26 W TC-D (68 W CB)

LED 26 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 33 W ≈

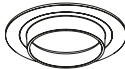
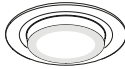
3 x 26 W TC-D (102 W CB)

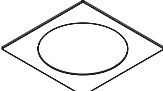
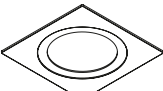
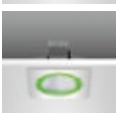
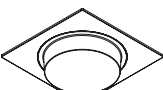
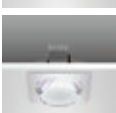
LED 42 W ≈

1 x 70 W HIT (84 W CB)

3 x 32 W TC-TEL (105 W EVG)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Recessed downlights							
Ceiling cut out DA 228 mm, HE 173 mm							
Tunable White - 2700 K to 6500 K							
901569.00X.2.730	L 242, B 242, H 3	LED	827-865	2400 lm	31 W	smart+free	A+ A+

Reference number		Dimensions		
Accessories Round			Price Category 21	
for mounting to ROUND version of Pascala, not suitable for mounting to SQUARE version of Pascala				
	Diffuser: safety glass (IP 54)			
	981753.00X	transparent		
	981753.01X	matt		
	981753.02X	centre: matt		
	981753.03X	centre: transparent		
	Decorative rings, satin finish (coloured)			
	981754.00X	clear		
	981754.03X	red		
	981754.04X	green		
	981754.05X	blue		
	981754.06X	yellow		
	Decorative cylinder, open			
	981755.00X	glass, transparent		
	981755.01X	glass, matt		
Decorative cylinder, closed, IP 54				
	981756.00X	glass, transparent		
	981756.01X	glass, matt		
	981756.02X	covering surface: transparent; floor: matt		
	981756.03X	covering surface: transparent; floor: partially matt (with transparent centre)		
Decorative designer glass cover with lens, IP 54				
	981757.00X	transparent		
	981757.01X	matt		
	981757.02X	covering surface: transparent; floor: matt		
	981757.03X	covering surface: transparent; floor: partially matt (with transparent centre)		
Decorative attachment (hanging down)				
	981758.000	transparent		
	981758.002	matt		
	981758.010	centre: matt		
	981758.020	centre: transparent		

Accessories Round		Price Category 21	
with square cover plate; for mounting to ROUND version of Pascala, not suitable for mounting to SQUARE version of Pascala			
		Diffuser: safety glass IP 54	
		981895.00X transparent	
		981895.01X matt	
		981895.02X centre: matt	
		981895.03X centre: transparent	
		Decorative rings, satin finish (coloured)	
		981896.00X transparent	
		981896.03X red	
		981896.04X green	
		981896.05X blue	
		981896.06X yellow	
		Decorative cylinder, closed, IP 54	
		981897.00X glass, transparent	
		981897.01X glass, matt	
		981897.02X covering surface: transparent; floor: matt	
		981897.03X covering surface: transparent; floor: partially matt (with transparent centre)	
		Decorative cylinder, open	
		981898.00X glass, transparent	
		981898.01X glass, matt	
		Decorative glass cover, IP 54	
		981899.00X transparent	
		981899.01X matt	
		981899.02X covering surface: transparent; floor: matt	
		981899.03X covering surface: transparent; floor: partially matt (with transparent centre)	
			

Accessories Square		Price Category 21	
decorative square-shaped plates (hanging down)			
for mounting to SQUARE version of Pascala			
		981675.030 transparent	
		981675.032 matt	
		981675.040 centre: matt	
		981675.050 centre: transparent	



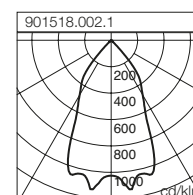


LEDONA

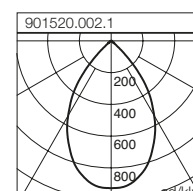
Recessed downlights

- LED downlight featuring advanced technology and sophisticated design
- Type of protection: IP 65 or IP 20
- IP 65 version also keeps the protection for the intermediate ceiling; this in turn means optimum protection against dust or moisture (does not apply to converter, IP 20)
- Single-layer safety glass diffuser (IP 65 LED version)
- IP 65 versions with ball impact protection in accordance with DIN 18032-03
- IP 65 versions with Gore™ Protective Vents diaphragm valve for reduction of condensation
- IP 65 versions suitable for use in the food and drink industry
- Round and Square versions available
- Four-segment aluminium faceted reflector surface-structured for IP 65 or mirror finish for IP 20
- Unique light mixing chamber provides harmonized lighting and advanced anti-glare properties, as well as high LORs
- Passive cooling system
- Five different LED lumen options
- Colour temperature 3000 K or 4000 K
- Ra 85 as standard, optionally Ra 95 also possible
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Converter standard (on/off) or DALI dimmable
- The converter is compatible with DC, making it ideal for central battery systems
- Round ceiling cut-out also with square types
- Easy to install thanks to tool-free spring fastening system

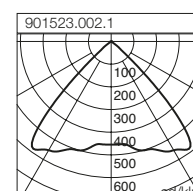
901518.002.1		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	5	9

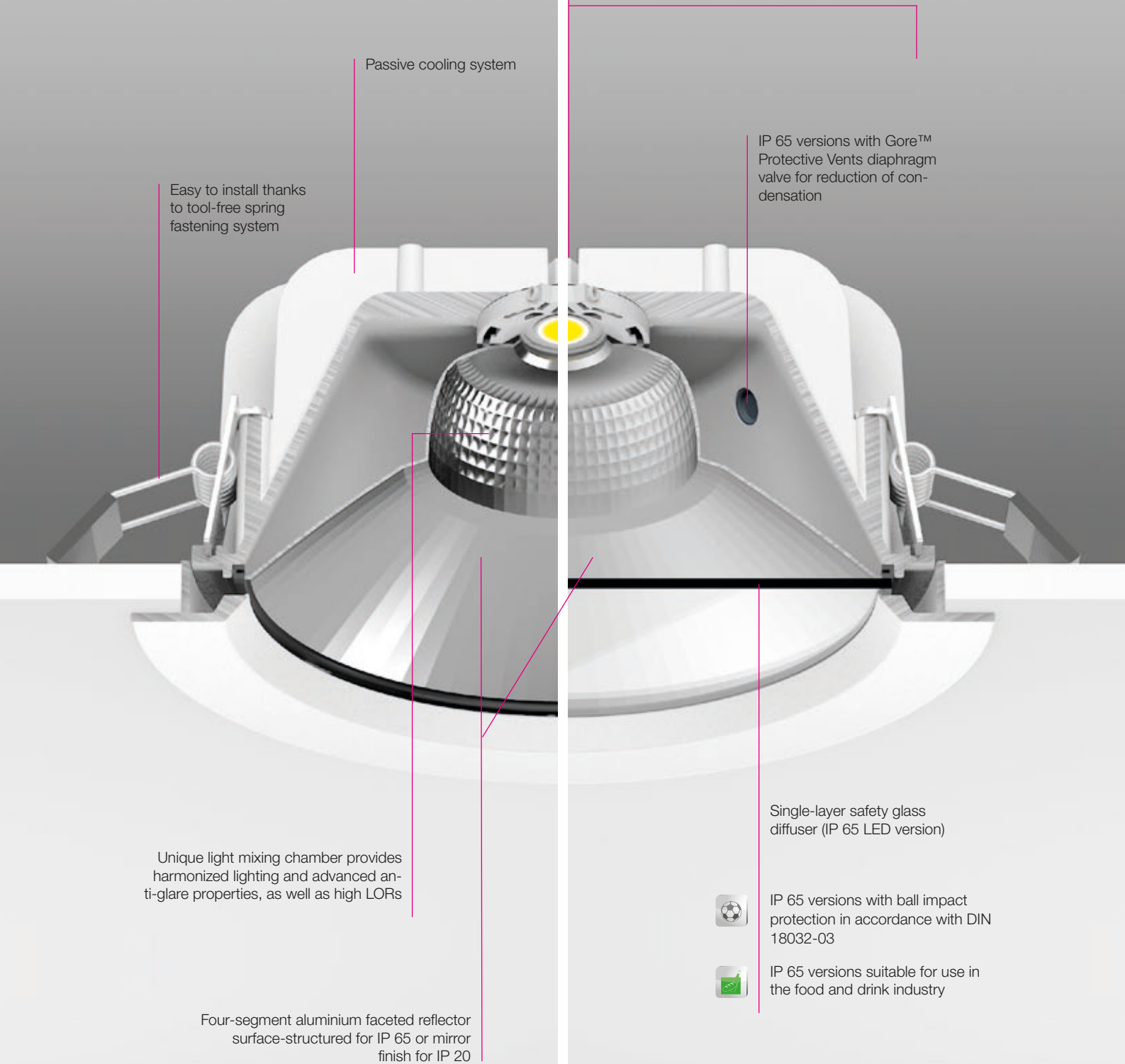


901520.002.1		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



901523.002.1		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5







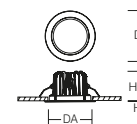
Recessed downlights | Series: Ledona Round IP20

Type of Protection: IP 20
Protection Class: I, II
Ceiling Thickness: 1-20 mm
Impact Protection: IK03

Housing: aluminium profile constructed as heat sink. Bezel ring: die-cast aluminium, powder-coated. Open version. Faceted aluminium reflector high gloss, with high gloss light mixing chamber. Spring fastening system. Passive cooling. Suitable for through-wiring. The converter is compatible with DC, making it ideal for central battery systems.

LED included. Connected converter included in separate gearbox.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 12 W ≈

1 x 26 W TC-D (34 W CB)

LED 17,2 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 W ≈

1 x 57 W TC-TEL (59 W EB)

LED 34 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 43 W ≈

2 x 42 W TC-TEL (90 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed downlights								
Price Category 21								
120 Ceiling cut out DA 120 mm, HE 79 mm								
901517.002	D 140, H 3	LED	830	1150 lm	12 W	52°	17,9 on/off	A A
901517.002.76	D 140, H 3	LED	830	1150 lm	12 W	52°	17,9 DALI	A A
901517.002.1.Q	D 140, H 3	LED	840	1150 lm	12 W	52°	18,0 on/off	A A
901517.002.1.76	D 140, H 3	LED	840	1150 lm	12 W	52°	18,0 DALI	A A
901518.002	D 140, H 3	LED	830	1950 lm	17,2 W	53°	20,2 on/off	A++ A++
901518.002.76	D 140, H 3	LED	830	1950 lm	17,2 W	53°	20,2 DALI	A++ A++
901518.002.1	D 140, H 3	LED	840	2050 lm	17,2 W	53°	20,4 on/off	A++ A++
901518.002.1.76	D 140, H 3	LED	840	2050 lm	17,2 W	53°	20,4 DALI	A++ A++
160 Ceiling cut out DA 160 mm, HE 89 mm								
901519.002	D 180, H 3	LED	830	2000 lm	17,2 W	67°	19,2 on/off	A++ A++
901519.002.76.Q	D 180, H 3	LED	830	2000 lm	17,2 W	67°	19,2 DALI	A++ A++
901519.002.1	D 180, H 3	LED	840	2100 lm	17,2 W	67°	19,4 on/off	A++ A++
901519.002.1.76.Q	D 180, H 3	LED	840	2100 lm	17,2 W	67°	19,4 DALI	A++ A++
901520.002	D 180, H 3	LED	830	2850 lm	26 W	67°	20,6 on/off	A++ A++
901520.002.76	D 180, H 3	LED	830	2850 lm	26 W	67°	20,6 DALI	A++ A++
901520.002.1	D 180, H 3	LED	840	3000 lm	26 W	67°	20,7 on/off	A++ A++
901520.002.1.76	D 180, H 3	LED	840	3000 lm	26 W	67°	20,7 DALI	A++ A++
210 Ceiling cut out DA 210 mm, HE 108 mm								
901521.002	D 230, H 3	LED	830	2750 lm	26 W	88°	22,1 on/off	A++ A++
901521.002.76	D 230, H 3	LED	830	2750 lm	26 W	88°	22,1 DALI	A++ A++
901521.002.1	D 230, H 3	LED	840	2900 lm	26 W	88°	22,2 on/off	A++ A++
901521.002.1.76	D 230, H 3	LED	840	2900 lm	26 W	88°	22,2 DALI	A++ A++
901522.002	D 230, H 3	LED	830	3400 lm	34 W	88°	22,8 on/off	A++ A++
901522.002.76	D 230, H 3	LED	830	3400 lm	34 W	88°	22,8 DALI	A++ A++
901522.002.1	D 230, H 3	LED	840	3550 lm	34 W	88°	22,9 on/off	A++ A++
901522.002.1.76	D 230, H 3	LED	840	3550 lm	34 W	88°	22,9 DALI	A++ A++
901523.002	D 230, H 3	LED	830	4150 lm	43 W	88°	23,5 on/off	A++ A++
901523.002.76	D 230, H 3	LED	830	4150 lm	43 W	88°	23,5 DALI	A++ A++
901523.002.1	D 230, H 3	LED	840	4300 lm	43 W	88°	23,6 on/off	A++ A++
901523.002.1.76	D 230, H 3	LED	840	4300 lm	43 W	88°	23,6 DALI	A++ A++

Recessed downlights | Series: Ledona Round IP65

 Type of Protection: **IP 65**, Converter IP 20

Protection Class: I, II

Ceiling Thickness: 1-20 mm

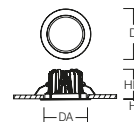
Impact Protection: IK07

Housing: aluminium profile constructed as heat sink. Bezel ring: die-cast aluminium, powder-coated. Closed version. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. LED diffuser made of safety glass. Faceted aluminium reflector satin-matt, with high gloss light mixing chamber. Spring fastening system. Passive cooling. Suitable for through-wiring. The converter is compatible with DC, making it ideal for central battery systems.

Ball impact proof in accordance with DIN 18032-03.

LED included. Connected converter included in separate gearbox.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed downlights								
Price Category 21								
120 Ceiling cut out DA 120 mm, HE 82 mm								
901524.002 .Q	D 140, H 3	LED	830	1100 lm	12 W	47°	17,7 on/off	A A
901524.002.76	D 140, H 3	LED	830	1100 lm	12 W	47°	17,7 DALI	A A
901524.002.1	D 140, H 3	LED	840	1100 lm	12 W	47°	17,9 on/off	A A
901524.002.1.76	D 140, H 3	LED	840	1100 lm	12 W	47°	17,9 DALI	A A
901525.002	D 140, H 3	LED	830	1850 lm	17,2 W	51°	20,4 on/off	A++ A++
901525.002.76	D 140, H 3	LED	830	1850 lm	17,2 W	51°	20,4 DALI	A++ A++
901525.002.1	D 140, H 3	LED	840	1950 lm	17,2 W	51°	20,6 on/off	A++ A++
901525.002.1.76	D 140, H 3	LED	840	1950 lm	17,2 W	51°	20,6 DALI	A++ A++
160 Ceiling cut out DA 160 mm, HE 92 mm								
901526.002	D 180, H 3	LED	830	1850 lm	17,2 W	64°	18,7 on/off	A++ A++
901526.002.76	D 180, H 3	LED	830	1850 lm	17,2 W	64°	18,7 DALI	A++ A++
901526.002.1 .Q	D 180, H 3	LED	840	1950 lm	17,2 W	64°	18,9 on/off	A++ A++
901526.002.1.76	D 180, H 3	LED	840	1950 lm	17,2 W	64°	18,9 DALI	A++ A++
901527.002	D 180, H 3	LED	830	2550 lm	26 W	64°	19,9 on/off	A++ A++
901527.002.76	D 180, H 3	LED	830	2550 lm	26 W	64°	19,9 DALI	A++ A++
901527.002.1 .Q	D 180, H 3	LED	840	2750 lm	26 W	64°	20,1 on/off	A++ A++
901527.002.1.76	D 180, H 3	LED	840	2750 lm	26 W	64°	20,1 DALI	A++ A++
210 Ceiling cut out DA 210 mm, HE 111 mm								
901528.002	D 230, H 3	LED	830	2800 lm	26 W	91°	22,3 on/off	A++ A++
901528.002.76	D 230, H 3	LED	830	2800 lm	26 W	91°	22,3 DALI	A++ A++
901528.002.1	D 230, H 3	LED	840	2950 lm	26 W	91°	22,4 on/off	A++ A++
901528.002.1.76	D 230, H 3	LED	840	2950 lm	26 W	91°	22,4 DALI	A++ A++
901529.002	D 230, H 3	LED	830	3450 lm	34 W	91°	23,0 on/off	A++ A++
901529.002.76	D 230, H 3	LED	830	3450 lm	34 W	91°	23,0 DALI	A++ A++
901529.002.1	D 230, H 3	LED	840	3600 lm	34 W	91°	23,1 on/off	A++ A++
901529.002.1.76	D 230, H 3	LED	840	3600 lm	34 W	91°	23,1 DALI	A++ A++
901530.002	D 230, H 3	LED	830	4200 lm	43 W	91°	23,7 on/off	A++ A++
901530.002.76	D 230, H 3	LED	830	4200 lm	43 W	91°	23,7 DALI	A++ A++
901530.002.1	D 230, H 3	LED	840	4400 lm	43 W	91°	23,8 on/off	A++ A++
901530.002.1.76	D 230, H 3	LED	840	4400 lm	43 W	91°	23,8 DALI	A++ A++

**Comparison
LED vs. conventional lamps**
LED 12 W ≈

1 x 26 W TC-D (34 W CB)

LED 17,2 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 W ≈

1 x 57 W TC-TEL (59 W EB)

LED 34 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 43 W ≈

2 x 42 W TC-TEL (90 W EB)



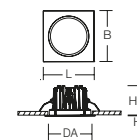
Recessed downlights | Series: Ledona Square IP20

Type of Protection: IP 20
Protection Class: I, II
Ceiling Thickness: 1-20 mm
Impact Protection: IK03

Housing: aluminium profile constructed as heat sink. Square cover plate: die-cast aluminium, powder-coated. Open version. Faceted aluminium reflector high gloss, with high gloss light mixing chamber. Spring fastening system. Passive cooling. Suitable for through-wiring. The converter is compatible with DC, making it ideal for central battery systems.

LED included. Connected converter included in separate gearbox.

Available colour: 2 = white



Comparison LED vs. conventional lamps

LED 12 W ≈

1 x 26 W TC-D (34 W CB)

LED 17,2 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 W ≈

1 x 57 W TC-TEL (59 W EB)

LED 34 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 43 W ≈

2 x 42 W TC-TEL (90 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed downlights								
Price Category 21								
120 Ceiling cut out DA 120 mm, HE 79 mm								
901531.002	L 130, B 130, H 3	LED	830	1150 lm	12 W	52°	17,9 on/off	A A
901531.002.76	L 130, B 130, H 3	LED	830	1150 lm	12 W	52°	17,9 DALI	A A
901531.002.1	L 130, B 130, H 3	LED	840	1150 lm	12 W	52°	18,0 on/off	A A
901531.002.1.76	L 130, B 130, H 3	LED	840	1150 lm	12 W	52°	18,0 DALI	A A
901532.002	L 130, B 130, H 3	LED	830	1950 lm	17,2 W	53°	20,2 on/off	A++ A++
901532.002.76	L 130, B 130, H 3	LED	830	1950 lm	17,2 W	53°	20,2 DALI	A++ A++
901532.002.1	L 130, B 130, H 3	LED	840	2050 lm	17,2 W	53°	20,4 on/off	A++ A++
901532.002.1.76	L 130, B 130, H 3	LED	840	2050 lm	17,2 W	53°	20,4 DALI	A++ A++
160 Ceiling cut out DA 160 mm, HE 89 mm								
901533.002	L 170, B 170, H 3	LED	830	2000 lm	17,2 W	67°	19,2 on/off	A++ A++
901533.002.76	L 170, B 170, H 3	LED	830	2000 lm	17,2 W	67°	19,2 DALI	A++ A++
901533.002.1	L 170, B 170, H 3	LED	840	2100 lm	17,2 W	67°	19,4 on/off	A++ A++
901533.002.1.76	L 170, B 170, H 3	LED	840	2100 lm	17,2 W	67°	19,4 DALI	A++ A++
901534.002	L 170, B 170, H 3	LED	830	2850 lm	26 W	67°	20,6 on/off	A++ A++
901534.002.76	L 170, B 170, H 3	LED	830	2850 lm	26 W	67°	20,6 DALI	A++ A++
901534.002.1	L 170, B 170, H 3	LED	840	3000 lm	26 W	67°	20,7 on/off	A++ A++
901534.002.1.76	L 170, B 170, H 3	LED	840	3000 lm	26 W	67°	20,7 DALI	A++ A++
210 Ceiling cut out DA 210 mm, HE 108 mm								
901535.002	L 220, B 220, H 3	LED	830	2750 lm	26 W	88°	22,1 on/off	A++ A++
901535.002.76	L 220, B 220, H 3	LED	830	2750 lm	26 W	88°	22,1 DALI	A++ A++
901535.002.1	L 220, B 220, H 3	LED	840	2900 lm	26 W	88°	22,2 on/off	A++ A++
901535.002.1.76	L 220, B 220, H 3	LED	840	2900 lm	26 W	88°	22,2 DALI	A++ A++
901536.002	L 220, B 220, H 3	LED	830	3400 lm	34 W	88°	22,8 on/off	A++ A++
901536.002.76	L 220, B 220, H 3	LED	830	3400 lm	34 W	88°	22,8 DALI	A++ A++
901536.002.1	L 220, B 220, H 3	LED	840	3550 lm	34 W	88°	22,9 on/off	A++ A++
901536.002.1.76	L 220, B 220, H 3	LED	840	3550 lm	34 W	88°	22,9 DALI	A++ A++
901537.002	L 220, B 220, H 3	LED	830	4150 lm	43 W	88°	23,5 on/off	A++ A++
901537.002.76	L 220, B 220, H 3	LED	830	4150 lm	43 W	88°	23,5 DALI	A++ A++
901537.002.1	L 220, B 220, H 3	LED	840	4300 lm	43 W	88°	23,6 on/off	A++ A++
901537.002.1.76	L 220, B 220, H 3	LED	840	4300 lm	43 W	88°	23,6 DALI	A++ A++

Recessed downlights | Series: Ledona Square IP65

Type of Protection: **IP 65**, Converter IP 20

Protection Class: I, II

Ceiling Thickness: 1-20 mm

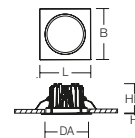
Impact Protection: IK07

Housing: aluminium profile constructed as heat sink. Square cover plate: die-cast aluminium, powder-coated. Closed version. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. LED diffuser made of safety glass. Faceted aluminium reflector satin-matt, with high gloss light mixing chamber. Spring fastening system. Passive cooling. Suitable for through-wiring. The converter is compatible with DC, making it ideal for central battery systems.

Ball impact proof in accordance with DIN 18032-03.

LED included. Connected converter included in separate gearbox.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed downlights								
Price Category 21								
120 Ceiling cut out DA 120 mm, HE 82 mm								
901538.002	L 130, B 130, H 3	LED	830	1100 lm	12 W	47°	17,7 on/off	A A
901538.002.76	L 130, B 130, H 3	LED	830	1100 lm	12 W	47°	17,7 DALI	A A
901538.002.1	L 130, B 130, H 3	LED	840	1100 lm	12 W	47°	17,9 on/off	A A
901538.002.1.76	L 130, B 130, H 3	LED	840	1100 lm	12 W	47°	17,9 DALI	A A
901539.002	L 130, B 130, H 3	LED	830	1850 lm	17,2 W	51°	20,4 on/off	A++ A++
901539.002.76	L 130, B 130, H 3	LED	830	1850 lm	17,2 W	51°	20,4 DALI	A++ A++
901539.002.1	L 130, B 130, H 3	LED	840	1950 lm	17,2 W	51°	20,6 on/off	A++ A++
901539.002.1.76	L 130, B 130, H 3	LED	840	1950 lm	17,2 W	51°	20,6 DALI	A++ A++
160 Ceiling cut out DA 160 mm, HE 92 mm								
901540.002	L 170, B 170, H 3	LED	830	1850 lm	17,2 W	64°	18,7 on/off	A++ A++
901540.002.76	L 170, B 170, H 3	LED	830	1850 lm	17,2 W	64°	18,7 DALI	A++ A++
901540.002.1	L 170, B 170, H 3	LED	840	1950 lm	17,2 W	64°	18,9 on/off	A++ A++
901540.002.1.76	L 170, B 170, H 3	LED	840	1950 lm	17,2 W	64°	18,9 DALI	A++ A++
901541.002	L 170, B 170, H 3	LED	830	2550 lm	26 W	64°	19,9 on/off	A++ A++
901541.002.76	L 170, B 170, H 3	LED	830	2550 lm	26 W	64°	19,9 DALI	A++ A++
901541.002.1	L 170, B 170, H 3	LED	840	2750 lm	26 W	64°	20,1 on/off	A++ A++
901541.002.1.76	L 170, B 170, H 3	LED	840	2750 lm	26 W	64°	20,1 DALI	A++ A++
210 Ceiling cut out DA 210 mm, HE 111 mm								
901542.002	L 220, B 220, H 3	LED	830	2800 lm	26 W	91°	22,3 on/off	A++ A++
901542.002.76	L 220, B 220, H 3	LED	830	2800 lm	26 W	91°	22,3 DALI	A++ A++
901542.002.1	L 220, B 220, H 3	LED	840	2950 lm	26 W	91°	22,4 on/off	A++ A++
901542.002.1.76	L 220, B 220, H 3	LED	840	2950 lm	26 W	91°	22,4 DALI	A++ A++
901543.002	L 220, B 220, H 3	LED	830	3450 lm	34 W	91°	23,0 on/off	A++ A++
901543.002.76	L 220, B 220, H 3	LED	830	3450 lm	34 W	91°	23,0 DALI	A++ A++
901543.002.1	L 220, B 220, H 3	LED	840	3600 lm	34 W	91°	23,1 on/off	A++ A++
901543.002.1.76	L 220, B 220, H 3	LED	840	3600 lm	34 W	91°	23,1 DALI	A++ A++
901544.002	L 220, B 220, H 3	LED	830	4200 lm	43 W	91°	23,7 on/off	A++ A++
901544.002.76	L 220, B 220, H 3	LED	830	4200 lm	43 W	91°	23,7 DALI	A++ A++
901544.002.1	L 220, B 220, H 3	LED	840	4400 lm	43 W	91°	23,8 on/off	A++ A++
901544.002.1.76	L 220, B 220, H 3	LED	840	4400 lm	43 W	91°	23,8 DALI	A++ A++

Comparison LED vs. conventional lamps

LED 12 W ≈

1 x 26 W TC-D (34 W CB)

LED 17,2 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 W ≈

1 x 57 W TC-TEL (59 W EB)

LED 34 W ≈

2 x 32 W TC-TEL (69 W EB)

LED 43 W ≈

2 x 42 W TC-TEL (90 W EB)

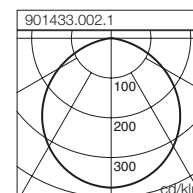


LEDONA ECO

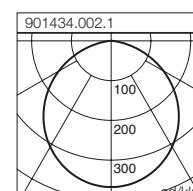
Recessed downlights

- LED downlight to fulfill highest demands
- IP 65 rating also for the intermediate ceiling; this in turn means optimum protection against dust or moisture
- Ball impact protection in accordance with DIN 18032-03
- With Gore™ Protective Vents diaphragm valve for reduction of condensation
- Suitable for use in the food and drink industry
- Round and Square versions available
- Shockproof cover made of plastic (opal)
- Three sizes: Mini, Midi, Maxi
- Passive cooling system
- Interchangeable mains voltage LED
- Three different lumen packages
- Colour temperature 3000 K or 4000 K
- Colour rendering index Ra 83
- LED rated life 50,000 h (L70, B30)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Direct connection to 220-240 V AC, i.e. no converter needed
- Round ceiling cut-out also with square types
- Easy to install thanks to tool-free spring fastening system

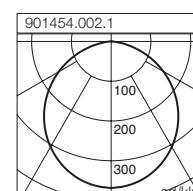
901433.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
10	15	20
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
15	22	36



901434.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
5	7	9
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	9	15



901454.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	7	11



Recessed downlights | Series: Ledona ECO Round

 Type of Protection: **IP 65**

Protection Class: I

Ceiling Thickness: 1-20 mm

Impact Protection: IK07

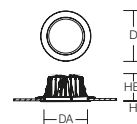
Bezel ring and housing: die-cast aluminium, powder-coated. Cover: plastic, opal.
Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Ceiling installation with spring system. 2 meter connecting cable with open wire ends. Passive cooling.

Ball impact proof in accordance with DIN 18032-03.

LED included.

No converter required.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimming	EEC
Recessed downlights									
Price Category 21									
120 Ceiling cut out DA 120 mm, HE 80 mm									
901431.002 .Q	D 140, H 3	LED ⁽¹⁾	830	570 lm	8,6 W	108°	26,6	on/off	A+ A+
901431.002.1	D 140, H 3	LED ⁽¹⁾	840	550 lm	9,8 W	108°	26,5	on/off	A+ A+
160 Ceiling cut out DA 160 mm, HE 90 mm									
901433.002	D 180, H 3	LED ⁽¹⁾	830	640 lm	8,6 W	110°	25,0	on/off	A+ A+
901433.002.1	D 180, H 3	LED ⁽¹⁾	840	550 lm	9,8 W	110°	26,5	on/off	A+ A+
901434.002.1 .Q	D 180, H 3	LED ⁽¹⁾	840	1500 lm	18,4 W	110°	28,0	on/off	A+ A+
901434.002 .Q	D 180, H 3	LED ⁽¹⁾	830	1550 lm	19,6 W	110°	28,0	on/off	A+ A+
210 Ceiling cut out DA 210 mm, HE 114 mm									
901454.002 .Q	D 230, H 3	LED ⁽¹⁾	830	2100 lm	34 W	110°	27,3	on/off	A+ A+
901454.002.1 .Q	D 230, H 3	LED ⁽¹⁾	840	2300 lm	34 W	110°	27,6	on/off	A+ A+

**Comparison
LED vs. conventional lamps**
LED 8,6 / 9,8 W ≈

1 x 18 W TC-D (26 W CB)

LED 18,4 / 19,6 W ≈

2 x 18 W TC-D (52 W CB)

LED 34 W ≈

2 x 26 W TC-D (68 W CB)

Recessed downlights | Series: Ledona ECO Square

 Type of Protection: **IP 65**

Protection Class: I

Ceiling Thickness: 1-20 mm

Impact Protection: IK07

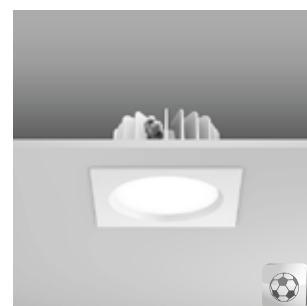
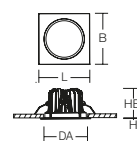
Square cover and housing: die-cast aluminium, powder-coated. Cover: plastic, opal.
Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Ceiling installation with spring system. 2 meter connecting cable with open wire ends. Passive cooling.

Ball impact proof in accordance with DIN 18032-03.

LED included.

No converter required.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimming	EEC
Recessed downlights									
Price Category 21									
120 Ceiling cut out DA 120 mm, HE 80 mm									
901435.002	L 130, B 130, H 3	LED ⁽¹⁾	830	570 lm	8,6 W	108°	26,6	on/off	A+ A+
901435.002.1	L 130, B 130, H 3	LED ⁽¹⁾	840	550 lm	9,8 W	108°	26,5	on/off	A+ A+
160 Ceiling cut out DA 160 mm, HE 90 mm									
901437.002	L 170, B 170, H 3	LED ⁽¹⁾	830	640 lm	8,6 W	110°	25,0	on/off	A+ A+
901437.002.1	L 170, B 170, H 3	LED ⁽¹⁾	840	550 lm	9,8 W	110°	26,5	on/off	A+ A+
901438.002.1	L 170, B 170, H 3	LED ⁽¹⁾	840	1500 lm	18,4 W	110°	28,0	on/off	A+ A+
901438.002	L 170, B 170, H 3	LED ⁽¹⁾	830	1550 lm	19,6 W	110°	28,0	on/off	A+ A+
210 Ceiling cut out DA 210 mm, HE 110 mm									
901455.002	L 220, B 220, H 3	LED ⁽¹⁾	830	2100 lm	34 W	110°	27,3	on/off	A+ A+
901455.002.1	L 220, B 220, H 3	LED ⁽¹⁾	840	2300 lm	34 W	110°	27,6	on/off	A+ A+

**Comparison
LED vs. conventional lamps**
LED 8,6 / 9,8 W ≈

1 x 18 W TC-D (26 W CB)

LED 18,4 / 19,6 W ≈

2 x 18 W TC-D (52 W CB)

LED 34 W ≈

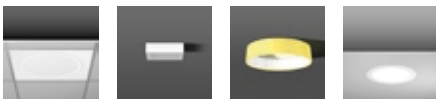
2 x 26 W TC-D (68 W CB)



TOLEDO FLAT

Recessed downlights

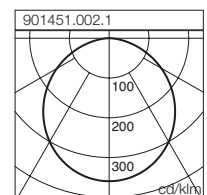
- Ultra thin recessed LED downlight
- Lightguide and diffuser made of non-yellowing PMMA
- Shallow recessed depth
- LED rated life 50,000 h (L70, B10)
- Colour rendering index Ra > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Colour temperature 3000 K and 4000 K
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Easy to install thanks to tool-free spring fastening system
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Can be directly covered with thermal insulation material (does not apply for D 495 mm diameter)
- Separate converter box with connecting cable
- Converter for standard (on/off) or DALI dimmable
- DALI converter is compatible with DC, suitable for central battery systems
- Surface mounted housing as accessory for all sizes



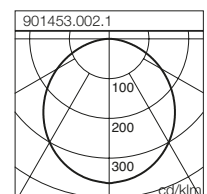
Further luminaires of this series, see:
 Indoor lighting | Recessed modular and linear luminaires
 Indoor lighting | Surface mounted downlights
 Indoor lighting | Fabric lampshade luminaires
 Emergency lighting

- Retrofittable decorative cylinders made of chintz fabric as accessory, optional with satin finish polycarbonate diffuser
- Applications:
 Corridors, side rooms, hotels, restaurants, conference rooms, private rooms

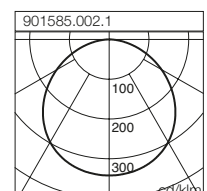
901451.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
16	24	32
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
23	35	58



901453.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	9	14



901585.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



Recessed downlights | Series: Toledo Flat Square

 Type of Protection: **IP 40**

Protection Class: II

Ceiling Thickness: 1-20 mm

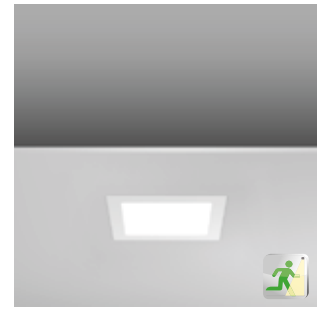
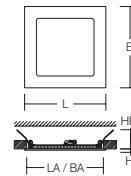
Impact Protection: IK06

Housing: die-cast aluminium. Lightguide and diffuser made of non-yellowing PMMA.
Ceiling installation with spring system. Mounting depth depends on ceiling strength.
Separate LED converter with connecting cable 250 mm.

LED and LED converter included.

Available colour: 2 = white

Versions with smart+free Bluetooth control for wireless network and operation using
Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EB	BB	EEC
Recessed downlights										Price Category 21
Ceiling cut out LA 96 x BA 96 mm										
901485.002 .Q	L 110, B 110, H 3, HE 27-56	LED	830	370 lm	4,7 W	107°	28,2	on/off	✓	A+ A+
901485.002.76	L 110, B 110, H 3, HE 31-56	LED	830	370 lm	4,7 W	107°	28,2	DALI	✓	A+ A+
901485.002.1	L 110, B 110, H 3, HE 27-56	LED	840	390 lm	4,7 W	107°	28,4	on/off	✓	A+ A+
901485.002.1.76	L 110, B 110, H 3, HE 31-56	LED	840	390 lm	4,7 W	107°	28,4	DALI	✓	A+ A+
Ceiling cut out LA 156 x BA 156 mm										
901486.002 .Q	L 172, B 172, H 3, HE 28-56	LED	830	730 lm	8 W	108°	25,8	on/off	✓	A+ A+
901486.002.76	L 172, B 172, H 3, HE 31-56	LED	830	730 lm	8 W	108°	25,8	DALI	✓	A+ A+
901486.002.1 .Q	L 172, B 172, H 3, HE 28-56	LED	840	750 lm	8 W	108°	25,8	on/off	✓	A+ A+
901486.002.1.76	L 172, B 172, H 3, HE 31-56	LED	840	750 lm	8 W	108°	25,8	DALI	✓	A+ A+
Ceiling cut out LA 208 x BA 208 mm										
901487.002 .Q	L 225, B 225, H 3, HE 29-56	LED	830	1600 lm	17,8 W	108°	26,0	on/off	✓	A+ A+
901487.002.76	L 225, B 225, H 3, HE 31-56	LED	830	1600 lm	17,8 W	108°	26,0	DALI	✓	A+ A+
901487.002.1 .Q	L 225, B 225, H 3, HE 29-56	LED	840	1650 lm	17,8 W	108°	26,1	on/off	✓	A+ A+
901487.002.1.76	L 225, B 225, H 3, HE 31-56	LED	840	1650 lm	17,8 W	108°	26,1	DALI	✓	A+ A+
Tunable White - 2700 K to 6500 K										
901670.002.730	L 225, B 225, H 3, HE 29-56	LED	827-865	1400 lm	19,1 W	108°	26,0	smart+free		A+ A+
Ceiling cut out LA 280 x BA 280 mm										
901488.002 .Q	L 300, B 300, H 3, HE 31-56	LED	830	2050 lm	22 W	108°	24,4	on/off	✓	A+ A+
901488.002.76 .Q	L 300, B 300, H 3, HE 31-56	LED	830	2050 lm	22 W	108°	24,4	DALI	✓	A+ A+
901488.002.1 .Q	L 300, B 300, H 3, HE 31-56	LED	840	2200 lm	22 W	108°	24,6	on/off	✓	A+ A+
901488.002.1.76	L 300, B 300, H 3, HE 31-56	LED	840	2200 lm	22 W	108°	24,6	DALI	✓	A+ A+
Tunable White - 2700 K to 6500 K										
901671.002.730	L 300, B 300, H 3, HE 31-56	LED	827-865	2000 lm	25 W	108°	24,4	smart+free		A+ A+

Comparison LED vs. conventional lamps
LED 4,7 W ≈

1 x 10 W TC-D (16 W CB)

LED 8 W ≈

1 x 18 W TC-D (26 W CB)

LED 17,8 / 19,1 W ≈

1 x 32 W TC-TEL (36 W EB)

LED 22 / 25 W ≈

2 x 26 W TC-D (68 W CB)



L x B 110



L x B 172



L x B 225

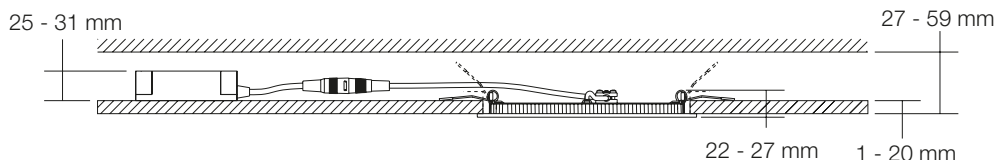


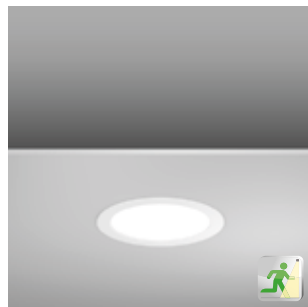
L x B 300

Accessories | Surface mounting accessories

Surface mounted housing: sheet steel, powder coated. Downlight can be locked without tools.

Surface mounted housing			Price Category 21
982138.002	L 110, B 110, H 55	for Toledo Flat Square 110 x 110	
982139.002	L 172, B 172, H 55	for Toledo Flat Square 172 x 172	
982140.002	L 225, B 225, H 55	for Toledo Flat Square 225 x 225	
982141.002	L 300, B 300, H 55	for Toledo Flat Square 300 x 300	





Recessed downlights | Series: Toledo Flat Round

Type of Protection: IP 40

Protection Class: II

Ceiling Thickness: 1-20 mm

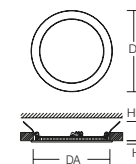
Impact Protection: IK06

Housing: die-cast aluminium. Lightguide and diffuser made of non-yellowing PMMA. Ceiling installation with spring system. Mounting depth depends on ceiling strength. Separate LED converter with connecting cable 250 mm.

LED and LED converter included.

Available colour: 2 = white

Versions with smart-free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Comparison LED vs. conventional lamps

LED 5 W ≈

1 x 10 W TC-D (16 W CB)

LED 9 W ≈

1 x 18 W TC-D (26 W CB)

LED 17,8 / 19,2 W ≈

1 x 32 W TC-D (36 W CB)

LED 23 / 25 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 / 35 W ≈

3 x 26 W TC-D (102 W CB)

4 x 14 W T16 (68 W EB)

4 x 18 W T26 (104 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dimmable	EB	CB	EEC
Recessed downlights											
Price Category 21											
Diffuser: plastic, opal											
Ceiling cut out DA 128 mm											
901451.002	D 148, H 2, HE 27-53	LED	830	390 lm	5 W	110°	26,4	on/off	✓	✓	A+ A+
901451.002.76	D 148, H 2, HE 31-53	LED	830	390 lm	5 W	110°	26,4	DALI			A+ A+
901451.002.1.Q	D 148, H 2, HE 27-53	LED	840	410 lm	5 W	110°	26,4	on/off	✓	✓	A+ A+
901451.002.1.76	D 148, H 2, HE 31-53	LED	840	410 lm	5 W	110°	26,4	DALI			A+ A+
Ceiling cut out DA 170 mm											
901452.002	D 190, H 3, HE 27-53	LED	830	740 lm	9 W	110°	26,2	on/off	✓	✓	A+ A+
901452.002.76.Q	D 190, H 3, HE 31-53	LED	830	740 lm	9 W	110°	26,2	DALI			A+ A+
901452.002.1.Q	D 190, H 3, HE 27-53	LED	840	840 lm	9 W	110°	26,6	on/off	✓	✓	A+ A+
901452.002.1.76.Q	D 190, H 3, HE 31-53	LED	840	840 lm	9 W	110°	26,6	DALI			A+ A+
Ceiling cut out DA 234 mm											
901453.002	D 255, H 3, HE 30-56	LED	830	1650 lm	17,8 W	110°	26,5	on/off	✓	✓	A+ A+
901453.002.76.Q	D 255, H 3, HE 31-56	LED	830	1650 lm	17,8 W	110°	26,5	DALI			A+ A+
901453.002.1.Q	D 255, H 3, HE 30-56	LED	840	1700 lm	17,8 W	110°	26,6	on/off	✓	✓	A+ A+
901453.002.1.76.Q	D 255, H 3, HE 31-56	LED	840	1700 lm	17,8 W	110°	26,6	DALI			A+ A+
Tunable White - 2700 K to 6500 K											
901666.002.730	D 255, H 3, HE 30-56	LED	827-865	1550 lm	19,2 W	110°	26,5	smart+free			A+ A+
Ceiling cut out DA 288 mm											
901484.002	D 317, H 3, HE 31-54	LED	830	2200 lm	23 W	108°	25,6	on/off	✓	✓	A+ A+
901484.002.76.Q	D 317, H 3, HE 31-54	LED	830	2200 lm	23 W	108°	25,6	DALI			A+ A+
901484.002.1.Q	D 317, H 3, HE 31-54	LED	840	2300 lm	23 W	108°	25,7	on/off	✓	✓	A+ A+
901484.002.1.76.Q	D 317, H 3, HE 31-54	LED	840	2300 lm	23 W	108°	25,7	DALI			A+ A+
Tunable White - 2700 K to 6500 K											
901667.002.730	D 317, H 3, HE 31-54	LED	827-865	2250 lm	25 W	108°	25,6	smart+free			A+ A+
Ceiling cut out DA 470 mm											
901585.002	D 495, H 6, HE 40-59	LED	830	3600 lm	35 W	113°	23,9	on/off			A+ A+
901585.002.76	D 495, H 6, HE 40-59	LED	830	3600 lm	35 W	113°	23,9	DALI			A+ A+
901585.002.1	D 495, H 6, HE 40-59	LED	840	3600 lm	35 W	113°	23,9	on/off			A+ A+
901585.002.1.76	D 495, H 6, HE 40-59	LED	840	3600 lm	35 W	113°	23,9	DALI			A+ A+
Tunable White - 2700 K bis 6500 K											
901668.002.730	D 495, H 6, HE 55-75	LED	827-865	3050 lm	33 W	113°	23,9	smart+free			A+ A+
Diffuser: transparent plastic, microprismatic											
Ceiling cut out DA 470 mm											
901586.002	D 495, H 6, HE 40-59	LED	830	3500 lm	35 W	88°	21,1	on/off			A+ A+
901586.002.76	D 495, H 6, HE 40-59	LED	830	3500 lm	35 W	88°	21,1	DALI			A+ A+
901586.002.1	D 495, H 6, HE 40-59	LED	840	3600 lm	35 W	88°	21,4	on/off			A+ A+
901586.002.1.76	D 495, H 6, HE 40-59	LED	840	3600 lm	35 W	88°	21,4	DALI			A+ A+
Tunable White - 2700 K to 6500 K											
901669.002.730	D 495, H 6, HE 55-75	LED	827-865	3000 lm	33 W	88°	21,1	smart+free			A+ A+



D 148



D 190



D 255



D 317



D 495



D 495 microprismatic



Recessed frame

Module 600

982182.002 L 595, B 595, H 36 for Toledo Flat Round D 495

Module 625

982183.002 L 622, B 622, H 36 for Toledo Flat Round D 495



Accessories | Surface mounting accessories

Ceiling frame and mounting plate galvanised metal. Cylinder housing sheet steel powder-coated. Downlight can be locked without tools.

Surface mounted housing

982072.002 *	D 150, H 55	for Toledo Flat Round D 148
982073.002	D 192, H 55	for Toledo Flat Round D 190
982074.002	D 257, H 60	for Toledo Flat Round D 255
982119.002	D 319, H 60	for Toledo Flat Round D 317
982181.002	D 500, H 57	for Toledo Flat Round D 495

* Not suitable for DALI version

Not suitable for the tunable white version

Price Category 21

Price Category 21

Accessories | Chintz decorative cylinder Toledo Flat

Standard colour covering surface: 66.8003.01 white

Other colours (see illustration) available at the same price. Please include the colour code in your order.

Can be retrofitted without tools to the recessed downlight.

Please be aware of possible increased freight charges for deliveries outside of Germany.

Available colour: 2 = white



with diffuser



without diffuser

Reference number	Dimensions		Price Category 21
Chintz lampshades			
982319.002	D 153, H 60	Chintz decorative cylinder for Toledo Flat Round D 148	
982320.002	D 195, H 60	Chintz decorative cylinder for Toledo Flat Round D 190	
982321.002	D 260, H 60	Chintz decorative cylinder for Toledo Flat Round D 255	
982322.002	D 322, H 60	Chintz decorative cylinder for Toledo Flat Round D 317	
982323.002	D 500, H 60	Chintz decorative cylinder for Toledo Flat Round D 495	
Cannot be fitted with surface mount housing			

Satin finish polycarbonate diffuser (optional)			Price Category 21
Can be installed on the decorative cylinder without any tools			
982324.002	D 151, H 4	Accessories for chintz decorative cylinder D 153	
982325.002	D 193, H 4	Accessories for chintz decorative cylinder D 195	
982326.002	D 258, H 4	Accessories for chintz decorative cylinder D 260	
982327.002	D 320, H 4	Accessories for chintz decorative cylinder D 322	
982328.002	D 498, H 4	Accessories for chintz decorative cylinder D 500	



Fabric lampshades chintz			Price Category 21
Colour chart			
W06630	Chintz lampshades are available in more than 70 different colours		



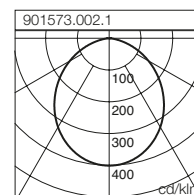
DALI

TOLEDO

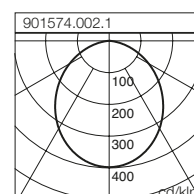
Recessed downlights

- High efficiency LED recessed downlight in three sizes
- Housing and opal plastic diffuser made of UV-resistant polycarbonate
- Homogeneous and smooth light distribution
- Protection type IP 44
- Luminous efficiency up to 117 lm/W
- LED rated life 50,000 h (L70, B50)
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Suitable for through-wiring
- Spring fastening system for installation without tools
- Colour temperature 2700 K or 4000 K
- Colour rendering index Ra > 80

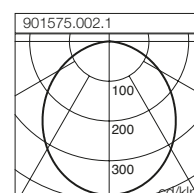
901573.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
8	12	15
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
11	16	27



901574.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	5	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	8	12



901575.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



Recessed downlights | Series: Toledo

 Type of Protection: **IP 44**

Protection Class: II

Ceiling Thickness: 1-25 mm

Impact Protection: IK05

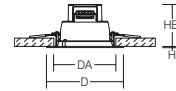
Bezel ring: die-cast aluminium, powder-coated. Housing plastic (polycarbonate UV-resistant).

Diffusor plastic (polycarbonate UV-resistant) opal, impact resistant. Spring fastening system.

Passive cooling. Suitable for through-wiring. On/off version with integrated converter. DALI version with separate converter.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmi-able	EEC
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Recessed downlights
Price Category 21

105

Ceiling cut out DA 105 mm, HE 100 mm

901573.002	D 130, H 2	LED	827	770 lm	8 W	102°	26,5 on/off	A+ A+
901573.002.1 .Q	D 130, H 2	LED	840	850 lm	8 W	102°	26,9 on/off	A+ A+

Ceiling cut out DA 105 mm, HE 140 mm

901573.002.76	D 130, H 2	LED	827	770 lm	9 W	102°	27,5 DALI	A+ A+
901573.002.1.76	D 130, H 2	LED	840	850 lm	9 W	102°	27,8 DALI	A+ A+

150

Ceiling cut out DA 150 mm, HE 140 mm

901574.002	D 172, H 2	LED	827	1750 lm	17 W	102°	27,1 on/off	A+ A+
901574.002.1 .Q	D 172, H 2	LED	840	1900 lm	17 W	102°	27,4 on/off	A+ A+

901574.002.76	D 172, H 2	LED	827	1750 lm	18 W	102°	28,2 DALI	A+ A+
901574.002.1.76	D 172, H 2	LED	840	1900 lm	18 W	102°	28,5 DALI	A+ A+

200

Ceiling cut out DA 200 mm, HE 140 mm

901575.002	D 225, H 4	LED	827	2600 lm	26 W	104°	26,9 on/off	A+ A+
901575.002.1 .Q	D 225, H 4	LED	840	3050 lm	26 W	104°	27,4 on/off	A+ A+

901575.002.76	D 225, H 4	LED	827	2600 lm	27 W	104°	28,0 DALI	A+ A+
901575.002.1.76	D 225, H 4	LED	840	3050 lm	27 W	104°	28,5 DALI	A+ A+

Comparison
LED vs. conventional lamps
LED 8 / 9 W ≈

1 x 18 W TC-D (26 W CB)

LED 17 / 18 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 / 27 W ≈

2 x 32 W TC-TEL (69 W EB)



DALI



Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 48 W ≈

2 x 42 W TC-TEL (90 W EB)

Recessed downlights | Series: Quardo® LED 165

Type of Protection: IP 23

Protection Class: II

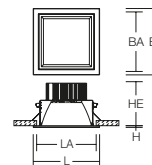
Ceiling Thickness: 1-30 mm

Impact Protection: IK02

Mounting and masking frame: metal, powder-coated. Bracket: galvanised sheet steel. Reflector: aluminium, highly polished anodised finish. Cover plate: satin finish. Ceiling installation with spring system. LED converter in separate box. With connecting cable (L 400 mm). Suitable for through-wiring. Passive cooling.

LED and LED converter included.

Available colours (X): 2 = white, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Recessed downlights

Price Category 21

Ceiling cut out LA 165 x BA 165 mm, HE 180 mm



901288.00X	L 195, B 195, H 5	LED	830	1700 lm	21 W	69°	19,5	on/off	A++ A+
901288.00X.76	L 195, B 195, H 5	LED	830	1700 lm	21 W	69°	19,5	DALI	A++ A+
901289.00X	L 195, B 195, H 5	LED	840	1750 lm	21 W	69°	19,6	on/off	A++ A+
901289.00X.76	L 195, B 195, H 5	LED	840	1750 lm	21 W	69°	19,6	DALI	A++ A+

Ceiling cut out LA 165 x BA 165 mm, HE 220 mm

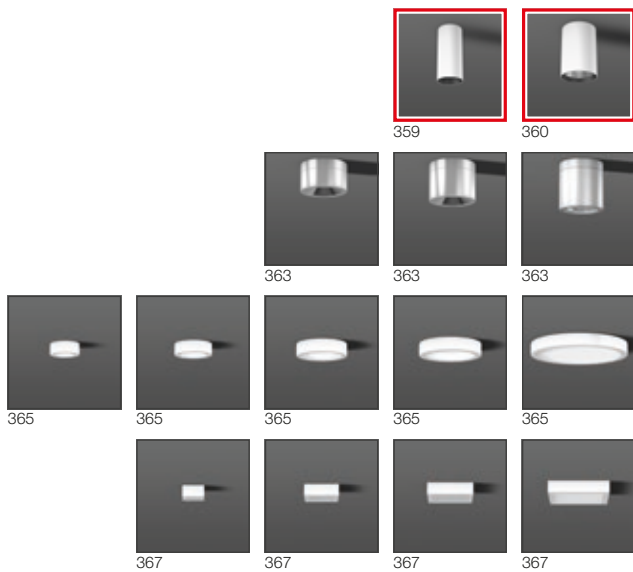
901472.00X	L 195, B 195, H 5	LED	830	3800 lm	48 W	69°	22,3	on/off	A++ A+
901472.00X.76	L 195, B 195, H 5	LED	830	3800 lm	48 W	69°	22,3	DALI	A++ A+
901473.00X	L 195, B 195, H 5	LED	840	3900 lm	48 W	69°	22,5	on/off	A++ A+
901473.00X.76	L 195, B 195, H 5	LED	840	3900 lm	48 W	69°	22,5	DALI	A++ A+



*Il faut soigner le corps
pour que l'âme s'y plaise...*



The application image shows:
Toledo Flat



Heledon®
358-361

Andho®
362-363

Toledo Flat
364-367

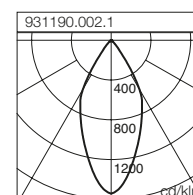


HELEDON®

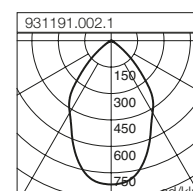
Surface mounted downlights

- High quality die-cast aluminium housing in two sizes
- Excellent light quality without flickering, homogeneous light distribution, glare control and light colour quality
- Suitable for reflector as well as lens technologies
- MIRO-SILVER® reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone
- Interchangeable lenses with different beam angles
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering stroboscopic effect
- Suitable for On/Off and DALI
- Easy installation with a separate ceiling frame with bayonet mounting and plug connection
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, clear and frosted diffusers, white interchangeable plastic ring

931190.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



931191.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Further luminaires of this series, see:
Indoor lighting | Recessed downlights

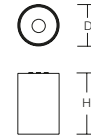
Surface mounted downlights | Series: Heledon® Mini

Type of Protection: IP 20
Protection Class: I

Housing: pressure die-cast aluminium, powder-coated. Internal ceiling frame polycarbonate with bayonet mounting. Connected via plug-in connector. Heat resistant plastic ring black. With faceted aluminium reflector optical assembly or polycarbonate lens. Converter installed. Passive cooling.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Surface mounted downlights

Price Category 21

Including lens for best uniformity of the light cone

931189.002	D 87, H 197	LED	830	2050 lm	20 W	71°	24,8	on/off	A++ A++
931189.002.76	D 87, H 197	LED	830	2050 lm	20 W	71°	24,8	DALI	A++ A++
931189.002.1	D 87, H 197	LED	840	2100 lm	20 W	71°	24,9	on/off	A++ A++
931189.002.1.76	D 87, H 197	LED	840	2100 lm	20 W	71°	24,9	DALI	A++ A++
931191.002	D 87, H 197	LED	830	2850 lm	30 W	71°	25,9	on/off	A++ A++
931191.002.76	D 87, H 197	LED	830	2850 lm	30 W	71°	25,9	DALI	A++ A++
931191.002.1	D 87, H 197	LED	840	2900 lm	30 W	71°	26,1	on/off	A++ A++
931191.002.1.76	D 87, H 197	LED	840	2900 lm	30 W	71°	26,1	DALI	A++ A++

Including wide beam reflector

931188.002	D 87, H 197	LED	830	1900 lm	20 W	47°	19,5	on/off	A++ A++
931188.002.76	D 87, H 197	LED	830	1900 lm	20 W	47°	19,5	DALI	A++ A++
931188.002.1	D 87, H 197	LED	840	1900 lm	20 W	47°	19,6	on/off	A++ A++
931188.002.1.76	D 87, H 197	LED	840	1900 lm	20 W	47°	19,6	DALI	A++ A++
931190.002	D 87, H 197	LED	830	2700 lm	30 W	47°	20,8	on/off	A++ A++
931190.002.76	D 87, H 197	LED	830	2700 lm	30 W	47°	20,8	DALI	A++ A++
931190.002.1	D 87, H 197	LED	840	2800 lm	30 W	47°	20,9	on/off	A++ A++
931190.002.1.76	D 87, H 197	LED	840	2800 lm	30 W	47°	20,9	DALI	A++ A++

Ra > 90 options on request

Diffuser

Price Category 21

982370.000	D 75, H 3	Safety glass, clear
982370.010	D 75, H 3	Safety glass, satin finish

Anti-glare honeycomb louvre

Price Category 21

982371.003	D 74, H 3	Mini honeycomb louvre
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Interchangeable plastic rings

Price Category 21

982419.002	D 82, H 20	White plastic ring for reflector
982421.002	D 82, H 31	White plastic ring for lens



Interchangeable optics

Price Category 21

982368.003	D 82, H 55	Reflector, narrow beam
982368.013	D 82, H 55	Reflector, medium beam
982368.023	D 82, H 55	Reflector, wide beam
982369.003	D 82, H 55	Lens, narrow beam
982369.013	D 82, H 55	Lens, medium beam
982369.023	D 82, H 55	Lens, wide beam
982369.033	D 82, H 55	Lens, very wide beam
982369.043	D 82, H 55	Lens with oval light distribution for corridor





Comparison LED vs. conventional lamps

LED 27 W ≈

1 x 150 W QT16 (150 W)
1 x 35 W HIT (45 W CB)

LED 38 W ≈

1 x 50 W HIT (60 W CB)

Surface mounted downlights | Series: Heledon® Maxi

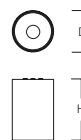
Type of Protection: IP 20

Protection Class: I

Housing: pressure die-cast aluminium, powder-coated. Internal ceiling frame polycarbonate with bayonet mounting. Connected via plug-in connector. Heat resistant plastic ring black. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Converter installed. Passive cooling.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
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Surface mounted downlights

Price Category 21

Including lens for best uniformity of the light cone

931193.002	D 123, H 183	LED	830	2400 lm	27 W	41°	13,4	on/off	A++ A++
931193.002.76	D 123, H 183	LED	830	2400 lm	27 W	41°	13,4	DALI	A++ A++
931193.002.1	D 123, H 183	LED	840	2500 lm	27 W	41°	13,6	on/off	A++ A++
931193.002.1.76	D 123, H 183	LED	840	2500 lm	27 W	41°	13,6	DALI	A++ A++
931195.002	D 123, H 183	LED	830	3150 lm	38 W	41°	14,4	on/off	A++ A++
931195.002.76	D 123, H 183	LED	830	3150 lm	38 W	41°	14,4	DALI	A++ A++
931195.002.1	D 123, H 183	LED	840	3350 lm	38 W	41°	14,6	on/off	A++ A++
931195.002.1.76	D 123, H 183	LED	840	3350 lm	38 W	41°	14,6	DALI	A++ A++

Including reflector for maximum efficiency

931192.002	D 123, H 183	LED	830	3050 lm	27 W	63°	19,7	on/off	A++ A++
931192.002.76	D 123, H 183	LED	830	3050 lm	27 W	63°	19,7	DALI	A++ A++
931192.002.1	D 123, H 183	LED	840	3200 lm	27 W	63°	19,8	on/off	A++ A++
931192.002.1.76	D 123, H 183	LED	840	3200 lm	27 W	63°	19,8	DALI	A++ A++
931194.002	D 123, H 183	LED	830	4000 lm	38 W	63°	20,6	on/off	A++ A++
931194.002.76	D 123, H 183	LED	830	4000 lm	38 W	63°	20,6	DALI	A++ A++
931194.002.1	D 123, H 183	LED	840	4250 lm	38 W	63°	20,8	on/off	A++ A++
931194.002.1.76	D 123, H 183	LED	840	4250 lm	38 W	63°	20,8	DALI	A++ A++

Ra > 90 options on request

Diffuser

Price Category 21

982374.000	D 111, H 3	Safety glass, clear
982374.010	D 111, H 3	Safety glass, satin finish



Anti-glare honeycomb louvre

Price Category 21

982375.003	D 111, H 3	Maxi honeycomb louvre
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Interchangeable plastic rings

Price Category 21

982420.002	D 118, H 20	White plastic ring for reflector
982422.002	D 118, H 33	White plastic ring for lens



Interchangeable optics

Price Category 21

982372.003	D 118, H 83	Reflector, narrow beam
982372.013	D 118, H 83	Reflector, medium beam
982372.023	D 118, H 83	Reflector, wide beam
982372.033	D 118, H 83	Reflector, very wide beam
982373.003	D 118, H 83	Lens, narrow beam
982373.013	D 118, H 83	Lens, medium beam
982373.023	D 118, H 83	Lens, wide beam





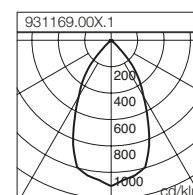
DALI

ANDHO®

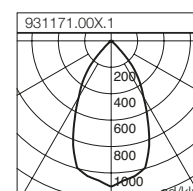
Surface mounted downlights

- High-quality LED die cast aluminium surface-mounted downlight
- Protection type IP 65
- Three sizes
- LED rated life 50,000 h (L80, B10 at 21 W and 30 W; L80, B50 at 35 W)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Passive cooling system
- Standard is either converter for on/off or DALI dimming
- Suspension set as accessory

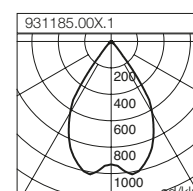
931169.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	9



931171.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



931185.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
1	2	2
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	4



Surface mounted downlights | Series: Andho® Flat

Type of Protection: **IP 65**

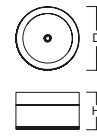
Protection Class: I

Impact Protection: IK03

Housing: aluminium extrusion profile, powder-coated. Cover ring and ceiling frame die cast aluminium, powder coated. Reflector: aluminium, highly polished anodised finish. 5 pole double terminal for through-wiring. With safety glass, clear.

LED and LED converter included.

Available colours (X): 2 = white, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Surface mounted downlights								
931169.00X	D 230, H 138	LED	830	1800 lm	21 W	56°	15,9 on/off	A++ A++
931169.00X.76	D 230, H 138	LED	830	1800 lm	21 W	56°	15,9 DALI	A++ A++
931169.00X.1	D 230, H 138	LED	840	1900 lm	21 W	56°	16,0 on/off	A++ A++
931169.00X.1.76	D 230, H 138	LED	840	1900 lm	21 W	56°	16,0 DALI	A++ A++
Accessories								
981694.00X	Bezel ring (screwed on the luminaire), with safety glass, matt							
981678.00X	Suspension cable (2m) with 5-pole power supply cable (IP 23)							

Comparison LED vs. conventional lamps

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

1 x 35 W HIT-CE (45 W CB)

Surface mounted downlights | Series: Andho® Midi

Type of Protection: **IP 65**

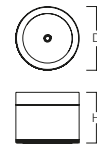
Protection Class: I

Impact Protection: IK03

Housing: aluminium extrusion profile, powder-coated. Cover ring and ceiling frame die cast aluminium, powder coated. Reflector: aluminium, highly polished anodised finish. 5 pole double terminal for through-wiring. With safety glass, clear.

LED and LED converter included.

Available colours (X): 2 = white, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Surface mounted downlights								
931171.00X	D 230, H 188	LED	830	2700 lm	30 W	56°	17,3 on/off	A++ A++
931171.00X.76	D 230, H 188	LED	830	2700 lm	30 W	56°	17,3 DALI	A++ A++
931171.00X.1	D 230, H 188	LED	840	2800 lm	30 W	56°	17,4 on/off	A++ A++
931171.00X.1.76	D 230, H 188	LED	840	2800 lm	30 W	56°	17,4 DALI	A++ A++
Accessories								
981694.00X	Bezel ring (screwed on the luminaire), with safety glass, matt							
981678.00X	Suspension cable (2m) with 5-pole power supply cable (IP 23)							

Comparison LED vs. conventional lamps

LED 30 W ≈

2 x 32 W TC-D (69 W EB)

1 x 50 W HIT-CE (60 W CB)

Surface mounted downlights | Series: Andho® High

Type of Protection: **IP 65**

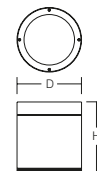
Protection Class: I

Impact Protection: IK03

Housing: aluminium extrusion profile, powder-coated. Cover ring and ceiling frame die cast aluminium, powder coated. Reflector: aluminium, highly polished anodised finish. 5 pole double terminal for through-wiring. With safety glass, clear.

LED and LED converter included.

Available colours (X): 2 = white, 4 = silver metallic



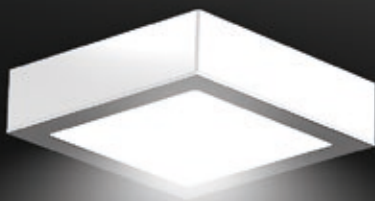
Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Surface mounted downlights								
931185.00X	D 230, H 250	LED	830	4100 lm	35 W	67°	18,2 on/off	A++ A++
931185.00X.76	D 230, H 250	LED	830	4100 lm	35 W	67°	18,2 DALI	A++ A++
931185.00X.1	D 230, H 250	LED	840	4350 lm	35 W	67°	18,4 on/off	A++ A++
931185.00X.1.76	D 230, H 250	LED	840	4350 lm	35 W	67°	18,4 DALI	A++ A++
Accessories								
981694.00X	Bezel ring (screwed on the luminaire), with safety glass, matt							
981678.00X	Suspension cable (2m) with 5-pole power supply cable (IP 23)							

Comparison LED vs. conventional lamps

LED 35 W ≈

2 x 42 W TC-TEL (90 W EB)

1 x 70 W HIT (84 W CB)



TOLEDO FLAT

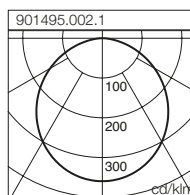
Surface mounted downlights

- Extra flat LED surface-mounted downlight in five sizes round and four sizes square
- Lightguide and diffuser made of non-yellowing PMMA
- Suitable for ceiling and wall mounting
- Very low installation height
- LED rated life 50,000 h (L70, B10)
- Colour rendering index Ra > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Colour temperature 3000 K and 4000 K
- Applications:
Corridors, side rooms, hotels, restaurants, conference rooms, private rooms

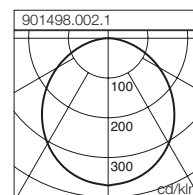


Further luminaires of this series, see:
Indoor lighting | Recessed modular luminaires
Indoor lighting | Fabric lampshade luminaires
Indoor lighting | Recessed downlights

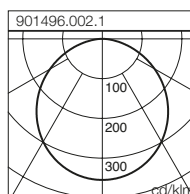
901495.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
16	24	32
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
23	35	58



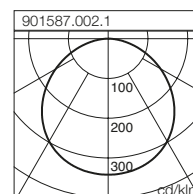
901498.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
5	7	11



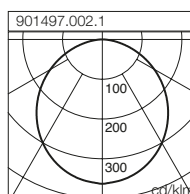
901496.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
8	12	16
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
12	17	29



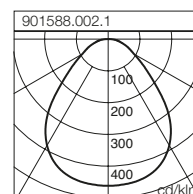
901587.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7



901497.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	9	14



901588.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6



Surface mounted downlights | Series: Toledo Flat Round

 Type of Protection: **IP 40**

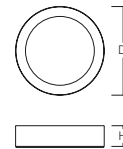
Protection Class: II

Impact Protection: IK06

Cylinder housing: sheet steel, powder coated. Bezel ring: die-cast aluminium, powder-coated. Lightguide and plastic cover made of non-yellowing PMMA, opal matt or prismatic.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EB	CB	EEC
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Surface mounted downlights

Price Category 21

Diffuser: plastic, opal

Diameter D 150 mm

901495.002	D 150, H 57	LED	830	390 lm	5 W	110°	26,4	on/off	✓	A+ A+
901495.002.1	D 150, H 57	LED	840	410 lm	5 W	110°	26,4	on/off	✓	A+ A+

Diameter D 192 mm

901496.002	D 192, H 58	LED	830	740 lm	9 W	110°	26,2	on/off	✓	A+ A+
901496.002.76	D 192, H 58	LED	830	740 lm	9 W	110°	26,2	DALI	✓	A+ A+
901496.002.1	D 192, H 58	LED	840	840 lm	9 W	110°	26,6	on/off	✓	A+ A+
901496.002.1.76	D 192, H 58	LED	840	840 lm	9 W	110°	26,6	DALI	✓	A+ A+

Diameter D 257 mm

901497.002 .Q	D 257, H 63	LED	830	1650 lm	17,8 W	110°	26,5	on/off	✓	A+ A+
901497.002.76	D 257, H 63	LED	830	1650 lm	17,8 W	110°	26,5	DALI	✓	A+ A+
901497.002.1 .Q	D 257, H 63	LED	840	1700 lm	17,8 W	110°	26,6	on/off	✓	A+ A+
901497.002.1.76	D 257, H 63	LED	840	1700 lm	17,8 W	110°	26,6	DALI	✓	A+ A+

Diameter D 319 mm

901498.002	D 319, H 63	LED	830	2200 lm	23 W	108°	25,6	on/off	✓	A+ A+
901498.002.76	D 319, H 63	LED	830	2200 lm	23 W	108°	25,6	DALI	✓	A+ A+
901498.002.1	D 319, H 63	LED	840	2300 lm	23 W	108°	25,7	on/off	✓	A+ A+
901498.002.1.76	D 319, H 63	LED	840	2300 lm	23 W	108°	25,7	DALI	✓	A+ A+

Diameter D 500 mm

901587.002	D 500, H 63	LED	830	3600 lm	35 W	113°	23,9	on/off		A+ A+
901587.002.76	D 500, H 63	LED	830	3600 lm	35 W	113°	23,9	DALI		A+ A+
901587.002.1	D 500, H 63	LED	840	3600 lm	35 W	113°	23,9	on/off		A+ A+
901587.002.1.76	D 500, H 63	LED	840	3600 lm	35 W	113°	23,9	DALI		A+ A+

Diffuser: transparent plastic, micropismatic

Diameter D 500 mm

901588.002	D 500, H 63	LED	830	3500 lm	35 W	88°	21,1	on/off		A+ A+
901588.002.76	D 500, H 63	LED	830	3500 lm	35 W	88°	21,1	DALI		A+ A+
901588.002.1	D 500, H 63	LED	840	3600 lm	35 W	88°	21,4	on/off		A+ A+
901588.002.1.76	D 500, H 63	LED	840	3600 lm	35 W	88°	21,4	DALI		A+ A+


Accessories | Supporting ring for fabric lamp shades

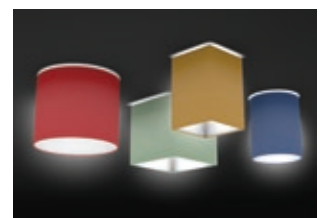
Retrofittable holder for a tool-free mounting of a lamp shade.

Ring metal powder coated. M4 Threaded. Knurled nuts plastic.

Mounting ring for fabric lamp shades

Price Category 21

982386.002	D 162, H 10	for surface mounted downlight Toledo Flat Round D 150 for mounting the lamp shade Toledo Flatliner 200
982387.002	D 204, H 10	for surface mounted downlights Toledo Flat Round D 192 for mounting the lamp shade Toledo Flatliner 242
982388.002	D 270, H 10	for surface mounted downlights Toledo Flat Round D 257 for mounting the lamp shade Toledo Flatliner 307
982389.002	D 331, H 10	for surface mounted downlights Toledo Flat Round D 319 for mounting the lamp shade Toledo Flatliner 369





The application image shows:
Toledo Flat Square

Surface mounted downlights | Series: Toledo Flat Square

 Type of Protection: **IP 40**

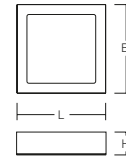
Protection Class: II

Impact Protection: IK06

Surface mounted housing: sheet steel, powder coated. Square cover plate: die cast aluminium, powder coated. Light guide and plastic cover made of non-yellowing PMMA, opal matt.

LED and LED converter included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dim-able	EB	CB	EEC
Surface mounted downlights											
Length L 110 mm x Width B 110 mm											
901551.002	L 110, B 110, H 58	LED	830	370 lm	4,7 W	107°	28,2	on/off	✓	A+ A+	
901551.002.1	L 110, B 110, H 58	LED	840	390 lm	4,7 W	107°	28,4	on/off	✓	A+ A+	
Length L 172 mm x Width B 172 mm											
901552.002	L 172, B 172, H 58	LED	830	730 lm	8 W	108°	25,8	on/off	✓	A+ A+	
901552.002.76	L 172, B 172, H 58	LED	830	730 lm	8 W	108°	25,8	DALI		A+ A+	
901552.002.1	L 172, B 172, H 58	LED	840	750 lm	8 W	108°	25,8	on/off	✓	A+ A+	
901552.002.1.76	L 172, B 172, H 58	LED	840	750 lm	8 W	108°	25,8	DALI		A+ A+	
Length L 225 mm x Width B 225 mm											
901553.002	L 225, B 225, H 58	LED	830	1600 lm	17,8 W	108°	26,0	on/off	✓	✓	A+ A+
901553.002.76	L 225, B 225, H 58	LED	830	1600 lm	17,8 W	108°	26,0	DALI			A+ A+
901553.002.1	L 225, B 225, H 58	LED	840	1650 lm	17,8 W	108°	26,1	on/off	✓	✓	A+ A+
901553.002.1.76	L 225, B 225, H 58	LED	840	1650 lm	17,8 W	108°	26,1	DALI			A+ A+
Length L 300 mm x Width B 300 mm											
901554.002	L 300, B 300, H 58	LED	830	2050 lm	22 W	108°	24,4	on/off	✓	✓	A+ A+
901554.002.76	L 300, B 300, H 58	LED	830	2050 lm	22 W	108°	24,4	DALI			A+ A+
901554.002.1 .Q	L 300, B 300, H 58	LED	840	2200 lm	22 W	108°	24,6	on/off	✓	✓	A+ A+
901554.002.1.76	L 300, B 300, H 58	LED	840	2200 lm	22 W	108°	24,6	DALI			A+ A+

Price Category 21

**Comparison
LED vs. conventional lamps**
LED 4,7 W ≈

1 x 10 W TC-D (16 W CB)

LED 8 W ≈

1 x 18 W TC-D (26 W CB)

LED 17,8 W ≈

2 x 18 W TC-D (52 W CB)

LED 22 W ≈

2 x 26 W TC-D (68 W CB)





The application image shows:
Golas



PAR16
371



373



374

Levido Swing
372-375



377

Vortex
376-377



379

Deecos R
378-381



383



383



383

Magcardo®
382-385



387



388

Rondos R
386-389



391



392

Golas
390-393



395

Tarek R
394-395



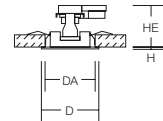
The application image shows:
PAR16



Recessed projectors | Series: PAR16

Type of Protection: **IP 23**
 Protection Class: I
 Ceiling Thickness: 1-25 mm
 Impact Protection: IK02
 Housing and recessed ring: metal. Lampholder: GU10 with lamp changer. Ceramic socket. Can be swivelled by $\pm 30^\circ$.

Lamp not included.
 Available colour: 2 = white



Reference number	Dimensions	Lamp	dim-able	EEC
Recessed projectors				
Ceiling cut out DA 82 mm, HE 72 mm				
911005.002	D 94, H 3	1 x QPAR16 50 W	on/off	D A, A+



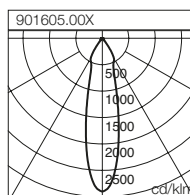


LEVIDO SWING

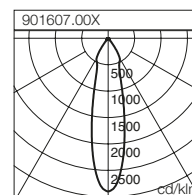
Recessed projectors

- Daintily small dimensions
- Alternative for low-voltage spotlights 35 W and 50 W
- LED rated life 50,000 h (L70, B10)
- Three different light colours (2700 K, 3000 K, 4000 K)
- Colour rendering index Ra > 80
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Two different beam angles
- Flexible directing of light thanks to pivot range $\pm 25^\circ$
- Safety glass cover to protect the LED
- Opal diffuser made of PMMA (included for optional use, mounting without tools):
 - for homogeneous light distribution
 - for reduction of direct glare
- Versions in DALI dimmable and for phase dimming

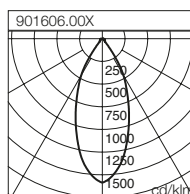
901605.00X		
h [m]	Ø [m]	E [lx]
1,0	0,42	1426
2,0	0,84	357
3,0	1,26	158
4,0	1,69	89
5,0	2,11	57



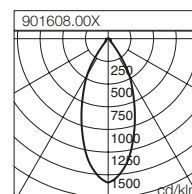
901607.00X		
h [m]	Ø [m]	E [lx]
1,0	0,42	2098
2,0	0,84	525
3,0	1,26	233
4,0	1,69	131
5,0	2,11	84



901606.00X		
h [m]	Ø [m]	E [lx]
1,0	0,77	736
2,0	1,54	184
3,0	2,32	82
4,0	3,09	46
5,0	3,86	29



901608.00X		
h [m]	Ø [m]	E [lx]
1,0	0,78	1111
2,0	1,56	278
3,0	2,34	123
4,0	3,12	69
5,0	3,90	44



Opal PMMA plastic cover included

Recessed projectors | Series: Levido Swing Round

Type of Protection: **IP 40**

Protection Class: II

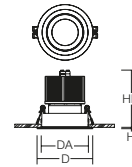
Ceiling Thickness: 1-20 mm

Impact Protection: IK06

Cover: Die cast aluminium, powder coated, white. Extruded aluminium heat sink. Can be swivelled by $\pm 25^\circ$. Reflector: aluminium, highly polished anodised finish. With safety glass. Ceiling installation with spring system. Separate LED converter with connecting cable 250 mm. Passive cooling. Opal PMMA plastic cover included as accessory.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Recessed projectors								
Ceiling cut out DA 78 mm								
901605.002.2	D 91, H 2, HE 90	LED	827	630 lm	8 W	24°	on/off	A+ A+
901605.003.2	D 91, H 2, HE 90	LED	827	560 lm	8 W	24°	on/off	A+ A+
901606.002.2	D 91, H 2, HE 90	LED	827	600 lm	8 W	42°	on/off	A+ A+
901606.003.2	D 91, H 2, HE 90	LED	827	540 lm	8 W	42°	on/off	A+ A+
901605.002	D 91, H 2, HE 90	LED	830	630 lm	8 W	24°	on/off	A+ A+
901605.003	D 91, H 2, HE 90	LED	830	560 lm	8 W	24°	on/off	A+ A+
901606.002	D 91, H 2, HE 90	LED	830	600 lm	8 W	42°	on/off	A+ A+
901606.003	D 91, H 2, HE 90	LED	830	540 lm	8 W	42°	on/off	A+ A+
901605.002.1	D 91, H 2, HE 90	LED	840	640 lm	8 W	24°	on/off	A+ A+
901605.003.1	D 91, H 2, HE 90	LED	840	570 lm	8 W	24°	on/off	A+ A+
901606.002.1	D 91, H 2, HE 90	LED	840	610 lm	8 W	42°	on/off	A+ A+
901606.003.1	D 91, H 2, HE 90	LED	840	550 lm	8 W	42°	on/off	A+ A+
901607.002.2	D 91, H 2, HE 90	LED	827	940 lm	13 W	24°	on/off	A+ A+
901607.002.2.76 *	D 91, H 2, HE 90	LED	827	940 lm	13 W	24°	DALI	A+ A+
901607.003.2	D 91, H 2, HE 90	LED	827	850 lm	13 W	24°	on/off	A+ A+
901607.003.2.76 *	D 91, H 2, HE 90	LED	827	850 lm	13 W	24°	DALI	A+ A+
901608.002.2	D 91, H 2, HE 90	LED	827	920 lm	13 W	42°	on/off	A+ A+
901608.002.2.76 *	D 91, H 2, HE 90	LED	827	920 lm	13 W	42°	DALI	A+ A+
901608.003.2	D 91, H 2, HE 90	LED	827	830 lm	13 W	42°	on/off	A+ A+
901608.003.2.76 *	D 91, H 2, HE 90	LED	827	830 lm	13 W	42°	DALI	A+ A+
901607.002	D 91, H 2, HE 90	LED	830	940 lm	13 W	24°	on/off	A+ A+
901607.002.76 *	D 91, H 2, HE 90	LED	830	940 lm	13 W	24°	DALI	A+ A+
901607.003	D 91, H 2, HE 90	LED	830	850 lm	13 W	24°	on/off	A+ A+
901607.003.76 *	D 91, H 2, HE 90	LED	830	850 lm	13 W	24°	DALI	A+ A+
901608.002	D 91, H 2, HE 90	LED	830	920 lm	13 W	42°	on/off	A+ A+
901608.002.76 *	D 91, H 2, HE 90	LED	830	920 lm	13 W	42°	DALI	A+ A+
901608.003	D 91, H 2, HE 90	LED	830	830 lm	13 W	42°	on/off	A+ A+
901608.003.76 *	D 91, H 2, HE 90	LED	830	830 lm	13 W	42°	DALI	A+ A+
901607.002.1	D 91, H 2, HE 90	LED	840	980 lm	13 W	24°	on/off	A+ A+
901607.002.1.76 *	D 91, H 2, HE 90	LED	840	980 lm	13 W	24°	DALI	A+ A+
901607.003.1	D 91, H 2, HE 90	LED	840	880 lm	13 W	24°	on/off	A+ A+
901607.003.1.76 *	D 91, H 2, HE 90	LED	840	880 lm	13 W	24°	DALI	A+ A+
901608.002.1	D 91, H 2, HE 90	LED	840	960 lm	13 W	42°	on/off	A+ A+
901608.002.1.76 *	D 91, H 2, HE 90	LED	840	960 lm	13 W	42°	DALI	A+ A+
901608.003.1	D 91, H 2, HE 90	LED	840	870 lm	13 W	42°	on/off	A+ A+
901608.003.1.76 *	D 91, H 2, HE 90	LED	840	870 lm	13 W	42°	DALI	A+ A+
901609.002.2	D 91, H 2, HE 90	LED	827	1050 lm	16 W	24°	Phase-cut	A+ A+
901609.003.2	D 91, H 2, HE 90	LED	827	940 lm	16 W	24°	Phase-cut	A+ A+
901610.002.2	D 91, H 2, HE 90	LED	827	1050 lm	16 W	42°	Phase-cut	A+ A+
901610.003.2	D 91, H 2, HE 90	LED	827	920 lm	16 W	42°	Phase-cut	A+ A+
901609.002	D 91, H 2, HE 90	LED	830	1050 lm	16 W	24°	Phase-cut	A+ A+
901609.003	D 91, H 2, HE 90	LED	830	940 lm	16 W	24°	Phase-cut	A+ A+
901610.002	D 91, H 2, HE 90	LED	830	1050 lm	16 W	42°	Phase-cut	A+ A+
901610.003	D 91, H 2, HE 90	LED	830	920 lm	16 W	42°	Phase-cut	A+ A+
901609.002.1	D 91, H 2, HE 90	LED	840	1100 lm	16 W	24°	Phase-cut	A+ A+
901609.003.1	D 91, H 2, HE 90	LED	840	980 lm	16 W	24°	Phase-cut	A+ A+
901610.002.1	D 91, H 2, HE 90	LED	840	1100 lm	16 W	42°	Phase-cut	A+ A+
901610.003.1	D 91, H 2, HE 90	LED	840	960 lm	16 W	42°	Phase-cut	A+ A+

* DALI converter is compatible with DC for central battery systems

Comparison LED vs. conventional lamps

LED 8 W $\approx$

1 x 35 W QR-CB (39 W CB)

LED 13 / 16 W $\approx$

1 x 50 W QR51 (55 W CB)



NEW: Available in black colour



Recessed projectors | Series: Levido Swing Square

Type of Protection: **IP 40**

Protection Class: II

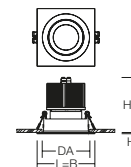
Ceiling Thickness: 1-20 mm

Impact Protection: IK06

Cover: Die cast aluminium, powder coated, white. Extruded aluminium heat sink. Can be swivelled by $\pm 25^\circ$. Reflector: aluminium, highly polished anodised finish. With safety glass. Ceiling installation with spring system. Separate LED converter with connecting cable 250 mm. Passive cooling. Opal PMMA plastic cover included as accessory.

LED and LED converter included.

Available colours (X): 2 = white, 3 = black



Comparison LED vs. conventional lamps

LED 8 W ≈

1 x 35 W QR-CB (39 W CB)

LED 13 / 16 W ≈

1 x 50 W QR51 (55 W CB)



NEW: Available in black colour

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	EEC
Recessed projectors								
Ceiling cut out DA 82 mm								
901611.002.2	L 98, B 98, H 2, HE 90	LED	827	630 lm	8 W	24°	on/off	A+ A+
901611.003.2	L 98, B 98, H 2, HE 90	LED	827	560 lm	8 W	24°	on/off	A+ A+
901612.002.2	L 98, B 98, H 2, HE 90	LED	827	600 lm	8 W	42°	on/off	A+ A+
901612.003.2	L 98, B 98, H 2, HE 90	LED	827	540 lm	8 W	42°	on/off	A+ A+
901611.002	L 98, B 98, H 2, HE 90	LED	830	630 lm	8 W	24°	on/off	A+ A+
901611.003	L 98, B 98, H 2, HE 90	LED	830	560 lm	8 W	24°	on/off	A+ A+
901612.002	L 98, B 98, H 2, HE 90	LED	830	600 lm	8 W	42°	on/off	A+ A+
901612.003	L 98, B 98, H 2, HE 90	LED	830	540 lm	8 W	42°	on/off	A+ A+
901611.002.1	L 98, B 98, H 2, HE 90	LED	840	640 lm	8 W	24°	on/off	A+ A+
901611.003.1	L 98, B 98, H 2, HE 90	LED	840	570 lm	8 W	24°	on/off	A+ A+
901612.002.1	L 98, B 98, H 2, HE 90	LED	840	610 lm	8 W	42°	on/off	A+ A+
901612.003.1	L 98, B 98, H 2, HE 90	LED	840	550 lm	8 W	42°	on/off	A+ A+
901613.002.2	L 98, B 98, H 2, HE 90	LED	827	940 lm	13 W	24°	on/off	A+ A+
901613.002.2.76 *	L 98, B 98, H 2, HE 90	LED	827	940 lm	13 W	24°	DALI	A+ A+
901613.003.2	L 98, B 98, H 2, HE 90	LED	827	850 lm	13 W	24°	on/off	A+ A+
901613.003.2.76 *	L 98, B 98, H 2, HE 90	LED	827	850 lm	13 W	24°	DALI	A+ A+
901614.002.2	L 98, B 98, H 2, HE 90	LED	827	920 lm	13 W	42°	on/off	A+ A+
901614.002.2.76 *	L 98, B 98, H 2, HE 90	LED	827	920 lm	13 W	42°	DALI	A+ A+
901614.003.2	L 98, B 98, H 2, HE 90	LED	827	830 lm	13 W	42°	on/off	A+ A+
901614.003.2.76 *	L 98, B 98, H 2, HE 90	LED	827	830 lm	13 W	42°	DALI	A+ A+
901613.002	L 98, B 98, H 2, HE 90	LED	830	940 lm	13 W	24°	on/off	A+ A+
901613.002.76 *	L 98, B 98, H 2, HE 90	LED	830	940 lm	13 W	24°	DALI	A+ A+
901613.003	L 98, B 98, H 2, HE 90	LED	830	850 lm	13 W	24°	on/off	A+ A+
901613.003.76 *	L 98, B 98, H 2, HE 90	LED	830	850 lm	13 W	24°	DALI	A+ A+
901614.002	L 98, B 98, H 2, HE 90	LED	830	920 lm	13 W	42°	on/off	A+ A+
901614.002.76 *	L 98, B 98, H 2, HE 90	LED	830	920 lm	13 W	42°	DALI	A+ A+
901614.003	L 98, B 98, H 2, HE 90	LED	830	830 lm	13 W	42°	on/off	A+ A+
901614.003.76 *	L 98, B 98, H 2, HE 90	LED	830	830 lm	13 W	42°	DALI	A+ A+
901613.002.1	L 98, B 98, H 2, HE 90	LED	840	980 lm	13 W	24°	on/off	A+ A+
901613.002.1.76 *	L 98, B 98, H 2, HE 90	LED	840	980 lm	13 W	24°	DALI	A+ A+
901613.003.1	L 98, B 98, H 2, HE 90	LED	840	880 lm	13 W	24°	on/off	A+ A+
901613.003.1.76 *	L 98, B 98, H 2, HE 90	LED	840	880 lm	13 W	24°	DALI	A+ A+
901614.002.1	L 98, B 98, H 2, HE 90	LED	840	960 lm	13 W	42°	on/off	A+ A+
901614.002.1.76 *	L 98, B 98, H 2, HE 90	LED	840	960 lm	13 W	42°	DALI	A+ A+
901614.003.1	L 98, B 98, H 2, HE 90	LED	840	870 lm	13 W	42°	on/off	A+ A+
901614.003.1.76 *	L 98, B 98, H 2, HE 90	LED	840	870 lm	13 W	42°	DALI	A+ A+
901615.002.2	L 98, B 98, H 2, HE 90	LED	827	1050 lm	16 W	24°	Phase-cut	A+ A+
901615.003.2	L 98, B 98, H 2, HE 90	LED	827	940 lm	16 W	24°	Phase-cut	A+ A+
901616.002.2	L 98, B 98, H 2, HE 90	LED	827	1050 lm	16 W	42°	Phase-cut	A+ A+
901616.003.2	L 98, B 98, H 2, HE 90	LED	827	920 lm	16 W	42°	Phase-cut	A+ A+
901615.002	L 98, B 98, H 2, HE 90	LED	830	1050 lm	16 W	24°	Phase-cut	A+ A+
901615.003	L 98, B 98, H 2, HE 90	LED	830	940 lm	16 W	24°	Phase-cut	A+ A+
901616.002	L 98, B 98, H 2, HE 90	LED	830	1050 lm	16 W	42°	Phase-cut	A+ A+
901616.003	L 98, B 98, H 2, HE 90	LED	830	920 lm	16 W	42°	Phase-cut	A+ A+
901615.002.1	L 98, B 98, H 2, HE 90	LED	840	1100 lm	16 W	24°	Phase-cut	A+ A+
901615.003.1	L 98, B 98, H 2, HE 90	LED	840	980 lm	16 W	24°	Phase-cut	A+ A+
901616.002.1	L 98, B 98, H 2, HE 90	LED	840	1100 lm	16 W	42°	Phase-cut	A+ A+
901616.003.1	L 98, B 98, H 2, HE 90	LED	840	960 lm	16 W	42°	Phase-cut	A+ A+

* DALI converter is compatible with DC for central emergency battery systems



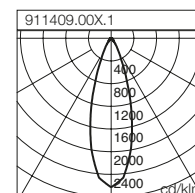


VORTEX

Recessed projectors

- Die-cast aluminium recessed projector with very small dimensions
- 68 mm ceiling cutout for standard hole cutter
- With external through-wiring box for phase cut dimming
- Connection LED converter via plug connection with 300mm connecting cable with phase cut dimming
- Hybrid optical system with lens and reflector for homogeneous lighting
- Alternative for low-voltage spotlights 50 W
- Colour temperature 2800 K or 4000 K
- Versions in dim to warm: during dimming, the light colour changes dynamically from 3000 K to 1800 K and thus provides a comfortable, cosy lighting atmosphere
- Colour rendering index Ra > 80 with standard monochrome LED; colour rendering index Ra 97 with dim to warm
- LED rated life: with standard monochrome LED 50,000 h (L70, B50); with dim to warm 25,000 h (L70, B50)
- Flexible directing of light thanks to pivot range $\pm 25^\circ$
- Versions with monochrome standard LED dimmable DALI or for phase cut dimming

911409.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,56	1893
2,0	1,12	473
3,0	1,69	210
4,0	2,25	118
5,0	2,81	76



Recessed projectors | Series: Vortex

Type of Protection: IP 20

Protection Class: II

Ceiling Thickness: 1-25 mm

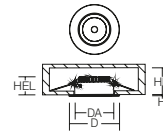
Die-cast aluminium cover, powder-coated. Heat sink die-cast aluminium. Can be swivelled by $\pm 25^\circ$. Hybrid optical system with polycarbonate lens and reflector in white. Passive cooling. Mounting depth depends on ceiling strength. Ceiling installation with spring system.

With phase cut dimming: LED converter with external through-wiring box via plug connection and connecting cable 300 mm.

With DALI: connected converter included in separate gearbox.

LED and LED converter included.

Available colours (X): 2 = white, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimming-able	EEC
Recessed projectors								
Ceiling cut out DA 68 mm, minimum mechanical height installed HEL 28 mm								
911409.00X.Q	D 80, H 2, HE 69-93	LED	828	900 lm	11 W	31°	Phase-cut	A+ A+
911409.00X.76	D 80, H 2, HE 69-93	LED	828	900 lm	11 W	31°	DALI	A+ A+
911409.00X.1.Q	D 80, H 2, HE 69-93	LED	840	900 lm	11 W	31°	Phase-cut	A+ A+
911409.00X.1.76	D 80, H 2, HE 69-93	LED	840	900 lm	11 W	31°	DALI	A+ A+
Dim to warm - 3000 K to 1800 K								
911409.00X.2	D 80, H 2, HE 69-93	LED	930-918	500 lm	8 W	31°	Phase-cut	A+ A+

Comparison LED vs. conventional lamps

LED 8 W $\approx$

1 x 35 W QR-CB (39 W CB)

LED 11 W $\approx$

1 x 50 W QR51 (55 W CB)



The application image shows:
Vortex



DEECOS R

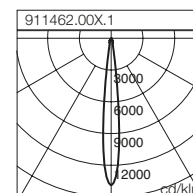
Recessed projectors

- High quality die-cast aluminum housing
- Excellent light quality without flickering, homogeneous light distribution, glare control and light colour quality
- Modern design: cylindrical shape with no visible cooling ribs
- Can be extended and retracted so that it is flush with the ceiling, turns by 356° and swivels by 90° for maximum flexibility in adjustment
- Suitable for reflector as well as lens technologies
- **MIRO-SILVER®** reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone, each with three different beam angles narrow, medium, wide
- Additional Superspot versions
- Inner cover prevents view into the false ceiling
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- Further light colours 927, 930, 935, 940 with Ra 92 available on request
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering and stroboscopic effect
- Separate converter box with connecting cable
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, clear and frosted diffusers, white interchangeable plastic ring

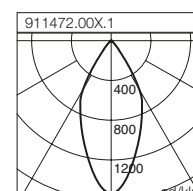


Further luminaires of this series, see:
Indoor lighting | Surface mounted projectors
Indoor lighting | Pendant luminaires

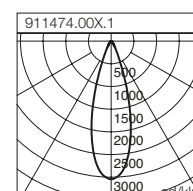
911462.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,20	22880
2,0	0,41	5720
3,0	0,61	2542
4,0	0,81	1430
5,0	1,02	915



911472.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,88	3454
2,0	1,76	863
3,0	2,63	384
4,0	3,51	216
5,0	4,39	138



911474.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,55	6437
2,0	1,11	1609
3,0	1,66	715
4,0	2,22	402
5,0	2,77	257



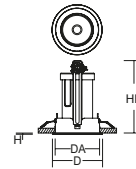
Recessed projectors | Series: Deecos R Mini

Type of Protection: IP 20
 Protection Class: II
 Ceiling Thickness: 1-20 mm
 Impact Protection: IK06

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°. Swivel range: 90°. Can be swivelled flush with the ceiling. Heat resistant plastic ring black. Installation without tools thanks to spring fastening system. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Recessed projectors								
Ceiling cut out DA 133 mm								
Including lens for best uniformity of the light cone								
911467.00X	D 143, H 3	LED	830	1900 lm	20 W	21°	on/off	A++ A++
911467.00X.76	D 143, H 3	LED	830	1900 lm	20 W	21°	DALI	A++ A++
911468.00X	D 143, H 3	LED	830	1800 lm	20 W	31°	on/off	A++ A++
911468.00X.76	D 143, H 3	LED	830	1800 lm	20 W	31°	DALI	A++ A++
911469.00X	D 143, H 3	LED	830	1700 lm	20 W	46°	on/off	A++ A++
911469.00X.76	D 143, H 3	LED	830	1700 lm	20 W	46°	DALI	A++ A++
911467.00X.1	D 143, H 3	LED	840	1950 lm	20 W	21°	on/off	A++ A++
911467.00X.1.76	D 143, H 3	LED	840	1950 lm	20 W	21°	DALI	A++ A++
911468.00X.1	D 143, H 3	LED	840	1850 lm	20 W	31°	on/off	A++ A++
911468.00X.1.76	D 143, H 3	LED	840	1850 lm	20 W	31°	DALI	A++ A++
911469.00X.1	D 143, H 3	LED	840	1750 lm	20 W	46°	on/off	A++ A++
911469.00X.1.76	D 143, H 3	LED	840	1750 lm	20 W	46°	DALI	A++ A++
911473.00X	D 143, H 3	LED	830	2700 lm	30 W	21°	on/off	A++ A++
911473.00X.76	D 143, H 3	LED	830	2700 lm	30 W	21°	DALI	A++ A++
911474.00X	D 143, H 3	LED	830	2550 lm	30 W	31°	on/off	A++ A++
911474.00X.76	D 143, H 3	LED	830	2550 lm	30 W	31°	DALI	A++ A++
911475.00X	D 143, H 3	LED	830	2400 lm	30 W	46°	on/off	A++ A++
911475.00X.76	D 143, H 3	LED	830	2400 lm	30 W	46°	DALI	A++ A++
911473.00X.1	D 143, H 3	LED	840	2750 lm	30 W	21°	on/off	A++ A++
911473.00X.1.76	D 143, H 3	LED	840	2750 lm	30 W	21°	DALI	A++ A++
911474.00X.1	D 143, H 3	LED	840	2650 lm	30 W	31°	on/off	A++ A++
911474.00X.1.76	D 143, H 3	LED	840	2650 lm	30 W	31°	DALI	A++ A++
911475.00X.1	D 143, H 3	LED	840	2450 lm	30 W	46°	on/off	A++ A++
911475.00X.1.76	D 143, H 3	LED	840	2450 lm	30 W	46°	DALI	A++ A++
Including reflector for maximum efficiency								
911463.00X	D 143, H 3	LED	830	2250 lm	20 W	19°	on/off	A++ A++
911463.00X.76	D 143, H 3	LED	830	2250 lm	20 W	19°	DALI	A++ A++
911464.00X	D 143, H 3	LED	830	2100 lm	20 W	32°	on/off	A++ A++
911464.00X.76	D 143, H 3	LED	830	2100 lm	20 W	32°	DALI	A++ A++
911465.00X	D 143, H 3	LED	830	1900 lm	20 W	47°	on/off	A++ A++
911465.00X.76	D 143, H 3	LED	830	1900 lm	20 W	47°	DALI	A++ A++
911463.00X.1	D 143, H 3	LED	840	2300 lm	20 W	19°	on/off	A++ A++
911463.00X.1.76	D 143, H 3	LED	840	2300 lm	20 W	19°	DALI	A++ A++
911464.00X.1	D 143, H 3	LED	840	2150 lm	20 W	32°	on/off	A++ A++
911464.00X.1.76	D 143, H 3	LED	840	2150 lm	20 W	32°	DALI	A++ A++
911465.00X.1	D 143, H 3	LED	840	1900 lm	20 W	47°	on/off	A++ A++
911465.00X.1.76	D 143, H 3	LED	840	1900 lm	20 W	47°	DALI	A++ A++
911470.00X	D 143, H 3	LED	830	3200 lm	30 W	19°	on/off	A++ A++
911470.00X.76	D 143, H 3	LED	830	3200 lm	30 W	19°	DALI	A++ A++
911471.00X	D 143, H 3	LED	830	3000 lm	30 W	33°	on/off	A++ A++
911471.00X.76	D 143, H 3	LED	830	3000 lm	30 W	33°	DALI	A++ A++
911472.00X	D 143, H 3	LED	830	2700 lm	30 W	47°	on/off	A++ A++
911472.00X.76	D 143, H 3	LED	830	2700 lm	30 W	47°	DALI	A++ A++
911470.00X.1	D 143, H 3	LED	840	3300 lm	30 W	19°	on/off	A++ A++
911470.00X.1.76	D 143, H 3	LED	840	3300 lm	30 W	19°	DALI	A++ A++
911471.00X.1	D 143, H 3	LED	840	3100 lm	30 W	33°	on/off	A++ A++
911471.00X.1.76	D 143, H 3	LED	840	3100 lm	30 W	33°	DALI	A++ A++
911472.00X.1	D 143, H 3	LED	840	2800 lm	30 W	47°	on/off	A++ A++
911472.00X.1.76	D 143, H 3	LED	840	2800 lm	30 W	47°	DALI	A++ A++
Superspot version with small spot LED								
Including lens for best uniformity of the light cone								
911466.00X	D 143, H 3	LED	830	1750 lm	22 W	14°	on/off	A++ A++
911466.00X.76	D 143, H 3	LED	830	1750 lm	22 W	14°	DALI	A++ A++
911466.00X.1	D 143, H 3	LED	840	1800 lm	22 W	14°	on/off	A++ A++
911466.00X.1.76	D 143, H 3	LED	840	1800 lm	22 W	14°	DALI	A++ A++
Including reflector for maximum efficiency								
911462.00X	D 143, H 3	LED	830	2000 lm	22 W	11°	on/off	A++ A++
911462.00X.76	D 143, H 3	LED	830	2000 lm	22 W	11°	DALI	A++ A++
911462.00X.1	D 143, H 3	LED	840	2050 lm	22 W	11°	on/off	A++ A++
911462.00X.1.76	D 143, H 3	LED	840	2050 lm	22 W	11°	DALI	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request

Comparison
LED vs. conventional lamps

LED 20 / 22 W ≈
 1 x 35 W HIT (45 W CB)

LED 30 W ≈
 1 x 50 W HIT (60 W CB)



TYLE

The application image shows:
Deecos R

Accessories | Series: Deecos R Mini

Diffuser

Price Category 21

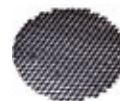
982370.000	D 75, H 3	Safety glass, clear
982370.010	D 75, H 3	Safety glass, satin finish



Anti-glare honeycomb louvre

Price Category 21

982371.003	D 74, H 3	Mini honeycomb louvre
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Interchangeable plastic rings

Price Category 21

982419.002	D 82, H 20	White plastic ring for reflector
982421.002	D 82, H 31	White plastic ring for lens

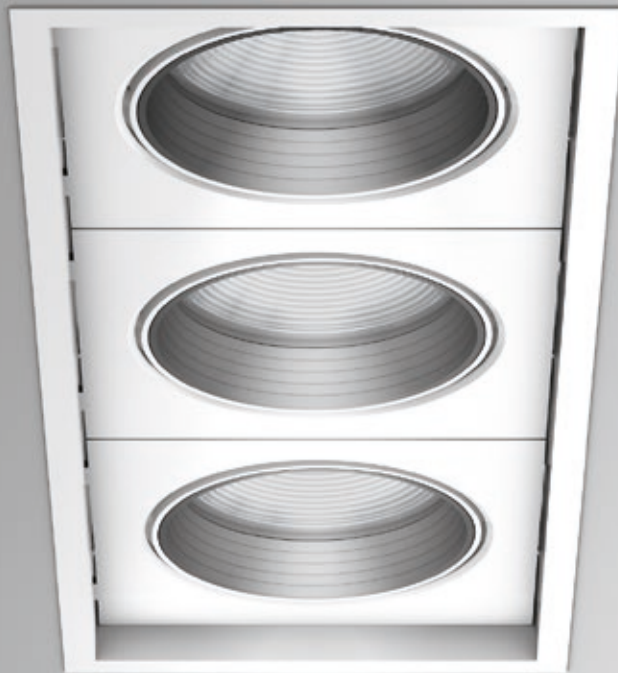


Interchangeable optics

Price Category 21

982368.003	D 82, H 55	Reflector, narrow beam
982368.013	D 82, H 55	Reflector, medium beam
982368.023	D 82, H 55	Reflector, wide beam
982369.003	D 82, H 55	Lens, narrow beam
982369.013	D 82, H 55	Lens, medium beam
982369.023	D 82, H 55	Lens, wide beam
982369.033	D 82, H 55	Lens, very wide beam
982369.043	D 82, H 55	Lens with oval light distribution for corridor



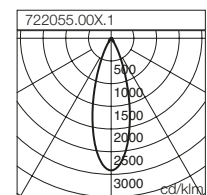


MAGCARDO®

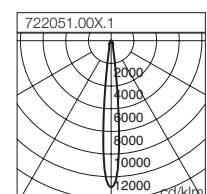
Recessed projectors

- Magnetic click locking mechanism for quick and convenient installation without tools: insert the recessed frame (1, 2 or 3-lamp) with clamp fastener (no tools required), push the luminaire head with the base plate into the recessed frame and fix magnetically
- Flexible adjustment, can be turned by 356° and swivelled by ± 35°
- Inner cover prevents view into the false ceiling
- Excellent light quality without flickering, homogeneous light distribution, glare control and light colour quality
- Suitable for reflector as well as lens technologies
- **MIRO-SILVER®** reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone, each with three different beam angles narrow, medium, wide
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- Further light colours 927, 930, 935, 940 with Ra 92 and with Maxi special food LEDs: champagne with Ra 97, meat and meat fresh available on request
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering and stroboscopic effect
- Separate converter box with connecting cable
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, clear and frosted diffusers, white interchangeable plastic ring

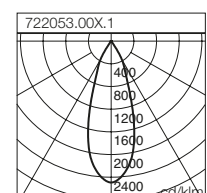
722055.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,57	7554	
2,0	1,14	1888	
3,0	1,71	839	
4,0	2,28	472	
5,0	2,85	302	



722051.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,20	42007	
2,0	0,41	10502	
3,0	0,61	4667	
4,0	0,81	2625	
5,0	1,02	1680	



722053.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,63	8084	
2,0	1,26	2021	
3,0	1,89	898	
4,0	2,52	505	
5,0	3,15	323	



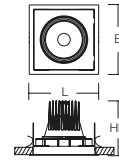
Recessed projectors | Series: Magcardo® Maxi

Type of Protection: IP 20
Protection Class: II
Ceiling Thickness: 6-30 mm

Luminaire top: die-cast aluminium, powder-coated. Recessed mounting frame: sheet steel, powder-coated. Rotation range 356° and swivel range ± 35°. Heat resistant plastic ring black. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm. LED and LED converter included.

Modular design: recessed frame must be ordered separately!

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
Luminaire head								
Price Category 21								
Including lens for best uniformity of the light cone								
722048.00X	L 172, B 167, H 137	LED	830	2400 lm	27 W	13°	on/off	A++ A++
722048.00X.76	L 172, B 167, H 137	LED	830	2400 lm	27 W	13°	DALI	A++ A++
722049.00X	L 172, B 167, H 137	LED	830	2350 lm	27 W	32°	on/off	A++ A++
722049.00X.76	L 172, B 167, H 137	LED	830	2350 lm	27 W	32°	DALI	A++ A++
722050.00X	L 172, B 167, H 137	LED	830	2400 lm	27 W	41°	on/off	A++ A++
722050.00X.76	L 172, B 167, H 137	LED	830	2400 lm	27 W	41°	DALI	A++ A++
722048.00X.1	L 172, B 167, H 137	LED	840	2500 lm	27 W	13°	on/off	A++ A++
722048.00X.1.76	L 172, B 167, H 137	LED	840	2500 lm	27 W	13°	DALI	A++ A++
722049.00X.1	L 172, B 167, H 137	LED	840	2450 lm	27 W	32°	on/off	A++ A++
722049.00X.1.76	L 172, B 167, H 137	LED	840	2450 lm	27 W	32°	DALI	A++ A++
722050.00X.1	L 172, B 167, H 137	LED	840	2500 lm	27 W	41°	on/off	A++ A++
722050.00X.1.76	L 172, B 167, H 137	LED	840	2500 lm	27 W	41°	DALI	A++ A++
722054.00X	L 172, B 167, H 137	LED	830	3150 lm	38 W	13°	on/off	A++ A++
722054.00X.76	L 172, B 167, H 137	LED	830	3150 lm	38 W	13°	DALI	A++ A++
722055.00X	L 172, B 167, H 137	LED	830	3050 lm	38 W	32°	on/off	A++ A++
722055.00X.76	L 172, B 167, H 137	LED	830	3050 lm	38 W	32°	DALI	A++ A++
722056.00X	L 172, B 167, H 137	LED	830	3150 lm	38 W	41°	on/off	A++ A++
722056.00X.76	L 172, B 167, H 137	LED	830	3150 lm	38 W	41°	DALI	A++ A++
722054.00X.1	L 172, B 167, H 137	LED	840	3350 lm	38 W	13°	on/off	A++ A++
722054.00X.1.76	L 172, B 167, H 137	LED	840	3350 lm	38 W	13°	DALI	A++ A++
722055.00X.1	L 172, B 167, H 137	LED	840	3250 lm	38 W	32°	on/off	A++ A++
722055.00X.1.76	L 172, B 167, H 137	LED	840	3250 lm	38 W	32°	DALI	A++ A++
722056.00X.1	L 172, B 167, H 137	LED	840	3350 lm	38 W	41°	on/off	A++ A++
722056.00X.1.76	L 172, B 167, H 137	LED	840	3350 lm	38 W	41°	DALI	A++ A++
Including reflector for maximum efficiency								
722045.00X	L 172, B 167, H 137	LED	830	3000 lm	27 W	12°	on/off	A++ A++
722045.00X.76	L 172, B 167, H 137	LED	830	3000 lm	27 W	12°	DALI	A++ A++
722046.00X	L 172, B 167, H 137	LED	830	3000 lm	27 W	21°	on/off	A++ A++
722046.00X.76	L 172, B 167, H 137	LED	830	3000 lm	27 W	21°	DALI	A++ A++
722047.00X	L 172, B 167, H 137	LED	830	2900 lm	27 W	35°	on/off	A++ A++
722047.00X.76	L 172, B 167, H 137	LED	830	2900 lm	27 W	35°	DALI	A++ A++
722045.00X.1	L 172, B 167, H 137	LED	840	3100 lm	27 W	12°	on/off	A++ A++
722045.00X.1.76	L 172, B 167, H 137	LED	840	3100 lm	27 W	12°	DALI	A++ A++
722046.00X.1	L 172, B 167, H 137	LED	840	3150 lm	27 W	21°	on/off	A++ A++
722046.00X.1.76	L 172, B 167, H 137	LED	840	3150 lm	27 W	21°	DALI	A++ A++
722047.00X.1	L 172, B 167, H 137	LED	840	3050 lm	27 W	35°	on/off	A++ A++
722047.00X.1.76	L 172, B 167, H 137	LED	840	3050 lm	27 W	35°	DALI	A++ A++
722051.00X	L 172, B 167, H 137	LED	830	3800 lm	38 W	12°	on/off	A++ A++
722051.00X.76	L 172, B 167, H 137	LED	830	3800 lm	38 W	12°	DALI	A++ A++
722052.00X	L 172, B 167, H 137	LED	830	3900 lm	38 W	21°	on/off	A++ A++
722052.00X.76	L 172, B 167, H 137	LED	830	3900 lm	38 W	21°	DALI	A++ A++
722053.00X	L 172, B 167, H 137	LED	830	3800 lm	38 W	35°	on/off	A++ A++
722053.00X.76	L 172, B 167, H 137	LED	830	3800 lm	38 W	35°	DALI	A++ A++
722051.00X.1	L 172, B 167, H 137	LED	840	4050 lm	38 W	12°	on/off	A++ A++
722051.00X.1.76	L 172, B 167, H 137	LED	840	4050 lm	38 W	12°	DALI	A++ A++
722052.00X.1	L 172, B 167, H 137	LED	840	4150 lm	38 W	21°	on/off	A++ A++
722052.00X.1.76	L 172, B 167, H 137	LED	840	4150 lm	38 W	21°	DALI	A++ A++
722053.00X.1	L 172, B 167, H 137	LED	840	4050 lm	38 W	35°	on/off	A++ A++
722053.00X.1.76	L 172, B 167, H 137	LED	840	4050 lm	38 W	35°	DALI	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request

Recessed mounting frame				Price Category 21
one lamp				
982431.00X	L 194, B 194, H 2, HE 75	Ceiling cut out LA 180 x BA 180 mm		
two lamps				
982432.00X	L 362, B 194, H 2, HE 75	Ceiling cut out LA 348 x BA 180 mm		
three lamps				
982433.00X	L 530, B 194, H 2, HE 75	Ceiling cut out LA 516 x BA 180 mm		



Comparison
LED vs. conventional lamps

LED 27 W ≈
1 x 35 W HIT (45 W CB)

LED 38 W ≈
1 x 50 W HIT (60 W CB)





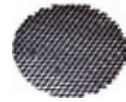
The application image shows:
Magcardo®

Accessories | Series: Magcardo® Maxi

Diffuser			Price Category 21
982374.000	D 111, H 3	Safety glass, clear	
982374.010	D 111, H 3	Safety glass, satin finish	



Anti-glare honeycomb louvre			Price Category 21
982375.003	D 111, H 3	Maxi honeycomb louvre	



Interchangeable plastic rings			Price Category 21
982420.002	D 118, H 20	White plastic ring for reflector	
982422.002	D 118, H 33	White plastic ring for lens	



Interchangeable optics			Price Category 21
982372.003	D 118, H 83	Reflector, narrow beam	
982372.013	D 118, H 83	Reflector, medium beam	
982372.023	D 118, H 83	Reflector, wide beam	
982372.033	D 118, H 83	Reflector, very wide beam	
982373.003	D 118, H 83	Lens, narrow beam	
982373.013	D 118, H 83	Lens, medium beam	
982373.023	D 118, H 83	Lens, wide beam	



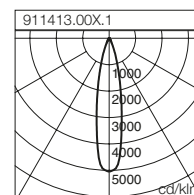


RONDOS

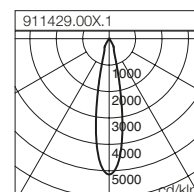
Recessed projectors

- High quality die-cast aluminium housing in two sizes
- Excellent light quality without flickering, homogeneous light distribution, glare control and light colour quality
- Flexible adjustment, can be turned by 356° and swivelled by ± 35°
- Suitable for reflector as well as lens technologies
- **MIRO-SILVER®** reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone, each with three different beam angles narrow, medium, wide
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- Further light colours 927, 930, 935, 940 with Ra 92 available on request
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering and stroboscopic effect
- Separate converter box with connecting cable
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, clear and frosted diffusers, white interchangeable plastic ring

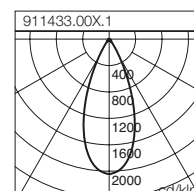
911413.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,37	7829
2,0	0,75	1957
3,0	1,12	870
4,0	1,50	489
5,0	1,87	313



911429.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,37	17100
2,0	0,75	4275
3,0	1,12	1900
4,0	1,50	1069
5,0	1,87	684



911433.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,75	5454
2,0	1,50	1364
3,0	2,26	606
4,0	3,01	341
5,0	3,76	218



Recessed projectors | Series: Rondos Mini

Type of Protection: IP 20

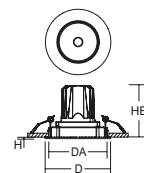
Protection Class: II

Ceiling Thickness: 1-20 mm

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°; swivel range: ± 35°. Heat resistant plastic ring black. Installation without tools thanks to spring fastening system. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	EEC
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Recessed projectors

Price Category 21


Ceiling cut out DA 133 mm
Including lens for best uniformity of the light cone

911413.00X	D 143, H 3	LED	830	1900 lm	20 W	21°	on/off	A++ A++
911413.00X.76	D 143, H 3	LED	830	1900 lm	20 W	21°	DALI	A++ A++
911414.00X	D 143, H 3	LED	830	1800 lm	20 W	31°	on/off	A++ A++
911414.00X.76	D 143, H 3	LED	830	1800 lm	20 W	31°	DALI	A++ A++
911415.00X	D 143, H 3	LED	830	1700 lm	20 W	46°	on/off	A++ A++
911415.00X.76	D 143, H 3	LED	830	1700 lm	20 W	46°	DALI	A++ A++
911413.00X.1	D 143, H 3	LED	840	1950 lm	20 W	21°	on/off	A++ A++
911413.00X.1.76	D 143, H 3	LED	840	1950 lm	20 W	21°	DALI	A++ A++
911414.00X.1	D 143, H 3	LED	840	1850 lm	20 W	31°	on/off	A++ A++
911414.00X.1.76	D 143, H 3	LED	840	1850 lm	20 W	31°	DALI	A++ A++
911415.00X.1	D 143, H 3	LED	840	1750 lm	20 W	46°	on/off	A++ A++
911415.00X.1.76	D 143, H 3	LED	840	1750 lm	20 W	46°	DALI	A++ A++
911419.00X	D 143, H 3	LED	830	2700 lm	30 W	21°	on/off	A++ A++
911419.00X.76	D 143, H 3	LED	830	2700 lm	30 W	21°	DALI	A++ A++
911420.00X	D 143, H 3	LED	830	2550 lm	30 W	31°	on/off	A++ A++
911420.00X.76	D 143, H 3	LED	830	2550 lm	30 W	31°	DALI	A++ A++
911421.00X	D 143, H 3	LED	830	2400 lm	30 W	46°	on/off	A++ A++
911421.00X.76	D 143, H 3	LED	830	2400 lm	30 W	46°	DALI	A++ A++
911419.00X.1	D 143, H 3	LED	840	2750 lm	30 W	21°	on/off	A++ A++
911419.00X.1.76	D 143, H 3	LED	840	2750 lm	30 W	21°	DALI	A++ A++
911420.00X.1	D 143, H 3	LED	840	2650 lm	30 W	31°	on/off	A++ A++
911420.00X.1.76	D 143, H 3	LED	840	2650 lm	30 W	31°	DALI	A++ A++
911421.00X.1	D 143, H 3	LED	840	2450 lm	30 W	46°	on/off	A++ A++
911421.00X.1.76	D 143, H 3	LED	840	2450 lm	30 W	46°	DALI	A++ A++

Including reflector for maximum efficiency

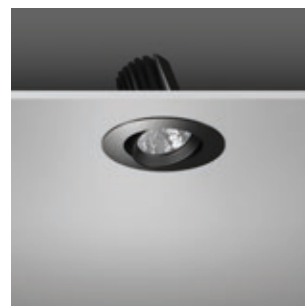
911410.00X	D 143, H 3	LED	830	2250 lm	20 W	19°	on/off	A++ A++
911410.00X.76	D 143, H 3	LED	830	2250 lm	20 W	19°	DALI	A++ A++
911411.00X	D 143, H 3	LED	830	2100 lm	20 W	33°	on/off	A++ A++
911411.00X.76	D 143, H 3	LED	830	2100 lm	20 W	33°	DALI	A++ A++
911412.00X	D 143, H 3	LED	830	1900 lm	20 W	47°	on/off	A++ A++
911412.00X.76	D 143, H 3	LED	830	1900 lm	20 W	47°	DALI	A++ A++
911410.00X.1	D 143, H 3	LED	840	2300 lm	20 W	19°	on/off	A++ A++
911410.00X.1.76	D 143, H 3	LED	840	2300 lm	20 W	19°	DALI	A++ A++
911411.00X.1	D 143, H 3	LED	840	2150 lm	20 W	33°	on/off	A++ A++
911411.00X.1.76	D 143, H 3	LED	840	2150 lm	20 W	33°	DALI	A++ A++
911412.00X.1	D 143, H 3	LED	840	1900 lm	20 W	47°	on/off	A++ A++
911412.00X.1.76	D 143, H 3	LED	840	1900 lm	20 W	47°	DALI	A++ A++
911416.00X	D 143, H 3	LED	830	3200 lm	30 W	19°	on/off	A++ A++
911416.00X.76	D 143, H 3	LED	830	3200 lm	30 W	19°	DALI	A++ A++
911417.00X	D 143, H 3	LED	830	3000 lm	30 W	33°	on/off	A++ A++
911417.00X.76	D 143, H 3	LED	830	3000 lm	30 W	33°	DALI	A++ A++
911418.00X	D 143, H 3	LED	830	2700 lm	30 W	47°	on/off	A++ A++
911418.00X.76	D 143, H 3	LED	830	2700 lm	30 W	47°	DALI	A++ A++
911416.00X.1	D 143, H 3	LED	840	3300 lm	30 W	19°	on/off	A++ A++
911416.00X.1.76	D 143, H 3	LED	840	3300 lm	30 W	19°	DALI	A++ A++
911417.00X.1	D 143, H 3	LED	840	3100 lm	30 W	33°	on/off	A++ A++
911417.00X.1.76	D 143, H 3	LED	840	3100 lm	30 W	33°	DALI	A++ A++
911418.00X.1	D 143, H 3	LED	840	2800 lm	30 W	47°	on/off	A++ A++
911418.00X.1.76	D 143, H 3	LED	840	2800 lm	30 W	47°	DALI	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request

**Comparison
LED vs. conventional lamps**

LED 20 W ≈
1 x 35 W HIT (45 W CB)

LED 30 W ≈
1 x 50 W HIT (60 W CB)





Recessed projectors | Series: Rundos Maxi

Type of Protection: IP 20

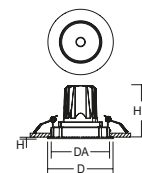
Protection Class: II

Ceiling Thickness: 1-20 mm

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°; swivel range: ± 35°. Heat resistant plastic ring black. Installation without tools thanks to spring fastening system. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Comparison LED vs. conventional lamps

LED 27 W ≈

1 x 35 W HIT (45 W CB)

LED 38 W ≈

1 x 50 W HIT (60 W CB)



Recessed projectors

Price Category 21

Ceiling cut out DA 168 mm

Including lens for best uniformity of the light cone

911425.00X	D 178, H 3	LED	830	2400 lm	27 W	13°	on/off	A++ A++
911425.00X.76	D 178, H 3	LED	830	2400 lm	27 W	13°	DALI	A++ A++
911426.00X	D 178, H 3	LED	830	2350 lm	27 W	32°	on/off	A++ A++
911426.00X.76	D 178, H 3	LED	830	2350 lm	27 W	32°	DALI	A++ A++
911427.00X	D 178, H 3	LED	830	2400 lm	27 W	41°	on/off	A++ A++
911427.00X.76	D 178, H 3	LED	830	2400 lm	27 W	41°	DALI	A++ A++
911425.00X.1	D 178, H 3	LED	840	2500 lm	27 W	13°	on/off	A++ A++
911425.00X.1.76	D 178, H 3	LED	840	2500 lm	27 W	13°	DALI	A++ A++
911426.00X.1	D 178, H 3	LED	840	2450 lm	27 W	32°	on/off	A++ A++
911426.00X.1.76	D 178, H 3	LED	840	2450 lm	27 W	32°	DALI	A++ A++
911427.00X.1	D 178, H 3	LED	840	2500 lm	27 W	41°	on/off	A++ A++
911427.00X.1.76	D 178, H 3	LED	840	2500 lm	27 W	41°	DALI	A++ A++
911431.00X	D 178, H 3	LED	830	3150 lm	38 W	13°	on/off	A++ A++
911431.00X.76	D 178, H 3	LED	830	3150 lm	38 W	13°	DALI	A++ A++
911432.00X	D 178, H 3	LED	830	3050 lm	38 W	32°	on/off	A++ A++
911432.00X.76	D 178, H 3	LED	830	3050 lm	38 W	32°	DALI	A++ A++
911433.00X	D 178, H 3	LED	830	3150 lm	38 W	41°	on/off	A++ A++
911433.00X.76	D 178, H 3	LED	830	3150 lm	38 W	41°	DALI	A++ A++
911431.00X.1	D 178, H 3	LED	840	3350 lm	38 W	13°	on/off	A++ A++
911431.00X.1.76	D 178, H 3	LED	840	3350 lm	38 W	13°	DALI	A++ A++
911432.00X.1	D 178, H 3	LED	840	3250 lm	38 W	32°	on/off	A++ A++
911432.00X.1.76	D 178, H 3	LED	840	3250 lm	38 W	32°	DALI	A++ A++
911433.00X.1	D 178, H 3	LED	840	3350 lm	38 W	41°	on/off	A++ A++
911433.00X.1.76	D 178, H 3	LED	840	3350 lm	38 W	41°	DALI	A++ A++

Including reflector for maximum efficiency

911422.00X	D 178, H 3	LED	830	3000 lm	27 W	12°	on/off	A++ A++
911422.00X.76	D 178, H 3	LED	830	3000 lm	27 W	12°	DALI	A++ A++
911423.00X	D 178, H 3	LED	830	3000 lm	27 W	21°	on/off	A++ A++
911423.00X.76	D 178, H 3	LED	830	3000 lm	27 W	21°	DALI	A++ A++
911424.00X	D 178, H 3	LED	830	2900 lm	27 W	35°	on/off	A++ A++
911424.00X.76	D 178, H 3	LED	830	2900 lm	27 W	35°	DALI	A++ A++
911422.00X.1	D 178, H 3	LED	840	3100 lm	27 W	12°	on/off	A++ A++
911422.00X.1.76	D 178, H 3	LED	840	3100 lm	27 W	12°	DALI	A++ A++
911423.00X.1	D 178, H 3	LED	840	3150 lm	27 W	21°	on/off	A++ A++
911423.00X.1.76	D 178, H 3	LED	840	3150 lm	27 W	21°	DALI	A++ A++
911424.00X.1	D 178, H 3	LED	840	3050 lm	27 W	35°	on/off	A++ A++
911424.00X.1.76	D 178, H 3	LED	840	3050 lm	27 W	35°	DALI	A++ A++
911428.00X	D 178, H 3	LED	830	3800 lm	38 W	12°	on/off	A++ A++
911428.00X.76	D 178, H 3	LED	830	3800 lm	38 W	12°	DALI	A++ A++
911429.00X	D 178, H 3	LED	830	3900 lm	38 W	21°	on/off	A++ A++
911429.00X.76	D 178, H 3	LED	830	3900 lm	38 W	21°	DALI	A++ A++
911430.00X	D 178, H 3	LED	830	3800 lm	38 W	35°	on/off	A++ A++
911430.00X.76	D 178, H 3	LED	830	3800 lm	38 W	35°	DALI	A++ A++
911428.00X.1	D 178, H 3	LED	840	4050 lm	38 W	12°	on/off	A++ A++
911428.00X.1.76	D 178, H 3	LED	840	4050 lm	38 W	12°	DALI	A++ A++
911429.00X.1	D 178, H 3	LED	840	4150 lm	38 W	21°	on/off	A++ A++
911429.00X.1.76	D 178, H 3	LED	840	4150 lm	38 W	21°	DALI	A++ A++
911430.00X.1	D 178, H 3	LED	840	4050 lm	38 W	35°	on/off	A++ A++
911430.00X.1.76	D 178, H 3	LED	840	4050 lm	38 W	35°	DALI	A++ A++

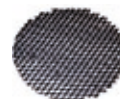
Versions with Ra > 90 colour rendition are also available in other light colours on request

Accessories | Series: Rondos Mini

Diffuser		Price Category 21
982370.000	D 75, H 3	Safety glass, clear
982370.010	D 75, H 3	Safety glass, satin finish



Anti-glare honeycomb louvre		Price Category 21
982371.003	D 74, H 3	Mini honeycomb louvre



Interchangeable plastic rings		Price Category 21
982419.002	D 82, H 20	White plastic ring for reflector
982421.002	D 82, H 31	White plastic ring for lens



Interchangeable optics		Price Category 21
982368.003	D 82, H 55	Reflector, narrow beam
982368.013	D 82, H 55	Reflector, medium beam
982368.023	D 82, H 55	Reflector, wide beam
982369.003	D 82, H 55	Lens, narrow beam
982369.013	D 82, H 55	Lens, medium beam
982369.023	D 82, H 55	Lens, wide beam
982369.033	D 82, H 55	Lens, very wide beam
982369.043	D 82, H 55	Lens with oval light distribution for corridor

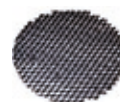


Accessories | Series: Rondos Maxi

Diffuser		Price Category 21
982374.000	D 111, H 3	Safety glass, clear
982374.010	D 111, H 3	Safety glass, satin finish



Anti-glare honeycomb louvre		Price Category 21
982375.003	D 111, H 3	Maxi honeycomb louvre



Interchangeable plastic rings		Price Category 21
982420.002	D 118, H 20	White plastic ring for reflector
982422.002	D 118, H 33	White plastic ring for lens



Interchangeable optics		Price Category 21
982372.003	D 118, H 83	Reflector, narrow beam
982372.013	D 118, H 83	Reflector, medium beam
982372.023	D 118, H 83	Reflector, wide beam
982372.033	D 118, H 83	Reflector, very wide beam
982373.003	D 118, H 83	Lens, narrow beam
982373.013	D 118, H 83	Lens, medium beam
982373.023	D 118, H 83	Lens, wide beam



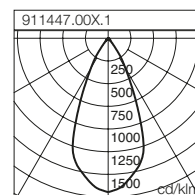


GOLAS

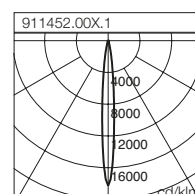
Recessed projectors

- High quality die-cast aluminium housing in two sizes
- Excellent light quality without flickering, homogeneous light distribution, glare control and light colour quality
- Swivels by 90° and turns by 356° - resulting in maximum flexibility in adjustment
- Suitable for reflector as well as lens technologies
- **MIRO-SILVER®** reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone, each with three different beam angles narrow, medium, wide
- Additional Superspot versions
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- Further light colours 927, 930, 935, 940 with Ra 92 and with Maxi special food LEDs: champagne with Ra 97, meat and meat fresh available on request
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering and stroboscopic effect
- Separate converter box with connecting cable
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, clear and frosted diffusers, white interchangeable plastic ring

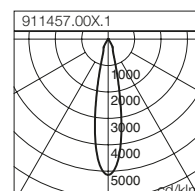
911447.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,84	3322
2,0	1,67	831
3,0	2,51	369
4,0	3,35	208
5,0	4,18	133



911452.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,16	25305
2,0	0,33	6326
3,0	0,49	2812
4,0	0,66	1582
5,0	0,82	1012



911457.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,37	17100
2,0	0,75	4275
3,0	1,12	1900
4,0	1,50	1069
5,0	1,87	684



Recessed projectors | Series: Golas Mini

Type of Protection: IP 20

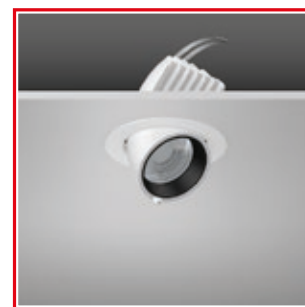
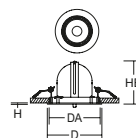
Protection Class: II

Ceiling Thickness: 1-20 mm

Housing: pressure die-cast aluminium, powder-coated. 356° rotation range and 90° swivel range. Heat resistant plastic ring black. Installation without tools thanks to spring fastening system. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
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Recessed projectors

Price Category 21


Ceiling cut out DA 133 mm
Including lens for best uniformity of the light cone

911439.00X	D 143, H 3	LED	830	1900 lm	20 W	21°	on/off	A++ A++
911439.00X.76	D 143, H 3	LED	830	1900 lm	20 W	21°	DALI	A++ A++
911440.00X	D 143, H 3	LED	830	1800 lm	20 W	31°	on/off	A++ A++
911440.00X.76	D 143, H 3	LED	830	1800 lm	20 W	31°	DALI	A++ A++
911441.00X	D 143, H 3	LED	830	1700 lm	20 W	46°	on/off	A++ A++
911441.00X.76	D 143, H 3	LED	830	1700 lm	20 W	46°	DALI	A++ A++
911439.00X.1	D 143, H 3	LED	840	1950 lm	20 W	21°	on/off	A++ A++
911439.00X.1.76	D 143, H 3	LED	840	1950 lm	20 W	21°	DALI	A++ A++
911440.00X.1	D 143, H 3	LED	840	1850 lm	20 W	31°	on/off	A++ A++
911440.00X.1.76	D 143, H 3	LED	840	1850 lm	20 W	31°	DALI	A++ A++
911441.00X.1	D 143, H 3	LED	840	1750 lm	20 W	46°	on/off	A++ A++
911441.00X.1.76	D 143, H 3	LED	840	1750 lm	20 W	46°	DALI	A++ A++
911445.00X	D 143, H 3	LED	830	2700 lm	30 W	21°	on/off	A++ A++
911445.00X.76	D 143, H 3	LED	830	2700 lm	30 W	21°	DALI	A++ A++
911446.00X	D 143, H 3	LED	830	2550 lm	30 W	31°	on/off	A++ A++
911446.00X.76	D 143, H 3	LED	830	2550 lm	30 W	31°	DALI	A++ A++
911447.00X	D 143, H 3	LED	830	2400 lm	30 W	46°	on/off	A++ A++
911447.00X.76	D 143, H 3	LED	830	2400 lm	30 W	46°	DALI	A++ A++
911445.00X.1	D 143, H 3	LED	840	2750 lm	30 W	21°	on/off	A++ A++
911445.00X.1.76	D 143, H 3	LED	840	2750 lm	30 W	21°	DALI	A++ A++
911446.00X.1	D 143, H 3	LED	840	2650 lm	30 W	31°	on/off	A++ A++
911446.00X.1.76	D 143, H 3	LED	840	2650 lm	30 W	31°	DALI	A++ A++
911447.00X.1	D 143, H 3	LED	840	2450 lm	30 W	46°	on/off	A++ A++
911447.00X.1.76	D 143, H 3	LED	840	2450 lm	30 W	46°	DALI	A++ A++

Including reflector for maximum efficiency

911435.00X	D 143, H 3	LED	830	2250 lm	20 W	19°	on/off	A++ A++
911435.00X.76	D 143, H 3	LED	830	2250 lm	20 W	19°	DALI	A++ A++
911436.00X	D 143, H 3	LED	830	2100 lm	20 W	33°	on/off	A++ A++
911436.00X.76	D 143, H 3	LED	830	2100 lm	20 W	33°	DALI	A++ A++
911437.00X	D 143, H 3	LED	830	1900 lm	20 W	47°	on/off	A++ A++
911437.00X.76	D 143, H 3	LED	830	1900 lm	20 W	47°	DALI	A++ A++
911435.00X.1	D 143, H 3	LED	840	2300 lm	20 W	19°	on/off	A++ A++
911435.00X.1.76	D 143, H 3	LED	840	2300 lm	20 W	19°	DALI	A++ A++
911436.00X.1	D 143, H 3	LED	840	2150 lm	20 W	33°	on/off	A++ A++
911436.00X.1.76	D 143, H 3	LED	840	2150 lm	20 W	33°	DALI	A++ A++
911437.00X.1	D 143, H 3	LED	840	1900 lm	20 W	47°	on/off	A++ A++
911437.00X.1.76	D 143, H 3	LED	840	1900 lm	20 W	47°	DALI	A++ A++
911442.00X	D 143, H 3	LED	830	3200 lm	30 W	19°	on/off	A++ A++
911442.00X.76	D 143, H 3	LED	830	3200 lm	30 W	19°	DALI	A++ A++
911443.00X	D 143, H 3	LED	830	3000 lm	30 W	33°	on/off	A++ A++
911443.00X.76	D 143, H 3	LED	830	3000 lm	30 W	33°	DALI	A++ A++
911444.00X	D 143, H 3	LED	830	2700 lm	30 W	47°	on/off	A++ A++
911444.00X.76	D 143, H 3	LED	830	2700 lm	30 W	47°	DALI	A++ A++
911442.00X.1	D 143, H 3	LED	840	3300 lm	30 W	19°	on/off	A++ A++
911442.00X.1.76	D 143, H 3	LED	840	3300 lm	30 W	19°	DALI	A++ A++
911443.00X.1	D 143, H 3	LED	840	3100 lm	30 W	33°	on/off	A++ A++
911443.00X.1.76	D 143, H 3	LED	840	3100 lm	30 W	33°	DALI	A++ A++
911444.00X.1	D 143, H 3	LED	840	2800 lm	30 W	47°	on/off	A++ A++
911444.00X.1.76	D 143, H 3	LED	840	2800 lm	30 W	47°	DALI	A++ A++

Superspot version with small spot LED
Including lens for best uniformity of the light cone

911438.00X	D 143, H 3	LED	830	1750 lm	22 W	14°	on/off	A++ A++
911438.00X.76	D 143, H 3	LED	830	1750 lm	22 W	14°	DALI	A++ A++
911438.00X.1	D 143, H 3	LED	840	1800 lm	22 W	14°	on/off	A++ A++
911438.00X.1.76	D 143, H 3	LED	840	1800 lm	22 W	14°	DALI	A++ A++

Including reflector for maximum efficiency

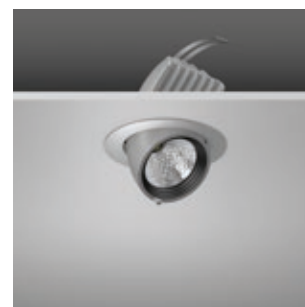
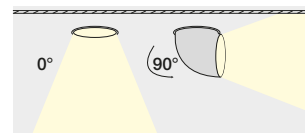
911434.00X	D 143, H 3	LED	830	2000 lm	22 W	11°	on/off	A++ A++
911434.00X.76	D 143, H 3	LED	830	2000 lm	22 W	11°	DALI	A++ A++
911434.00X.1	D 143, H 3	LED	840	2050 lm	22 W	11°	on/off	A++ A++
911434.00X.1.76	D 143, H 3	LED	840	2050 lm	22 W	11°	DALI	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request

**Comparison
LED vs. conventional lamps**

LED 20 / 22 W ≈
1 x 35 W HIT (45 W CB)

LED 30 W ≈
1 x 50 W HIT (60 W CB)





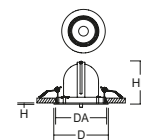
Recessed projectors | Series: Golas Maxi

Type of Protection: IP 20
Protection Class: II
Ceiling Thickness: 1-20 mm

Housing: pressure die-cast aluminium, powder-coated. 356° rotation range and 90° swivel range. Heat resistant plastic ring black. Installation without tools thanks to spring fastening system. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. Separate LED converter with connecting cable 250 mm.

LED included.

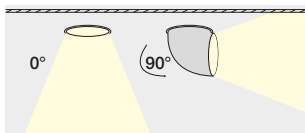
Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Comparison LED vs. conventional lamps

LED 22 / 27 W ≈
1 x 35 W HIT (45 W CB)

LED 38 W ≈
1 x 50 W HIT (60 W CB)



Recessed projectors

Price Category 21

Ceiling cut out DA 168 mm

Including lens for best uniformity of the light cone

911453.00X	D 178, H 3	LED	830	2400 lm	27 W	13°	on/off	A++ A++
911453.00X.76	D 178, H 3	LED	830	2400 lm	27 W	13°	DALI	A++ A++
911454.00X	D 178, H 3	LED	830	2350 lm	27 W	32°	on/off	A++ A++
911454.00X.76	D 178, H 3	LED	830	2350 lm	27 W	32°	DALI	A++ A++
911455.00X	D 178, H 3	LED	830	2400 lm	27 W	41°	on/off	A++ A++
911455.00X.76	D 178, H 3	LED	830	2400 lm	27 W	41°	DALI	A++ A++
911453.00X.1	D 178, H 3	LED	840	2500 lm	27 W	13°	on/off	A++ A++
911453.00X.1.76	D 178, H 3	LED	840	2500 lm	27 W	13°	DALI	A++ A++
911454.00X.1	D 178, H 3	LED	840	2450 lm	27 W	32°	on/off	A++ A++
911454.00X.1.76	D 178, H 3	LED	840	2450 lm	27 W	32°	DALI	A++ A++
911455.00X.1	D 178, H 3	LED	840	2500 lm	27 W	41°	on/off	A++ A++
911455.00X.1.76	D 178, H 3	LED	840	2500 lm	27 W	41°	DALI	A++ A++
911459.00X	D 178, H 3	LED	830	3150 lm	38 W	13°	on/off	A++ A++
911459.00X.76	D 178, H 3	LED	830	3150 lm	38 W	13°	DALI	A++ A++
911460.00X	D 178, H 3	LED	830	3050 lm	38 W	32°	on/off	A++ A++
911460.00X.76	D 178, H 3	LED	830	3050 lm	38 W	32°	DALI	A++ A++
911461.00X	D 178, H 3	LED	830	3150 lm	38 W	41°	on/off	A++ A++
911461.00X.76	D 178, H 3	LED	830	3150 lm	38 W	41°	DALI	A++ A++
911459.00X.1	D 178, H 3	LED	840	3350 lm	38 W	13°	on/off	A++ A++
911459.00X.1.76	D 178, H 3	LED	840	3350 lm	38 W	13°	DALI	A++ A++
911460.00X.1	D 178, H 3	LED	840	3250 lm	38 W	32°	on/off	A++ A++
911460.00X.1.76	D 178, H 3	LED	840	3250 lm	38 W	32°	DALI	A++ A++
911461.00X.1	D 178, H 3	LED	840	3350 lm	38 W	41°	on/off	A++ A++
911461.00X.1.76	D 178, H 3	LED	840	3350 lm	38 W	41°	DALI	A++ A++

Including reflector for maximum efficiency

911449.00X	D 178, H 3	LED	830	3000 lm	27 W	12°	on/off	A++ A++
911449.00X.76	D 178, H 3	LED	830	3000 lm	27 W	12°	DALI	A++ A++
911450.00X	D 178, H 3	LED	830	3000 lm	27 W	21°	on/off	A++ A++
911450.00X.76	D 178, H 3	LED	830	3000 lm	27 W	21°	DALI	A++ A++
911451.00X	D 178, H 3	LED	830	2900 lm	27 W	35°	on/off	A++ A++
911451.00X.76	D 178, H 3	LED	830	2900 lm	27 W	35°	DALI	A++ A++
911449.00X.1	D 178, H 3	LED	840	3100 lm	27 W	12°	on/off	A++ A++
911449.00X.1.76	D 178, H 3	LED	840	3100 lm	27 W	12°	DALI	A++ A++
911450.00X.1	D 178, H 3	LED	840	3150 lm	27 W	21°	on/off	A++ A++
911450.00X.1.76	D 178, H 3	LED	840	3150 lm	27 W	21°	DALI	A++ A++
911451.00X.1	D 178, H 3	LED	840	3050 lm	27 W	35°	on/off	A++ A++
911451.00X.1.76	D 178, H 3	LED	840	3050 lm	27 W	35°	DALI	A++ A++
911456.00X	D 178, H 3	LED	830	3800 lm	38 W	12°	on/off	A++ A++
911456.00X.76	D 178, H 3	LED	830	3800 lm	38 W	12°	DALI	A++ A++
911457.00X	D 178, H 3	LED	830	3900 lm	38 W	21°	on/off	A++ A++
911457.00X.76	D 178, H 3	LED	830	3900 lm	38 W	21°	DALI	A++ A++
911458.00X	D 178, H 3	LED	830	3800 lm	38 W	35°	on/off	A++ A++
911458.00X.76	D 178, H 3	LED	830	3800 lm	38 W	35°	DALI	A++ A++
911456.00X.1	D 178, H 3	LED	840	4050 lm	38 W	12°	on/off	A++ A++
911456.00X.1.76	D 178, H 3	LED	840	4050 lm	38 W	12°	DALI	A++ A++
911457.00X.1	D 178, H 3	LED	840	4150 lm	38 W	21°	on/off	A++ A++
911457.00X.1.76	D 178, H 3	LED	840	4150 lm	38 W	21°	DALI	A++ A++
911458.00X.1	D 178, H 3	LED	840	4050 lm	38 W	35°	on/off	A++ A++
911458.00X.1.76	D 178, H 3	LED	840	4050 lm	38 W	35°	DALI	A++ A++

Superspot version with small spot LED

Including lens for best uniformity of the light cone

911452.00X	D 178, H 3	LED	830	1700 lm	22 W	9°	on/off	A++ A++
911452.00X.76	D 178, H 3	LED	830	1700 lm	22 W	9°	DALI	A++ A++
911452.00X.1	D 178, H 3	LED	840	1750 lm	22 W	9°	on/off	A++ A++
911452.00X.1.76	D 178, H 3	LED	840	1750 lm	22 W	9°	DALI	A++ A++

Including reflector for maximum efficiency

911448.00X	D 178, H 3	LED	830	2000 lm	22 W	7°	on/off	A++ A++
911448.00X.76	D 178, H 3	LED	830	2000 lm	22 W	7°	DALI	A++ A++
911448.00X.1	D 178, H 3	LED	840	2050 lm	22 W	7°	on/off	A++ A++
911448.00X.1.76	D 178, H 3	LED	840	2050 lm	22 W	7°	DALI	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request

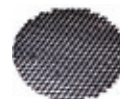
Accessories | Series: Golas Mini

Diffuser		Price Category 21
982370.000	D 75, H 3	Safety glass, clear
982370.010	D 75, H 3	Safety glass, satin finish

Anti-glare honeycomb louvre		Price Category 21
982371.003	D 74, H 3	Mini honeycomb louvre

Interchangeable plastic rings		Price Category 21
982419.002	D 82, H 20	White plastic ring for reflector
982421.002	D 82, H 31	White plastic ring for lens

Interchangeable optics		Price Category 21
982368.003	D 82, H 55	Reflector, narrow beam
982368.013	D 82, H 55	Reflector, medium beam
982368.023	D 82, H 55	Reflector, wide beam
982369.003	D 82, H 55	Lens, narrow beam
982369.013	D 82, H 55	Lens, medium beam
982369.023	D 82, H 55	Lens, wide beam
982369.033	D 82, H 55	Lens, very wide beam
982369.043	D 82, H 55	Lens with oval light distribution for corridor



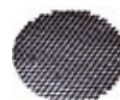
Accessories | Series: Golas Maxi

Diffuser		Price Category 21
982374.000	D 111, H 3	Safety glass, clear
982374.010	D 111, H 3	Safety glass, satin finish

Anti-glare honeycomb louvre		Price Category 21
982375.003	D 111, H 3	Maxi honeycomb louvre

Interchangeable plastic rings		Price Category 21
982420.002	D 118, H 20	White plastic ring for reflector
982422.002	D 118, H 33	White plastic ring for lens

Interchangeable optics		Price Category 21
982372.003	D 118, H 83	Reflector, narrow beam
982372.013	D 118, H 83	Reflector, medium beam
982372.023	D 118, H 83	Reflector, wide beam
982372.033	D 118, H 83	Reflector, very wide beam
982373.003	D 118, H 83	Lens, narrow beam
982373.013	D 118, H 83	Lens, medium beam
982373.023	D 118, H 83	Lens, wide beam





DALI

TAREK R

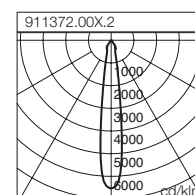
Recessed projectors

- High quality LED spot for tracks and recessed mounting in the same appealing design
- Different light colours: 830, 840 with Ra 85
- Further light colours with RA>90 and special food LEDs also available on request
- Passive cooling, achieved by specially designed heat sink
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Non-reflecting safety glass cover with minimal loss of transmission to protect LED and reflector
- Consistent alignment possible with visible tilt scale
- The recessed version can be fully flush to the ceiling and is extendable for highest flexible adjustability due to innovative push & play technology
- Swivel range up to 70°
- Standard is either converter for on/off or DALI dimming
- Compatible for light management system light control +³

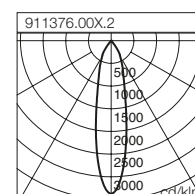


Further luminaires of this series, see:
Indoor lighting | Surface mounted projectors

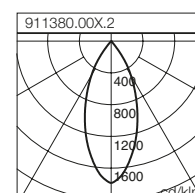
911372.00X.2		
h [m]	Ø [m]	E [lx]
1,0	0,27	24200
2,0	0,53	6050
3,0	0,80	2689
4,0	1,07	1513
5,0	1,33	968



911376.00X.2		
h [m]	Ø [m]	E [lx]
1,0	0,40	12456
2,0	0,81	3114
3,0	1,21	1384
4,0	1,61	778
5,0	2,02	498



911380.00X.2		
h [m]	Ø [m]	E [lx]
1,0	0,78	6504
2,0	1,57	1626
3,0	2,35	723
4,0	3,14	406
5,0	3,92	260



Recessed projectors | Series: Tarek R

Type of Protection: IP 20

Protection Class: II

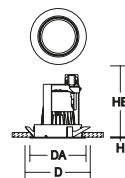
Ceiling Thickness: 3-21 mm

Impact Protection: IK07

Housing: pressure die-cast aluminium, powder-coated. Horizontal rotation range 356° and vertical swivel range 70°. Can be swivelled flush to the ceiling with magnetic fixing. Passive cooling. Faceted aluminium reflector. Non-reflecting safety glass.

LED included. Connected converter included in separate gearbox.

Available colours (X): 2 = white, 3 = black, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dimmable	EEC
Surface mounted projector								
Ceiling cut out DA 160 mm								
High efficiency standard LED included								
911366.00X.1	D 180, H 3, HE 210	LED	830	2850 lm	27 W	12°	on/off	A+ A+
911366.00X.1.76	D 180, H 3, HE 210	LED	830	2850 lm	27 W	12°	DALI	A+ A+
911368.00X.1	D 180, H 3, HE 210	LED	830	2800 lm	27 W	21°	on/off	A+ A+
911368.00X.1.76	D 180, H 3, HE 210	LED	830	2800 lm	27 W	21°	DALI	A+ A+
911370.00X.1	D 180, H 3, HE 210	LED	830	2800 lm	27 W	39°	on/off	A+ A+
911370.00X.1.76	D 180, H 3, HE 210	LED	830	2800 lm	27 W	39°	DALI	A+ A+
911366.00X.2	D 180, H 3, HE 210	LED	840	2900 lm	27 W	12°	on/off	A+ A+
911366.00X.2.76	D 180, H 3, HE 210	LED	840	2900 lm	27 W	12°	DALI	A+ A+
911368.00X.2	D 180, H 3, HE 210	LED	840	2850 lm	27 W	21°	on/off	A+ A+
911368.00X.2.76	D 180, H 3, HE 210	LED	840	2850 lm	27 W	21°	DALI	A+ A+
911370.00X.2	D 180, H 3, HE 210	LED	840	2850 lm	27 W	39°	on/off	A+ A+
911370.00X.2.76	D 180, H 3, HE 210	LED	840	2850 lm	27 W	39°	DALI	A+ A+
911372.00X.1	D 180, H 3, HE 300	LED	830	4350 lm	45 W	15°	on/off	A+ A+
911372.00X.1.76	D 180, H 3, HE 300	LED	830	4350 lm	45 W	15°	DALI	A+ A+
911376.00X.1	D 180, H 3, HE 300	LED	830	4250 lm	45 W	23°	on/off	A+ A+
911376.00X.1.76	D 180, H 3, HE 300	LED	830	4250 lm	45 W	23°	DALI	A+ A+
911380.00X.1	D 180, H 3, HE 300	LED	830	4250 lm	45 W	43°	on/off	A+ A+
911380.00X.1.76	D 180, H 3, HE 300	LED	830	4250 lm	45 W	43°	DALI	A+ A+
911372.00X.2	D 180, H 3, HE 300	LED	840	4650 lm	45 W	15°	on/off	A+ A+
911372.00X.2.76	D 180, H 3, HE 300	LED	840	4650 lm	45 W	15°	DALI	A+ A+
911376.00X.2	D 180, H 3, HE 300	LED	840	4600 lm	45 W	23°	on/off	A+ A+
911376.00X.2.76	D 180, H 3, HE 300	LED	840	4600 lm	45 W	23°	DALI	A+ A+
911380.00X.2	D 180, H 3, HE 300	LED	840	4550 lm	45 W	43°	on/off	A+ A+
911380.00X.2.76	D 180, H 3, HE 300	LED	840	4550 lm	45 W	43°	DALI	A+ A+

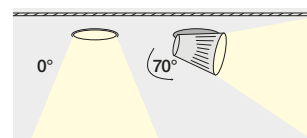
Price Category 21


**Comparison
LED vs. conventional lamps**
LED 27 W ≈

1 x 35 W HIT (45 W CB)

LED 45 W ≈

1 x 70 W HIT (84 W CB)

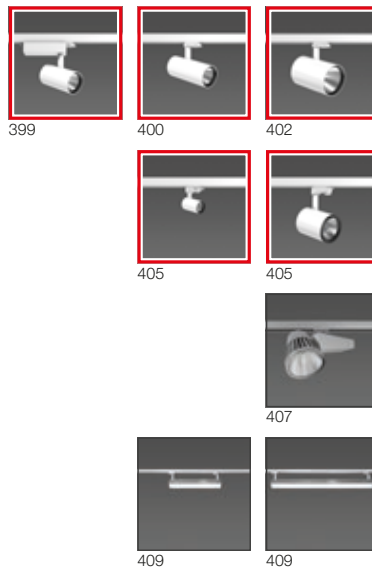


push & play technology





The application image shows:
Tarek S



Deecos
398-403

Calido®
404-405

Tarek S
406-407

Triade
408-409



DEECOS

Surface mounted projectors

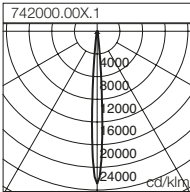
- High quality die-cast aluminium housing in two sizes
- Excellent light quality without flickering, homogeneous light distribution, glare control and light colour quality
- Modern design: cylindrical shape with no visible cooling ribs
- Converter integrated in the cylinder tube or in a separate box in the Mini B version
- Suitable for reflector as well as lens technologies
- **MIRO-SILVER®** reflectors for outstanding efficiency or polycarbonate lenses for the best uniformity of the light cone, each with three different beam angles narrow, medium, wide



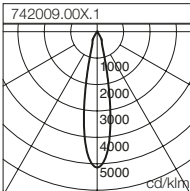
Further luminaires of this series, see:
 Indoor lighting | Recessed projectors
 Indoor lighting | Pendant luminaires

- Additional Superspot versions
- Black plastic ring with recessed LED for suppressing glare from the side
- Different light colours: 830, 840 with Ra 82
- Further light colours 927, 930, 935, 940 with Ra 92 and with Maxi special food LEDs: champagne with Ra 97, meat and meat fresh available on request
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- High quality converter without flickering and stroboscopic effect
- Suitable for On/Off and DALI
- The following accessories can be mounted without use of tools: interchangeable lenses, honeycomb louvre, clear and frosted diffusers, white interchangeable plastic ring

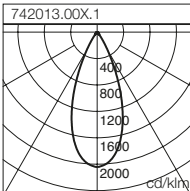
742000.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,13	44172	
2,0	0,26	11043	
3,0	0,39	4908	
4,0	0,52	2761	
5,0	0,65	1767	



742009.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,37	17100	
2,0	0,75	4275	
3,0	1,12	1900	
4,0	1,50	1069	
5,0	1,87	684	



742013.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,75	5454	
2,0	1,50	1364	
3,0	2,26	606	
4,0	3,01	341	
5,0	3,76	218	



Surface mounted projectors | Series: Deecos S Mini B

Type of Protection: IP 20

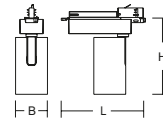
Protection Class: I

Impact Protection: IK06

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°. Swivel range: 90°. Heat resistant plastic ring black. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. With multi adaptor for 3-circuit tracks 230 V. Ceiling and wall installation.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Surface mounted projector								
with multi adaptor for 3-circuit tracks 230 V								
Including lens for best uniformity of the light cone								
742033.00X	L 228, B 87, H 209	LED	830	1900 lm	20 W	21°	on/off	A++ A++
742034.00X	L 228, B 87, H 209	LED	830	1800 lm	20 W	31°	on/off	A++ A++
742035.00X	L 228, B 87, H 209	LED	830	1700 lm	20 W	46°	on/off	A++ A++
742033.00X.1	L 228, B 87, H 209	LED	840	1950 lm	20 W	21°	on/off	A++ A++
742034.00X.1	L 228, B 87, H 209	LED	840	1850 lm	20 W	31°	on/off	A++ A++
742035.00X.1	L 228, B 87, H 209	LED	840	1750 lm	20 W	46°	on/off	A++ A++
742039.00X	L 228, B 87, H 209	LED	830	2700 lm	30 W	21°	on/off	A++ A++
742040.00X	L 228, B 87, H 209	LED	830	2550 lm	30 W	31°	on/off	A++ A++
742041.00X	L 228, B 87, H 209	LED	830	2400 lm	30 W	46°	on/off	A++ A++
742039.00X.1	L 228, B 87, H 209	LED	840	2750 lm	30 W	21°	on/off	A++ A++
742040.00X.1	L 228, B 87, H 209	LED	840	2650 lm	30 W	31°	on/off	A++ A++
742041.00X.1	L 228, B 87, H 209	LED	840	2450 lm	30 W	46°	on/off	A++ A++
Including reflector for maximum efficiency								
742029.00X	L 228, B 87, H 209	LED	830	2250 lm	20 W	19°	on/off	A++ A++
742030.00X	L 228, B 87, H 209	LED	830	2100 lm	20 W	33°	on/off	A++ A++
742031.00X	L 228, B 87, H 209	LED	830	1900 lm	20 W	47°	on/off	A++ A++
742029.00X.1	L 228, B 87, H 209	LED	840	2300 lm	20 W	19°	on/off	A++ A++
742030.00X.1	L 228, B 87, H 209	LED	840	2150 lm	20 W	33°	on/off	A++ A++
742031.00X.1	L 228, B 87, H 209	LED	840	1900 lm	20 W	47°	on/off	A++ A++
742036.00X	L 228, B 87, H 209	LED	830	3200 lm	30 W	19°	on/off	A++ A++
742037.00X	L 228, B 87, H 209	LED	830	3000 lm	30 W	33°	on/off	A++ A++
742038.00X	L 228, B 87, H 209	LED	830	2700 lm	30 W	47°	on/off	A++ A++
742036.00X.1	L 228, B 87, H 209	LED	840	3300 lm	30 W	19°	on/off	A++ A++
742037.00X.1	L 228, B 87, H 209	LED	840	3100 lm	30 W	33°	on/off	A++ A++
742038.00X.1	L 228, B 87, H 209	LED	840	2800 lm	30 W	47°	on/off	A++ A++
Superspot version with small spot LED								
Including lens for best uniformity of the light cone								
742032.00X	L 228, B 87, H 209	LED	830	1750 lm	22 W	14°	on/off	A++ A++
742032.00X.1	L 228, B 87, H 209	LED	840	1800 lm	22 W	14°	on/off	A++ A++
Including reflector for maximum efficiency								
742028.00X	L 228, B 87, H 209	LED	830	2000 lm	22 W	11°	on/off	A++ A++
742028.00X.1	L 228, B 87, H 209	LED	840	2050 lm	22 W	11°	on/off	A++ A++

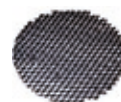
Versions with Ra > 90 colour rendition are also available in other light colours on request

Diffuser			Price Category 21					
982370.000	D 75, H 3	Safety glass, clear						
982370.010	D 75, H 3	Safety glass, satin finish						

Anti-glare honeycomb louvre			Price Category 21					
982371.003	D 74, H 3	Mini honeycomb louvre						

Interchangeable plastic rings			Price Category 21					
982419.002	D 82, H 20	White plastic ring for reflector						
982421.002	D 82, H 31	White plastic ring for lens						

Interchangeable optics			Price Category 21					
982368.003	D 82, H 55	Reflector, narrow beam						
982368.013	D 82, H 55	Reflector, medium beam						
982368.023	D 82, H 55	Reflector, wide beam						
982369.003	D 82, H 55	Lens, narrow beam						
982369.013	D 82, H 55	Lens, medium beam						
982369.023	D 82, H 55	Lens, wide beam						
982369.033	D 82, H 55	Lens, very wide beam						
982369.043	D 82, H 55	Lens with oval light distribution for corridor						



**Surface mounted projectors | Series: Deecos S Mini**

Type of Protection: IP 20

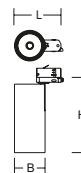
Protection Class: I

Impact Protection: IK06

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°. Swivel range: 90°. Heat resistant plastic ring black. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. With multi-adapter for 3-phase tracks or with adapter for RZB 3-phase DALI tracks. Ceiling mounting.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

**Comparison
LED vs. conventional lamps****LED 20 / 22 W ≈**

1 x 35 W HIT (45 W CB)

LED 30 W ≈

1 x 50 W HIT (60 W CB)

Surface mounted projector**Price Category 21****with multi adaptor for 3-circuit tracks 230 V****Including lens for best uniformity of the light cone**

742019.00X	L 97, B 87, H 214	LED	830	1900 lm	20 W	21°	on/off	A++ A++
742020.00X	L 97, B 87, H 214	LED	830	1800 lm	20 W	31°	on/off	A++ A++
742021.00X	L 97, B 87, H 214	LED	830	1700 lm	20 W	46°	on/off	A++ A++
742019.00X.1	L 97, B 87, H 214	LED	840	1950 lm	20 W	21°	on/off	A++ A++
742020.00X.1	L 97, B 87, H 214	LED	840	1850 lm	20 W	31°	on/off	A++ A++
742021.00X.1	L 97, B 87, H 214	LED	840	1750 lm	20 W	46°	on/off	A++ A++
742025.00X	L 97, B 87, H 214	LED	830	2700 lm	30 W	21°	on/off	A++ A++
742026.00X	L 97, B 87, H 214	LED	830	2550 lm	30 W	31°	on/off	A++ A++
742027.00X	L 97, B 87, H 214	LED	830	2400 lm	30 W	46°	on/off	A++ A++
742025.00X.1	L 97, B 87, H 214	LED	840	2750 lm	30 W	21°	on/off	A++ A++
742026.00X.1	L 97, B 87, H 214	LED	840	2650 lm	30 W	31°	on/off	A++ A++
742027.00X.1	L 97, B 87, H 214	LED	840	2450 lm	30 W	46°	on/off	A++ A++

Including reflector for maximum efficiency

742015.00X	L 97, B 87, H 214	LED	830	2250 lm	20 W	19°	on/off	A++ A++
742016.00X	L 97, B 87, H 214	LED	830	2100 lm	20 W	33°	on/off	A++ A++
742017.00X	L 97, B 87, H 214	LED	830	1900 lm	20 W	47°	on/off	A++ A++
742015.00X.1	L 97, B 87, H 214	LED	840	2300 lm	20 W	19°	on/off	A++ A++
742016.00X.1	L 97, B 87, H 214	LED	840	2150 lm	20 W	33°	on/off	A++ A++
742017.00X.1	L 97, B 87, H 214	LED	840	1900 lm	20 W	47°	on/off	A++ A++
742022.00X	L 97, B 87, H 214	LED	830	3200 lm	30 W	19°	on/off	A++ A++
742023.00X	L 97, B 87, H 214	LED	830	3000 lm	30 W	33°	on/off	A++ A++
742024.00X	L 97, B 87, H 214	LED	830	2700 lm	30 W	47°	on/off	A++ A++
742022.00X.1	L 97, B 87, H 214	LED	840	3300 lm	30 W	19°	on/off	A++ A++
742023.00X.1	L 97, B 87, H 214	LED	840	3100 lm	30 W	33°	on/off	A++ A++
742024.00X.1	L 97, B 87, H 214	LED	840	2800 lm	30 W	47°	on/off	A++ A++

Superspot version with small spot LED**Including lens for best uniformity of the light cone**

742018.00X	L 97, B 87, H 214	LED	830	1750 lm	22 W	14°	on/off	A++ A++
742018.00X.1	L 97, B 87, H 214	LED	840	1800 lm	22 W	14°	on/off	A++ A++

Including reflector for maximum efficiency

742014.00X	L 97, B 87, H 214	LED	830	2000 lm	22 W	11°	on/off	A++ A++
742014.00X.1	L 97, B 87, H 214	LED	840	2050 lm	22 W	11°	on/off	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimm-able	EEC
Surface mounted projector								
with DALI adapter only for RZB 3-phase DALI track 230 V								
Including lens for best uniformity of the light cone								
742019.00X.76	L 97, B 87, H 214	LED	830	1900 lm	20 W	21°	DALI	A++ A++
742020.00X.76	L 97, B 87, H 214	LED	830	1800 lm	20 W	31°	DALI	A++ A++
742021.00X.76	L 97, B 87, H 214	LED	830	1700 lm	20 W	46°	DALI	A++ A++
742019.00X.1.76	L 97, B 87, H 214	LED	840	1950 lm	20 W	21°	DALI	A++ A++
742020.00X.1.76	L 97, B 87, H 214	LED	840	1850 lm	20 W	31°	DALI	A++ A++
742021.00X.1.76	L 97, B 87, H 214	LED	840	1750 lm	20 W	46°	DALI	A++ A++
742025.00X.76	L 97, B 87, H 214	LED	830	2700 lm	30 W	21°	DALI	A++ A++
742026.00X.76	L 97, B 87, H 214	LED	830	2550 lm	30 W	31°	DALI	A++ A++
742027.00X.76	L 97, B 87, H 214	LED	830	2400 lm	30 W	46°	DALI	A++ A++
742025.00X.1.76	L 97, B 87, H 214	LED	840	2750 lm	30 W	21°	DALI	A++ A++
742026.00X.1.76	L 97, B 87, H 214	LED	840	2650 lm	30 W	31°	DALI	A++ A++
742027.00X.1.76	L 97, B 87, H 214	LED	840	2450 lm	30 W	46°	DALI	A++ A++
Including reflector for maximum efficiency								
742015.00X.76	L 97, B 87, H 214	LED	830	2250 lm	20 W	19°	DALI	A++ A++
742016.00X.76	L 97, B 87, H 214	LED	830	2100 lm	20 W	33°	DALI	A++ A++
742017.00X.76	L 97, B 87, H 214	LED	830	1900 lm	20 W	47°	DALI	A++ A++
742015.00X.1.76	L 97, B 87, H 214	LED	840	2300 lm	20 W	19°	DALI	A++ A++
742016.00X.1.76	L 97, B 87, H 214	LED	840	2150 lm	20 W	33°	DALI	A++ A++
742017.00X.1.76	L 97, B 87, H 214	LED	840	1900 lm	20 W	47°	DALI	A++ A++
742022.00X.76	L 97, B 87, H 214	LED	830	3200 lm	30 W	19°	DALI	A++ A++
742023.00X.76	L 97, B 87, H 214	LED	830	3000 lm	30 W	33°	DALI	A++ A++
742024.00X.76	L 97, B 87, H 214	LED	830	2700 lm	30 W	47°	DALI	A++ A++
742022.00X.1.76	L 97, B 87, H 214	LED	840	3300 lm	30 W	19°	DALI	A++ A++
742023.00X.1.76	L 97, B 87, H 214	LED	840	3100 lm	30 W	33°	DALI	A++ A++
742024.00X.1.76	L 97, B 87, H 214	LED	840	2800 lm	30 W	47°	DALI	A++ A++
Superspot version with small spot LED								
Including lens for best uniformity of the light cone								
742018.00X.76	L 97, B 87, H 214	LED	830	1750 lm	22 W	14°	DALI	A++ A++
742018.00X.1.76	L 97, B 87, H 214	LED	840	1800 lm	22 W	14°	DALI	A++ A++
Including reflector for maximum efficiency								
742014.00X.76	L 97, B 87, H 214	LED	830	2000 lm	22 W	11°	DALI	A++ A++
742014.00X.1.76	L 97, B 87, H 214	LED	840	2050 lm	22 W	11°	DALI	A++ A++

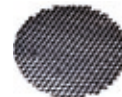
Comparison LED vs. conventional lamps

LED 20 / 22 W ≈
1 x 35 W HIT (45 W CB)

LED 30 W ≈
1 x 50 W HIT (60 W CB)

Diffuser			Price Category 21
982370.000	D 75, H 3	Safety glass, clear	
982370.010	D 75, H 3	Safety glass, satin finish	

Anti-glare honeycomb louvre			Price Category 21
982371.003	D 74, H 3	Mini honeycomb louvre	



Interchangeable plastic rings			Price Category 21
982419.002	D 82, H 20	White plastic ring for reflector	
982421.002	D 82, H 31	White plastic ring for lens	



Interchangeable optics			Price Category 21
982368.003	D 82, H 55	Reflector, narrow beam	
982368.013	D 82, H 55	Reflector, medium beam	
982368.023	D 82, H 55	Reflector, wide beam	
982369.003	D 82, H 55	Lens, narrow beam	
982369.013	D 82, H 55	Lens, medium beam	
982369.023	D 82, H 55	Lens, wide beam	
982369.033	D 82, H 55	Lens, very wide beam	
982369.043	D 82, H 55	Lens with oval light distribution for corridor	





Surface mounted projectors | Series: Deecos S Maxi

Type of Protection: IP 20

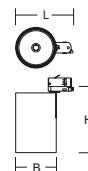
Protection Class: I

Impact Protection: IK06

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°. Swivel range: 90°. Heat resistant plastic ring black. With optical assembly MIRO-SILVER® reflector or polycarbonate lens. Passive cooling. With multi-adapter for 3-phase tracks or with adapter for RZB 3-phase DALI tracks. Ceiling mounting.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Comparison LED vs. conventional lamps

LED 22 / 27 W ≈

1 x 35 W HIT (45 W CB)

LED 38 W ≈

1 x 50 W HIT (60 W CB)

Surface mounted projector

Price Category 21

with multi adaptor for 3-circuit tracks 230 V

Including lens for best uniformity of the light cone

742005.00X	L 133, B 123, H 200	LED	830	2400 lm	27 W	13°	on/off	A++ A++
742006.00X	L 133, B 123, H 200	LED	830	2350 lm	27 W	32°	on/off	A++ A++
742007.00X	L 133, B 123, H 200	LED	830	2400 lm	27 W	41°	on/off	A++ A++
742005.00X.1	L 133, B 123, H 200	LED	840	2500 lm	27 W	13°	on/off	A++ A++
742006.00X.1	L 133, B 123, H 200	LED	840	2450 lm	27 W	32°	on/off	A++ A++
742007.00X.1	L 133, B 123, H 200	LED	840	2500 lm	27 W	41°	on/off	A++ A++
742011.00X	L 133, B 123, H 200	LED	830	3150 lm	38 W	13°	on/off	A++ A++
742012.00X	L 133, B 123, H 200	LED	830	3050 lm	38 W	32°	on/off	A++ A++
742013.00X	L 133, B 123, H 200	LED	830	3150 lm	38 W	41°	on/off	A++ A++
742011.00X.1	L 133, B 123, H 200	LED	840	3350 lm	38 W	13°	on/off	A++ A++
742012.00X.1	L 133, B 123, H 200	LED	840	3250 lm	38 W	32°	on/off	A++ A++
742013.00X.1	L 133, B 123, H 200	LED	840	3350 lm	38 W	41°	on/off	A++ A++

Including reflector for maximum efficiency

742001.00X	L 133, B 123, H 200	LED	830	3000 lm	27 W	12°	on/off	A++ A++
742002.00X	L 133, B 123, H 200	LED	830	3000 lm	27 W	21°	on/off	A++ A++
742003.00X	L 133, B 123, H 200	LED	830	2900 lm	27 W	35°	on/off	A++ A++
742001.00X.1	L 133, B 123, H 200	LED	840	3100 lm	27 W	12°	on/off	A++ A++
742002.00X.1	L 133, B 123, H 200	LED	840	3150 lm	27 W	21°	on/off	A++ A++
742003.00X.1	L 133, B 123, H 200	LED	840	3050 lm	27 W	35°	on/off	A++ A++
742008.00X	L 133, B 123, H 200	LED	830	3800 lm	38 W	12°	on/off	A++ A++
742009.00X	L 133, B 123, H 200	LED	830	3900 lm	38 W	21°	on/off	A++ A++
742010.00X	L 133, B 123, H 200	LED	830	3800 lm	38 W	35°	on/off	A++ A++
742008.00X.1	L 133, B 123, H 200	LED	840	4050 lm	38 W	12°	on/off	A++ A++
742009.00X.1	L 133, B 123, H 200	LED	840	4150 lm	38 W	21°	on/off	A++ A++
742010.00X.1	L 133, B 123, H 200	LED	840	4050 lm	38 W	35°	on/off	A++ A++

Superspot version with small spot LED

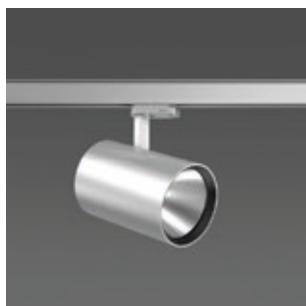
Including lens for best uniformity of the light cone

742004.00X	L 133, B 123, H 200	LED	830	1700 lm	22 W	9°	on/off	A++ A++
742004.00X.1	L 133, B 123, H 200	LED	840	1750 lm	22 W	9°	on/off	A++ A++

Including reflector for maximum efficiency

742000.00X	L 133, B 123, H 200	LED	830	2000 lm	22 W	7°	on/off	A++ A++
742000.00X.1	L 133, B 123, H 200	LED	840	2050 lm	22 W	7°	on/off	A++ A++

Versions with Ra > 90 colour rendition are also available in other light colours on request



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimm-able	EEC
Surface mounted projector								
with DALI adapter only for RZB 3-phase DALI track 230 V								
Including lens for best uniformity of the light cone								
742005.00X.76	L 133, B 123, H 200	LED	830	2400 lm	27 W	13°	DALI	A++ A++
742006.00X.76	L 133, B 123, H 200	LED	830	2350 lm	27 W	32°	DALI	A++ A++
742007.00X.76	L 133, B 123, H 200	LED	830	2400 lm	27 W	41°	DALI	A++ A++
742005.00X.1.76	L 133, B 123, H 200	LED	840	2500 lm	27 W	13°	DALI	A++ A++
742006.00X.1.76	L 133, B 123, H 200	LED	840	2450 lm	27 W	32°	DALI	A++ A++
742007.00X.1.76	L 133, B 123, H 200	LED	840	2500 lm	27 W	41°	DALI	A++ A++
742011.00X.76	L 133, B 123, H 200	LED	830	3150 lm	38 W	13°	DALI	A++ A++
742012.00X.76	L 133, B 123, H 200	LED	830	3050 lm	38 W	32°	DALI	A++ A++
742013.00X.76	L 133, B 123, H 200	LED	830	3150 lm	38 W	41°	DALI	A++ A++
742011.00X.1.76	L 133, B 123, H 200	LED	840	3350 lm	38 W	13°	DALI	A++ A++
742012.00X.1.76	L 133, B 123, H 200	LED	840	3250 lm	38 W	32°	DALI	A++ A++
742013.00X.1.76	L 133, B 123, H 200	LED	840	3350 lm	38 W	41°	DALI	A++ A++
Including reflector for maximum efficiency								
742001.00X.76	L 133, B 123, H 200	LED	830	3000 lm	27 W	12°	DALI	A++ A++
742002.00X.76	L 133, B 123, H 200	LED	830	3000 lm	27 W	21°	DALI	A++ A++
742003.00X.76	L 133, B 123, H 200	LED	830	2900 lm	27 W	35°	DALI	A++ A++
742001.00X.1.76	L 133, B 123, H 200	LED	840	3100 lm	27 W	12°	DALI	A++ A++
742002.00X.1.76	L 133, B 123, H 200	LED	840	3150 lm	27 W	21°	DALI	A++ A++
742003.00X.1.76	L 133, B 123, H 200	LED	840	3050 lm	27 W	35°	DALI	A++ A++
742009.00X.76	L 133, B 123, H 200	LED	830	3900 lm	38 W	21°	DALI	A++ A++
742010.00X.76	L 133, B 123, H 200	LED	830	3800 lm	38 W	35°	DALI	A++ A++
742008.00X.76	L 133, B 123, H 200	LED	830	3800 lm	38 W	12°	DALI	A++ A++
742009.00X.1.76	L 133, B 123, H 200	LED	840	4150 lm	38 W	21°	DALI	A++ A++
742010.00X.1.76	L 133, B 123, H 200	LED	840	4050 lm	38 W	35°	DALI	A++ A++
742008.00X.1.76	L 133, B 123, H 200	LED	840	4050 lm	38 W	12°	DALI	A++ A++
Superspot version with small spot LED								
Including lens for best uniformity of the light cone								
742004.00X.76	L 133, B 123, H 200	LED	830	1700 lm	22 W	9°	DALI	A++ A++
742004.00X.1.76	L 133, B 123, H 200	LED	840	1750 lm	22 W	9°	DALI	A++ A++
Including reflector for maximum efficiency								
742000.00X.76	L 133, B 123, H 200	LED	830	2000 lm	22 W	7°	DALI	A++ A++
742000.00X.1.76	L 133, B 123, H 200	LED	840	2050 lm	22 W	7°	DALI	A++ A++

Diffuser			Price Category 21					
982374.000	D 111, H 3	Safety glass, clear						
982374.010	D 111, H 3	Safety glass, satin finish						

Anti-glare honeycomb louvre			Price Category 21					
982375.003	D 111, H 3	Maxi honeycomb louvre						

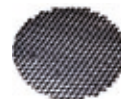
Interchangeable plastic rings			Price Category 21					
982420.002	D 118, H 20	White plastic ring for reflector						
982422.002	D 118, H 33	White plastic ring for lens						

Interchangeable optics			Price Category 21					
982372.003	D 118, H 83	Reflector, narrow beam						
982372.013	D 118, H 83	Reflector, medium beam						
982372.023	D 118, H 83	Reflector, wide beam						
982372.033	D 118, H 83	Reflector, very wide beam						
982373.003	D 118, H 83	Lens, narrow beam						
982373.013	D 118, H 83	Lens, medium beam						
982373.023	D 118, H 83	Lens, wide beam						

**Comparison
LED vs. conventional lamps**

LED 22 / 27 W ≈
1 x 35 W HIT (45 W CB)

LED 38 W ≈
1 x 50 W HIT (60 W CB)



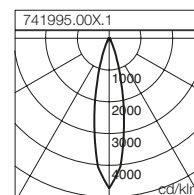


CALIDO®

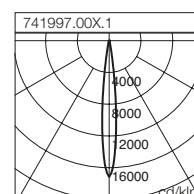
Surface mounted projectors

- Modern design: cylindrical shape with no visible cooling ribs
- Mini version features particularly compact dimensions
- Converter integrated in the cylinder tube
- Hybrid optical system with lens and reflector for homogeneous light distribution
- Three beam angles: narrow, medium, wide
- Black front ring for suppressing glare from the side
- Two light colours: 830, 840 for Maxi; 828, 840 for Mini
- LED rated life:
Maxi 50,000 hrs / L70, B50;
Mini 25,000 hrs / L70, B50 (3-year warranty)
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Excellent value for money
- The following accessories can be mounted without use of tools: honeycomb louvre

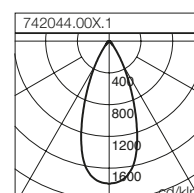
741995.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,40	3789
2,0	0,80	947
3,0	1,20	421
4,0	1,60	237
5,0	2,00	152



741997.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,20	45981
2,0	0,40	11495
3,0	0,60	5109
4,0	0,80	2874
5,0	1,00	1839



742044.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,76	6776
2,0	1,52	1694
3,0	2,28	753
4,0	3,04	423
5,0	3,80	271



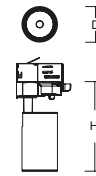
Surface mounted projectors | Series: Calido® Mini

Type of Protection: IP 20
Protection Class: II

Housing: aluminium extrusion profile, powder-coated. Cover and lever arm made of plastic. Rotation range: 356°. Swivel range: 90°. Heat resistant plastic ring black. Hybrid optical system with polycarbonate lens and reflector in white. Passive cooling. With multi adaptor for 3-circuit tracks 230 V. Ceiling mounting.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmi-able	EEC
Surface mounted projector								
with multi adaptor for 3-circuit tracks 230 V								
742057.00X	D 50, H 132	LED	828	910 lm	12 W	13°	on/off	A++ A++
741995.00X	D 50, H 132	LED	828	950 lm	12 W	23°	on/off	A++ A++
741996.00X	D 50, H 132	LED	828	950 lm	12 W	36°	on/off	A++ A++
742057.00X.1	D 50, H 132	LED	840	960 lm	12 W	13°	on/off	A++ A++
741995.00X.1	D 50, H 132	LED	840	1000 lm	12 W	23°	on/off	A++ A++
741996.00X.1	D 50, H 132	LED	840	1000 lm	12 W	36°	on/off	A++ A++

Price Category 21

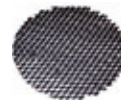
Comparison LED vs. conventional lamps

LED 12 W ≈
1 x 20 W HIT (23 W EB)

Anti-glare honeycomb louvre

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmi-able	EEC
982404.003	D 42, H 4	Calido Mini honeycomb louvre for 23° + 36°						
982448.003	D 47, H 4	Calido Mini honeycomb louvre for 13°						

Price Category 21



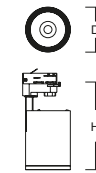
Surface mounted projectors | Series: Calido® Maxi

Type of Protection: IP 20
Protection Class: II

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°. Swivel range: 90°. Front ring die-cast aluminium black. Hybrid optical system with polycarbonate lens and reflector in faceted aluminium. Passive cooling. With multi adaptor for 3-circuit tracks 230 V. Ceiling mounting.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmi-able	EEC
Surface mounted projector								
with multi adaptor for 3-circuit tracks 230 V								
741997.00X	D 110, H 215	LED	830	3100 lm	37 W	11°	on/off	A++ A++
741998.00X	D 110, H 215	LED	830	3300 lm	37 W	21°	on/off	A++ A++
741999.00X	D 110, H 215	LED	830	3300 lm	37 W	38°	on/off	A++ A++
741997.00X.1	D 110, H 215	LED	840	3300 lm	37 W	11°	on/off	A++ A++
741998.00X.1	D 110, H 215	LED	840	3500 lm	37 W	21°	on/off	A++ A++
741999.00X.1	D 110, H 215	LED	840	3500 lm	37 W	38°	on/off	A++ A++
742043.00X	D 110, H 215	LED	830	4500 lm	49 W	22°	on/off	A++ A++
742044.00X	D 110, H 215	LED	830	4500 lm	49 W	42°	on/off	A++ A++
742043.00X.1	D 110, H 215	LED	840	4700 lm	49 W	22°	on/off	A++ A++
742044.00X.1	D 110, H 215	LED	840	4700 lm	49 W	42°	on/off	A++ A++

Price Category 21

Comparison LED vs. conventional lamps

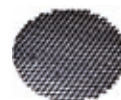
LED 37 W ≈
1 x 50 W HIT (60 W CB)

LED 49 W ≈
1 x 70 W HIT (84 W CB)

Anti-glare honeycomb louvre

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmi-able	EEC
982405.003	D 90, H 8	Calido Maxi honeycomb louvre						

Price Category 21





TAREK S

Surface mounted projectors

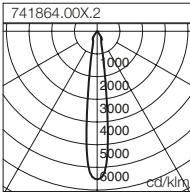
- High quality LED spot for tracks and recessed mounting in the same appealing design
- Different light colours: 830, 840 with Ra 85
- Further light colours with RA>90 and special food LEDs also available on request
- Luminous flux up to 6350 lm
- Passive cooling, achieved by specially designed heat sink
- LED rated life 50,000 h (L80, B10)
- Good colour consistency within 3-steps MacAdam (3 SDCM)

- Non-reflecting safety glass cover with minimal loss of transmission to protect LED and reflector
- Consistent alignment possible with visible tilt scale
- Standard is either converter for on/off or DALI dimming
- Versions suitable for DALI tracks required for the creation of dynamic light scenes are standard

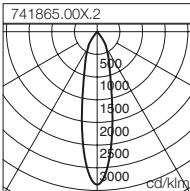


Further luminaires of this series, see:
Indoor lighting | Recessed projectors

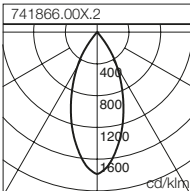
741864.00X.2		
h [m]	Ø [m]	E [lx]
1,0	0,27	24200
2,0	0,53	6050
3,0	0,80	2689
4,0	1,07	1513
5,0	1,33	968



741865.00X.2		
h [m]	Ø [m]	E [lx]
1,0	0,40	12456
2,0	0,81	3114
3,0	1,21	1384
4,0	1,61	778
5,0	2,02	498



741866.00X.2		
h [m]	Ø [m]	E [lx]
1,0	0,78	6504
2,0	1,57	1626
3,0	2,35	723
4,0	3,14	406
5,0	3,92	260



Surface mounted projectors | Series: Tarek S

Type of Protection: IP 20

Protection Class: I

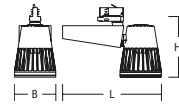
Impact Protection: IK07

Housing: pressure die-cast aluminium, powder-coated. Rotation range: 356°. Swivel range: 180°. Passive cooling. Faceted aluminium reflector. Non-reflecting safety glass. With multi-adaptor for 3-phase tracks or with adapter for RZB 3-phase DALI tracks.

Ceiling mounting.

LED included.

Available colours (X): 2 = white, 3 = black, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
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Surface mounted projector

Price Category 21

with multi adaptor for 3-circuit tracks 230 V

High efficiency standard LED included

741858.00X.1	L 290, B 120, H 178	LED	830	2850 lm	27 W	12°	on/off	A+ A+
741859.00X.1	L 290, B 120, H 178	LED	830	2800 lm	27 W	21°	on/off	A+ A+
741860.00X.1	L 290, B 120, H 178	LED	830	2800 lm	27 W	39°	on/off	A+ A+
741858.00X.2	L 290, B 120, H 178	LED	840	2900 lm	27 W	12°	on/off	A+ A+
741859.00X.2	L 290, B 120, H 178	LED	840	2850 lm	27 W	21°	on/off	A+ A+
741860.00X.2	L 290, B 120, H 178	LED	840	2850 lm	27 W	39°	on/off	A+ A+
741864.00X.1	L 290, B 120, H 178	LED	830	4350 lm	45 W	15°	on/off	A+ A+
741865.00X.1	L 290, B 120, H 178	LED	830	4250 lm	45 W	23°	on/off	A+ A+
741866.00X.1	L 290, B 120, H 178	LED	830	4250 lm	45 W	43°	on/off	A+ A+
741864.00X.2	L 290, B 120, H 178	LED	840	4650 lm	45 W	15°	on/off	A+ A+
741865.00X.2	L 290, B 120, H 178	LED	840	4600 lm	45 W	23°	on/off	A+ A+
741866.00X.2	L 290, B 120, H 178	LED	840	4550 lm	45 W	43°	on/off	A+ A+
741920.00X.1	L 290, B 120, H 178	LED	830	6100 lm	59 W	18°	on/off	A++ A++
741921.00X.1	L 290, B 120, H 178	LED	830	6050 lm	59 W	24°	on/off	A++ A++
741922.00X.1	L 290, B 120, H 178	LED	830	5950 lm	59 W	44°	on/off	A++ A++
741920.00X.2	L 290, B 120, H 178	LED	840	6300 lm	59 W	18°	on/off	A++ A++
741921.00X.2	L 290, B 120, H 178	LED	840	6350 lm	59 W	25°	on/off	A++ A++
741922.00X.2	L 290, B 120, H 178	LED	840	6150 lm	59 W	44°	on/off	A++ A++

with DALI adapter only for RZB 3-phase DALI track 230 V

High efficiency standard LED included

741858.00X.1.76	L 290, B 120, H 178	LED	830	2850 lm	27 W	12°	DALI	A+ A+
741859.00X.1.76	L 290, B 120, H 178	LED	830	2800 lm	27 W	21°	DALI	A+ A+
741860.00X.1.76	L 290, B 120, H 178	LED	830	2800 lm	27 W	39°	DALI	A+ A+
741858.00X.2.76	L 290, B 120, H 178	LED	840	2900 lm	27 W	12°	DALI	A+ A+
741859.00X.2.76	L 290, B 120, H 178	LED	840	2850 lm	27 W	21°	DALI	A+ A+
741860.00X.2.76	L 290, B 120, H 178	LED	840	2850 lm	27 W	39°	DALI	A+ A+
741864.00X.1.76	L 290, B 120, H 178	LED	830	4350 lm	45 W	15°	DALI	A+ A+
741865.00X.1.76	L 290, B 120, H 178	LED	830	4250 lm	45 W	23°	DALI	A+ A+
741866.00X.1.76	L 290, B 120, H 178	LED	830	4250 lm	45 W	43°	DALI	A+ A+
741864.00X.2.76	L 290, B 120, H 178	LED	840	4650 lm	45 W	15°	DALI	A+ A+
741865.00X.2.76	L 290, B 120, H 178	LED	840	4600 lm	45 W	23°	DALI	A+ A+
741866.00X.2.76	L 290, B 120, H 178	LED	840	4550 lm	45 W	43°	DALI	A+ A+
741920.00X.1.76	L 290, B 120, H 178	LED	830	6100 lm	59 W	18°	DALI	A++ A++
741921.00X.1.76	L 290, B 120, H 178	LED	830	6050 lm	59 W	24°	DALI	A++ A++
741922.00X.1.76	L 290, B 120, H 178	LED	830	5950 lm	59 W	44°	DALI	A++ A++
741920.00X.2.76	L 290, B 120, H 178	LED	840	6300 lm	59 W	18°	DALI	A++ A++
741921.00X.2.76	L 290, B 120, H 178	LED	840	6350 lm	59 W	25°	DALI	A++ A++
741922.00X.2.76	L 290, B 120, H 178	LED	840	6150 lm	59 W	44°	DALI	A++ A++

Ra > 90 options on request

Comparison LED vs. conventional lamps

LED 27 W ≈

1 x 35 W HIT (45 W CB)

LED 45 W ≈

1 x 70 W HIT (84 W CB)

LED 59 W ≈

1 x 100 W HIT (106 W CB)





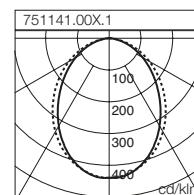
DALI

TRIADE LED

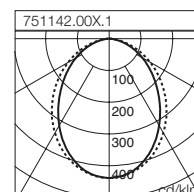
Surface mounted projectors

- LED spotlight for surface / track mounting in geometrical design for indoor applications
- For general and wall lighting
- Energy savings up to 58% compared to fluorescent lamps
- Swivel range: 90°
- Diffuser made of UV stabilised opal polycarbonate - for uniform and soft light distribution
- High quality housing made of extruded aluminium profile, powder coated
- Colour temperature 3000 K or 4000 K
- LED rated life 50,000 h (L70, B10)
- Good colour consistency within 4-steps MacAdam (4 SDCM)
- Track mounting for high flexibility
- Available in two sizes and wattages
- With multi adapter for 3-circuit tracks or with adapter for 3-circuit DALI tracks
- With integrated converter

751141.00X.1		
h [m]	Ø [m]	E [lx]
1,0	1,92 / 2,27	1106
2,0	3,84 / 4,54	277
3,0	5,75 / 6,81	123
4,0	7,67 / 9,07	69
5,0	9,59 / 11,34	44



751142.00X.1		
h [m]	Ø [m]	E [lx]
1,0	1,91 / 2,33	1912
2,0	3,82 / 4,65	478
3,0	5,73 / 6,98	212
4,0	7,65 / 9,30	119
5,0	9,56 / 11,63	76



Surface mounted projectors | Series: Triade LED

Type of Protection: IP 20

Protection Class: I

Impact Protection: IK02

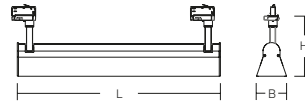
Housing: aluminium extrusion profile, powder-coated. Vertical swivel range: 90°.

Diffuser: plastic (polycarbonate), opal. Integral LED and driver. Passive cooling.

With multi-adaptor for 3-phase tracks or with adapter for RZB 3-phase DALI tracks.

Ceiling mounting.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	 dimmable	EEC
Surface mounted projector							
with multi adaptor for 3-circuit tracks 230 V							
751141.00X	L 600, B 89, H 178	LED	830	3100 lm	36 W	90°/98° on/off	A+ A+
751141.00X.1	L 600, B 89, H 178	LED	840	3150 lm	36 W	88°/97° on/off	A+ A+
751142.00X	L 1160, B 89, H 178	LED	830	5250 lm	60 W	90°/99° on/off	A+ A+
751142.00X.1	L 1160, B 89, H 178	LED	840	5450 lm	60 W	87°/99° on/off	A+ A+
with DALI adapter only for RZB 3-phase DALI track 230 V							
751141.00X.76	L 600, B 89, H 178	LED	830	3100 lm	36 W	90°/98° DALI	A+ A+
751141.00X.1.76	L 600, B 89, H 178	LED	840	3150 lm	36 W	88°/97° DALI	A+ A+
751142.00X.76	L 1160, B 89, H 178	LED	830	5250 lm	60 W	90°/99° DALI	A+ A+
751142.00X.1.76	L 1160, B 89, H 178	LED	840	5450 lm	60 W	87°/99° DALI	A+ A+

Price Category 21

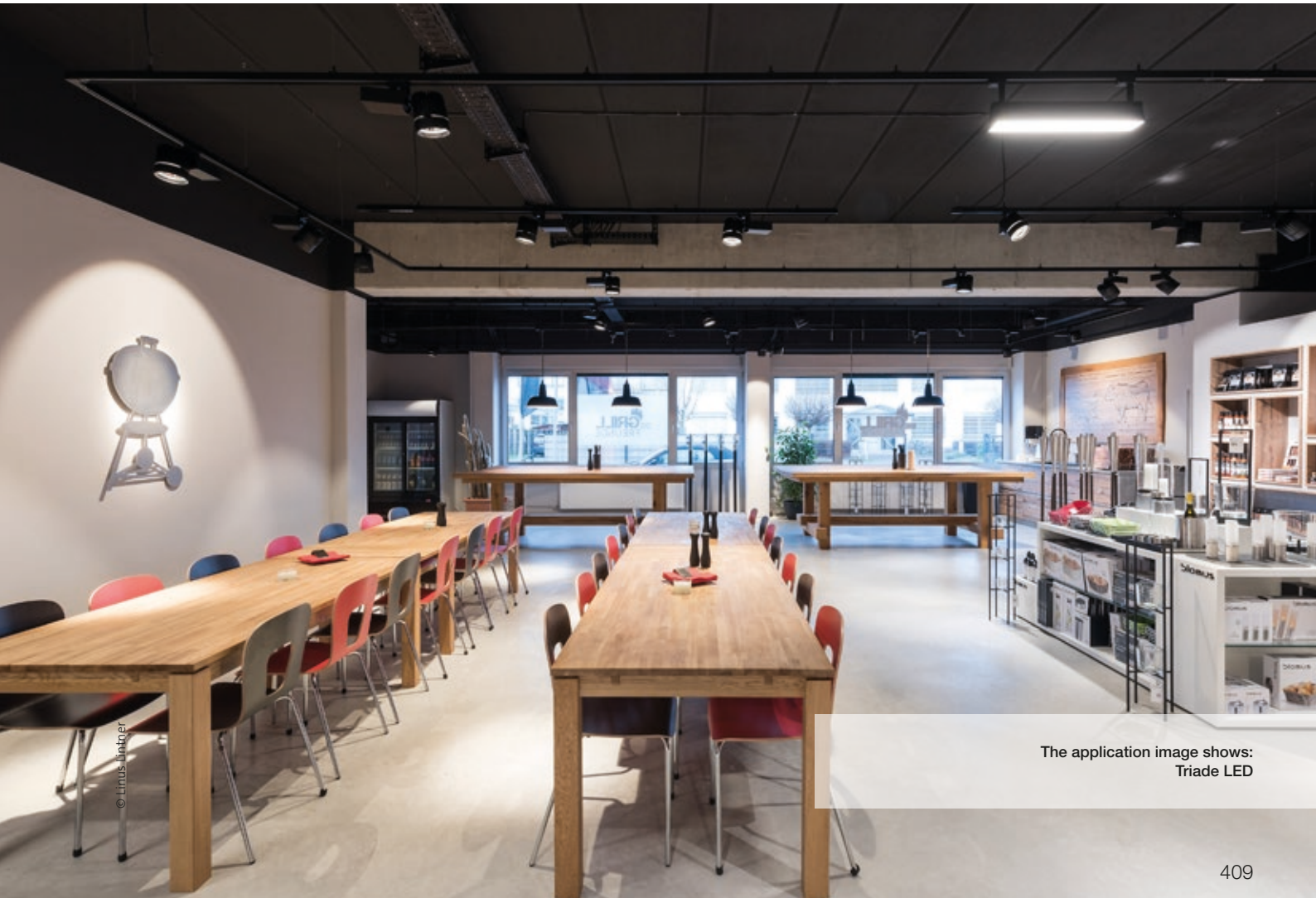
Comparison LED vs. conventional lamps

LED 36 W ≈

2 x 36 W TC-L (86 W CB)

LED 60 W ≈

2 x 58 W T26 (134 W CB)



The application image shows:
Triade LED

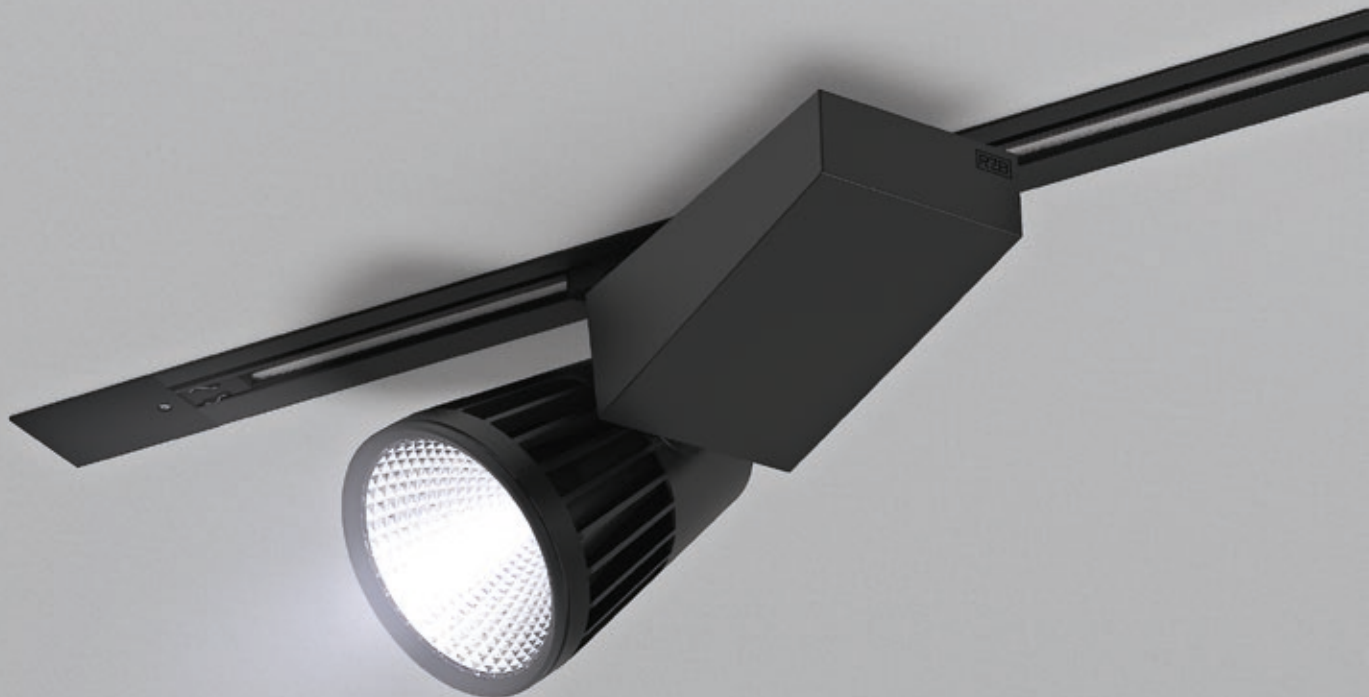


The application image shows:
Tarek S
3-circuit DALI track



3-circuit tracks
412-419

3-circuit DALI tracks
420-425

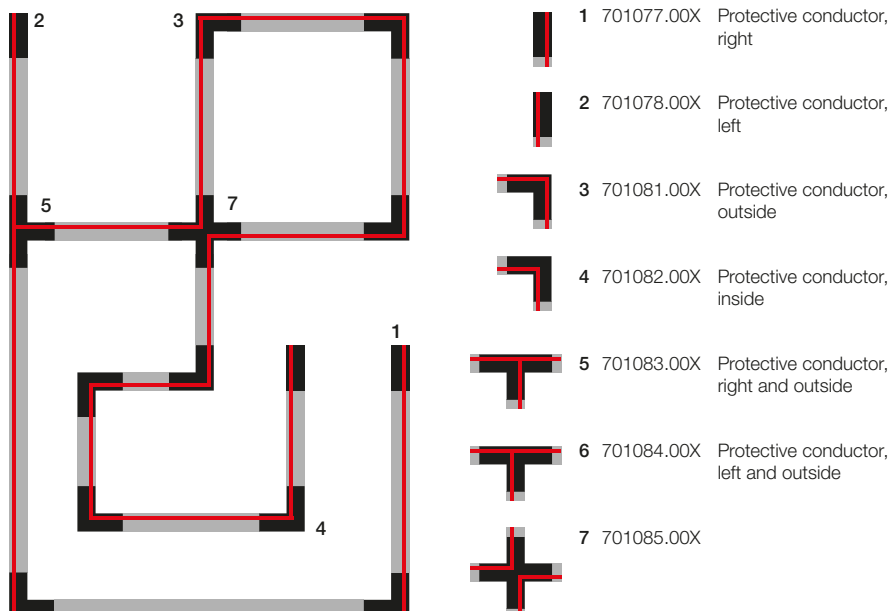


3-CIRCUIT TRACKS

Tracks

- Aluminium extrusion profile tracks for the most flexible mounting options of spotlights
- 3-circuit tracks with three electrical circuits that can be switched separately
- Tracks can be cut easily by sawing them off without additional work steps
- Large range of accessories for flexible design of the track system
- Recessed and surface-mounted versions available
- Approved for use within hand's reach

Planning example for surface-mounted 3-circuit tracks
(View from below of the ceiling-mounted system.)



Tracks | Series: 3-circuit tracks

Type of Protection: IP 20

Protection Class: I

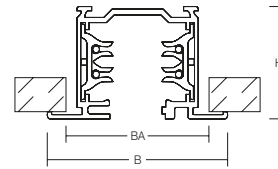
Aluminium extrusion profile, painted. Tracks can be cut to any required length. May be used within hand's reach.

Voltage: 250 V~ or 3-Circuit current 230/400 V max. 16 A

Available colours (X): 2 = white, 3 = black, 4 = aluminium, anodised

Reference number

Dimensions



**Recessed tracks (track wings),
Ceiling cut out width (BA) 42 mm**

Price Category 21

Length 1000 mm, mounting holes at 100; 880 mm

701067.00X L 1000, B 53, H 33

Length 2000 mm, mounting holes at 100; 990; 1,880 mm

701068.00X L 2000, B 53, H 33

Length 3000 mm, mounting holes at 100; 990; 1,990; 2,880 mm

701069.00X L 3000, B 53, H 33

Length 4000 mm, mounting holes at 100; 990; 1,990; 2,990; 3,875 mm

701070.00X L 4000, B 53, H 33

Live end feed for 3-circuit tracks

Protection Class: I

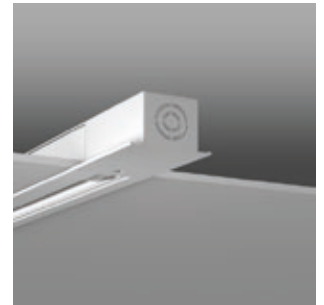
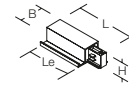
Plastic

Suitable for recessed tracks (track wings).

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference number

Dimensions



Recessed length (Le): 80 mm

Price Category 21

Protective conductor, left

701089.00X L 119, B 53, H 33

Protective conductor, right

701088.00X L 119, B 53, H 33

Alternative live feed for 3-circuit tracks

Protection Class: I

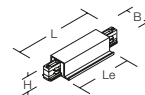
Plastic

Suitable for recessed tracks (track wings).

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference number

Dimensions



Recessed length (Le): 120 mm

Price Category 21

701090.00X L 198, B 53, H 33



Tracks | Series: 3-circuit tracks

Type of Protection: IP 20

Protection Class: I

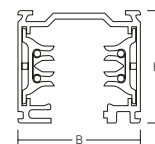
Aluminium extrusion profile, painted. Tracks can be cut to any required length. May be used within hand's reach.

Voltage: 250 V~ or 3-Circuit current 230/400 V max. 16 A

Available colours (X): 2 = white, 3 = black, 4 = aluminium, anodised

Reference
number

Dimensions



Surface mounted tracks

Price Category 21

Length 1000 mm, mounting holes at 100; 880 mm

701063.00X L 1000, B 36, H 33

Length 2000 mm, mounting holes at 100; 990; 1,880 mm

701064.00X L 2000, B 36, H 33

Length 3000 mm, mounting holes at 100; 990; 1,990; 2,880 mm

701065.00X L 3000, B 36, H 33

Length 4000 mm, mounting holes at 100; 990; 1,990; 2,990; 3,870 mm

701066.00X L 4000, B 36, H 33



Live end feed for 3-circuit tracks

Protection Class: I

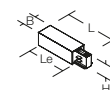
Plastic

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference
number

Dimensions



Recessed length (Le): 80 mm

Price Category 21

Protective conductor, left

701078.00X L 119, B 37, H 33

Protective conductor, right

701077.00X L 119, B 37, H 33



Alternative live feed for 3-circuit tracks

Protection Class: I

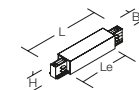
Plastic

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference
number

Dimensions



Recessed length (Le): 120 mm

Price Category 21

701079.00X L 198, B 37, H 33



90° angle coupling for 3-circuit tracks

Protection Class: I

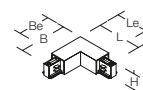
Plastic, with live feed

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference
number

Dimensions



Recessed length (Le): 80 mm, Be 80 mm

Price Category 21

Protective conductor, outside

701081.00X L 117, B 117, H 33

Protective conductor, inside

701082.00X L 117, B 117, H 33

T-coupling for 3-circuit tracks

Protection Class: I

Plastic, with live feed

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference number

Dimensions

Recessed length (Le): 120 mm, Be 80 mm

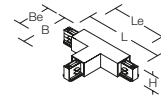
Price Category 21

Protective conductor, left and outside

701084.00X L 198, B 117, H 33

Protective conductor, right and outside

701083.00X L 198, B 117, H 33



Cross coupling for 3-circuit tracks

Protection Class: I

Plastic, with live feed

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

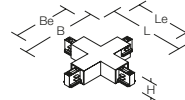
Reference number

Dimensions

Recessed length (Le): 120 mm, Be 120 mm

Price Category 21

701085.00X L 198, B 198, H 33



Joint coupling for 3-circuit tracks

Protection Class: I

Plastic. Swivel range: $\pm 120^\circ$ (from 60° to 300°), stepless.

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

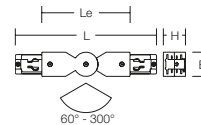
Reference number

Dimensions

Recessed length (Le): 130 mm

Price Category 21

701092.00X L 208, B 36, H 33



Flexible coupling for 3-circuit tracks

Protection Class: I

Plastic. Rotation and swivel range: $\pm 180^\circ$, horizontal and vertical, stepless.

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

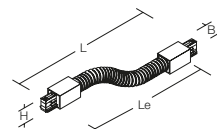
Reference number

Dimensions

Recessed length (Le): 300 mm

Price Category 21

701086.00X L 390, B 37, H 33



Electric coupling, straight, for 3-circuit tracks

Protection Class: I

Plastic, gapless

Coupling for electrical and mechanical connection.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

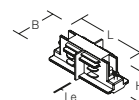
Reference number

Dimensions

Recessed length (Le): 2 mm

Price Category 21

701071.00X L 81, B 37, H 32





Mechanical coupling, straight, for 3-circuit tracks

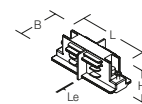
Plastic, gapless

Mechanical coupling for electrical isolation.

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference
number

Dimensions



Recessed length (Le): 2 mm

Price Category 21

701080.00X	L 81, B 37, H 32
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End cap for 3-circuit tracks

Plastic

Available colours (X): 2 = white, 3 = black, 4 = silver coloured

Reference
number

Dimensions



Recessed length (Le): 3 mm

Price Category 21

701087.00X	L 36, B 10, H 33
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Suspension kit for 3-circuit tracks

Suspension Length: 100 mm - 5000 mm

Suspension set with clamps for track mounting; max. 160 N [16 kg].

Steel cable Ø 1.2 mm; pendant length: 5 m; can be shortened with quick adjustment system, ceiling mounting material included.

A distance of 1.5 m between two suspensions is recommended.

Available colours (X): 0 = stainless steel, 2 = white, 3 = black

Reference
number

Dimensions



Suspension kit for 3-circuit tracks

Price Category 21

01-8524.15X	D 12LP 100-5000
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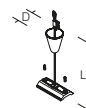
Cable suspension for 3-circuit tracks

Ceiling mounting, with canopy and M6 screw. Max. 200 N [20 kg], pendant length: 1.5 m, can be shortened. The wire rope clip is fixed to the canopy, the quick adjustment system is mounted to the track. A distance of 1.5 m between two suspensions is recommended.

Available colours (X): 2 = white, 3 = black

Reference
number

Dimensions



Cable suspension for 3-circuit tracks

Price Category 21

701073.00X	D 41LP 100-2000
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Clamp unit for grid ceilings

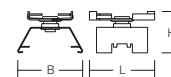
Clamp unit for tracks: 24 mm white with clamp for tracks.

A distance of approx. 1.5 m between two clamps is recommended.

Available colours (X): 0 = stainless steel, 2 = white, 3 = black

Reference
number

Dimensions



Clamp unit for grid ceilings

Price Category 21

981986.002	L 38, B 28, H 21
981986.003	L 38, B 28, H 21
981986.100	L 38, B 28, H 21

Ceiling mount for 3-circuit tracks

Aluminium, raw. A distance of 1.5 m between two suspensions is recommended.



Reference number Dimensions

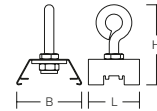
Ceiling mount for 3-circuit tracks

Price Category 21

701074.000 L 31, B 35, H 15

Clip with eye ring

Clamp fastening system for tracks, with M6 eye ring.
A distance of 1.5 m between two suspensions is recommended.
Available colour: 0 = stainless steel



Reference number Dimensions

Clip with eye ring

Price Category 21

701094.000 L 30, B 37, H 42

Hanging clamp for 3-circuit tracks

Metal, galvanised. A distance of 1.5 m between two suspensions is recommended.
Available colour: 4 = silver coloured



Reference number Dimensions

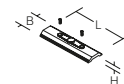
Hanging clamp for 3-circuit tracks

Price Category 21

701091.004 L 24, B 32, H 38

Mechanical connection plate for 3-circuit tracks

Aluminium, raw. 4 thread M5.
Available colour: 4 = silver coloured



Reference number Dimensions

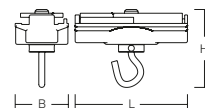
Mechanical connection plate for 3-circuit tracks

Price Category 21

701072.004 L 120, B 31, H 17

Decorative hook for 3-circuit tracks

Aluminium, painted, track-mounting. F max. 100 N [10 kg].
Available colours (X): 2 = white, 3 = black, 4 = silver coloured



Reference number Dimensions

Recessed height (He): 37 mm

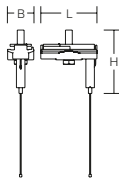
Price Category 21

701076.00X L 66, B 32, H 38



Mechanical adaptor with steel cable quick mount for 3-circuit tracks

Aluminium, painted; track mounting; mechanical adaptor for easy installation of steel cable D 1.2 mm. 2 m steel cable included, F max. 100 N [10 kg].
Available colours (X): 2 = white, 3 = black, 4 = silver coloured



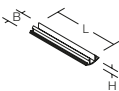
Reference number Dimensions

Mechanical adaptor with steel cable quick mount for 3-circuit tracks		Price Category 21
701093.00X	L 66, B 32, H 75	



Cover for 3-circuit tracks

Plastic track cover, length: 1 m.
Available colours (X): 2 = white, 3 = black



Reference number Dimensions

Cover for 3-circuit tracks		Price Category 21
701075.00X	L 1000, B 18, H 10	



Multi adaptor with Schukoplug socket for 3-circuit tracks

Protection Class: I
Multi adaptor for 3-circuit tracks of all known brands, plastic, max. 10 A / 250 V ~.
Rotatable circuit selector with circuit breaker and mechanical lock; with Schukoplug socket; only for lighting or lighting accessories.
Available colour: 2 = white

Reference number Dimensions

Multi adaptor with Schukoplug socket for 3-circuit tracks		Price Category 21
70316.002	L 90, B 57, H 73	



Multi adaptor for 3-circuit tracks

Protection Class: I
For all known brands. Plastic. max. 6 A/250 V~, F max. 50 N [5 kg]. Rotatable circuit selector with circuit breaker and mechanical lock.
Available colours (X): 2 = white, 3 = black, 9 = grey

Reference number Dimensions

Recessed height (He): 19 mm		Price Category 21
701035.00X	L 70, B 35, H 51	



Multi adaptor for 3-circuit tracks

Protection Class: I
For all known brands. Plastic. max. 10 A/250 V~, F max. 100 N [10 kg]. Rotatable circuit selector with circuit breaker and mechanical lock.
Available colours (X): 2 = white, 3 = black, 9 = grey

Reference number Dimensions

Recessed height (He): 33 mm		Price Category 21
70318.00X	L 85, B 32, H 63	

Aluminium holder for multi adaptor

With M10x1 thread. Thread length: 12 mm
Available colours (X): 3 = black, 4 = aluminium

Reference number	Dimensions
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Aluminium holder for multi adaptor

Price Category 21

70349	aluminium
70349.003	black



Strain relief for multi adaptor

Plastic
Available colours (X): 2 = white, 3 = black

Reference number	Dimensions
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Recessed height (He): 30 mm

Price Category 21

70875.00X	D 27, H 33
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Point outlet for 3-circuit multi adaptor

Type of Protection: IP 20
Protection Class: I
Housing: plastic. Cable inlets: break-off (one inlet on the side, three on the back).
250 V/10 A, F max. 50 N [5 kg].
Available colour: 2 = white

Reference number	Dimensions
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Surface mounted point outlet

Price Category 21

70319.002	D 100, H 32
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Recessed socket for point outlet

Type of Protection: IP 20
Housing: plastic.
Available colour: 2 = white

Reference number	Dimensions
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Recessed socket

Price Category 21

Ceiling cut out DA 105 mm, TE 60 mm	
70360.002	D 130, H 60, HE 60





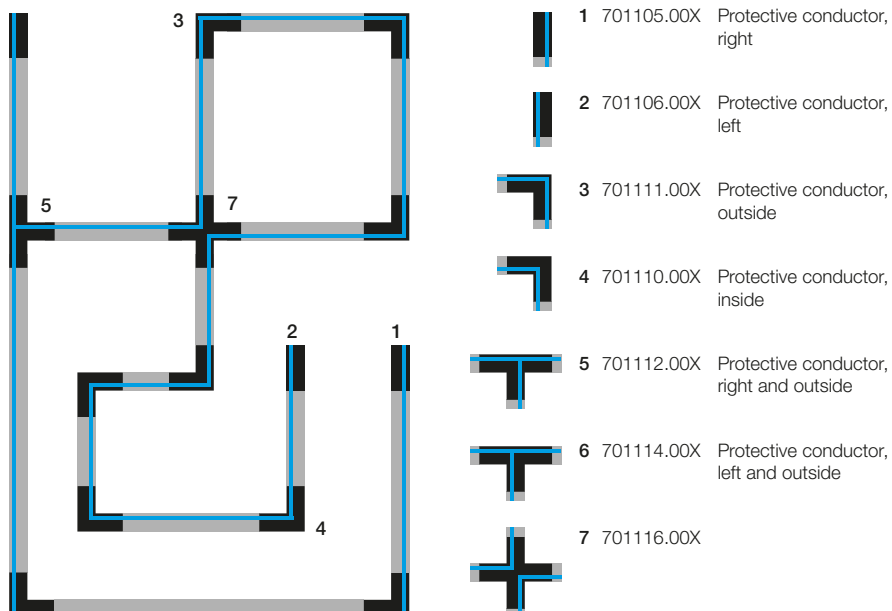
DALI

3-PHASE DALI-TRACKS

Tracks

- 3-circuit track with integral DALI bus
- 3-circuit track system for track mounted DALI spot-lights with additional data-bus function for energy savings and dynamic lighting
- Huge variety of accessories for most flexible track layouts
- Recessed and surface-mounted versions available
- Suitable also for standard 3-circuit adaptors

Planning example for surface-mounted 3-circuit DALI tracks
(View from below of the ceiling-mounted system.)

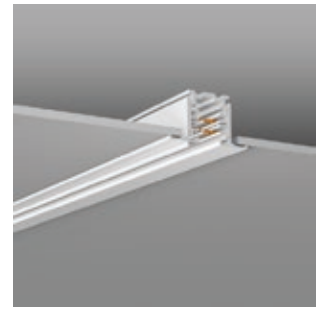
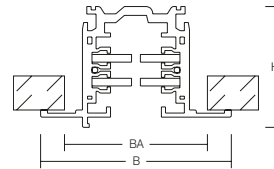


Tracks | Series: Recessed 3-circuit DALI tracks

Type of Protection: IP 20
Protection Class: I

Aluminium extrusion profile, painted. Tracks can be cut to any required length. May be used within hand's reach. Integral added twin-pole DALI bus leads. Power supply conductors 16 A / 400 V. DALI bus conductors 2x1 A / 50 V AC.

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number	Dimensions
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Recessed tracks (track wings)

Price Category 21

Ceiling cut out width (BA) 42 mm

Length 1000 mm

701101.00X	L 1000, B 56, H 36
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Length 2000 mm

701102.00X	L 2000, B 56, H 36
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Length 3000 mm

701103.00X	L 3000, B 56, H 36
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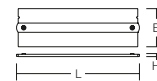
Length 4000 mm

701104.00X	L 4000, B 56, H 36
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Cover for recessed 3-circuit DALI tracks (DALI track wings)

Plastic, for live end feed and alternative live feed (break-off point for universal use).

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number	Dimensions
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Cover for recessed 3-circuit DALI tracks (DALI track wings)

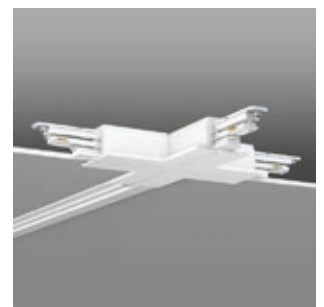
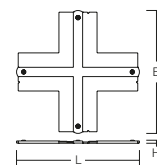
Price Category 21

701117.00X	L 181, B 56, H 4
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Cover for recessed 3-circuit DALI tracks (DALI track wings)

Plastic, for angled, cross and T couplings (break-off point for universal use)

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number	Dimensions
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Cover for recessed 3-circuit DALI tracks (DALI track wings)

Price Category 21

701118.00X	L 181, B 181, H 4
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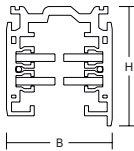


Tracks | Series: 3-circuit DALI tracks

Type of Protection: IP 20
Protection Class: I

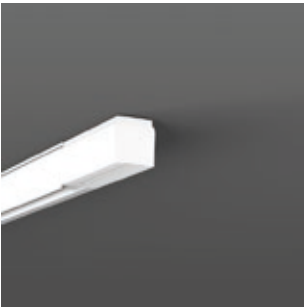
Aluminium extrusion profile, painted. Tracks can be cut to any required length. May be used within hand's reach. Integral added twin-pole DALI bus leads. Power supply conductors 16 A / 400 V. DALI bus conductors 2 x 1 A / 50 V FELV AC.

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number Dimensions

Surface mounted tracks		Price Category 21
Length 1000 mm		
701097.00X	L 1000, B 32, H 36	
Length 2000 mm		
701098.00X	L 2000, B 32, H 36	
Length 3000 mm		
701099.00X	L 3000, B 32, H 36	
Length 4000 mm		
701100.00X	L 4000, B 32, H 36	

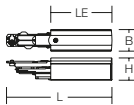


Live end feed for 3-circuit DALI tracks

Type of Protection: IP 20
Protection Class: I

Plastic

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number Dimensions

Recessed length (Le): 90 mm		Price Category 21
Protective conductor, left		
701106.00X	L 120, B 32, H 66	
Protective conductor, right		
701105.00X	L 120, B 32, H 66	

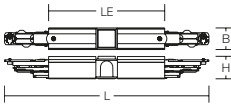


Alternative live feed for 3-circuit DALI tracks

Type of Protection: IP 20
Protection Class: I

Plastic

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number Dimensions

Recessed length (Le): 170 mm		Price Category 21
701107.00X	L 200, B 32, H 33	

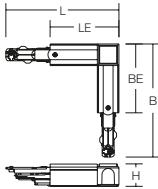


90° angle coupling for 3-circuit DALI tracks

Type of Protection: IP 20
Protection Class: I

Plastic, with live feed

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number Dimensions

Recessed length (Le): 100 mm, Be 100 mm		Price Category 21
Protective conductor, outside		
701111.00X	L 120, B 120, H 33	
Protective conductor, inside		
701110.00X	L 120, B 120, H 33	

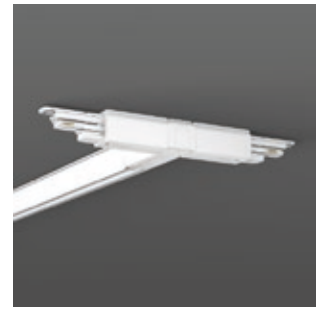
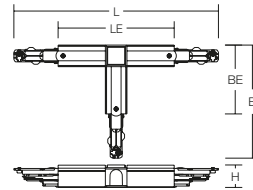
T-coupling for 3-circuit DALI tracks

Type of Protection: IP 20

Protection Class: I

Plastic, with live feed

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference
number

Dimensions

Recessed length (Le): 170 mm, Be 100 mm

Price Category 21

Protective conductor, left and outside

701114.00X L 200, B 120, H 33

Protective conductor, left and inside

701113.00X L 200, B 120, H 33

Protective conductor, right and outside

701112.00X L 200, B 120, H 33

Protective conductor, right and inside

701115.00X L 200, B 120, H 33

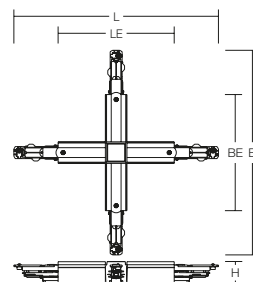
Cross coupling for 3-circuit DALI tracks

Type of Protection: IP 20

Protection Class: I

Plastic, with live feed

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference
number

Dimensions

Recessed length (Le): 170 mm, Be 170 mm

Price Category 21

701116.00X L 200, B 200, H 33

Electric coupling, straight, for 3-circuit DALI tracks

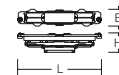
Type of Protection: IP 20

Protection Class: I

Plastic, gapless

Coupling for electrical and mechanical connection.

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference
number

Dimensions

Recessed length (Le): 0 mm

Price Category 21

701108.00X L 85, B 20, H 26

Flexible coupling for 3-circuit DALI tracks

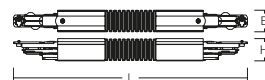
Type of Protection: IP 20

Protection Class: I

Plastic. Rotation and swivel range: $\pm 180^\circ$, horizontal and vertical, infinite.

Suitable for surface-mounted tracks.

Available colours (X): 2 = white, 3 = black, 9 = grey



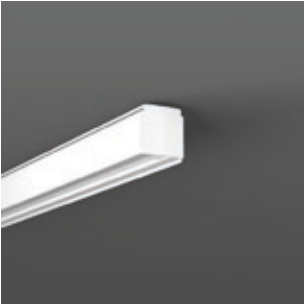
Reference
number

Dimensions

Recessed length (Le): 215 mm

Price Category 21

701109.00X L 260, B 32, H 33



End cap for 3-circuit DALI tracks

Plastic
Available colours (X): 2 = white, 3 = black, 9 = grey

Reference number Dimensions

Recessed length (Le): 3 mm	
70337.00X .Q	L 35, B 33, H 33

Price Category 21



Suspension kit for 3-circuit DALI tracks

Suspension Length: 100 mm - 5000 mm
Suspension set with clamps for DALI-track mounting; max. 160 N [16 kg].
Steel cable Ø 1.2 mm; pendant length: 5 m; can be shortened with quick adjustment system, ceiling mounting material included.
A distance of 1.5 m between two suspensions is recommended.
Available colours (X): 0 = stainless steel, 2 = white, 3 = black

Reference number Dimensions

Suspension kit for 3-circuit DALI tracks	
01-8524.13X .Q	D 12LP 100-5000

Price Category 21



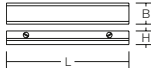
Mechanical connection plate for 3-circuit DALI tracks

Aluminium, raw. 4 thread M5.
Available colours (X): 2 = white, 4 = aluminium

Reference number Dimensions

Mechanical connection plate for 3-circuit DALI tracks	
70354.00X	L 182, B 31, H 20

Price Category 21



Ceiling mount for 3-circuit DALI tracks

Aluminium, raw. A distance of 1.5 m between two suspensions is recommended.
Available colours (X): 2 = white, 3 = black, 4 = aluminium

Reference number Dimensions

Ceiling mount for 3-circuit DALI tracks	
70594.00X	L 30, B 32, H 13

Price Category 21



Hanging clamp for 3-circuit DALI tracks

Metal, galvanised. A distance of 1.5 m between two suspensions is recommended.
Available colours (X): 2 = white, 4 = aluminium

Reference number Dimensions

Hanging clamp for 3-circuit DALI tracks	
70351.00X	L 25, B 31, H 39

Price Category 21



Decorative hook for 3-circuit DALI tracks

White plastic, painted, track-mounting F max. 100 N [10 kg].

Available colour: 2 = white



Reference number	Dimensions
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Recessed height (He): 37 mm

Price Category 21

70382.000	D 26, H 60
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Bending tool for 3-circuit DALI tracks

The ends of the copper conductor must be bent inwards when cutting tracks on site in order to ensure an electrical connection.

Available colour: 6 = blue

Reference number	Dimensions
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Bending tool for 3-circuit DALI tracks

Price Category 21

70348.000 .Q	L 133, B 22, H 14
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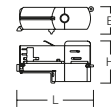


3-phase DALI adaptor

Protection Class: I

Plastic. max. 10 A/250 V~, F max. 100 N [10 kg]. Selector with circuit breaker and mechanical lock.

Available colours (X): 2 = white, 3 = black, 9 = grey



Reference number	Dimensions
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Recessed height (He): 30 mm

Price Category 21

701055.01X	L 105, B 39, H 62
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The application image shows:
Planos



Planos
428-441



PLANOS

Continuous line luminaire system

- LED continuous line luminaire system offering intuitive installation and handling
- 1:1 replacement for fluorescent lamps
- Colour rendering index Ra > 80
- LED rated life 50,000 h (L80, B10)
- Mounting track and luminaire inserts can be assembled without use of tools
- Extension modules with projectors and light management accessories
- Continuous and uniform light emission along the entire length (1500 mm LED insert)
- Four different light distribution modes available, depending on requirements
- Can be extended with emergency lighting components
- Operating range: -20°C to +45°C
- Suitable for AC/DC operation in accordance with EN 50172
- Also available as an emergency luminaire in accordance with EN 60598-2-22



PLANOS

SYSTEM OVERVIEW

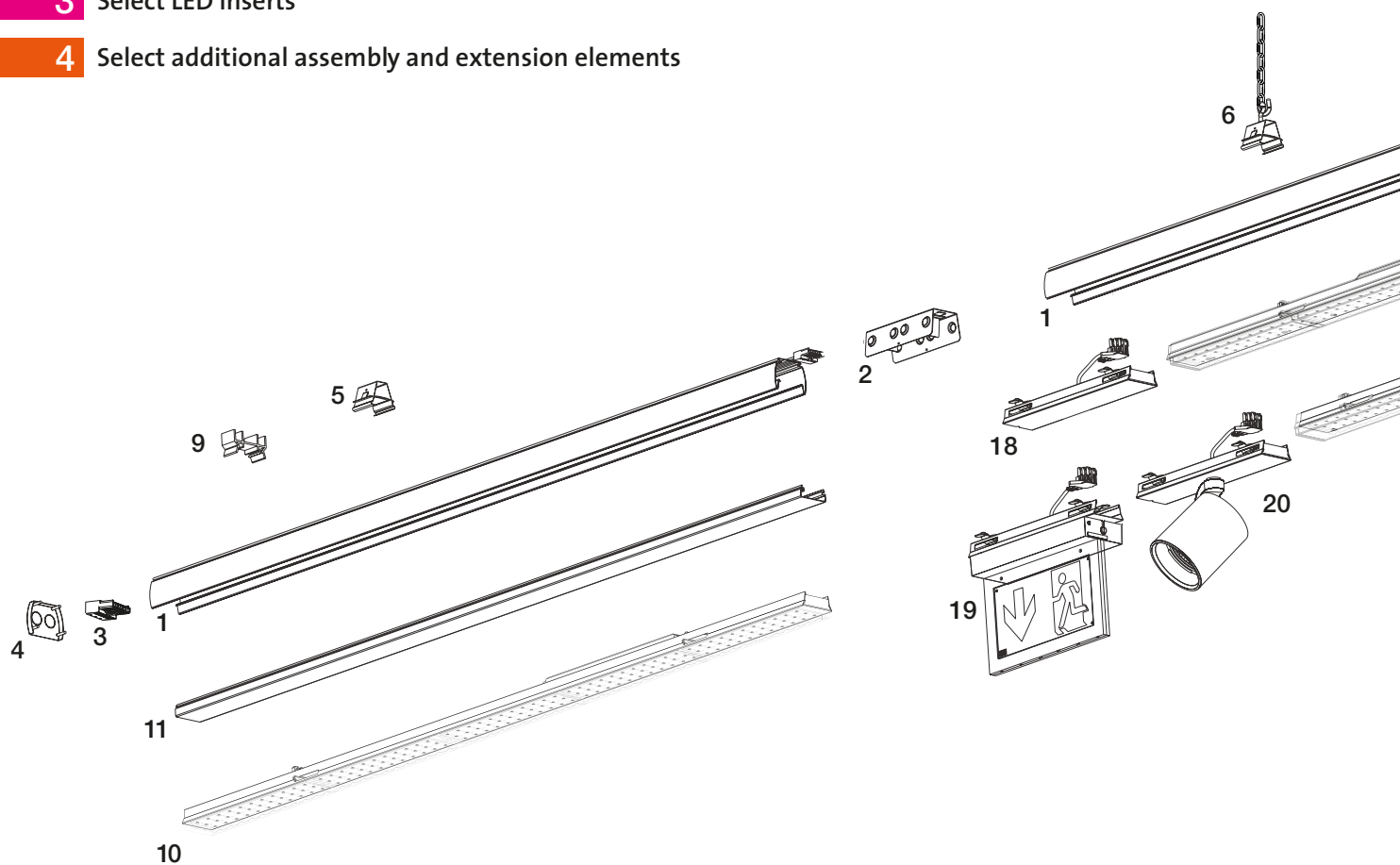
Complete continuous line luminaire in just 4 steps

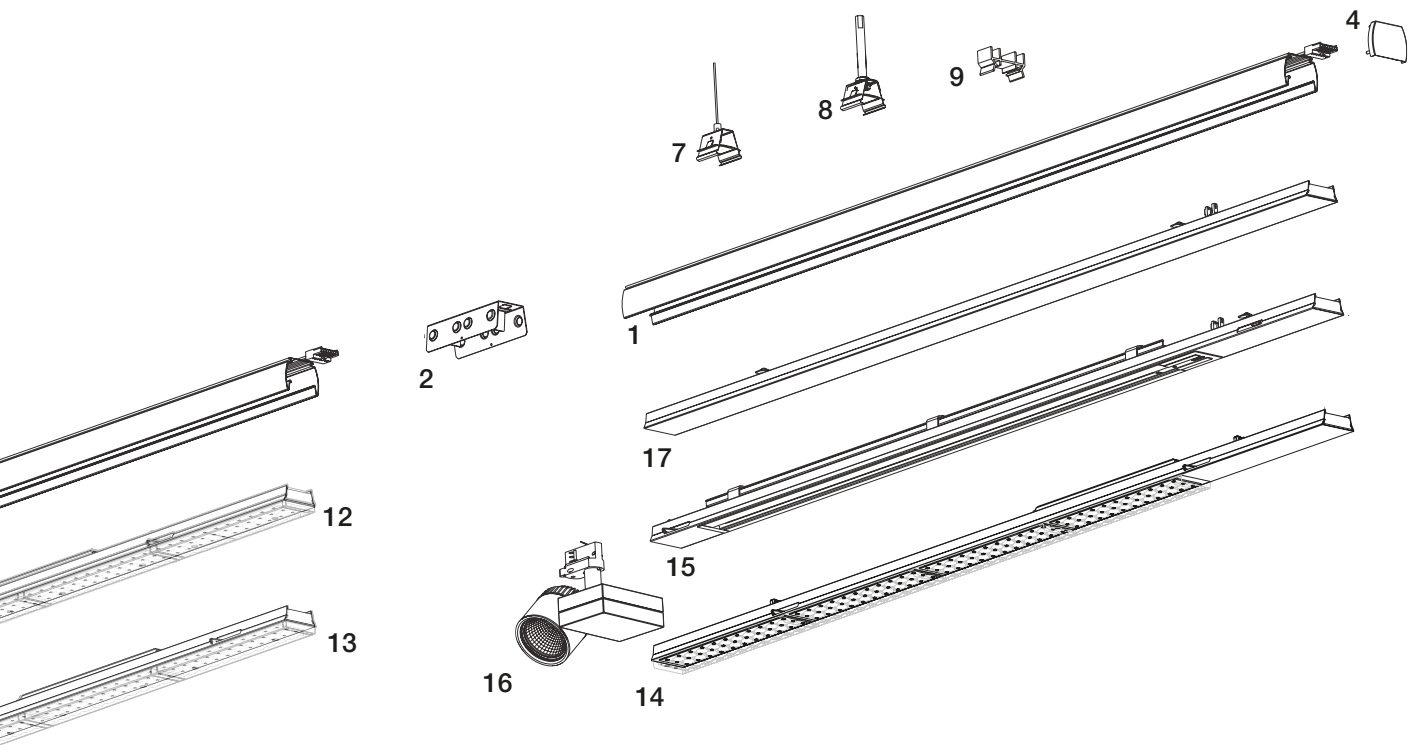
1 Calculate quantity and type of required mounting track segments

2 Select assembly accessories (suspension point $\leq 2,500$ mm)

3 Select LED inserts

4 Select additional assembly and extension elements





- | | |
|----------|--|
| 1 | 1 Mounting track (1,500 mm, 3,000 mm, 4,500 mm) |
| | 2 Mounting track connector |
| | 3 Feeding plug |
| | 4 End cap |
| 2 | 5 Clip (white) for ceiling installation with M6 thread or drilling for direct mounting |
| | 6 Clip with open eye bolt |
| | 7 Clip with cable holder |
| | 8 Clip for pendant tube (tube not included) |
| | 9 Plastic clip-on bracket (white), for routing other cables on the mounting track |
| 3 | 10 LED insert 5 LED elements (1,500 mm)
wide, narrow, asymmetrical and double asymmetrical beam |
| | 11 Blind cover can be shortened on site (1,500 mm) |
| | 12 LED insert 4 LED elements (1,200 mm) wide beam |
| | 13 LED insert 3 LED elements (900 mm) wide beam |
| | 14 LED insert 4 LED elements (1,500 mm) wide beam |
| 4 | 15 Track insert with 3-circuit track (1,500 mm) |
| | 16 Sample spotlight with 3-circuit track module |
| | 17 LED module with track cover (1,500 mm) |
| | 18 LED module with track cover (300 mm) |
| | 19 Emergency luminaire module (i.e. GSUN® S) |
| | 20 Track insert with projector module (i.e. AVIATO) |

**Mounting track | Series: Planos LED light channel**

Mounting track: sheet steel, painted white. Incl. through wiring with plug and sleeve for feeding and routing. One socket for the tapping point and electricity supply for use with L 1,500 mm (standard). Up to 3 sockets available (on request) for each module length.

Available colour: 2 = white



Reference number Dimensions

Mounting track**Price Category 21****Length L 1500 mm**

925169.002	L 1500, B 69, H 53	5 pole 1,5 mm ²
925170.002	L 1500, B 69, H 53	5 pole 2,5 mm ²
925171.002	L 1500, B 69, H 53	7 pole 1,5 mm ²
925172.002	L 1500, B 69, H 53	7 pole 2,5 mm ²
925173.002	L 1500, B 69, H 53	11 pole (7 x 2,5 mm ² , 4 x 1,5 mm ²)

Length L 3000 mm

925174.002	L 3000, B 69, H 53	5 pole 1,5 mm ²
925175.002	L 3000, B 69, H 53	5 pole 2,5 mm ²
925176.002	L 3000, B 69, H 53	7 pole 1,5 mm ²
925177.002	L 3000, B 69, H 53	7 pole 2,5 mm ²
925178.002	L 3000, B 69, H 53	11 pole (7 x 2,5 mm ² , 4 x 1,5 mm ²)

Length L 4500 mm

925179.002	L 4500, B 69, H 53	5 pole 1,5 mm ²
925180.002	L 4500, B 69, H 53	5 pole 2,5 mm ²
925181.002	L 4500, B 69, H 53	7 pole 1,5 mm ²
925182.002	L 4500, B 69, H 53	7 pole 2,5 mm ²
925183.002	L 4500, B 69, H 53	11 pole (7 x 2,5 mm ² , 4 x 1,5 mm ²)

Extra charge for additional electrical sleeve 19.00

7-pole ribbon cable

7 x 1.5 mm² o. 7 x 2.5 mm²

3 separate power circuits

2 control cables for DALI/BUS signal

11-pole ribbon cable

7 x 2.5 mm² + 4 x 1.5 mm²

3 separate power circuits

2 control cables for DALI/BUS signal

2 independent emergency lighting circuits

**Mounting track accessories | Planos LED light channel**

Connector: galvanised metal, for mounting track with rapid action closure.



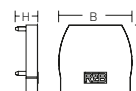
Reference number Dimensions

Connector for mounting track**Price Category 21**

925188.000	L 160, B 60, H 46
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**Mounting track accessories | Planos LED light channel**

End caps white plastic.



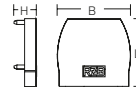
Reference number Dimensions

End caps**Price Category 21**

925184.002	L 72, B 66, H 21	End caps: white plastic
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Mounting track accessories | Planos LED light channel

Type of protection **IP 54**
End caps white plastic.
Available colour: 2 = white

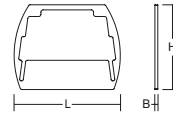


Reference number Dimensions

End caps		Price Category 21
925184.002.1	L 72, B 66, H 21	End caps white plastic. IP 54

Mounting track accessories | Planos LED light channel

Mounting track seal, necessary only for the version with protection class IP 54.
Available colour: 3 = black



Reference number Dimensions

Mounting track seal		Price Category 21
982400.003	L 73, B 58, H 2	

Mounting track accessories | Planos LED light channel

5 and 7-pin mounting track
Order power socket white (7-pin).

11-pin mounting track
Order power socket white (7-pin) and additional power socket grey (4-pin).



Reference number Dimensions

Power socket		Price Category 21
925249.009	L 34, B 37, H 14	4-pin grey
925248.002	L 34, B 39, H 18	7 pole white



2

Installation accessories | Planos LED light channel

Sliding claw: powder coated/galvanised sheet steel, for installing single mounting track modules.
Recommended mounting distance: approx. 2.5 m

Available colour: 2 = white



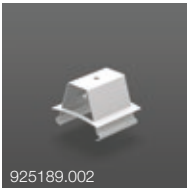
Reference
number

Dimensions

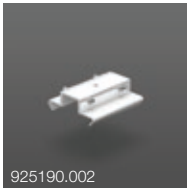
Connector for mounting track

Price Category 21

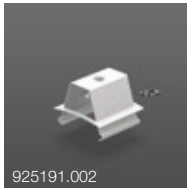
925189.002	L 57, B 54, H 43	for installation straight onto the ceiling, with M6 thread to accommodate a caddy clip
925191.002	L 57, B 54, H 43	for installation straight onto the ceiling, with drilling
925193.002	L 57, B 54, H 43	with centre hole, optional pendant mounting
925192.002	L 57, B 54, H 66	with wire cable holder, without cable
925241.002	L 57, B 54, H 66, LP 1500	With wire cable holder , including 1.5m wire cable
925242.002	L 57, B 54, H 66, LP 1500	With wire cable holder , including 1.5m wire cable and caddy clip
925194.002	L 57, B 54, H 85	with open eye ring, adjustable, optional chain/cable suspension
925240.002	L 57, B 54, H 85, LP 1500	With open eye ring, adjustable in height and direction, including 1.5m knotted chain
925190.002	L 60, B 54, H 20	for installation straight onto the ceiling, with M6 thread



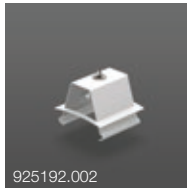
925189.002



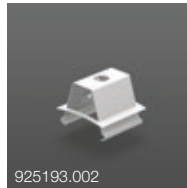
925190.002



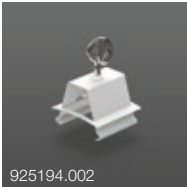
925191.002



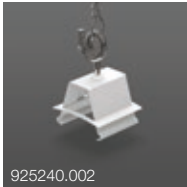
925192.002



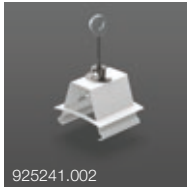
925193.002



925194.002



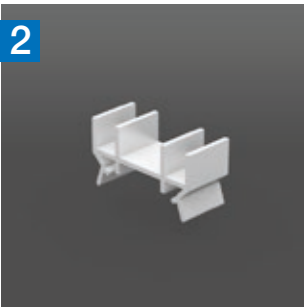
925240.002



925241.002



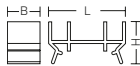
925242.002



2

Installation accessories | Planos LED light channel

Clip-on bracket white plastic, for routing other cables on the mounting track.



Reference
number

Dimensions

Clip-on bracket

Price Category 21

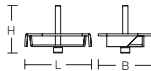
925187.002	L 71, B 30, H 42	Clip-on bracket: white plastic, for routing other cables on the mounting track
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2

Installation accessories | Planos LED light channel

Installation kit for mounting third-party luminaires on the mounting track.



Reference
number

Dimensions

With installation kit

Price Category 21

982237.000	L 61, B 51, H 33	Installation kit for third-party luminaires
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Installation accessories | Planos LED light channel

Blanking cover white plastic.

Available colour: 2 = white



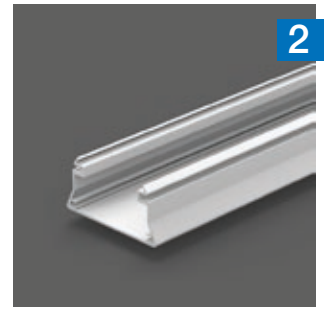
2

Reference number Dimensions

Blanking cover

925186.002 L 1500, B 56, H 26 Blind cover: white plastic

Price Category 21



The application image shows:
Planos continuous line luminaire in commercial use

3

**LED insert | Series: Planos LED IP 20**

Type of Protection: IP 20

Protection Class: I, II

Impact Protection: IK03

LED light channel module for mounting tracks with three-row lens system. LED cover provided by plastic (PMMA) panel with integrated three-row lens system. Freely adjustable phase setting (L1, L2, L3) on gear compartment. Standard version with 3-pin connecting terminal. For DALI version with 5-pin connecting terminal.

Available colour: 2 = white

**Comparison
LED vs. conventional lamps****LED 26 W ≈**

1 x 49 W T16 (53 W EB)

1 x 58 W T26 (67 W CB)

LED 35 W ≈

1 x 80 W T16 (86 W EB)

2 x 36 W T26 (86 W CB)

LED 53 W ≈

2 x 49 W T16 (106 W EB)

LED 62 W ≈

2 x 58 W T26 (134 W CB)

LED 76 W ≈

2 x 80 W T16 (172 W EB)

LED light channel module**Price Category 21****Wide beam light distribution**

925161.002	L 1500, B 70, H 51	LED	840	3950 lm	26 W	106°/109°	21,3	on/off	A+ A+
925161.002.76	L 1500, B 70, H 51	LED	840	3950 lm	26 W	106°/109°	21,3	DALI	A+ A+
925162.002	L 1500, B 70, H 51	LED	840	5000 lm	35 W	106°/109°	22,1	on/off	A+ A+
925162.002.76	L 1500, B 70, H 51	LED	840	5000 lm	35 W	106°/109°	22,1	DALI	A+ A+
925163.002	L 1500, B 70, H 51	LED	840	7050 lm	53 W	106°/109°	23,3	on/off	A+ A+
925163.002.76	L 1500, B 70, H 51	LED	840	7050 lm	53 W	106°/109°	23,3	DALI	A+ A+
925230.002	L 1500, B 70, H 51	LED	840	7850 lm	62 W	106°/109°	23,7	on/off	A+ A+
925230.002.76	L 1500, B 70, H 51	LED	840	7850 lm	62 W	106°/109°	23,7	DALI	A+ A+
925164.002	L 1500, B 70, H 51	LED	840	9500 lm	76 W	106°/109°	24,3	on/off	A+ A+
925164.002.76	L 1500, B 70, H 51	LED	840	9500 lm	76 W	106°/109°	24,3	DALI	A+ A+

**Narrow beam light distribution**

925165.002	L 1500, B 70, H 51	LED	840	4000 lm	26 W	29°/29°	11,0	on/off	A+ A+
925165.002.76	L 1500, B 70, H 51	LED	840	4000 lm	26 W	29°/29°	11,0	DALI	A+ A+
925166.002	L 1500, B 70, H 51	LED	840	5050 lm	35 W	29°/29°	11,9	on/off	A+ A+
925166.002.76	L 1500, B 70, H 51	LED	840	5050 lm	35 W	29°/29°	11,9	DALI	A+ A+
925167.002	L 1500, B 70, H 51	LED	840	7250 lm	53 W	29°/29°	13,1	on/off	A+ A+
925167.002.76	L 1500, B 70, H 51	LED	840	7250 lm	53 W	29°/29°	13,1	DALI	A+ A+
925229.002	L 1500, B 70, H 51	LED	840	7700 lm	62 W	29°/29°	13,3	on/off	A+ A+
925229.002.76	L 1500, B 70, H 51	LED	840	7700 lm	62 W	29°/29°	13,3	DALI	A+ A+
925168.002	L 1500, B 70, H 51	LED	840	9500 lm	76 W	29°/29°	14,1	on/off	A+ A+
925168.002.76	L 1500, B 70, H 51	LED	840	9500 lm	76 W	29°/29°	14,1	DALI	A+ A+

**Asymmetrical light distribution**

925153.002	L 1500, B 70, H 51	LED	840	3850 lm	26 W	32°/22°/0°/23°	18,4	on/off	A+ A+
925153.002.76	L 1500, B 70, H 51	LED	840	3850 lm	26 W	32°/22°/0°/23°	18,4	DALI	A+ A+
925154.002	L 1500, B 70, H 51	LED	840	4900 lm	35 W	32°/22°/0°/23°	19,2	on/off	A+ A+
925154.002.76	L 1500, B 70, H 51	LED	840	4900 lm	35 W	32°/22°/0°/23°	19,2	DALI	A+ A+
925155.002	L 1500, B 70, H 51	LED	840	6950 lm	53 W	32°/22°/0°/23°	20,4	on/off	A+ A+
925155.002.76	L 1500, B 70, H 51	LED	840	6950 lm	53 W	32°/22°/0°/23°	20,4	DALI	A+ A+
925227.002	L 1500, B 70, H 51	LED	840	7650 lm	62 W	32°/22°/0°/23°	20,8	on/off	A+ A+
925227.002.76	L 1500, B 70, H 51	LED	840	7650 lm	62 W	32°/22°/0°/23°	20,8	DALI	A+ A+
925156.002	L 1500, B 70, H 51	LED	840	9250 lm	76 W	32°/22°/0°/23°	21,5	on/off	A+ A+
925156.002.76	L 1500, B 70, H 51	LED	840	9250 lm	76 W	32°/22°/0°/23°	21,5	DALI	A+ A+

**Double asymmetrical light distribution**

925157.002	L 1500, B 70, H 51	LED	840	3900 lm	26 W	72°/85°	18,9	on/off	A+ A+
925157.002.76	L 1500, B 70, H 51	LED	840	3900 lm	26 W	72°/85°	18,9	DALI	A+ A+
925158.002	L 1500, B 70, H 51	LED	840	4950 lm	35 W	72°/85°	19,7	on/off	A+ A+
925158.002.76	L 1500, B 70, H 51	LED	840	4950 lm	35 W	72°/85°	19,7	DALI	A+ A+
925159.002	L 1500, B 70, H 51	LED	840	7000 lm	53 W	72°/85°	20,9	on/off	A+ A+
925159.002.76	L 1500, B 70, H 51	LED	840	7000 lm	53 W	72°/85°	20,9	DALI	A+ A+
925228.002	L 1500, B 70, H 51	LED	840	7700 lm	62 W	72°/85°	21,3	on/off	A+ A+
925228.002.76	L 1500, B 70, H 51	LED	840	7700 lm	62 W	72°/85°	21,3	DALI	A+ A+
925160.002	L 1500, B 70, H 51	LED	840	9300 lm	76 W	72°/85°	21,9	on/off	A+ A+
925160.002.76	L 1500, B 70, H 51	LED	840	9300 lm	76 W	72°/85°	21,9	DALI	A+ A+

LED insert | Series: Planos LED ECO

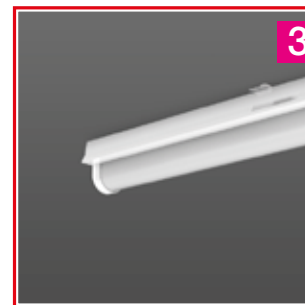
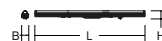
Type of Protection: IP 20

Protection Class: I

Impact Protection: IK03

LED light channel module for mounting tracks. LED cover plastic (PMMA), semi-circular opal. Freely adjustable phase setting (L1, L2, L3) on gear compartment. Standard version with 3-pin connecting terminal. For DALI version with 5-pin connecting terminal.

Available colour: 2 = white



3

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dimmi-able	EEC
LED light channel module									
Wide beam light distribution									
925313.002	L 1500, B 70, H 51	LED	840	4100 lm	28 W	179°/108°	28,8	on/off	A++ A++
925313.002.76	L 1500, B 70, H 51	LED	840	4100 lm	28 W	179°/108°	28,8	DALI	A++ A++
925314.002	L 1500, B 70, H 51	LED	840	4500 lm	31 W	179°/108°	29,1	on/off	A++ A++
925314.002.76	L 1500, B 70, H 51	LED	840	4500 lm	31 W	179°/108°	29,1	DALI	A++ A++
925315.002	L 1500, B 70, H 51	LED	840	5600 lm	39 W	179°/108°	29,8	on/off	A++ A++
925315.002.76	L 1500, B 70, H 51	LED	840	5600 lm	39 W	179°/108°	29,8	DALI	A++ A++
925316.002	L 1500, B 70, H 51	LED	840	6850 lm	51 W	179°/108°	30,5	on/off	A++ A++
925316.002.76	L 1500, B 70, H 51	LED	840	6850 lm	51 W	179°/108°	30,5	DALI	A++ A++

Price Category 21

**Comparison****LED vs. conventional lamps****LED 28 W ≈**

1 x 54 W T16 (58 W EB)

1 x 58 W T26 (67 W CB)

LED 31 W ≈

1 x 54 W T16 (58 W EB)

2 x 36 W T26 (86 W CB)

LED 39 W ≈

1 x 80 W T16 (86 W EB)

2 x 36 W T26 (86 W CB)

LED 51 W ≈

2 x 49 W T16 (106 W EB)

LED insert | Series: Planos LED IP 54

Type of Protection: IP 54

Protection Class: I

Impact Protection: IK03

LED light channel module for mounting tracks with three-row lens system. LED cover provided by plastic (PMMA) panel with integrated three-row lens system. Freely adjustable phase setting (L1, L2, L3) on gear compartment. Standard version with 3-pin connecting terminal. For DALI version with 5-pin connecting terminal.

Available colour: 2 = white



3

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dimmi-able	EEC
LED light channel module									
Light distribution deep-wide beam									
925254.002	L 1500, B 70, H 51	LED	840	4000 lm	26 W	61°/59°	14,9	on/off	A+ A+
925254.002.76	L 1500, B 70, H 51	LED	840	4000 lm	26 W	61°/59°	14,9	DALI	A+ A+
925255.002	L 1500, B 70, H 51	LED	840	5050 lm	35 W	61°/59°	15,7	on/off	A+ A+
925255.002.76	L 1500, B 70, H 51	LED	840	5050 lm	35 W	61°/59°	15,7	DALI	A+ A+
925256.002	L 1500, B 70, H 51	LED	840	7250 lm	53 W	61°/59°	17,0	on/off	A+ A+
925256.002.76	L 1500, B 70, H 51	LED	840	7250 lm	53 W	61°/59°	17,0	DALI	A+ A+
925257.002	L 1500, B 70, H 51	LED	840	7700 lm	62 W	61°/59°	17,2	on/off	A+ A+
925257.002.76	L 1500, B 70, H 51	LED	840	7700 lm	62 W	61°/59°	17,2	DALI	A+ A+
925258.002	L 1500, B 70, H 51	LED	840	9500 lm	76 W	61°/59°	17,9	on/off	A+ A+
925258.002.76	L 1500, B 70, H 51	LED	840	9500 lm	76 W	61°/59°	17,9	DALI	A+ A+

Price Category 21

**Comparison****LED vs. conventional lamps****LED 26 W ≈**

1 x 49 W T16 (53 W EB)

1 x 58 W T26 (67 W CB)

LED 35 W ≈

1 x 80 W T16 (86 W EB)

2 x 36 W T26 (86 W CB)

LED 53 W ≈

2 x 49 W T16 (106 W EB)

LED 62 W ≈

2 x 58 W T26 (134 W CB)

LED 76 W ≈

2 x 80 W T16 (172 W EB)

4



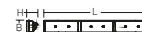
Continuous line luminaire module | Series: Planos LED continuous line luminaire

Type of Protection: IP 20

Protection Class: I

LED module as an installation and additional element for mounting tracks. Versions with triple-row lens system on full length or part lengths with empty unit. PMMA LED cover for mounting tracks with integrated triple-row lens system. Freely adjustable phase setting (L1, L2, L3) on luminaire insert. With 3-pole connecting terminal. For DALI version with 5-pin connecting terminal.

Available colour: 2 = white



Reference number	Dimensions	Luminaire flux	System power		UGR	dimmi-able
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Continuous line luminaire installation and additional elements

Price Category 21



Wide beam light distribution

925205.002	L 900, B 70, H 51	4100 lm	26 W	23,4	on/off
925206.002	L 1200, B 70, H 51	4000 lm	26 W	22,3	on/off
925206.002.76	L 1200, B 70, H 51	4000 lm	26 W	22,3	DALI
925207.002	L 1500, B 70, H 51	4000 lm	26 W	22,3	on/off
925207.002.76	L 1500, B 70, H 51	4000 lm	26 W	22,3	DALI
925231.002	L 1500, B 70, H 51	4100 lm	26 W	23,4	on/off
925231.002.76	L 1500, B 70, H 60	4100 lm	26 W	23,4	DALI

4



Continuous line luminaire module | Series: Planos LED continuous line luminaire

LED module as an installation and additional element for mounting tracks. Version including 3 circuit track (1 m) for the installation of external projectors with multi adaptor for 3 circuit tracks 230 V. With 5-pole connecting terminal.



Reference number	Dimensions
------------------	------------

Continuous line luminaire installation and additional elements

Price Category 21

Light channel module with 3-phase track

925208.002	L 1500, B 69, H 53	Light channel module with 3-phase track
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4



Continuous line luminaire module | Series: Planos LED continuous line luminaire

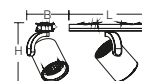
Type of Protection: IP 20

Protection Class: I

LED module as an installation and additional element for mounting tracks. Module in part length including projectors from the AVIATO Series. Freely adjustable phase setting (L1, L2, L3) on luminaire insert with variable power cable (length 450 mm) for the tapping point on the mounting track. With 3-pole connecting terminal.

Additional RZB spotlights available on request.

Available colour: 2 = white



Reference number	Dimensions	Luminaire flux	System power		dimmi-able
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Continuous line luminaire installation and additional elements

Price Category 21

Light channel module with projector

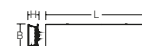
925233.002	L 600, B 106, H 215	3350 lm	36 W	24°	on/off
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4



Continuous line luminaire module | Series: Planos LED continuous line luminaire

LED insert as an installation and additional element for mounting tracks. Version with empty profile offering the potential for the installation of external projectors or light management components. Freely adjustable phase setting (L1, L2, L3) on luminaire insert with variable power cable (450 mm) for sections with tapping points on the mounting track. With 3-pole connecting terminal.



Reference number	Dimensions
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Continuous line luminaire installation and additional elements

Price Category 21

Light channel module with empty profile

925209.002	L 300, B 69, H 53	Empty module L = 300 mm for projectors or other components. With variable power cable L=450 mm.
925210.002	L 600, B 69, H 53	Empty module L = 600 mm for projectors or other components. With variable power cable L=450 mm.
925211.002	L 1500, B 69, H 53	Empty module L = 1500 mm for projectors or components of a light management system.

LED continuous line luminaire | Series: Planos LED IP 20



Type of Protection: IP 20

Protection Class: I

Impact Protection: IK03

LED light channel luminaire with three-row lens system. Complete unit consisting of: mounting track, gear compartment, 5 conductor 1.5 mm² wiring and accessories. LED cover provided by plastic (PMMA) panel with integrated three-row lens system. Freely adjustable phase setting (L1, L2, L3) on gear compartment.

- With 3-pole connecting terminal. For DALI version with 5-pin connecting terminal.
- LED drivers are suitable for emergency lighting systems in accordance with IEC60598-2-22.

Incl. mounting claw for suspension chain/cable

Other installation accessories must be ordered separately.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dim-able	EEC
LED light channel luminaire									
									Price Category 21
Wide beam light distribution									
925145.002	L 1500, B 70, H 70	LED	840	3950 lm	26 W	106°/109°	21,3	on/off	A+ A+
925145.002.76	L 1500, B 70, H 70	LED	840	3950 lm	26 W	106°/109°	21,3	DALI	A+ A+
925146.002	L 1500, B 70, H 70	LED	840	5000 lm	35 W	106°/109°	22,1	on/off	A+ A+
925146.002.76	L 1500, B 70, H 70	LED	840	5000 lm	35 W	106°/109°	22,1	DALI	A+ A+
925147.002	L 1500, B 70, H 70	LED	840	7050 lm	53 W	106°/109°	23,3	on/off	A+ A+
925147.002.76	L 1500, B 70, H 70	LED	840	7050 lm	53 W	106°/109°	23,3	DALI	A+ A+
925226.002	L 1500, B 70, H 70	LED	840	7850 lm	62 W	106°/109°	23,7	on/off	A+ A+
925226.002.76	L 1500, B 70, H 70	LED	840	7850 lm	62 W	106°/109°	23,7	DALI	A+ A+
925148.002	L 1500, B 70, H 70	LED	840	9500 lm	76 W	106°/109°	24,3	on/off	A+ A+
925148.002.76	L 1500, B 70, H 70	LED	840	9500 lm	76 W	106°/109°	24,3	DALI	A+ A+
Narrow beam light distribution									
925149.002	L 1500, B 70, H 70	LED	840	4000 lm	26 W	29°/29°	11,0	on/off	A+ A+
925149.002.76	L 1500, B 70, H 70	LED	840	4000 lm	26 W	29°/29°	11,0	DALI	A+ A+
925150.002	L 1500, B 70, H 70	LED	840	5050 lm	35 W	29°/29°	11,9	on/off	A+ A+
925150.002.76	L 1500, B 70, H 70	LED	840	5050 lm	35 W	29°/29°	11,9	DALI	A+ A+
925151.002	L 1500, B 70, H 70	LED	840	7250 lm	53 W	29°/29°	13,1	on/off	A+ A+
925151.002.76	L 1500, B 70, H 70	LED	840	7250 lm	53 W	29°/29°	13,1	DALI	A+ A+
925225.002	L 1500, B 70, H 70	LED	840	7700 lm	62 W	29°/29°	13,3	on/off	A+ A+
925225.002.76	L 1500, B 70, H 70	LED	840	7700 lm	62 W	29°/29°	13,3	DALI	A+ A+
925152.002	L 1500, B 70, H 70	LED	840	9500 lm	76 W	29°/29°	14,1	on/off	A+ A+
925152.002.76	L 1500, B 70, H 70	LED	840	9500 lm	76 W	29°/29°	14,1	DALI	A+ A+
Asymmetrical light distribution									
925137.002	L 1500, B 70, H 70	LED	840	3850 lm	26 W	32°/22°/0°/23°	18,4	on/off	A+ A+
925137.002.76	L 1500, B 70, H 70	LED	840	3850 lm	26 W	32°/22°/0°/23°	18,4	DALI	A+ A+
925138.002	L 1500, B 70, H 70	LED	840	4900 lm	35 W	32°/22°/0°/23°	19,2	on/off	A+ A+
925138.002.76	L 1500, B 70, H 70	LED	840	4900 lm	35 W	32°/22°/0°/23°	19,2	DALI	A+ A+
925139.002	L 1500, B 70, H 70	LED	840	6950 lm	53 W	32°/22°/0°/23°	20,4	on/off	A+ A+
925139.002.76	L 1500, B 70, H 70	LED	840	6950 lm	53 W	32°/22°/0°/23°	20,4	DALI	A+ A+
925223.002	L 1500, B 70, H 70	LED	840	7650 lm	62 W	32°/22°/0°/23°	20,8	on/off	A+ A+
925223.002.76	L 1500, B 70, H 70	LED	840	7650 lm	62 W	32°/22°/0°/23°	20,8	DALI	A+ A+
925140.002	L 1500, B 70, H 70	LED	840	9250 lm	76 W	32°/22°/0°/23°	21,5	on/off	A+ A+
925140.002.76	L 1500, B 70, H 70	LED	840	9250 lm	76 W	32°/22°/0°/23°	21,5	DALI	A+ A+
Double asymmetrical light distribution									
925141.002	L 1500, B 70, H 70	LED	840	3900 lm	26 W	72°/85°	18,9	on/off	A+ A+
925141.002.76	L 1500, B 70, H 70	LED	840	3900 lm	26 W	72°/85°	18,9	DALI	A+ A+
925142.002	L 1500, B 70, H 70	LED	840	4950 lm	35 W	72°/85°	19,7	on/off	A+ A+
925142.002.76	L 1500, B 70, H 70	LED	840	4950 lm	35 W	72°/85°	19,7	DALI	A+ A+
925143.002	L 1500, B 70, H 70	LED	840	7000 lm	53 W	72°/85°	20,9	on/off	A+ A+
925143.002.76	L 1500, B 70, H 70	LED	840	7000 lm	53 W	72°/85°	20,9	DALI	A+ A+
925224.002	L 1500, B 70, H 70	LED	840	7700 lm	62 W	72°/85°	21,3	on/off	A+ A+
925224.002.76	L 1500, B 70, H 70	LED	840	7700 lm	62 W	72°/85°	21,3	DALI	A+ A+
925144.002	L 1500, B 70, H 70	LED	840	9300 lm	76 W	72°/85°	21,9	on/off	A+ A+
925144.002.76	L 1500, B 70, H 70	LED	840	9300 lm	76 W	72°/85°	21,9	DALI	A+ A+

Comparison LED vs. conventional lamps

LED 26 W ≈

1 x 49 W T16 (53 W EB)
1 x 58 W T26 (67 W CB)

LED 35 W ≈

1 x 80 W T16 (86 W EB)
2 x 36 W T26 (86 W CB)

LED 53 W ≈

2 x 49 W T16 (106 W EB)

LED 62 W ≈

2 x 58 W T26 (134 W CB)

LED 76 W ≈

2 x 80 W T16 (172 W EB)



LED continuous line luminaire | Series: Planos LED IP 54



Type of Protection: **IP 54**
Protection Class: I
Impact Protection: IK03

LED light channel luminaire with three-row lens system. Complete unit consisting of: mounting track, gear compartment, 5 conductor 1.5 mm² wiring and accessories. LED cover provided by plastic (PMMA) panel with integrated three-row lens system. Freely adjustable phase setting (L1, L2, L3) on gear compartment.

- With 3-pole connecting terminal. For DALI version with 5-pin connecting terminal.
- LED drivers are suitable for emergency lighting systems in accordance with IEC60598-2-22.

Incl. mounting claw for suspension chain/cable
Other installation accessories must be ordered separately.
Available colour: 2 = white

Comparison
LED vs. conventional lamps

LED 26 W ≈
1 x 49 W T16 (53 W EB)
1 x 58 W T26 (67 W CB)

LED 35 W ≈
1 x 80 W T16 (86 W EB)
2 x 36 W T26 (86 W CB)

LED 53 W ≈
2 x 49 W T16 (106 W EB)

LED 62 W ≈
2 x 58 W T26 (134 W CB)

LED 76 W ≈
2 x 80 W T16 (172 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		UGR	dimmable	EEC
LED light channel luminaire									
Light distribution deep-wide beam									
925259.002	L 1500, B 70, H 70	LED	840	4000 lm	26 W	61°/59°	14,9	on/off	A+ A+
925259.002.76	L 1500, B 70, H 70	LED	840	4000 lm	26 W	61°/59°	14,9	DALI	A+ A+
925260.002	L 1500, B 70, H 70	LED	840	5050 lm	35 W	61°/59°	15,7	on/off	A+ A+
925260.002.76	L 1500, B 70, H 70	LED	840	5050 lm	35 W	61°/59°	15,7	DALI	A+ A+
925261.002	L 1500, B 70, H 70	LED	840	7250 lm	53 W	61°/59°	17,0	on/off	A+ A+
925261.002.76	L 1500, B 70, H 70	LED	840	7250 lm	53 W	61°/59°	17,0	DALI	A+ A+
925262.002	L 1500, B 70, H 70	LED	840	7700 lm	62 W	61°/59°	17,2	on/off	A+ A+
925262.002.76	L 1500, B 70, H 70	LED	840	7700 lm	62 W	61°/59°	17,2	DALI	A+ A+
925263.002	L 1500, B 70, H 70	LED	840	9500 lm	76 W	61°/59°	17,9	on/off	A+ A+
925263.002.76	L 1500, B 70, H 70	LED	840	9500 lm	76 W	61°/59°	17,9	DALI	A+ A+



The application image shows:
Planos

An allround continuous line luminaire system

The empty system tray offers a quick and flexible installation with all existing accessories even from other RZB luminaires. In combination with an installation kit any kind of luminaire can be mounted easily.

Mounting track | Planos LED light channel

Mounting track: sheet steel, painted white. Without through wiring.

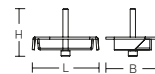
Available colour: 2 = white



Reference number	Dimensions		
Mounting track empty			Price Category 21
925212.002	L 1500, B 69, H 53	Without through wiring	
925213.002	L 3000, B 69, H 53	Without through wiring	
925214.002	L 4500, B 69, H 53	Without through wiring	

Installation accessories | Planos LED light channel

Installation kit for mounting third-party luminaires on the mounting track.

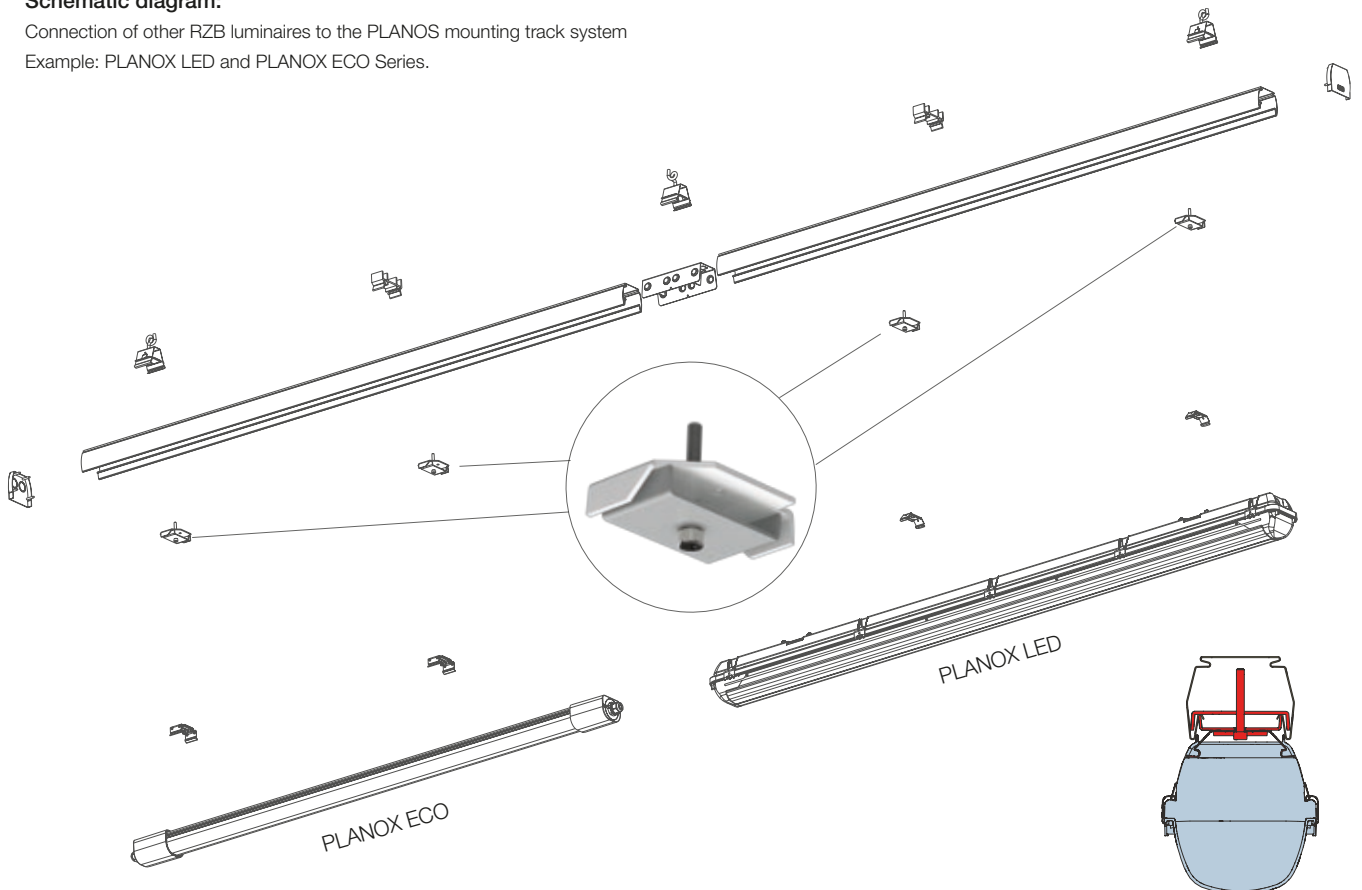


Reference number	Dimensions		
With installation kit			Price Category 21
982237.000	L 61, B 51, H 33	Installation kit for third-party luminaires	

Schematic diagram:

Connection of other RZB luminaires to the PLANOS mounting track system

Example: PLANOX LED and PLANOX ECO Series.



Cross-sectional view



The application image shows:
Planox ECO



446

Planox
444-447



450

Planox PRO
448-451



454



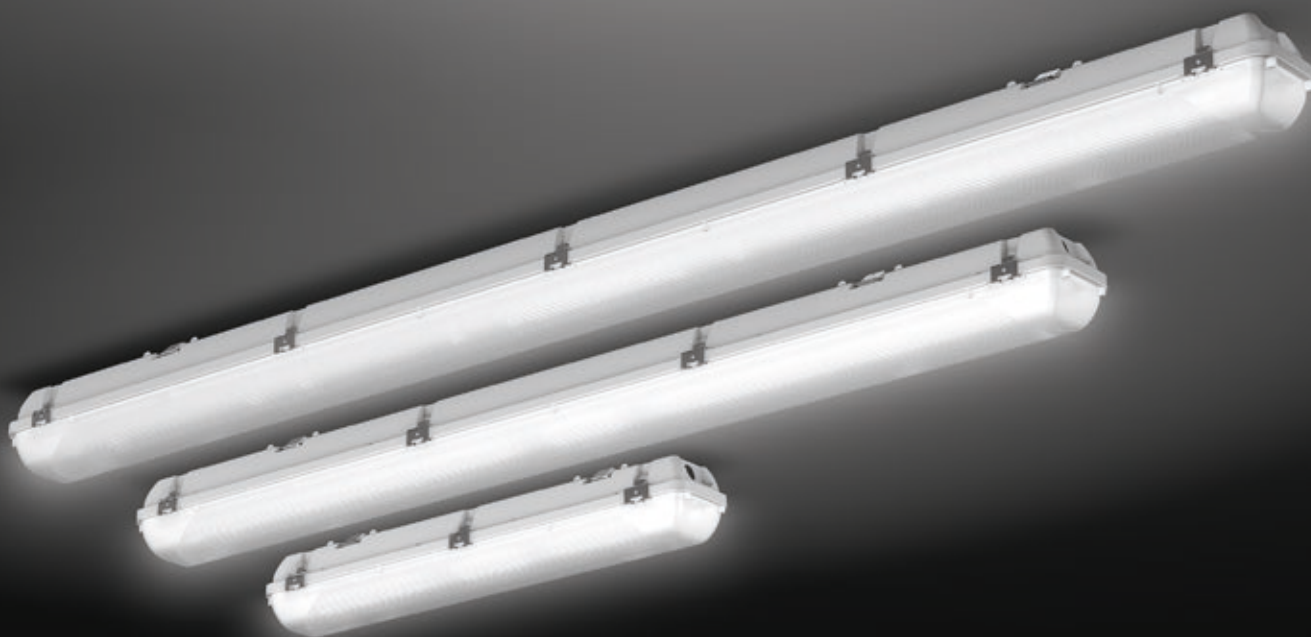
454

Planox ECO
452-455



457

Planox Tube
456-457



PLANOX

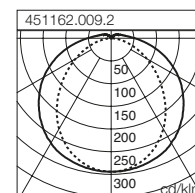
Ceiling and wall luminaires

- 1:1 replacement for fluorescent lamps
- Colour rendering Ra 80
- Colour temperature 4000 K and 5000 K
- LED rated life 50,000 h (L80, B10)
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- High degree of protection IP 66
- Housing made of polycarbonate (PC)
- The injection-moulded diffusers are prismatic inside, UV-resistant and provide homogeneous light output
- Diffusers optionally in PMMA or PC
- Seal between diffuser and housing is made of non-ageing PU (polyurethane) foam
- Diffusers held by stainless steel clips (standard)
- Easy to install with stainless steel quick fastening clips
- Replaceable LED unit
- LED board can be individually replaced
- Comfortable installation by suspendable LED tray
- Suitable for use in the food and drink industry
- Also available as an emergency luminaire in accordance with EN 60598-2-22

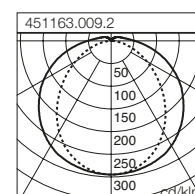


Further luminaires of this series, see:
Emergency lighting

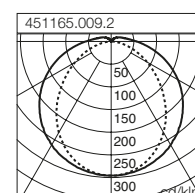
451162.009.2		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



451163.009.2		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



451165.009.2		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	6





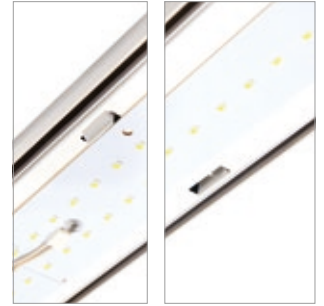
Diffusers are available in PMMA and PC



Homogeneous light distribution thanks to frosted diffuser



Easy installation thanks to clip system



Every single LED module can be exchanged, complete unit with LED modules and converter can be exchanged



Terminal with plug connection - suitable for through wiring



Easy installation: unit with LED modules and converter can be suspended on the housing temporarily



Stainless steel retention clips included



Brackets for surface mounting and suspension are included



Additional nipple for through wiring included



Ceiling and wall luminaires | Series: Planox

Type of Protection: IP 66

Protection Class: I

Impact Protection: IK03 (PMMA), IK08 (polycarbonate)

Base: plastic (polycarbonate). White painted interior fastening element made of steel plate. Refractor: plastic (PMMA or PC) prismatic inside. Refractor fastening: stainless steel clips.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 9 = grey

Comparison
LED vs. conventional lamps

LED 23 / 28 W ≈

2 x 18 W T26 (52 W CB)

1 x 36 W T26 (43 W CB)

2 x 24 W T16 (49 W EB)

1 x 35 W T16 (38 W EB)

LED 34 W ≈

2 x 36 W T26 (86 W CB)

1 x 58 W T26 (67 W CB)

1 x 49 W T16 (53 W EB)

LED 41 W ≈

2 x 36 W T26 (86 W CB)

2 x 28 W T16 (61 W EB)

LED 48 W ≈

2 x 36 W T26 (86 W CB)

1 x 80 W T16 (86 W EB)

LED 54 W ≈

2 x 58 W T26 (134 W CB)

1 x 80 W T16 (86 W EB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	EB	CB	dim-able	EEC
Ceiling and wall luminaires									Price Category 11
Refractor: plastic (PMMA)									
Length L 658 mm									
451161.009	L 658, B 96, H 100	LED	840	2850 lm	23 W		✓	on/off	A++ A++
451161.009.76	L 658, B 96, H 100	LED	840	2850 lm	23 W			DALI	A++ A++
451161.009.2	L 658, B 96, H 100	LED	850	3050 lm	23 W		✓	on/off	A++ A++
451161.009.2.76	L 658, B 96, H 100	LED	850	3050 lm	23 W			DALI	A++ A++
Length L 1278 mm									
451162.009	L 1278, B 96, H 100	LED	840	3350 lm	28 W	✓	✓	on/off	A++ A++
451162.009.76	L 1278, B 96, H 100	LED	840	3350 lm	28 W			DALI	A++ A++
451162.009.2	L 1278, B 96, H 100	LED	850	3400 lm	28 W	✓	✓	on/off	A++ A++
451162.009.2.76	L 1278, B 96, H 100	LED	850	3400 lm	28 W			DALI	A++ A++
451163.009	L 1278, B 96, H 100	LED	840	5100 lm	41 W	✓	✓	on/off	A++ A++
451163.009.76	L 1278, B 96, H 100	LED	840	5100 lm	41 W			DALI	A++ A++
451163.009.2	L 1278, B 96, H 100	LED	850	5400 lm	41 W	✓	✓	on/off	A++ A++
451163.009.2.76	L 1278, B 96, H 100	LED	850	5400 lm	41 W			DALI	A++ A++
451164.009	L 1278, B 96, H 100	LED	840	5700 lm	48 W	✓	✓	on/off	A++ A++
451164.009.76	L 1278, B 96, H 100	LED	840	5700 lm	48 W			DALI	A++ A++
451164.009.2	L 1278, B 96, H 100	LED	850	6100 lm	48 W	✓	✓	on/off	A++ A++
451164.009.2.76	L 1278, B 96, H 100	LED	850	6100 lm	48 W			DALI	A++ A++
Length L 1573 mm									
451165.009	L 1573, B 96, H 100	LED	840	4150 lm	34 W	✓	✓	on/off	A++ A++
451165.009.76	L 1573, B 96, H 100	LED	840	4150 lm	34 W			DALI	A++ A++
451165.009.2	L 1573, B 96, H 100	LED	850	4250 lm	34 W	✓	✓	on/off	A++ A++
451165.009.2.76	L 1573, B 96, H 100	LED	850	4250 lm	34 W			DALI	A++ A++
451166.009	L 1573, B 96, H 100	LED	840	6550 lm	54 W	✓	✓	on/off	A++ A++
451166.009.76	L 1573, B 96, H 100	LED	840	6550 lm	54 W			DALI	A++ A++
451166.009.2	L 1573, B 96, H 100	LED	850	7050 lm	54 W	✓	✓	on/off	A++ A++
451166.009.2.76	L 1573, B 96, H 100	LED	850	7050 lm	54 W			DALI	A++ A++
Refractor: plastic (polycarbonate)									
Length L 658 mm									
451161.009.1	L 658, B 96, H 100	LED	840	2750 lm	23 W		✓	on/off	A++ A++
451161.009.1.76	L 658, B 96, H 100	LED	840	2750 lm	23 W			DALI	A++ A++
451161.009.3	L 658, B 96, H 100	LED	850	2950 lm	23 W		✓	on/off	A++ A++
451161.009.3.76	L 658, B 96, H 100	LED	850	2950 lm	23 W			DALI	A++ A++
Length L 1278 mm									
451162.009.1	L 1278, B 96, H 100	LED	840	3250 lm	28 W	✓	✓	on/off	A++ A++
451162.009.1.76	L 1278, B 96, H 100	LED	840	3250 lm	28 W			DALI	A++ A++
451162.009.3	L 1278, B 96, H 100	LED	850	3300 lm	28 W	✓	✓	on/off	A++ A++
451162.009.3.76	L 1278, B 96, H 100	LED	850	3300 lm	28 W			DALI	A++ A++
451163.009.1	L 1278, B 96, H 100	LED	840	4850 lm	41 W	✓	✓	on/off	A++ A++
451163.009.1.76	L 1278, B 96, H 100	LED	840	4850 lm	41 W			DALI	A++ A++
451163.009.3	L 1278, B 96, H 100	LED	850	5150 lm	41 W	✓	✓	on/off	A++ A++
451163.009.3.76	L 1278, B 96, H 100	LED	850	5150 lm	41 W			DALI	A++ A++
451164.009.1	L 1278, B 96, H 100	LED	840	5400 lm	48 W	✓	✓	on/off	A++ A++
451164.009.1.76	L 1278, B 96, H 100	LED	840	5400 lm	48 W			DALI	A++ A++
451164.009.3	L 1278, B 96, H 100	LED	850	5800 lm	48 W	✓	✓	on/off	A++ A++
451164.009.3.76	L 1278, B 96, H 100	LED	850	5800 lm	48 W			DALI	A++ A++
Length L 1573 mm									
451165.009.1	L 1573, B 96, H 100	LED	840	4050 lm	34 W	✓	✓	on/off	A++ A++
451165.009.1.76	L 1573, B 96, H 100	LED	840	4050 lm	34 W			DALI	A++ A++
451165.009.3	L 1573, B 96, H 100	LED	850	4150 lm	34 W	✓	✓	on/off	A++ A++
451165.009.3.76	L 1573, B 96, H 100	LED	850	4150 lm	34 W			DALI	A++ A++
451166.009.1	L 1573, B 96, H 100	LED	840	6350 lm	54 W	✓	✓	on/off	A++ A++
451166.009.1.76	L 1573, B 96, H 100	LED	840	6350 lm	54 W			DALI	A++ A++
451166.009.3	L 1573, B 96, H 100	LED	850	6750 lm	54 W	✓	✓	on/off	A++ A++
451166.009.3.76	L 1573, B 96, H 100	LED	850	6750 lm	54 W			DALI	A++ A++





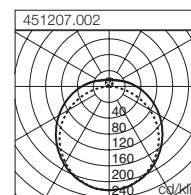


PLANOX PRO

Ceiling and wall luminaires

- Design-oriented moisture-proof luminaire
- Indirect light to illuminate the ceiling
- 1:1 replacement for fluorescent lamps
- Colour rendering index Ra 80
- Impact protection: IK08
- LED rated life 50,000 h (L80, B10)
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Operating range: -30°C to +50°C
- Operating range (.76 DALI versions): -25°C to +50°C
- High degree of protection IP 66
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Housing and end caps made of shockproof polycarbonate (PC)
- Mould cast diffusers as inner prisms, UV resistant and provide homogenous light distribution
- Flexible installation through sliding mounting bracket. Ideal for luminaire replacement
- Through-wiring as standard for further luminaires (On/Off: 5 x 1,5 mm²; DALI: 7 x 1,5 mm²)
- Cable installation on both sides through turn lock fastener
- Comfortable cable entry through cable screw fittings at both ends
- Suitable for use in the food and drink industry
- DALI converter is compatible with DC, suitable for central emergency power supply purposes

451207.002		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	4	7





Included in scope of delivery:
Ceiling mounting bracket and triangular bracket for pendant mounting.



Flexible installation through sliding mounting bracket. Ideal for luminaire replacement.



Can be opened and closed without tools using a turn lock fastener, cable screw fitting as standard.



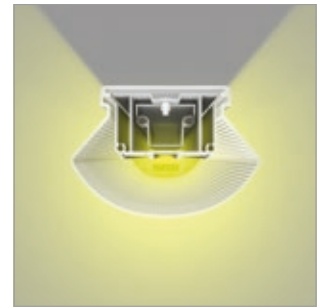
Simple connection by means of terminal with push-on connector, on-board through-wiring as standard. (on/off: 5x1,5mm² | DALI: 7x1,5mm²).



Accessories:
Mounting brackets made of stainless steel (theft protection) for ceiling and wall mounting



Low heat generation, suitable for workshops with limited surface temperatures.



Rearwards-directed light to illuminate the ceiling.
Homogeneous illumination through satin finish diffuser.



Ceiling and wall luminaires | Series: Planox PRO

Type of Protection: IP 66
Protection Class: II
Impact Protection: IK08

Side panels: plastic, white polycarbonate. Diffuser: plastic (polycarbonate), opal.
Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Cable screw fittings for convenient wiring. Turn lock fastener on both sides for easy installation. Luminaire with integrated through wiring for lining up further luminaires (protection class I and II). Ceiling mounting stainless steel brackets and triangular brackets for pendant mounting included in the scope of delivery.

⚠ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 2 = white



Comparison

LED vs. conventional lamps

LED 15 W ≈

2 x 14 W T16 (36 W EB)

2 x 18 W T26 (52 W CB)

LED 22 W ≈

1 x 36 W T26 (43 W CB)

1 x 35 W T16 (38 W EB)

2 x 24 W T16 (49 W EB)

LED 29 W ≈

2 x 28 W T16 (61 W EB)

2 x 36 W T26 (86 W CB)

LED 38 W ≈

1 x 49 W T16 (53 W EB)

1 x 58 W T26 (67 W CB)

LED 54 W ≈

2 x 35 W T16 (76 W EB)

2 x 58 W T26 (134 W CB)

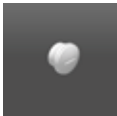


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires							
Length L 750 mm							
451204.002	L 750, B 88, H 63	LED	840	2050 lm	15 W	on/off	A+ A+
451204.002.76	L 750, B 88, H 63	LED	840	2050 lm	15 W	DALI	A+ A+
Length L 1350 mm							
451205.002	L 1350, B 88, H 63	LED	840	3000 lm	22 W	on/off	A+ A+
451206.002	L 1350, B 88, H 63	LED	840	5200 lm	38 W	on/off	A+ A+
451206.002.76	L 1350, B 88, H 63	LED	840	5200 lm	38 W	DALI	A+ A+
Length L 1650 mm							
451207.002	L 1650, B 88, H 63	LED	840	3900 lm	29 W	on/off	A+ A+
451208.002	L 1650, B 88, H 63	LED	840	7150 lm	54 W	on/off	A+ A+
451208.002.76	L 1650, B 88, H 63	LED	840	7150 lm	54 W	DALI	A+ A+

End piece for turn lock fastener with D 25 mm							
982394.002	D 25, H 13						Price Category 11

Turn lock fastening							
982396.002	D 56, H 50						Price Category 11

Mounting brackets made of stainless steel (theft protection) for ceiling and wall mounting							
982395.000	L 130, B 13, H 61						Price Category 11





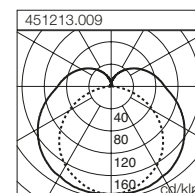


PLANOX ECO

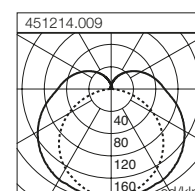
Ceiling and wall luminaires

- Design-oriented moisture-proof luminaire
- Indirect light to illuminate the ceiling
- 1:1 replacement for fluorescent lamps
- Colour rendering index Ra 80
- Impact protection: IK08
- LED rated life 50,000 h (L80, B10)
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Operating range: -30°C to +50°C
- Operating range (with movement sensor): -20°C to +50°C
- High degree of protection IP 66
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- Housing and end caps made of shockproof polycarbonate (PC)
- Mould cast diffusers are realized as inner prisms, UV resistant and provide homogenous light distribution
- Flexible installation through sliding mounting bracket. Ideal for luminaire replacement
- Through-wiring as standard for further luminaires (safety class I and II)
- Cable installation on both sides through turn lock fastener
- Comfortable cable entry through cable screw fittings at both ends
- Suitable for use in the food and drink industry
- Versions with infrared movement sensor, adjustable time delay of 10 s to 20 min and response brightness of 1 to 50 lux

451213.009		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	3	4
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	7

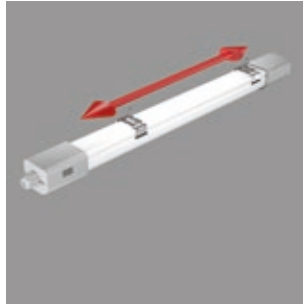


451214.009		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5





Included in scope of delivery:
Ceiling mounting bracket and triangular bracket for pendant mounting.



Flexible installation through sliding mounting bracket. Ideal for luminaire replacement.



Can be opened and closed without tools using a turn lock fastener, cable screw fitting as standard.



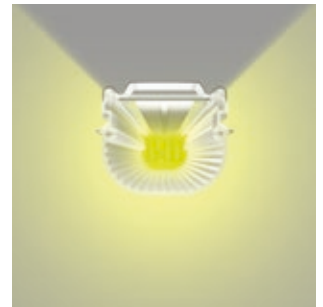
Simple connection by means of terminal with push-on connector, on-board through-wiring as standard.



Model with movement sensor
(Detection range 360°)



The sensitivity and time regulation can simply be adjusted with movement sensor model



Rearwards-directed light to illuminate the ceiling.
Homogeneous illumination through satin finish diffuser.



Housing and diffuser made of shockproof PC.



Low heat generation, suitable for workshops with limited surface temperatures.



Accessories:
Mounting brackets made of stainless steel (theft protection) for ceiling and wall mounting



Accessories:
Turn lock fastener with end piece



Ceiling and wall luminaires | Series: Planox ECO

Type of Protection: **IP 66**

Protection Class: II

Impact Protection: IK08

Side panels: plastic, grey polycarbonate. Diffuser: plastic (non-yellowing polycarbonate), opal. Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Cable screw fittings for convenient wiring. Turn lock fastener on both sides for easy installation. Luminaire with integrated 3-phase through wiring to connect multiple luminaires (protection class I and II). Ceiling mounting stainless steel brackets and triangular brackets for pendant mounting included in the scope of delivery.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 9 = grey



Comparison LED vs. conventional lamps

LED 20 W ≈

2 x 14 W T16 (36 W EB)

2 x 18 W T26 (52 W CB)

LED 23 W ≈

1 x 36 W T26 (43 W CB)

1 x 35 W T16 (38 W EB)

2 x 24 W T16 (49 W EB)

LED 33 W ≈

2 x 28 W T16 (61 W EB)

2 x 36 W T26 (86 W CB)

LED 37 W ≈

1 x 49 W T16 (53 W EB)

1 x 58 W T26 (67 W CB)

LED 53 W ≈

2 x 35 W T16 (76 W EB)

2 x 58 W T26 (134 W CB)



Ceiling and wall luminaires

without movement sensor

Length L 769 mm

451210.009 .Q L 769, B 61, H 50

LED

840

2250 lm

20 W

on/off

A+ | A+

Length L 1369 mm

451211.009 .Q L 1369, B 61, H 50

LED

840

2800 lm

23 W

on/off

A+ | A+

451212.009 .Q L 1369, B 61, H 50

LED

840

4900 lm

37 W

on/off

A+ | A+

Length L 1669 mm

451213.009 .Q L 1669, B 61, H 50

LED

840

4100 lm

33 W

on/off

A+ | A+

451214.009 .Q L 1669, B 61, H 50

LED

840

6750 lm

53 W

on/off

A+ | A+

Price Category 11



Ceiling and wall luminaires | Series: Planox ECO

Type of Protection: **IP 66**

Protection Class: II

Impact Protection: IK08

Side panels: plastic, grey polycarbonate. Diffuser: plastic (non-yellowing polycarbonate), opal. Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Cable screw fittings for convenient wiring. Turn lock fastener on both sides for easy installation. Luminaire with integrated 2-phase through wiring to connect multiple luminaires (protection class II). Ceiling mounting stainless steel brackets and triangular brackets for pendant mounting included in the scope of delivery. "Stand-alone" operation for model with movement sensor.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 9 = grey



Ceiling and wall luminaires

with movement sensor ("Stand-alone" operation)

Length L 750 mm

451182.009.19 .Q L 750, B 67, H 71

LED

840

1900 lm

20 W

on/off

A+ | A+

Length L 1350 mm

451185.009.19 .Q L 1350, B 67, H 71

LED

840

2800 lm

23 W

on/off

A+ | A+

451183.009.19 .Q L 1350, B 67, H 71

LED

840

4900 lm

42 W

on/off

A+ | A+

Length L 1650 mm

451186.009.19 .Q L 1650, B 67, H 71

LED

840

3650 lm

36 W

on/off

A+ | A+

451184.009.19 .Q L 1650, B 67, H 71

LED

840

6550 lm

64 W

on/off

A+ | A+

Price Category 11

End piece for turn lock fastener with D 25 mm
Price Category 11

982179.009 D 25, H 13


Turn lock fastening
Price Category 11

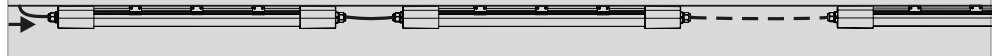
982186.009 D 48, H 50 For Planox ECO with movement sensor
982429.009 D 44, H 41 For Planox ECO standard

Mounting brackets made of stainless steel (theft protection) for ceiling and wall mounting
Price Category 11

982180.000 L 115, B 13, H 62 For Planox ECO with movement sensor
982430.000 L 146, B 16, H 38 For Planox ECO standard

Installation data for luminaires with movement sensor

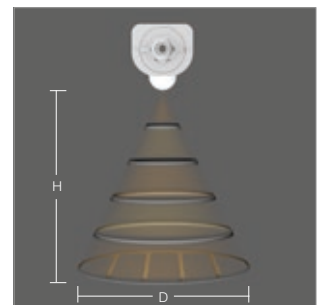
Through-wiring (2 pole) as standard - maximum number of luminaires per power level		
Reference number	System power	maximum luminaires
451182.009.19	20 W	62
451185.009.19	23 W	54
451183.009.19	42 W	29
451186.009.19	36 W	34
451184.009.19	64 W	19


Details on movement sensor

Single luminaire with infrared movement sensor.
Detection range 360°. Cover of movement sensor made of polyethylene, prismatic. Run-down time and intensity can be adjusted.



Technical data on movement sensor					
Tolerance 10 percent					
Mounting height (H)	3,0 m	4,0 m	5,0 m	6,0 m	8,0 m
Detection range (Diameter D)	7,40 m	11,0 m	13,0 m	13,8 m	14,4 m
Run-down time	10 s - 20 min adjustable				
Intensity	1-50lx adjustable				
Detection angle	120°				



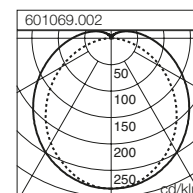


PLANOX TUBE

Tube luminaire

- Housing made of shockproof polycarbonate (PC)
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- With accessories for wall, ceiling or pendant mounting
- Powerful LED panel
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- 1:1 replacement for fluorescent lamps
- LED rated life 50,000 h (L80, B10)
- High type of protection: IP 67
- Replaceable LED unit
- Operating range: -20°C to +40°C
- Beam angle 260°
- Position of mounting brackets can be adjusted
- Beam angle can be varied by turning the luminaire within the mounting brackets
- Suitable for use in the food and drink industry

601069.002		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	2	3
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	5



Tube luminaire | Series: Planox Tube

Type of Protection: **IP 67**

Protection Class: I

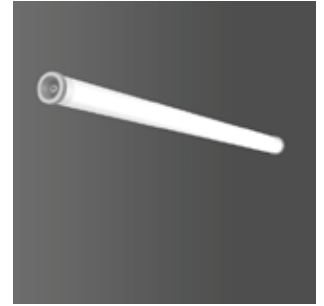
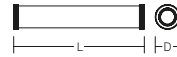
Impact Protection: IK10

Diffuser: plastic (polycarbonate), opal, shockproof. End caps plastic (polyamide) grey. Integral driver. Cable entry easy-to-handle by cable gland (M16) and easy installation by plug and play connector at the LED panel. Version for through-wiring has two cable glands. **Mounting set must be ordered separately.**

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	
Tube luminaires								Price Category 11
Without through wiring								
601065.002	D 78, L 405	LED	850	1200 lm	12 W	on/off	A++ A++	
601066.002	D 78, L 685	LED	850	2350 lm	23 W	on/off	A++ A++	
601067.002	D 78, L 965	LED	850	3550 lm	33 W	on/off	A++ A++	
601068.002	D 78, L 1245	LED	850	4800 lm	46 W	on/off	A++ A++	
601069.002	D 78, L 1530	LED	850	5950 lm	56 W	on/off	A++ A++	
With through wiring								
601066.002.1	D 78, L 685	LED	850	2350 lm	23 W	on/off	A++ A++	
601067.002.1	D 78, L 965	LED	850	3550 lm	33 W	on/off	A++ A++	
601068.002.1	D 78, L 1245	LED	850	4800 lm	46 W	on/off	A++ A++	
601069.002.1	D 78, L 1530	LED	850	5950 lm	56 W	on/off	A++ A++	
Pendant mounting								Price Category 11
982118.000		with hanger assembly made of stainless steel						
Wall or ceiling installation								Price Category 11
982117.009		L 100, B 98, H 20 Mounting bracket plastic (set 2 pieces)						

Comparison LED vs. conventional lamps

LED 12 W ≈

1 x 24 W T16 (26 W EB)

LED 23 W ≈

2 x 21 W T16 (42 W EB)

1 x 39 W T16 (42 W EB)

LED 33 W ≈

2 x 35 W T16 (76 W EB)

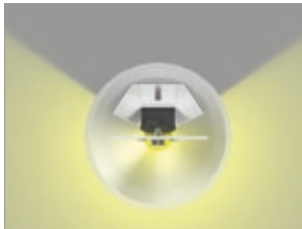
1 x 54 W T16 (58 W EB)

LED 46 W ≈

1 x 80 W T16 (86 W EB)

LED 56 W ≈

2 x 54 W T16 (115 W EB)



Rearwards-directed light to illuminate the ceiling.



Homogeneous light distribution thanks to frosted diffuser.



Beam angle can be varied by turning the luminaire within the mounting brackets.



Low heat generation. Suitable for workshops with limited surface temperatures.



For fixed installation, including connectors for easy installation and maintenance. Version with through-wiring (two-sided cable entry).



Can be **opened** and **closed** without tools using a turn lock fastener, cable screw fitting as standard.



Every single LED module can be exchanged, Complete unit with LED modules and converter can be exchanged.



Housing made of shockproof polycarbonate (PC).



Please order accessories separately

- ① Pendant mounting
- ② Ceiling and wall mounting
- Flexible installation through sliding mounting bracket.
- Ideal for luminaire replacement.**



- ③ Figure Mounting bracket for flexible installation
- ④ Figure Mounting bracket as theft protection



The application image shows:
Ralite® Highbay II



Ralite® Highbay II
460-461

Ralite® Highbay II HT
462-463

Industrial Hall Mini
464-467

Industrial Hall Midi
464-467

Industrial Hall Maxi
464-467

Industrial Hall HT Maxi
468-469



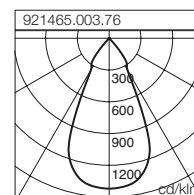
RALITE® HIGHBAY II

Highbay luminaires

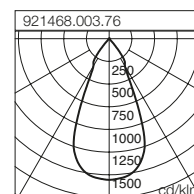
- State of the art pendant spot for highest technical requirements for indoor and outdoor use
- Advanced COB LED technology for maximum performance per luminaire top
- Individual components and LEDs are replaceable
- Luminous efficiency up to 128 lm/W
- 1:1 substitute for HME / HIE and HSE lamps
- Uses up to 72% less energy than conventional light sources
- "Self cleaning" heat sink: Vertical cooling ribs prevent dust deposits and ensure constant heat dissipation
- Non-reflecting, single pane safety glass (toughened glass) with minimal loss of transmission (less than 2%)
- Reflector made of MIRO-SILVER®

- 1 and 3 lamp versions with different power packages - for accurate and safe light planning
- Colour rendering index $Ra \geq 80$
- High degree of protection IP 66
- Ball impact protection in acc. with DIN 18032-03
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Simple to install thanks to 1-point suspension
- Converter in separate box, laterally swivel mounted to reduce total height
- Standard DALI design
- Superior design, for different applications from factory workshop to foyer
- Suitable for use in the food and drink industry

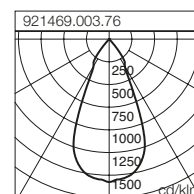
921465.003.76				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
6 m	11	32	52	
9 m	11	33	54	
12 m	12	34	56	
15 m	12	35	57	



921468.003.76				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
9 m	12	34	56	
12 m	12	36	60	
15 m	13	38	63	
18 m	14	41	68	



921469.003.76				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
12 m	4	12	19	
15 m	4	12	19	
18 m	4	12	20	
22 m	5	13	21	



Highbay luminaires | Series: Ralite® Highbay II

Type of Protection: **IP 66**

Protection Class: I

Impact Protection: IK07

Aluminium body with M8 eye bolt. Special black anodised aluminium cooling profile with calculated cooling fins for optimum heat dissipation. Passive cooling. Metal M12 cable screw fitting. Glass and reflector fitted in the spotlight top made of die cast aluminium. Reflector made of MIRO-SILVER®. Converter in separate ballast box. Driver housing can be mounted in a horizontally to reduce the pendant length of the system. Including anti-reflective safety glass. Suitable for chain or steel cable suspension (provided by the client).

Dimming range 10% to 100%. Optimum control with RZB light control +3.

Ball impact proof in accordance with DIN 18032-03.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 3 = black

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimming-able	EEC
Pendant projectors								
one lamp								
921462.003.76	D 150, H 829	LED	840	10000 lm	78 W	49°	21,3 DALI	A++ A++
921463.003.76	D 150, H 829	LED	840	12000 lm	97 W	49°	21,9 DALI	A++ A++
921464.003.76	D 150, H 829	LED	840	14500 lm	126 W	49°	22,6 DALI	A++ A++
921465.003.76 .Q	D 150, H 829	LED	840	16500 lm	154 W	49°	23,1 DALI	A++ A++
two lamps								
921466.003.76	L 327, B 150, H 939	LED	840	24300 lm	200 W	46°	21,5 DALI	A++ A++
921467.003.76	L 327, B 150, H 939	LED	840	28800 lm	253 W	46°	22,2 DALI	A++ A++
921468.003.76	L 327, B 150, H 939	LED	840	32700 lm	308 W	46°	22,6 DALI	A++ A++
three lamps								
921469.003.76	L 327, B 303, H 939	LED	840	49100 lm	468 W	46°	22,6 DALI	A++ A++



Comparison LED vs. conventional lamps

LED 78 W ≈

1 x 250 W HME (275 W CB)

LED 97 W ≈

1 x 250 W HIE (275 W CB)

LED 126 W ≈

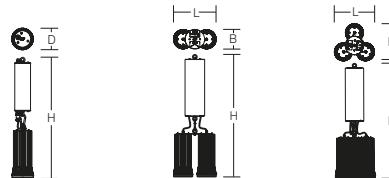
1 x 400 W HME (440 W CB)

LED 154 W ≈

1 x 400 W HIE (440 W CB)

LED 200 W ≈

1 x 400 W HIE (440 W CB)

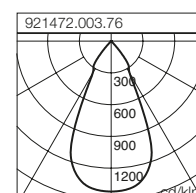
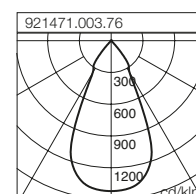
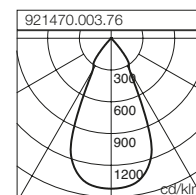




RALITE® HIGHBAY II HT (High Temperature)

Highbay luminaires

- State of the art pendant spot for highest technical requirements for indoor and outdoor use
- Advanced COB LED technology for maximum performance per luminaire top
- Individual components and LEDs are replaceable
- "Self cleaning" heat sink: Vertical cooling ribs prevent dust deposits and ensure constant heat dissipation
- Non-reflecting, single pane safety glass (toughened glass) with minimal loss of transmission (less than 2%)
- Reflector made of MIRO-SILVER®
- LED service life 50,000 h (L80/ B10) at ambient temperature of Ta 55°C
- 1 and 3 lamp versions with different power packages - for accurate and safe light planning
- Colour rendering index Ra $\geq$ 80
- High degree of protection IP 66
- Ball impact protection in acc. with DIN 18032-03
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Simple to install thanks to 1-point suspension
- Standard DALI design



Highbay luminaires | Series: Ralite® Highbay II HT (High Temperature)

Type of Protection: IP 66

Protection Class: I

Impact Protection: IK07

Aluminium body with M8 eye bolt. Special black anodised aluminium cooling profile with calculated cooling fins for optimum heat dissipation. Passive cooling. Metal M12 cable screw fitting. Glass and reflector fitted in the spotlight top made of die cast aluminium. Reflector made of MIRO-SILVER®. External converter in separate ballast box. Driver housing can be mounted in a horizontally to reduce the pendant length of the system. Including anti-reflective safety glass. Suitable for chain or steel cable suspension (provided by the client).

Dimming range 10% to 100%. Optimum control with RZB light control +3. Ball impact proof in accordance with DIN 18032-03.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

Up to 55°C ambient temperature.

LED included.

Available colour: 3 = black



Comparison LED vs. conventional lamps

LED 72 W ≈

1 x 150 W HIT (160 W CB)
1 x 250 W HME (275 W CB)

LED 144 W ≈

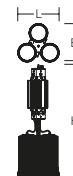
1 x 250 W HIE (275 W CB)
1 x 400 W HME (440 W CB)

LED 216 W ≈

1 x 400 W HIE (440 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmm-able	EEC
Pendant projectors								
one lamp								
921470.003.76	L 152, B 147, H 891	LED	840	8400 lm	72 W	49°	20,7 DALI	A++ A++
two lamps								
921471.003.76	L 327, B 147, H 894	LED	840	16800 lm	144 W	49°	20,6 DALI	A++ A++
three lamps								
921472.003.76	L 326, B 303, H 893	LED	840	23200 lm	216 W	49°	20,3 DALI	A++ A++

z. B. 921472.003.76 (L80, B10)		
Ambient temperature Ta	LED rated life luminaire unit	Luminaire flux
40 °C	100.000 h	24.000 lm
50 °C	75.000 h	23.500 lm
55 °C	50.000 h	23.200 lm



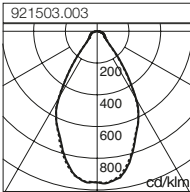


INDUSTRIAL HALL

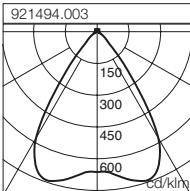
Highbay luminaires

- Compact and flat hall luminaire
- High ingress protection rating: IP 65
- 1:1 substitute for HME / HIE and HSE lamps
- Luminous efficiency up to 130 lm/W
- LED rated life 50,000 h (L70, B10)
- Glare limitation through accessories with reflectors ($UGR \leq 22$) and refractors ($UGR \leq 19,8$ up to 14,4)
- Non-reflecting, single pane safety glass (toughened glass)
- Passive cooling system
- Operating range: -20°C to $+40^{\circ}\text{C}$
- Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Energy savings of up to 70%
- Simple to install thanks to 1-point suspension
- Standard is either converter for on/off or DALI dimming
- DALI converter is compatible with DC, suitable for central emergency power supply purposes
- Suitable for use in the food and drink industry

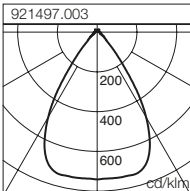
921503.003				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
6 m	25	74	123	
9 m	27	79	131	
12 m	28	84	140	
15 m	29	87	145	



921494.003				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
6 m	9	26	43	
9 m	9	27	45	
12 m	10	29	48	
15 m	10	30	50	



9211497.003				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
6 m	7	19	32	
9 m	7	20	34	
12 m	8	22	36	
15 m	8	22	37	



Highbay luminaires | Series: Industrial Hall Mini

Type of Protection: **IP 65**

Protection Class: I

LED Highbay luminaire for chain or cable suspension.

Housing: made of die-cast aluminium, powder coated black, with eye ring. Passive cooling. Cover clear single-pane tempered glass. Primary light control with high-performance wide-area LEDs in light colour 840 and 830. Standard version On/Off or DALI dimmable. Suitable for chain or steel cable suspension (provided by the client). Dimming range 10% to 100%.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dimmable	EEC
Commercial lighting								
Without lamp cover								
921498.003	D 249, H 190	LED	840	4300 lm	39 W	107°	31,6 on/off	A+ A+
921498.003.76	D 249, H 180	LED	840	4300 lm	39 W	107°	31,6 DALI	A+ A+
921499.003.1	D 249, H 190	LED	830	7500 lm	77 W	104°	33,6 on/off	A+ A+
921499.003	D 249, H 190	LED	840	7800 lm	77 W	104°	33,6 on/off	A+ A+
921499.003.76	D 249, H 180	LED	840	7800 lm	77 W	104°	33,6 DALI	A+ A+
Reflector: aluminium								
921500.003	D 249, H 259	LED	840	3850 lm	39 W	93°	24,3 on/off	A+ A+
921500.003.76	D 249, H 249	LED	840	3850 lm	39 W	93°	24,3 DALI	A+ A+
921501.003.1	D 249, H 259	LED	830	6950 lm	77 W	93°	26,6 on/off	A+ A+
921501.003	D 249, H 259	LED	840	7100 lm	77 W	93°	26,6 on/off	A+ A+
921501.003.76	D 249, H 249	LED	840	7100 lm	77 W	93°	26,6 DALI	A+ A+
Refractor: PMMA, transparent								
921502.003	D 315, H 379	LED	840	4100 lm	39 W	61°	16,2 on/off	A+ A+
921502.003.76	D 315, H 369	LED	840	4100 lm	39 W	61°	16,2 DALI	A+ A+
921503.003.1	D 315, H 379	LED	830	7200 lm	77 W	61°	18,2 on/off	A+ A+
921503.003	D 315, H 379	LED	840	7450 lm	77 W	61°	18,2 on/off	A+ A+
921503.003.76	D 315, H 369	LED	840	7450 lm	77 W	61°	18,2 DALI	A+ A+

Accessories | Ceiling and wall mounting bracket

Wall and ceiling mounting bracket made of black metal (wall installation: open beam and with reflector)

Ceiling and wall mounting bracket								
982265.003	L 253, B 90, H 157							Price Category 21

Reflector: aluminium								
982266.004	D 180, H 70		93°					Price Category 21

Refractor: plastic								
982267.000	D 315, H 188		61°					Price Category 21

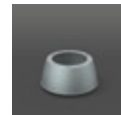


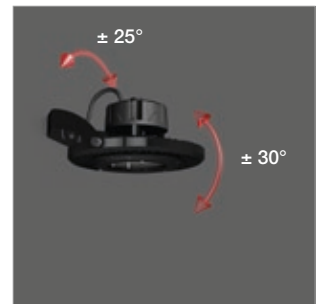
Fig. without cover



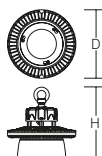
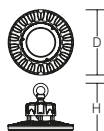
Fig. with reflector



Fig. with refractor (DALI)



Wall and ceiling mounting bracket





Comparison LED vs. conventional lamps

LED 97 W ≈

1 x 150 W HIE (170 W CB)
1 x 250 W HME (275 W CB)

LED 139 W ≈

1 x 250 W HIE (275 W CB)
1 x 400 W HME (440 W CB)

LED 202 W ≈

1 x 400 W HIE (440 W CB)

Highbay luminaires | Series: Industrial Hall Midi

Type of Protection: **IP 65**

Protection Class: I

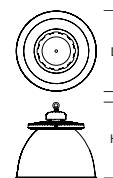
LED Highbay luminaire for chain or cable suspension.

Housing: made of die-cast aluminium, powder coated black, with eye ring. Passive cooling. Cover clear single-pane tempered glass. Primary light control with high-performance wide-area LEDs in light colour 840. Standard version On/Off or DALI dimmable. Suited for chain or steel cable suspension (provided by the client). Dimming range 10% to 100%.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dim-able	EEC
Commercial lighting									Price Category 21
Without lamp cover									
921483.003 .Q	D 390, H 199	LED	840	12900 lm	97 W	113°	32,2	on/off	A+ A+
921483.003.76	D 390, H 149	LED	840	12900 lm	97 W	113°	32,2	DALI	A+ A+
921484.003 .Q	D 390, H 199	LED	840	18100 lm	139 W	110°	33,4	on/off	A+ A+
921484.003.76	D 390, H 149	LED	840	18100 lm	139 W	110°	33,4	DALI	A+ A+
921485.003 .Q	D 390, H 199	LED	840	26900 lm	202 W	112°	34,7	on/off	A+ A+
921485.003.76	D 390, H 149	LED	840	26900 lm	202 W	112°	34,7	DALI	A+ A+
Reflector: aluminium									
921486.003 .Q	D 390, H 349	LED	840	11200 lm	97 W	86°	23,4	on/off	A+ A+
921486.003.76	D 390, H 299	LED	840	11200 lm	97 W	86°	23,4	DALI	A+ A+
921487.003 .Q	D 390, H 349	LED	840	15800 lm	139 W	87°	24,8	on/off	A+ A+
921487.003.76 .Q	D 390, H 299	LED	840	15800 lm	139 W	87°	24,8	DALI	A+ A+
921488.003 .Q	D 390, H 349	LED	840	23500 lm	202 W	87°	26,0	on/off	A+ A+
921488.003.76 .Q	D 390, H 299	LED	840	23500 lm	202 W	87°	26,0	DALI	A+ A+
Refractor: PMMA, transparent									
921492.003 .Q	D 570, H 533	LED	840	10900 lm	97 W	69°	12,5	on/off	A+ A+
921492.003.76	D 570, H 483	LED	840	10900 lm	97 W	69°	12,5	DALI	A+ A+
921493.003 .Q	D 570, H 533	LED	840	15300 lm	139 W	70°	13,9	on/off	A+ A+
921493.003.76 .Q	D 570, H 483	LED	840	15300 lm	139 W	70°	13,9	DALI	A+ A+
921494.003 .Q	D 570, H 533	LED	840	22200 lm	202 W	69°	15,1	on/off	A+ A+
921494.003.76 .Q	D 570, H 483	LED	840	22200 lm	202 W	69°	15,1	DALI	A+ A+

Accessories | Ceiling and wall mounting bracket

Wall and ceiling mounting bracket made of black metal (wall installation: open beam and with reflector)

Ceiling and wall mounting bracket

982112.003 L 394, B 124, H 232

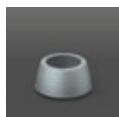
Price Category 21



Reflector: aluminium

982114.004 D 327, H 150 90°

Price Category 21



Refractor: plastic

982115.000 D 570, H 343 70°

Price Category 21



Fig. with refractor (DALI)

Highbay luminaires | Series: Industrial Hall Maxi

Type of Protection: **IP 65**

Protection Class: I

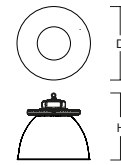
LED Highbay luminaire for chain or cable suspension.

Housing: made of die-cast aluminium, powder coated black, with eye ring. Passive cooling. Cover clear single-pane tempered glass. Primary light control with high-performance wide-area LEDs in light colour 840 and 850. Standard version On/Off or DALI dimmable. Suitable for chain or steel cable suspension (provided by the client). Dimming range 10% to 100%.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 3 = black



Comparison LED vs. conventional lamps

LED 251 W ≈
1 x 400 W HIE (440 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	UGR	dimmable	EEC
Commercial lighting									
Without lamp cover									
921495.003	D 430, H 205	LED	840	31200 lm	251 W	111°	33,9	on/off	A+ A+
921495.003.76	D 430, H 205	LED	840	31200 lm	251 W	111°	33,9	DALI	A+ A+
921495.003.2.76	D 430, H 205	LED	850	32200 lm	251 W	111°	33,9	DALI	A+ A+
Reflector: aluminium									
921496.003	D 430, H 399	LED	840	27600 lm	251 W	85°	24,2	on/off	A+ A+
921496.003.76	D 430, H 399	LED	840	27600 lm	251 W	85°	24,2	DALI	A+ A+
921496.003.2.76	D 430, H 399	LED	850	28400 lm	251 W	85°	24,2	DALI	A+ A+
Refractor: PMMA, transparent									
921497.003	D 570, H 547	LED	840	29700 lm	251 W	67°	16,8	on/off	A+ A+
921497.003.76	D 570, H 547	LED	840	29700 lm	251 W	67°	16,8	DALI	A+ A+
921497.003.2.76	D 570, H 547	LED	850	30600 lm	251 W	67°	16,8	DALI	A+ A+

Accessories | Ceiling and wall mounting bracket

Wall and ceiling mounting bracket made of black metal (wall installation: open beam and with reflector)

Ceiling and wall mounting bracket									
982337.003	L 122, B 434, H 229								Price Category 21

Reflector: aluminium									
982338.004	D 380, H 194	90°							Price Category 21

Refractor: plastic									
982115.010	D 570, H 343	70°							Price Category 21

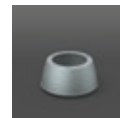


Fig. without cover



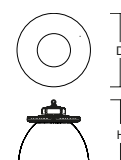
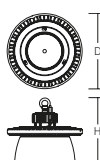
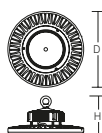
Fig. with reflector



Fig. with refractor (DALI)



Wall and ceiling mounting bracket



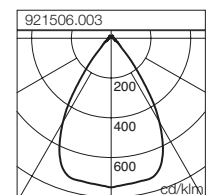


INDUSTRIAL HALL HT (High Temperature)

Highbay luminaires

- Compact and flat hall luminaire
- High ingress protection rating: IP 65
- LED service life 50,000 h (L70, B10) at ambient temperature of Ta 60°C
- LED service life 35,000 h (L70, B10) at ambient temperature of Ta 65°C
- Non-reflecting, single pane safety glass (toughened glass)
- Passive cooling system
- Operating range -10°C to +65°C
- ▼ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Simple to install thanks to 1-point suspension
- Suitable for use in the food and drink industry

921506.003				
Hall 50 x 30 m (0 m)				
Lph	100 lx	300 lx	500 lx	
6 m	11	31	52	
9 m	11	33	55	
12 m	12	35	59	
15 m	13	37	61	



Highbay luminaires | Series: Industrial Hall Maxi HT (High Temperature)

Type of Protection: **IP 65**

Protection Class: I

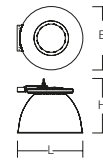
LED Highbay luminaire for chain or cable suspension.

Housing: made of die-cast aluminium, powder coated black, with eye ring. Passive cooling. Cover clear single-pane tempered glass. Primary light control with high-performance wide-area LEDs in light colour 840. Standard version On/Off or DALI dimmable. Suitable for chain or steel cable suspension (provided by the client). Dimming range 10% to 100%.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 3 = black



Comparison LED vs. conventional lamps

LED 148 W ≈
1 x 250 W HIE (275 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC	
Commercial lighting									Price Category 21
Without lamp cover									
921504.003	L 520, B 428, H 76	LED	840	18900 lm	148 W	110°	32,0	on/off	A+ A+
Reflector: aluminium									
921505.003	L 520, B 428, H 334	LED	840	16700 lm	148 W	85°	22,5	on/off	A+ A+
Refractor: PMMA, transparent									
921506.003	D 570, H 415	LED	840	18000 lm	148 W	67°	15,3	on/off	A+ A+
Reflector: aluminium									Price Category 21
982338.004	D 380, H 194	90°							
Refractor: plastic									Price Category 21
982115.010	D 570, H 343	70°							

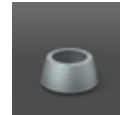


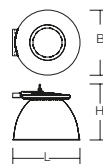
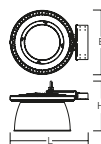
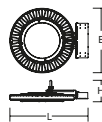
Fig. without cover



Fig. with reflector



Fig. with refractor









The application image shows:
Pascala® LED
light control +³ Professional

Hohenloher



smart+free

474-477

475



Control gear

478-479

479



487



487

light control +³ Economy

486-489



491

light control +³ Ambiente

490-491



493



498

light control +³ Professional

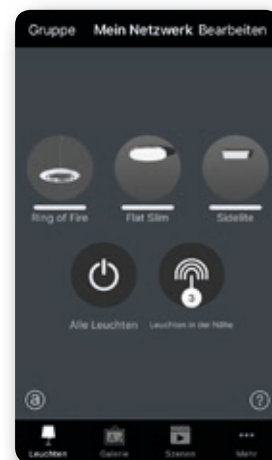
492-499



SMART+FREE

Light management

- 3-wire cable sufficient, without additional control wire
- Wireless networking with Bluetooth Low Energy
- Operation using standard pushbuttons, smartphones and tablet
- Control possible using Android / iOS devices
- Free App available for download
- Light and movement sensors can be integrated
- Tunable white and RGB applications can be implemented
- Thanks to its small size it is ideal for luminaire installation



Light management | Series: smart+free

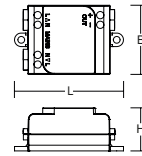
Type of Protection: IP 20
Protection Class: II

Bluetooth control module for the wireless networking and operation of DALI luminaires. Control possible using Android / iOS device. Free app available for download. A wireless network with up to 127 control modules is set up. Thanks to its small size it is ideal for luminaire installation. Housing: plastic.

Available colour: 2 = white

Reference
number

Dimensions


Bluetooth control module

Price Category 21

982378.002 .Q	L 57, B 36, H 22	1 DALI converter can be connected
982378.012	L 57, B 36, H 22	1 RGB DALI DT6 converter can be connected
982378.022	L 57, B 36, H 22	1 RGBW DALI DT6 converter can be connected
982378.032 .Q	L 57, B 36, H 22	1 tunable white DALI DT8 converter can be connected

Accessories | Installation box

Housing plastic. Installation box including terminals and strain relief.

Installation box

Price Category 21

982391.009	L 85, B 85, H 51	For a smart+free DALI control module 982378.002/.012/.022/.032
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Light management | Series: smart+free

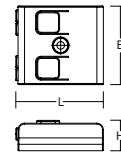
Type of Protection: IP 20
Protection Class: II

Bluetooth control module for the wireless networking and operation of switchable luminaires or luminaires that can be dimmed using conventional trailing edge dimmers. Control possible using Android / iOS device. Free app available for download. A wireless network with up to 127 control modules is set up. Thanks to its small size it is ideal for luminaire installation. Housing: plastic.

Available colour: 2 = white

Reference
number

Dimensions


Bluetooth control module

Price Category 21

982377.002 .Q	L 40, B 36, H 14	1 switchable converter or converter dimmable using conventional trailing edge dimmer can be connected
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Accessories | Installation box

Housing plastic. Installation box including terminals and strain relief.

Installation box

Price Category 21

982390.009	L 85, B 85, H 51	For a smart+free switchable control module or control module that can be dimmed using a conventional trailing edge dimmer 982377.002
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Accessories | Series: Interface for local switch

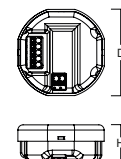
Type of Protection: IP 20
Protection Class: II

Smart+free Bluetooth button coupler for the wireless operation of luminaires. Conventional pushbutton can be connected on site. Installation in flush-type boxes. Housing: plastic.

Available colour: 2 = white

Reference
number

Dimensions


Interface for local switch

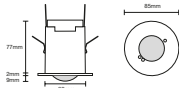
Price Category 21

982379.002 .Q	D 53, H 21	Up to 4 pushbuttons provided by the customer can be connected
982378.042 .Q	L 57, B 36, H 22	1 pushbutton provided by the customer can be connected



Accessories | Light and presence sensor

Type of Protection: IP 20
Protection Class: II
Smart-free Bluetooth sensor for wireless control of luminaires. Intelligent presence control and brightness sensors. Housing: plastic.
Available colour: 2 = white



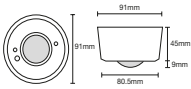
Reference number	Dimensions
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Light and presence sensor (for recessed installation)	Price Category 21
982451.002	D 85, H 11



Accessories | Light and presence sensor

Type of Protection: IP 20
Protection Class: II
Smart-free Bluetooth sensor for wireless control of luminaires. Intelligent presence control and brightness sensors. Housing: plastic.
Available colour: 2 = white



Reference number	Dimensions
------------------	------------

Light and presence sensor (Surface installation)	Price Category 21
982452.002	D 91, H 54

USING THE APP FOR THE FIRST TIME



- The Casambi app is easy to get up and running. Simply follow these steps:
1. Download the app from the Apple app store or Google Play.
 2. Switch on all the operated luminaires.
 3. Open the app.
 4. The app will automatically find all the operated luminaires that are switched on.
 5. Tap on “Add all luminaires to...” my network
 6. The app links all the luminaires to a network and automatically opens the “Luminaires” menu

Standard gestures

You can control your lighting using the following gestures on the app.

- Tap on the luminaire symbol to switch the luminaires on or off.
- Swipe horizontally over the luminaire symbol to adjust the brightness.
- Swipe vertically over the luminaire symbol to adjust the colour temperature.
- Hold the luminaire symbol down to select the light colour and save it to your colour palette.

SMART+FREE FUNCTIONS

Switching luminaires on and off

Bluetooth makes it convenient to switch your luminaires on and off.



Dimming lights

You can dim the appropriate luminaires by swiping horizontally. The setting can be saved and viewed at any time by clicking on it.



Luminaires and groups

If several luminaires often need to be switched on/off at the same time, you can create groups.



Gallery

Operate your luminaires from a photo. Simply take a photo of your room and mark the relevant luminaires in the picture to connect them to the app. Now you can also control your lights simply by clicking on the photo.



Scenes

Create a lighting scene for every occasion. Now you can select the right lighting for any occasion quickly and easily with just one tap.



Changing colour temperature

Adjust the colour temperature of your Tunable White luminaires by swiping vertically.



Changing colours

Colour settings for RGB and RGBW luminaires can easily be set using a colour wheel. The selected colour can of course also be saved.



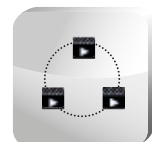
Timer

The timer gives you the option of switching a luminaire or an entire scene on or off at certain times and on certain days.



Animations

Here you can create and start the sequences you want from the various scenes.





CONTROL GEAR

Light management

- Controllers for DALI luminaires
- Control with pushbutton or rotary knob
- Controllers for tunable white luminaires with DALI device type 8 EB

Light management | Series: DALI rotary potentiometers

Type of Protection: IP 20
Protection Class: II

Housing: plastic. Digital potentiometer for switching and dimming up to 25 DALI converters (max. 50 DALI converters when operating two DALI rotary potentiometers in parallel, can be extended to max. 4 control points). Automatic synchronisation between the control points. Integrated DALI power supply which supplies the necessary DALI control current (= active mode) or power supply directly from the DALI control line (= passive mode). Broadcast mode (no DALI addressing required). Max. length of the DALI control cable 300 m (with 1.5 mm²). Screen and white knob included in the scope of delivery. Installation in flush-mounted socket.

Available colour: 2 = white

Reference number Dimensions

DALI rotary potentiometers
982253.002 L 80D 80, H 50



Price Category 21

Light management | Series: DALI rotary potentiometers Tunable White

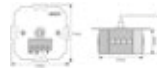
Type of Protection: IP 20
Protection Class: II

Housing: plastic. Digital potentiometer for switching or for manual adjustment of brightness and colour temperature of luminaires with a DALI device type 8 (IEC 62386-209) compatible EB for tunable white lighting. A maximum of up to 25 DALI converters (max. 50 DALI converters for the parallel operation of two DALI rotary potentiometers, expandable to max. 4 control points, it is important to make sure that the polarity of the DALI control cable is correct) can be connected. Automatic synchronisation between the control points. Integrated DALI power supply which supplies the necessary DALI control current (= active mode) or power supply directly from the DALI control line (= passive mode). Broadcast mode (no DALI addressing required). Max. length of the DALI control cable 300 m (with 1.5 mm²). Screen and white knob included in the scope of delivery. Installation in flush-mounted socket.

Available colour: 2 = white

Reference number Dimensions

DALI rotary potentiometer tunable white (TW)
982384.002 L 71, B 71, H 50



Price Category 21

Light management | Series: DALI push dimmer

Type of Protection: IP 20
Protection Class: II

For use with push buttons.

Housing: plastic. Digital push dimmer for switching and dimming up to 25 DALI converters (max. 50 DALI converters when operating two DALI push dimmers in parallel, can be extended to max. 4 control points). Automatic synchronisation between the control points. Integrated DALI power supply which supplies the necessary DALI control current (= active mode) or power supply directly from the DALI control line (= passive mode). Broadcast mode (no DALI addressing required). Max. length of the DALI control cable 300 m (with 1.5 mm²). Installation in flush-mounted socket.

Available colour: 2 = white

Reference number Dimensions

DALI push dimmer
982252.002 L 48, B 48, H 22



Price Category 21

Light management | DALI-Repeater

Type of Protection: IP 20
Protection Class: II

Housing: plastic. DALI controller and signal amplifier. Connection of up to 64 DALI EB in broadcast operation. Touch dim control. Enables DALI line to be extended in 300 m increments (for 1.5 mm²). Suitable for installation in the luminaire or external operation with recess housing (09-6448.000).

Available colour: 2 = white

Reference number Dimensions

Repeater-DALI
982254.002 L 189, B 30, H 21

Installation housing for DALI-Repeater
09-6448.000 L 261, B 71, H 27

Price Category 21

Price Category 21



light control ³

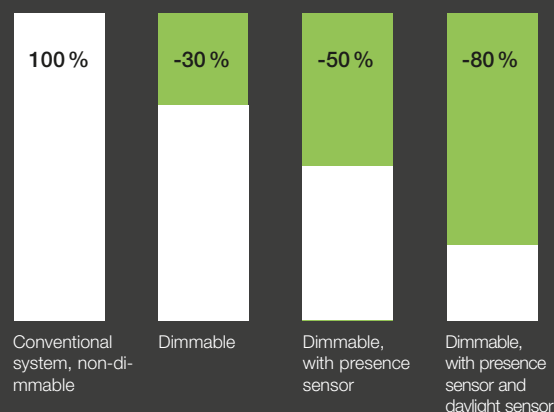
The Plug & Play light management system made by RZB

Light management systems are of the essence when it comes to a holistic approach to quality lighting design solutions.

Whether you are looking for an energy-saving daylight-dependent system or a light management system for lighting scenes or for dynamic RGB lighting, RZB's range of light management systems is so amazingly extensive that you're bound to find the ideal solution for your office, meeting room or store.

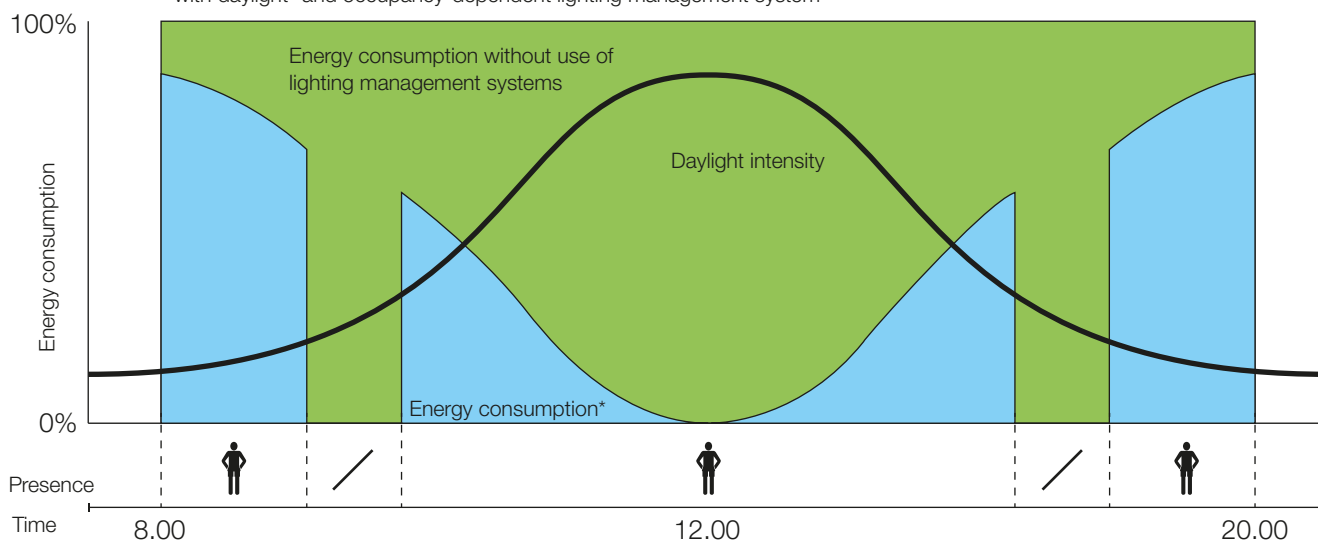
- ☒ Plug & Play
- ☒ Pre-wired system
- ☒ Quick and easy to install
- ☒ Complete system fully tested by manufacturer
- ☒ Energy savings of up to 80%

80%



Up to 80 % energy savings thanks to use of daylight- and occupancy-dependent light control

* with daylight- and occupancy-dependent lighting management system



ECONOMY

With energy prices soaring and environmental issues at the forefront of today's news, many of us are looking at ways in which we can reduce our energy consumption. In particular when it comes to high energy consuming applications, energy efficient lighting solutions are becoming more and more important.

Here at RZB, we offer:

- Light management systems for daylight-dependent and occupancy-dependent lighting

The light management system light control +³ Economy is suitable for a wide range of applications: The system is available in a DALI® version and as a switchable version. The light and presence sensors are available both for recessed and for surface-mounted ceiling installation. Application domains are, among others, office spaces, corridors, public conveniences or rec rooms.



AMBIENTE

Dynamic light grabs our attention and arouses our interest – with atmospheric colour changes and daylight simulation with white light.

Here at RZB, we offer:

- Light management systems for dynamic RGB lighting as well as warm-white and cool-white colour temperature control

Our light control +³ AMBIENTE lighting management system can be used for both static and dynamic lighting solutions. A single module allows for individual control of four output channels. The AMBIENTE system features an integrated sequence control for four separate sequences as well as 16 freely programmable lighting scenes. The system can easily be extended to a maximum of 16 control devices (64 channels) thanks to the reverse polarity protected plug-in system. Application domains are, among others, meeting/conference rooms, restaurants, bars or shops.



PROFESSIONAL

Rooms that are used by different people for different events and purposes need more than just adequate lighting – they need scene-based lighting.

Here at RZB, we offer:

- Light management systems for flexible management of lighting groups and lighting scenes
- Light management systems for circadian daylight simulation

Our PROFESSIONAL system is suitable for complex applications such as daylight-dependent lighting control, RGB- and dynamic light scenes.

The so-called circadian light imitates the circadian and circannual rhythms of natural light. The artificial light based on programmable dynamic daylight simulation, which is achieved by adjustment of illuminance levels and colour temperatures, has a positive effect on human beings.



APPLICATION DOMAINS		ECONOMY
		
General	Special	
	Product name	DALI
Industry	Warehouses	
	Production areas	
	Distribution centres	
	Laboratories	● ● ●
	Canteens	
	Garages	● ●
Office	Entrance halls	● ● ●
	Individual office rooms	● ● ●
	Grouped office rooms	● ●
	Open-plan offices	●
	Public conveniences	●
	Meeting/conference rooms	
	Corridors/stairs	● ● ●
	Kitchens/rec rooms	● ● ●
	Class-rooms	● ● ●
	Office corridors	
Shop	Signs	
	Windows	
	General lighting	
	Shelf lighting	
	Promotion stands	
	Accent lighting	
	Checkout area	
	Dressing rooms	● ●
	Refrigerators	
	Freezers	
	Warehouses	
Hotels & restaurants	Reception	● ● ●
	Hotel rooms	
	Meeting rooms	
	Corridors/stairs	● ● ●
	Garages	● ●
	Bars	
	Bistros	
	Restaurants	
	Public conveniences	●
	Wellness centres	
	Swimming pools	● ●
	Casinos	
	Façade lighting	
	Museums/art galleries	

	AMBIENTE	PROFESSIONAL	
MULTI DALI	EASY	CONTROL	CIRCADIAN
●		● ● ●	
● ●		● ● ●	●
		●	
●		● ●	
		● ● ●	
	● ●		
			● ● ●
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	●		
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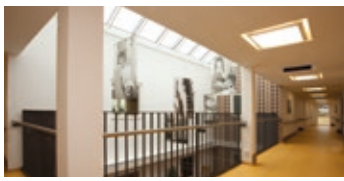
Legend: ● ● ● ideally suited ● ● very well suited ● well suited

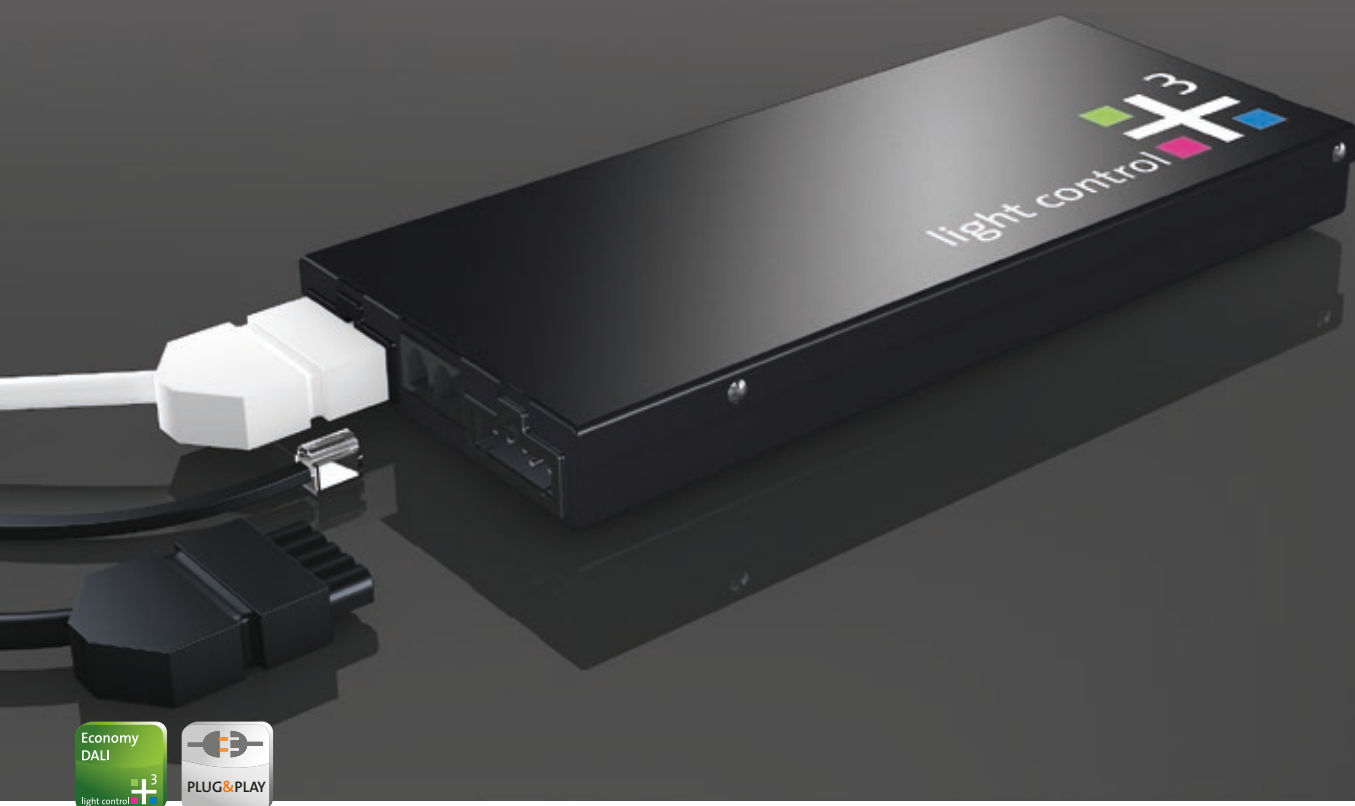
QUICK OVERVIEW

ECONOMY

	
Product name	DALI
Interface	DALI
Switchable	✓
Dimmable	✓
Movement / presence sensor	✓
Daylight sensor	✓
Number of luminaires (1 EB) *	6
Switchable power (resistive load)	1300 W
Number of sensors that can be connected	2
Touch Panel	–
Radio control (adressable via remote control)	–
Compliance with the MiNergie standard and the EU's ecodesign requirements	✓
Daylight simulation	–
RGB applications	–
Scenes (individual luminaire addressing)	–
Type of installation	universal
Dimensions	L 243, B 104, H 27
Reference number	981902.00XS1
For further information see	page 486

AMBIENTE
PROFESSIONAL

			
MULTI DALI	EASY	CONTROL 	CIRCADIAN
DALI	DALI	DALI	DALI
✓	✓	✓	✓
✓	✓	✓	–
✓	–	✓	–
✓	–	✓	–
32	32	256	32
–	–	–	–
4	–	50	–
–	✓	✓	✓
–	–	–	–
–	–	–	–
–	–	–	✓
–	✓	✓	–
–	–	✓	–
universal	universal	universal	universal
L 243, B 104, H 27	L 243, B 104, H 27	L 313, B 313, H 85	L 313, B 313, H 85
981903.00X1S1	981905.00X	981908.00X	981913.00X
page 488	page 490	page 492	page 498



LIGHT CONTROL +³ ECONOMY DALI

Light management

- Plug & Play
- Suitable for daylight-dependent control with presence function
- Energy savings up to 80% (compared to manual switching)
- Maximum power consumption in stand-by mode: 0.5 W
- Complies with Minergie and EU Ecodesign requirements
- 14 different operating modes via DIP switches for daylight- or presence-dependent switching
- 2 sensors can be connected (one sensor is included.)
- Suitable for up to 10 luminaires (1 x **EB DALI**®)

Light management | Series: light control +³ Economy DALI

Type of Protection: IP 20
Protection Class: I

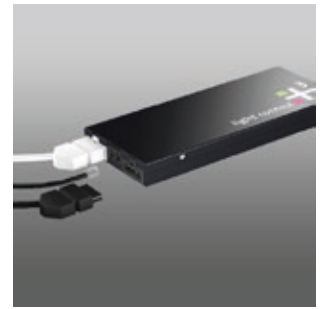
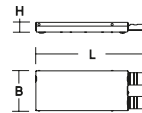
Light management system for daylight and presence-dependent lighting

Housing: metal, powder-coated; for universal mounting; ready to plug in (GST15 plug included).

Including light and presence sensor: housing plastic. Plug-in connector (RJ10) with 2 m connecting cable. Ceiling installation or ceiling mounting with accessories. Detection angle 80°.

Available colours (X): 2 = white, 3 = black

Reference number	Dimensions	Interface	Number of luminaires (EB)	Number of sensors that can be connected	Functions	Price Category 21
981902.00XS1	L 243, B 104, H 27	DALI	10	2	Switchable, Dimmable, Movement / presence sensor, Daylight sensor	



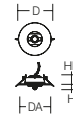
Accessories | Light and presence sensor for the Economy DALI system

Type of Protection: IP 20

Housing: plastic. Plug & Play. Ceiling installation sensor with moveable sensor head. Detection angle 80°. Daylight, movement and presence detection. Plug-in connector (RJ10) with cable length 10 cm. 2 m cable extension included in scope of supply. Ceiling surface-mounted with accessories, please order separately.

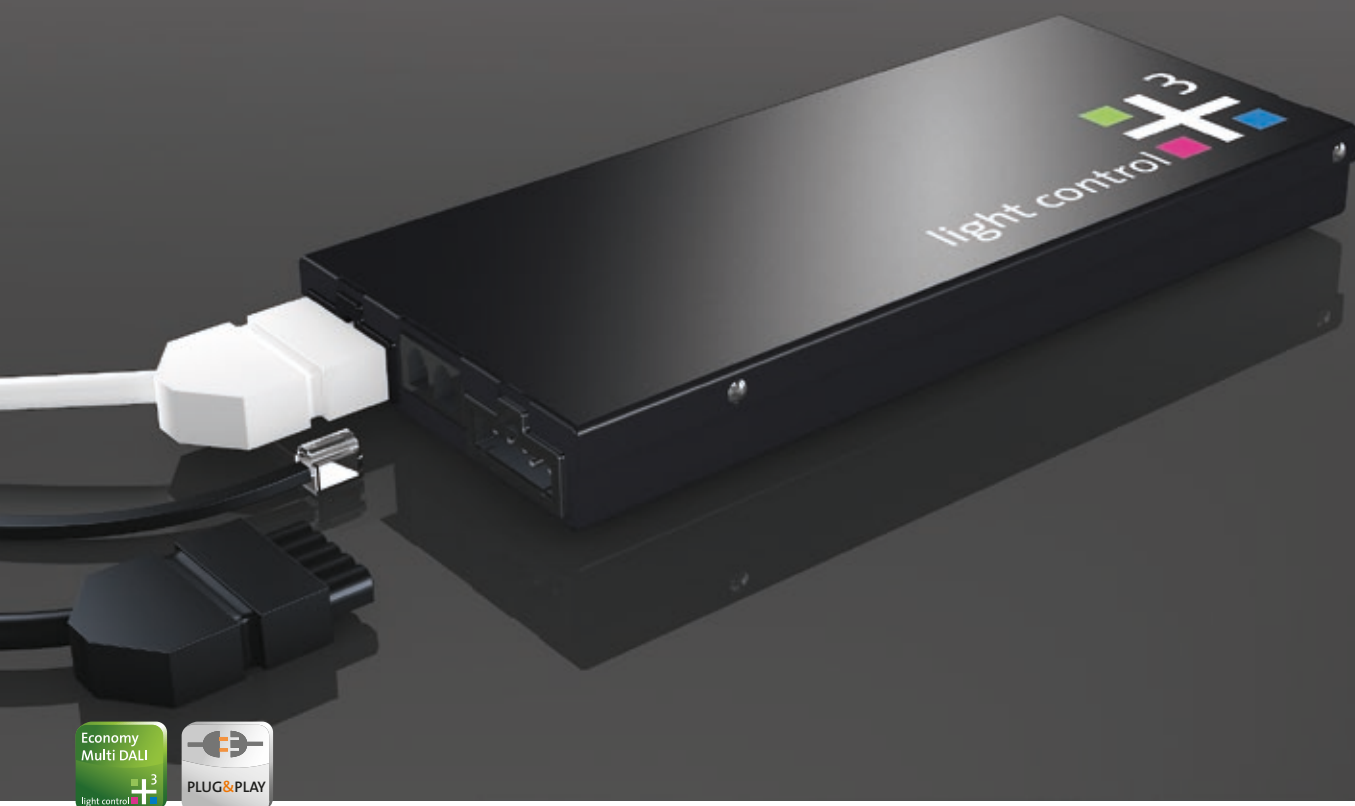
Available colour: 2 = white

Reference number	Dimensions		Price Category 21
Light and presence sensor (for recessed installation)			
09-6415.002	D 50, H 1		



Reference number	Dimensions	Housing: plastic, black	Price Category 21
09-6426.002	D 80, H 25		





LIGHT CONTROL +³ ECONOMY MULTI DALI

Light management

- Plug & Play
- Suitable for daylight-dependent control with presence function
- Energy savings up to 80% (compared to manual switching)
- Different operating modes (on request)
- 4 sensors can be connected (one sensor is included.)
- Suitable for up to 32 luminaires (1 x **EB DALI**®)

Light management | Series: light control +³ Economy MULTI DALI

Type of Protection: IP 20

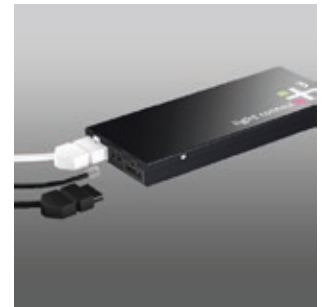
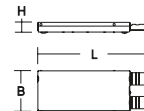
Protection Class: I

Light management system for daylight and presence-dependent lighting

Housing: metal, powder-coated; for universal mounting; ready to plug in (GST15 plug included).

Including light and presence sensor: housing plastic. Plug-in connector (RJ10) with 2 m connecting cable. Ceiling installation or ceiling mounting with accessories. Detection angle 80°.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Interface	Number of luminaires (EB)	Number of sensors that can be connected	Functions	Price Category 21
light control +³ Economy MULTI DALI						
981903.00X.1S1	L 243, B 104, H 27	DALI	32	4	Switchable, Dimmable, Movement / presence sensor, Daylight sensor	

Accessories | Light and presence sensor for Economy MULTI DALI system

Type of Protection: IP 20

Protection Class: II

Housing of non-flammable, halogen-free polycarbonate. Presence detection range adjustable via integrated shutters between 40° and 90°. Direct connection to DALI bus. Light sensor range: 20 to 800 lx (measured at the sensor). Function display with two-colour LED. Presence detection with passive IR element. Cable length 0.5 m. Installation height: 2-5 m. Ceiling installation or ceiling mounting with accessories. Modular design: Please order recessed or surface-mounted housing separately.

Available colour: 9 = grey



Reference number	Dimensions		Price Category 21
Light and presence sensor for installation heights of 2-5 m			
09-6598.009	L 48, B 15, H 17		

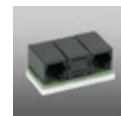
Reference number	Dimensions	Price Category 21
Support for light and presence sensor		
01-8613.002	D 80, H 37	



Reference number	Dimensions	Price Category 21
Surface mounted housing for light and presence sensor		
08-6093.002	L 65, B 65, H 34	



Reference number	Dimensions	Incl. 2 connecting cables (2.1 m)	Price Category 21
Y-Verteiler für Licht- und Präsenzsensoren			
09-6486.019	L 35, B 18, H 16		



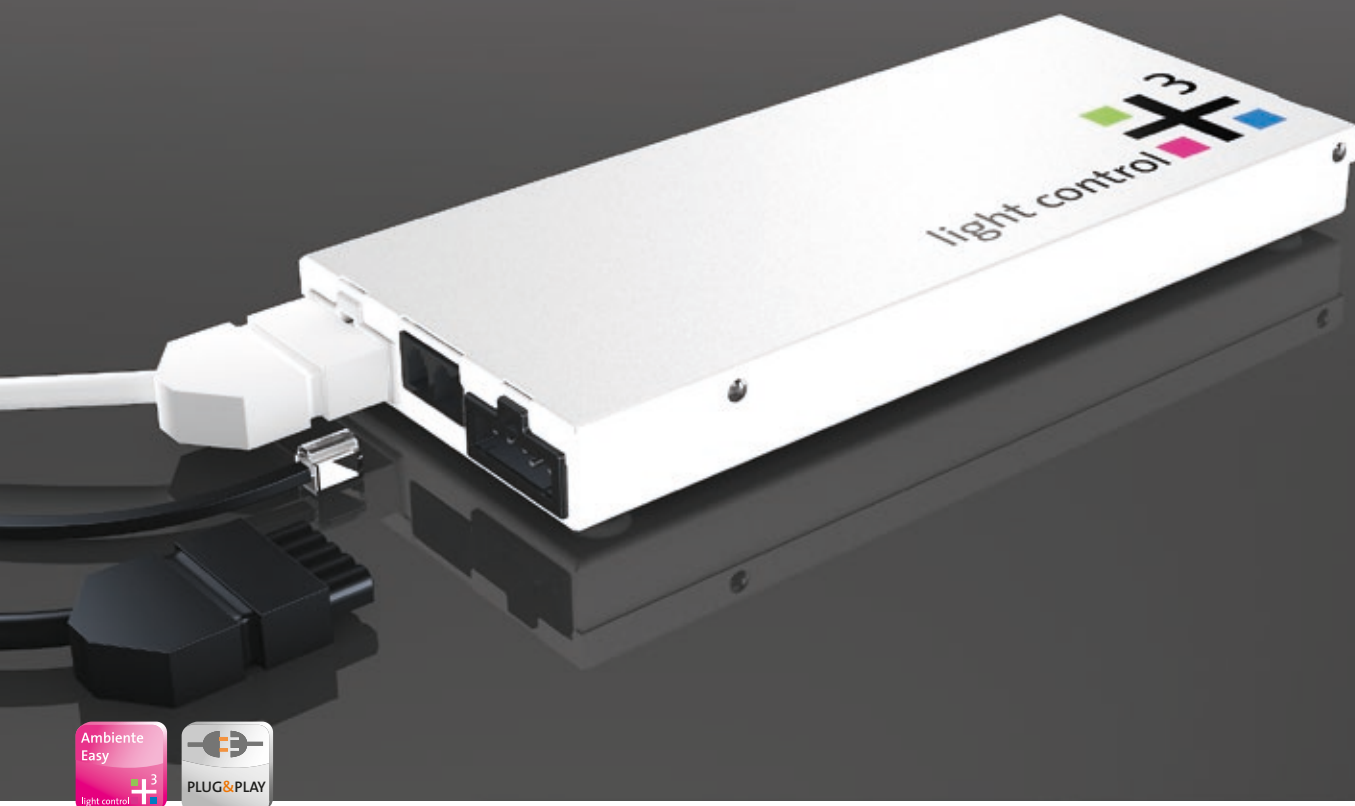
Accessories | DALI Economy remote control

Remote control for the configuration and startup of the MULTI DALI light control system.

Digital IR transmission. LEDs for displaying operating and programming mode and signal transmission. Incl. PC interface and USB cable. Power supplied by two type CR2032 button cells, included

Available colour: 3 = black

Reference number	Dimensions	Price Category 21
DALI Economy remote control		
982116.000	L 230, B 45, H 13	



LIGHT CONTROL +³ AMBIENTE EASY

Light management

- Plug & Play
- 4 DALI® broadcast outputs for up to 32 DALI® control gears for data transmission to all network subscribers of one line
- Integrated sequencer for up to 4 different sequences
- Up to 16 different lighting scenes can be configured with cross-fade times
- Up to 16 controllers can be synchronized via Y-connectors
- Plug & control function through default scenes and sequences
- Individually programmable

Light management | Series: light control +³ Ambiente EASY

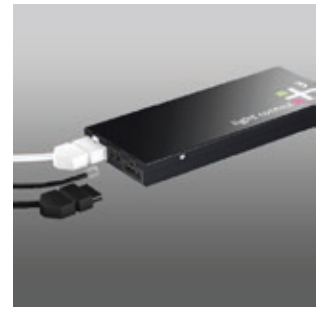
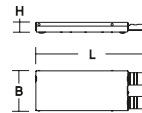
Type of Protection: IP 20
Protection Class: I

Light management system for dynamic RGB lighting as well as warm-white and cool-white colour temperature control

Housing: metal, powder-coated; for universal mounting; ready to plug in (GST15 plug included).

Control panel must be ordered separately.

Available colours (X): 2 = white, 3 = black

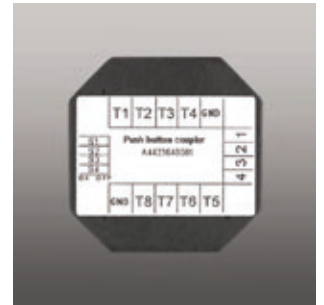
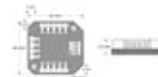


Reference number	Dimensions	Interface	Number of luminaires (EB)	Functions	Price Category 21
light control +³ Ambiente EASY					
981905.00X	L 243, B 104, H 27	DALI	32	Switchable, Dimmable, RGB applications	

Accessories | Interface for local switch

Up to 8 conventional buttons can be connected.

8 inputs for potential-free NO contacts, 25 m cable length on one input, max. 50 m total cable length over all inputs. Housing: plastic. Direct connection to EASY system. Power supply from EASY system (no separate power supply required). Installation in flush-mounted socket.



Reference number	Dimensions	Price Category 21
Interface for local switch		
982251.000	L 47, B 44, H 13	

Accessories | Radio package

Consisting of:

Radio receiver: Frequency band 868.3 MHz, connection to the EASY system by means of RJ10 cable (included in scope of delivery).

EASY remote control: Up to 8 channels, 8 light scenes and 4 sequences can be operated in a lighting installation, and brightness, light colour and colour temperature can be set, power supply via commercially available batteries, alternatively, an external power supply (DC 10-24 V) can be used attached in the supplied wall mount bracket.



Reference number	Dimensions	Price Category 21
Radio package		
981995.000	L 118, B 30, H 21	

Accessories | PC-Kit

Reference number

PC-Kit	Price Category 21
09-6459.000	software and connection cable

Service | Commissioning

The RZB light control +³ light management system must be commissioned on site by an RZB service technician.

Reference number

Commissioning
06566





LIGHT CONTROL +³ PROFESSIONAL CONTROL

Light management

- Plug & Play
- Daylight-dependent and event-driven control with presence function of all groups
- Control of up to 64 luminaires per DALI® circuit (1 x **EB DALI**®), 16 groups, 16 light scenarios
- 4 integrated, freely configurable floating relays in the controller
- ON/OFF switching
- Individual light value settings
- Several Professional CONTROL systems can be linked together (network)
- Smartphone and tablet operation possible (Android and IOS)
- Programmable via PC

Light management | Series: light control +³ Professional CONTROL

Type of Protection: IP 20
Protection Class: I

Lighting management system for flexible control of lighting groups and lighting scenarios

Housing: metal, powder-coated; for universal mounting; ready to plug in (GST15 plug included).

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Interface	Number of luminaires (EB)	Number of sensors that can be connected	Functions	Price Category 21
light control +³ Professional CONTROL						
981908.00X	L 313, B 313, H 85	DALI	256	50	Switchable, Dimmable, Movement / presence sensor, Daylight sensor, Scenes (individual luminaire/ballast addressing), RGB applications, Tunable White	

Accessories | Light and presence sensor

Housing of non-flammable, halogen-free polycarbonate. Direct connection to DALI bus. Presence detection range adjustable via integrated shutters between 40° and 90°. Presence detection with passive IR element. Light sensor range: 20 to 800 lx (measured at the sensor). Function display with two-colour LED. Installation height: 2-5 m. Ceiling installation or ceiling mounting with accessories.

Modular design: Please order recessed or surface-mounted housing separately.

Reference number

Dimensions

Light and presence sensor for installation heights of 2-5 m

Price Category 21

09-6599.009 L 48, B 15, H 17



Surface mounted housing for light and presence sensor

Price Category 21

08-6093.002 L 65, B 65, H 34



Support for light and presence sensor

Price Category 21

01-8613.002 D 80, H 37



Accessories | Series: Light sensor

Housing: plastic. Direct connection to DALI bus. Light control for installation heights of up to 13 m. Power supply through DALI line (no separate power supply required). System rating: 0.1 W.

Reference number

Dimensions

Light sensor for installation heights of up to 13 m

Price Category 21

981952.002 L 139, B 118, H 37



Accessories | Motion detector

Housing: plastic. Link to the Professional CONTROL system in connection with the light sensor 981952.002 or button coupler 09-6429.000. Power supply (120-277 V) required. System rating: 0.6 W. Detection angle 100°. Walking motion detection of persons: 3 to 10 m. Vehicle motion detector (e.g. fork lift): 3 to 13 m.

Reference number

Dimensions

Motion detector for installation heights of 3-13 m

Price Category 21

09-6422.002 D 116, H 39





Accessories | Interface for local switch

Housing: plastic. Installation in flush-mounted socket. Direct connection to DALI bus. Power supply through DALI line (no separate power supply required). 4 potential-free inputs. Conventional buttons can be connected.

Reference number	Dimensions	
Push-button coupler for connecting 4 buttons provided by customer		
09-6429.000	L 43, B 43, H 21	Price Category 21



Service | Commissioning

The RZB light control +³ light management system must be commissioned on site by an RZB service technician.

Reference number	
Commissioning	
06566	



HUMAN CENTRIC LIGHTING

Feel better, be more efficient.

During evolution humans have developed a complex system of internal timers, the so-called circadian system by the perception of light and dark, cold and warm, as well as by the change of seasons, with daylight being the natural timer for this rhythm.

Only a few years ago scientists discovered in the eye's retina those cells which are not required for seeing, but are setting our internal timer by suppressing or distributing the hormone melatonin. Now chronobiologists, lighting designers and architects have the chance to decisively improve our living conditions by using dynamic light.

FASCINATING

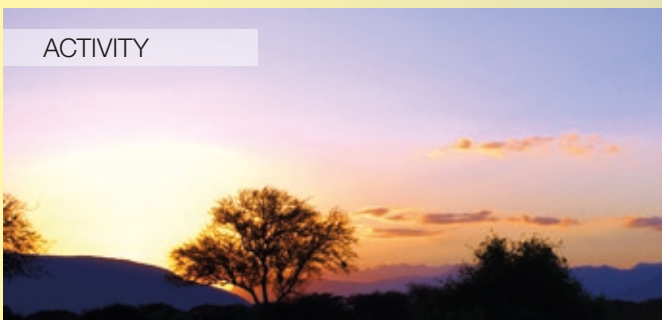
For investors, operators and users

Dynamic light which is biologically efficient is ...

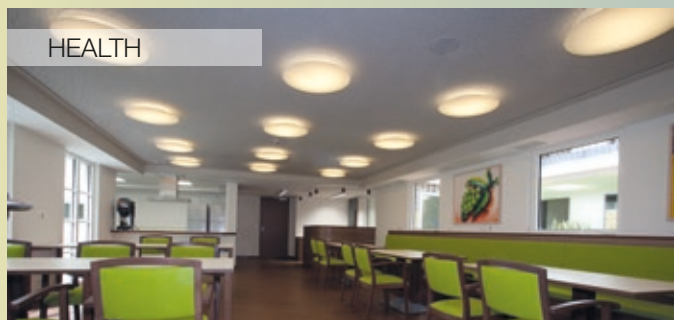
- strengthening the biological rhythm of human beings,
- increasing in educational institutions and workplaces the performance and ability of focusing,
- avoiding sleep disorder, stabilising patients in hospitals and nursing homes,
- creating a stimulating light to increase vitality and quality of life
- fostering well-being and good health



ACTIVITY



HEALTH



SKILLED

In increasing energy-efficiency and well-being thanks to RZB

Individual and tailor-made solutions: our team of experienced designers and engineers will be pleased to support you in your projects – right from the start.

RZB is a member of the research group for human centric lighting within the association of Lighting Europe and the ZVEI e.V. (registered association of electrical and electronic industry)



EVIDENT

To architects and lighting designers

Biologically efficient light can be achieved with suitable light fittings and an individual control system. Key parameters are lux level, light distribution, light direction, colour temperature and colour change.

RZB is offering suitable and attractive solutions with their series

- Econe®
- Parledo®
- Sidelite®
- Ring of Fire
- Toledo Flat

Appropriate recommendations for the design of biologically efficient lighting are listed in the new **DIN SPEC 67600:2013-04**.



Econe®



VITALITY



WELL-BEING





PROFESSIONAL CIRCADIAN

Light management

The so-called circadian light imitates the circadian and circannual rhythms of natural light. The artificial light based on programmable dynamic daylight simulation, which is achieved by adjustment of illuminance levels and colour temperatures, has a positive effect on human beings.

Numerous research studies have proved that the quality of life can be improved by circadian light; it helps employees to perform their work safely and efficiently, and students to concentrate for longer periods of time and assists with the processing of information to the brain. Circadian light promotes human health and well-being as well as healing processes.

- Plug & Play
- Circadian daylight simulation
- Individual lighting scenes (i.g. night lighting, active light) can be selected via up to 8 buttons (which need to be provided on site)
- Astro time switch clock
- ON/OFF switching
- Programmable via PC
- Luminaires with DALI EB can be connected
- Integrated button coupler for up to 4 buttons

Light management | Series: light control +³ Professional CIRCADIAN

Type of Protection: IP 20
Protection Class: I

Lighting management system for flexible control of lighting groups and lighting scenarios

Housing: metal, powder-coated; for universal mounting; ready to plug in (GST15 plug included).

Control panel must be ordered separately.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Interface	Number of luminaires (EB)	Functions	Price Category 21
light control + ³ Professional CIRCADIAN					
981913.00X	L 243, B 104, H 27	DALI	32	Switchable, Daylight simulation	

Service | Commissioning

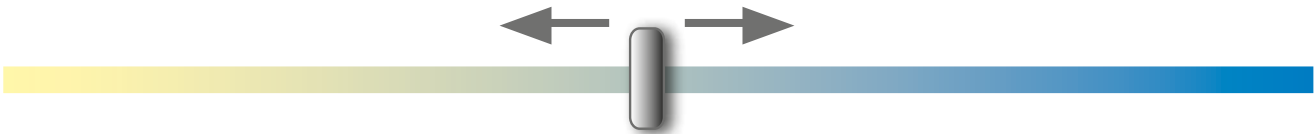
The RZB light control +³ light management system must be commissioned on site by an RZB service technician.



Reference number

Commissioning

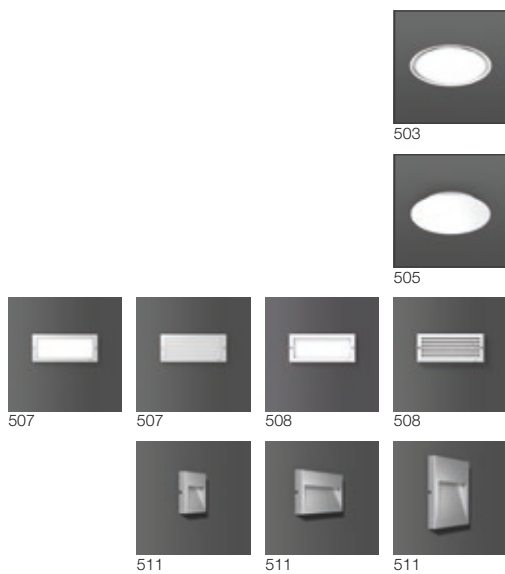
06566



The application image shows:
Econe®
light control +³
Less is more® 27



The application image shows:
Mondana®-E



Mondana®-E
502-503

Mondana®-HE
504-505

Brick® Steps
506-509

Brick® EVO
510-511

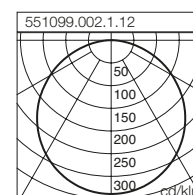


MONDANA®-E

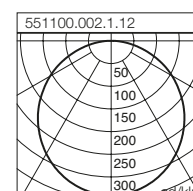
Recessed ceiling and wall luminaires

- Comprehensive range consisting of:
 - Ceiling and wall luminaires
 - Semi-recessed ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- For indoor and outdoor lighting
- The IP 65 type of protection provides excellent protection against rain and humidity and the luminaire is kept free from dirt and insects
- Integral membrane valve for ventilation against condensed water
- With mouth-blown, 3-layer opal glass satin finish or opal plastic (PE) diffuser
- For barrier-free architecture - flush with wall and ceiling

551099.002.1.12		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
6	9	12
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
9	13	21



551100.002.1.12		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	7
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	13



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

Recessed ceiling and wall luminaires | Series: Mondana®-E

Type of Protection: **IP 65**

Protection Class: I, II upon request

UGR: < 19

Ceiling Thickness: 10-30 mm

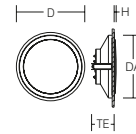
Impact Protection: IK03 (glass), IK10 (polyethylene)

Base: plastic (polycarbonate). Diffuser: mouth-blown opal glass, satin finish or plastic (polyethylene) opal, satin finish. Diffuser fastening: screwneck. Housing for recessed installation in walls and ceilings: aluminium, powder-coated.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Recessed ceiling and wall luminaires							
Glass: opal, satin finish							
Housing: D 352 mm, glass 280 mm, cut out DA 325 mm, TE 120 mm							
551086.002.1.12	D 352, H 2	LED ⁽¹⁾	830	510 lm	9 W	on/off	A+ A+
551086.002.12	D 352, H 2	LED ⁽¹⁾	840	520 lm	9 W	on/off	A+ A+
Diffuser: plastic							
Housing D 352 mm, diffuser 280 mm, cut out DA 325 mm, TE 120 mm							
551087.002.1.12	D 352, H 2	LED ⁽¹⁾	830	620 lm	9 W	on/off	A+ A+
551087.002.12	D 352, H 2	LED ⁽¹⁾	840	650 lm	9 W	on/off	A+ A+
Housing D 530 mm, diffuser 440 mm, cut out DA 505 mm, TE 120 mm							
551099.002.1.12	D 530, H 2	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
551099.002.1.76	D 530, H 2	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
551099.002.12	D 530, H 2	LED ⁽¹⁾	840	1150 lm	13,5 W	on/off	A+ A+
551099.002.76	D 530, H 2	LED ⁽¹⁾	840	1150 lm	13,5 W	DALI	A+ A+
Housing D 650 mm, diffuser 550 mm, cut out DA 625 mm, TE 140 mm							
551100.002.1.12	D 650, H 2	LED ⁽¹⁾	830	1900 lm	21 W	on/off	A+ A+
551100.002.1.76	D 650, H 2	LED ⁽¹⁾	830	1900 lm	21 W	DALI	A+ A+
551100.002.12	D 650, H 2	LED ⁽¹⁾	840	1900 lm	21 W	on/off	A+ A+
551100.002.76	D 650, H 2	LED ⁽¹⁾	840	1900 lm	21 W	DALI	A+ A+

Replacement glasses		Price Category 13
05-2008.002	D 280, H 88	

Replacement diffusers		Price Category 13
08-2036.002	D 280, H 88	Plastic (polyethylene)
08-2037.002	D 440, H 83	Plastic (polyethylene)
08-2038.002	D 550, H 114	Plastic (polyethylene)

Accessories | Concrete box

Supports for installation in concrete walls, ceilings and façades are available for all recessed and semi-recessed luminaires of the MONDANA series.

Concrete box		Price Category 11
981632.002	D 330, H 125	for Mondana-E 350
981633.002	D 510, H 125	for Mondana-E 530
981634.002	D 630, H 150	for Mondana-E 650

Comparison LED vs. conventional lamps

LED 9 W ≈

1 x 13 W TC-D (19 W CB)
1 x 75 W GLS (75 W)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)
2 x 75 W GLS (150 W)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)
2 x 100 W GLS (200 W)



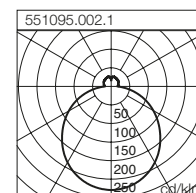


MONDANA®-HE

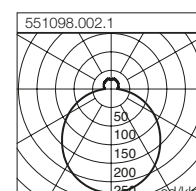
Semi-recessed ceiling and wall luminaires

- Comprehensive range consisting of:
 - Ceiling and wall luminaires
 - Semi-recessed ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- For indoor and outdoor lighting
- The IP 65 type of protection provides excellent protection against rain and humidity and the luminaire is kept free from dirt and insects
- Integral membrane valve for ventilation against condensed water
- With mouth-blown, 3-layer opal glass satin finish or opal plastic (PE) diffuser

551095.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
7	10	14
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
10	15	24



551098.002.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	9	14



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires

Semi-recessed ceiling and wall luminaires | Series: Mondana®-HE

 Type of Protection: **IP 65**

Protection Class: I, II upon request

UGR: < 19

Ceiling Thickness: 10-30 mm

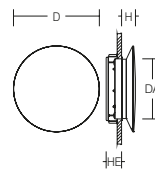
Impact Protection: IK03 (glass), IK10 (polyethylene)

Base: plastic (polycarbonate). Diffuser: mouth-blown opal glass, satin finish or plastic (polyethylene) opal, satin finish. Diffuser fastening: screwneck. Housing for semi-recessed installation in walls and ceilings: powder-coated aluminium.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Semi-recessed ceiling and wall luminaires							
Glass: opal, satin finish							
Price Category 11							
185 Diameter D 280 mm, cut out DA 185 mm, TE 90 mm							
551088.002.1	D 280, H 68	LED ⁽¹⁾	830	570 lm	9 W	on/off	A+ A+
551088.002	D 280, H 68	LED ⁽¹⁾	840	570 lm	9 W	on/off	A+ A+
310 Diameter D 390 mm, cut out DA 310 mm, TE 96 mm							
551095.002.1	D 390, H 57	LED ⁽¹⁾	830	1050 lm	13,5 W	on/off	A+ A+
551095.002.1.76	D 390, H 57	LED ⁽¹⁾	830	1050 lm	13,5 W	DALI	A+ A+
551095.002	D 390, H 57	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off	A+ A+
551095.002.76	D 390, H 57	LED ⁽¹⁾	840	1050 lm	13,5 W	DALI	A+ A+
390 Diameter D 500 mm, cut out DA 390 mm, TE 100 mm							
551098.002.1	D 500, H 78	LED ⁽¹⁾	830	1800 lm	21 W	on/off	A+ A+
551098.002.1.76	D 500, H 78	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+ A+
551098.002	D 500, H 78	LED ⁽¹⁾	840	1950 lm	21 W	on/off	A+ A+
551098.002.76	D 500, H 78	LED ⁽¹⁾	840	1950 lm	21 W	DALI	A+ A+
Diffuser: plastic							
185 Diameter D 280 mm, cut out DA 185 mm, TE 90 mm							
551089.002.1	D 280, H 70	LED ⁽¹⁾	830	650 lm	9 W	on/off	A+ A+
551089.002	D 280, H 70	LED ⁽¹⁾	840	690 lm	9 W	on/off	A+ A+
310 Diameter D 440 mm, cut out DA 310 mm, TE 96 mm							
551096.002.1	D 440, H 65	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off	A+ A+
551096.002.1.76	D 440, H 65	LED ⁽¹⁾	830	1250 lm	13,5 W	DALI	A+ A+
551096.002	D 440, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
551096.002.76	D 440, H 65	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
390 Diameter D 550 mm, cut out DA 390 mm, TE 100 mm							
551097.002.1	D 550, H 85	LED ⁽¹⁾	830	2200 lm	21 W	on/off	A+ A+
551097.002.1.76	D 550, H 85	LED ⁽¹⁾	830	2200 lm	21 W	DALI	A+ A+
551097.002	D 550, H 85	LED ⁽¹⁾	840	2150 lm	21 W	on/off	A+ A+
551097.002.76	D 550, H 85	LED ⁽¹⁾	840	2150 lm	21 W	DALI	A+ A+

Replacement glasses			Price Category 13
05-2008.002	D 280, H 88		
05-2009.002	D 390, H 83		
05-2010.002	D 500, H 109		

Replacement diffusers			Price Category 13
08-2036.002	D 280, H 88	Plastic (polyethylene)	
08-2037.002	D 440, H 83	Plastic (polyethylene)	
08-2038.002	D 550, H 114	Plastic (polyethylene)	

Accessories | Concrete box

Supports for installation in concrete walls, ceilings and façades are available for all recessed and semi-recessed luminaires of the MONDANA series.

Concrete box			Price Category 11
981629.002	D 190, H 65	for Mondana-HE 280	
981630.002	D 320, H 70	for Mondana-HE 390/440	
981631.002	D 395, H 75	for Mondana-HE 500/550	


**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

1 x 75 W GLS (75 W)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

2 x 75 W GLS (150 W)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)

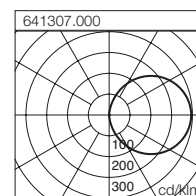
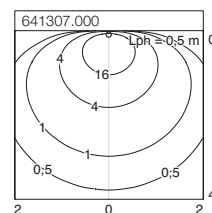
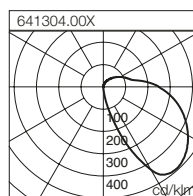
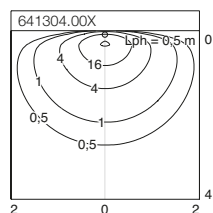
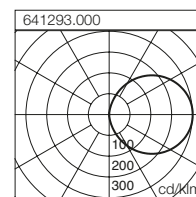
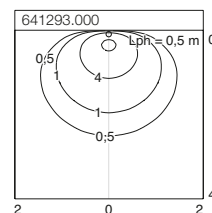
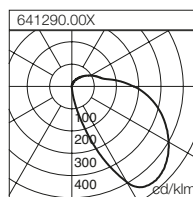
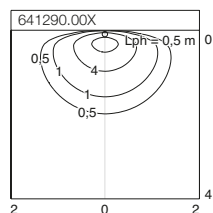
2 x 100 W GLS (200 W)



BRICK® STEPS

Recessed wall and step luminaires

- Recessed wall/stairway luminaires
- Housing of die-cast aluminium, suitable for direct installation. Usage of installation support is highly recommended
- Cover made of shock-resistant plastic (polycarbonate), opal
- Cover frame or louvre cover choice of stainless steel or powder-coated die-cast aluminium
- Selection of various luminous flux levels to prevent any glare. Choice of light colours
- DALI versions available



Recessed wall and step luminaires | Series: Brick® Steps

Type of Protection: **IP 66**

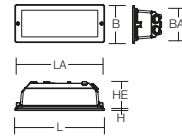
Protection Class: I

Impact Protection: IK08

Housing: die-cast aluminium, powder-coated. Shock resistant plastic (polycarbonate) cover, opal, with stainless steel frame. Integral driver. With second cable entry for loop through. **Recommended accessory: recessed support.**

LED included.

Available colour: 0 = stainless steel



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Recessed wall and step luminaires

Price Category 12

228
x
85
mm

cut out LA 228 x BA 85 mm, TE 70 mm

641293.000	L 236, B 100, H 5	LED	830	60 lm	2 W	on/off	A++ A++
641293.000.1	L 236, B 100, H 5	LED	840	60 lm	2 W	on/off	A++ A++
641307.000	L 236, B 100, H 5	LED	830	200 lm	6 W	on/off	A++ A++
641307.000.76	L 236, B 100, H 5	LED	830	200 lm	6 W	DALI	A++ A++
641307.000.1	L 236, B 100, H 5	LED	840	200 lm	6 W	on/off	A++ A++
641307.000.1.76	L 236, B 100, H 5	LED	840	200 lm	6 W	DALI	A++ A++
641316.000	L 236, B 100, H 5	LED	850	270 lm	10,9 W	on/off	A+ A+

Accessories | Installation housing for Brick® Steps luminaires

Recessed housing for cavity walls made of sendzimir galvanised steel, cutout LA 232 x BA 92 mm, max. wall thickness 20 mm.

Set for installation in cavity walls

Price Category 12

Cut out: LA 232 x BA 92 mm, TE 80, max. wall thickness 20 mm

90-2780	L 230, B 98, HE 76
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Recessed mounting box for concrete or brick walls

Price Category 12

64253.000	L 235, B 95, H 76, HE 76
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Comparison LED vs. conventional lamps

LED 2 W ≈

1 x 4 W T16 (6 W EB)
1 x 15 W GLS (15 W)

LED 6 W ≈

1 x 40 W GLS (40 W)
1 x 8 W T16 (11 W EB)

LED 10,9 W ≈

1 x 60 W GLS (60 W)



Recessed wall and step luminaires | Series: Brick® Steps

Type of Protection: **IP 66**

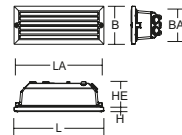
Protection Class: I

Impact Protection: IK10

Housing: die-cast aluminium, powder-coated. Shock resistant plastic (polycarbonate) cover, opal, with stainless steel lamella frame. Integral driver. With second cable entry for loop through. **Recommended accessory: recessed support.**

LED included.

Available colour: 0 = stainless steel



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
------------------	------------	------	--------------	----------------	--------------	----------	-----

Recessed wall and step luminaires

Price Category 12

228
x
85
mm

cut out LA 228 x BA 85 mm, TE 70 mm

641291.000	L 236, B 100, H 5	LED	830	40 lm	2 W	on/off	A++ A++
641291.000.1	L 236, B 100, H 5	LED	840	40 lm	2 W	on/off	A++ A++
641305.000	L 236, B 100, H 5	LED	830	120 lm	6 W	on/off	A++ A++
641305.000.76	L 236, B 100, H 5	LED	830	120 lm	6 W	DALI	A++ A++
641305.000.1	L 236, B 100, H 5	LED	840	120 lm	6 W	on/off	A++ A++
641305.000.1.76	L 236, B 100, H 5	LED	840	120 lm	6 W	DALI	A++ A++

Accessories | Installation housing for Brick® Steps luminaires

Recessed housing for cavity walls made of sendzimir galvanised steel, cutout LA 232 x BA 92 mm, max. wall thickness 20 mm.

Set for installation in cavity walls

Price Category 12

Cut out: LA 232 x BA 92 mm, TE 80, max. wall thickness 20 mm

90-2780	L 230, B 98, HE 76
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Recessed mounting box for concrete or brick walls

Price Category 12

64253.000	L 235, B 95, H 76, HE 76
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Comparison LED vs. conventional lamps

LED 2 W ≈

< 1 x 4 W T16 (6 W EB)
< 1 x 15 W GLS (15 W)

LED 6 W ≈

1 x 25 W GLS (25 W)
1 x 6 W T16 (8 W EB)





Recessed wall and step luminaires | Series: Brick® Steps

Type of Protection: **IP 66**

Protection Class: I

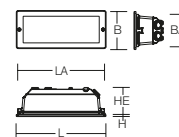
Impact Protection: IK08

Housing and frame: die-cast aluminium, powder-coated. Shock resistant plastic (polycarbonate) cover, opal. Integral driver. With second cable entry for loop through.

Recommended accessory: recessed support.

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic



Comparison LED vs. conventional lamps

LED 2 W ≈

1 x 4 W T16 (6 W EB)
1 x 15 W GLS (15 W)

LED 6 W ≈

1 x 40 W GLS (40 W)
1 x 8 W T16 (11 W EB)



Recessed wall and step luminaires

Price Category 12

cut out LA 228 x BA 85 mm, TE 70 mm

641292.00X	L 236, B 100, H 5	LED	830	60 lm	2 W	on/off	A++ A++
641292.00X.1	L 236, B 100, H 5	LED	840	60 lm	2 W	on/off	A++ A++
641306.00X	L 236, B 100, H 5	LED	830	210 lm	6 W	on/off	A++ A++
641306.00X.76	L 236, B 100, H 5	LED	830	210 lm	6 W	DALI	A++ A++
641306.00X.1	L 236, B 100, H 5	LED	840	210 lm	6 W	on/off	A++ A++
641306.00X.1.76	L 236, B 100, H 5	LED	840	210 lm	6 W	DALI	A++ A++

Accessories | Installation housing for Brick® Steps luminaires

Recessed housing for cavity walls made of sendzimir galvanised steel, cutout LA 232 x BA 92 mm, max. wall thickness 20 mm.

Set for installation in cavity walls

Price Category 12

Cut out: LA 232 x BA 92 mm, TE 80, max. wall thickness 20 mm

90-2780	L 230, B 98, HE 76
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Recessed mounting box for concrete or brick walls

Price Category 12

64253.000	L 235, B 95, H 76, HE 76
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Recessed wall and step luminaires | Series: Brick® Steps

Type of Protection: **IP 66**

Protection Class: I

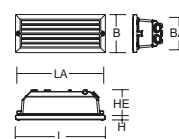
Impact Protection: IK10

Housing and louvers: die cast aluminium, powder coated. Shock resistant plastic (polycarbonate) cover, opal. Integral driver. With second cable entry for loop through.

Recommended accessory: recessed support.

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic



Comparison LED vs. conventional lamps

LED 2 W ≈

< 1 x 4 W T16 (6 W EB)
< 1 x 15 W GLS (15 W)

LED 6 W ≈

1 x 4 W T16 (6 W EB)
1 x 15 W GLS (15 W)



Recessed wall and step luminaires, anti-glare

Price Category 12

cut out LA 228 x BA 85 mm, TE 70 mm

641290.00X	L 236, B 100, H 5	LED	830	30 lm	2 W	on/off	A++ A++
641290.00X.1	L 236, B 100, H 5	LED	840	30 lm	2 W	on/off	A++ A++
641304.00X	L 236, B 100, H 5	LED	830	80 lm	6 W	on/off	A++ A++
641304.00X.76	L 236, B 100, H 5	LED	830	80 lm	6 W	DALI	A++ A++
641304.00X.1	L 236, B 100, H 5	LED	840	80 lm	6 W	on/off	A++ A++
641304.00X.1.76	L 236, B 100, H 5	LED	840	80 lm	6 W	DALI	A++ A++

Accessories | Installation housing for Brick® Steps luminaires

Recessed housing for cavity walls made of sendzimir galvanised steel, cutout LA 232 x BA 92 mm, max. wall thickness 20 mm.

Set for installation in cavity walls

Price Category 12

Cut out: LA 232 x BA 92 mm, TE 80, max. wall thickness 20 mm

90-2780	L 230, B 98, HE 76
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Recessed mounting box for concrete or brick walls

Price Category 12

64253.000	L 235, B 95, H 76, HE 76
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BRICK® EVO

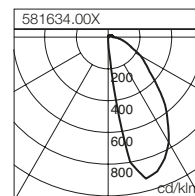
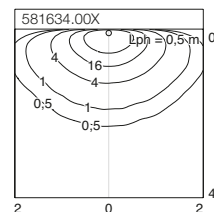
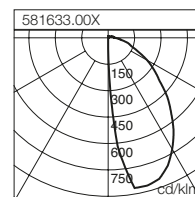
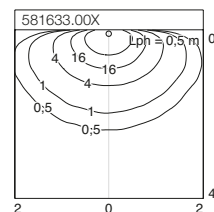
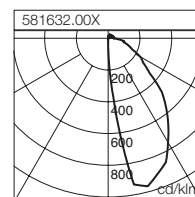
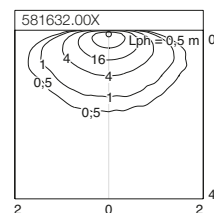
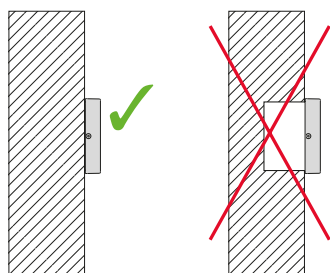
Wall luminaires

- Flat surface-mounted LED fitting for illumination of wall related areas such as stairs, ramps or corridors
- Only 24 mm depth, can be mounted directly over the cable outlet
- Choice of three models for ideal adaption to the surroundings

- Sturdy housing of non-corrosive pressure die-cast aluminium for outdoor application, powder coated with stainless steel screws
- Drill hole deviations can be compensated to achieve precise positioning

Brick® EVO

The revolutionary surface-mounted luminaire with recessed appearance



Wall luminaires | Series: Brick® EVO

Type of Protection: **IP 65**

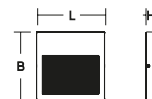
Protection Class: I

Impact Protection: IK09

Corrosion-resistant aluminium pressure die-cast housing, powder coated. With compensation for drill hole deviations. Integral driver. Toughened glass cover. With connecting terminal up to 1 x 3 x 1.5 mm², for max. 13 mm diameter mains cable.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Brick Evo Mini, asymmetrical light distribution							
581632.00X	L 120, B 120, H 24	LED	830	60 lm	4 W	on/off	A+ A+
581632.00X.1	L 120, B 120, H 24	LED	840	60 lm	4 W	on/off	A+ A+

Price Category 12

Comparison LED vs. conventional lamps

LED 4 W ≈

1 x 20 W QT12 (22 W CB)

Wall luminaires | Series: Brick® EVO

Type of Protection: **IP 65**

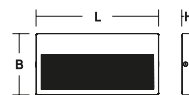
Protection Class: I

Impact Protection: IK09

Corrosion-resistant aluminium pressure die-cast housing, powder coated. With compensation for drill hole deviations. Integral driver. Toughened glass cover. With connecting terminal up to 1 x 3 x 1.5 mm², for max. 13 mm diameter mains cable.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Brick Evo Duo, asymmetrical light distribution							
581634.00X	L 240, B 120, H 24	LED	830	180 lm	10 W	on/off	A+ A+
581634.00X.1	L 240, B 120, H 24	LED	840	180 lm	10 W	on/off	A+ A+

Price Category 12

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 8 W T16 (11 W EB)

1 x 50 W QT12 (50 W)

Wall luminaires | Series: Brick® EVO

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK09

Corrosion-resistant aluminium pressure die-cast housing, powder coated. With compensation for drill hole deviations. Integral driver. Toughened glass cover. With connecting terminal up to 1 x 3 x 1.5 mm², for max. 13 mm diameter mains cable.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Brick Evo Midi, asymmetrical light distribution							
581633.00X	L 200, B 200, H 24	LED	830	190 lm	10 W	on/off	A+ A+
581633.00X.1	L 200, B 200, H 24	LED	840	190 lm	10 W	on/off	A+ A+

Price Category 12

Comparison LED vs. conventional lamps

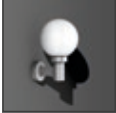
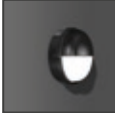
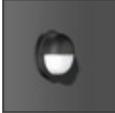
LED 10 W ≈

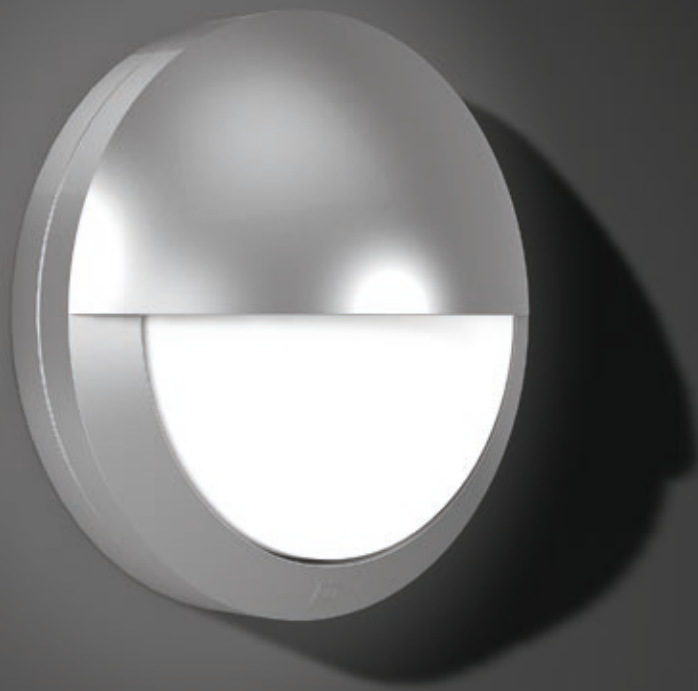
1 x 8 W T16 (11 W EB)

1 x 50 W QT12 (50 W)



The application image shows:
Cyl

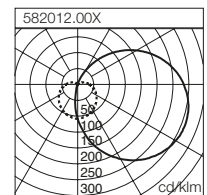
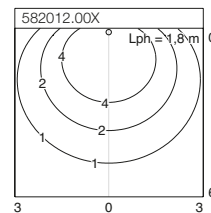
					Rounded® Midi 514-515
					Alu-Design 516-517
				517	
					Rounded® EVO 518-519
			519	519	
					Brick® EVO 520-521
			521	521	
					Zylinder Opal 522-523
			523	523	
					Kugel Opal 522, 524
			524	524	
					Trima 525
				525	
					Wallscaping 528-532
			Nadelspot 531	Cyl 531	
			Zono 532	Techno 532	
					Slopia® 533
				533	
					Alu-Superior 534-535
			535	535	
					Alu-Rund Alu-Lux oval 536-537
			536	537	
					Wall Head 538
			538	538	
					Rechteck 539
				539	



ROUNDED® MIDI

Wall luminaires

- LED: Smart and cost-saving LED modules for mains voltage on high LED-efficiency level applied for energy saving operation
- Elegant appearance without visible screw featuring bayonet lock and safety catch.
- Longevity by use of corrosion-resistant aluminium alloy, glass or PC diffuser
- Seawater resistant coating
- Light colour 840: A cool white light source is used for brilliant appearance of the opal diffuser
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Drill-hole tolerance-adjustment via perpendicular fixing slots possible.
- The flat circular shape can be applied everywhere. Selection of 8 variants provides high degree of design-freedom.
- Further options:
 - House number luminaire with integral daylight sensor
 - Emergency version for escape route lighting with central battery supply



Further luminaires of this series, see:
Outdoor lighting | Ceiling and wall luminaires

Wall luminaires | Series: Rounded® Midi

Type of Protection: IP 65

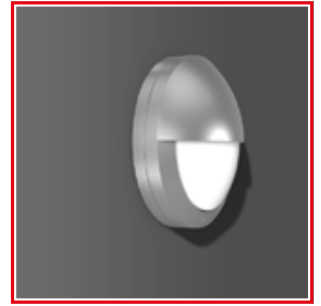
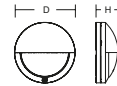
Protection Class: I

Impact Protection: IK07 (Glass), IK10 (polycarbonate)

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Visor with opal glass or plastic (polycarbonate) spherical cap diffuser retained in cover ring, screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

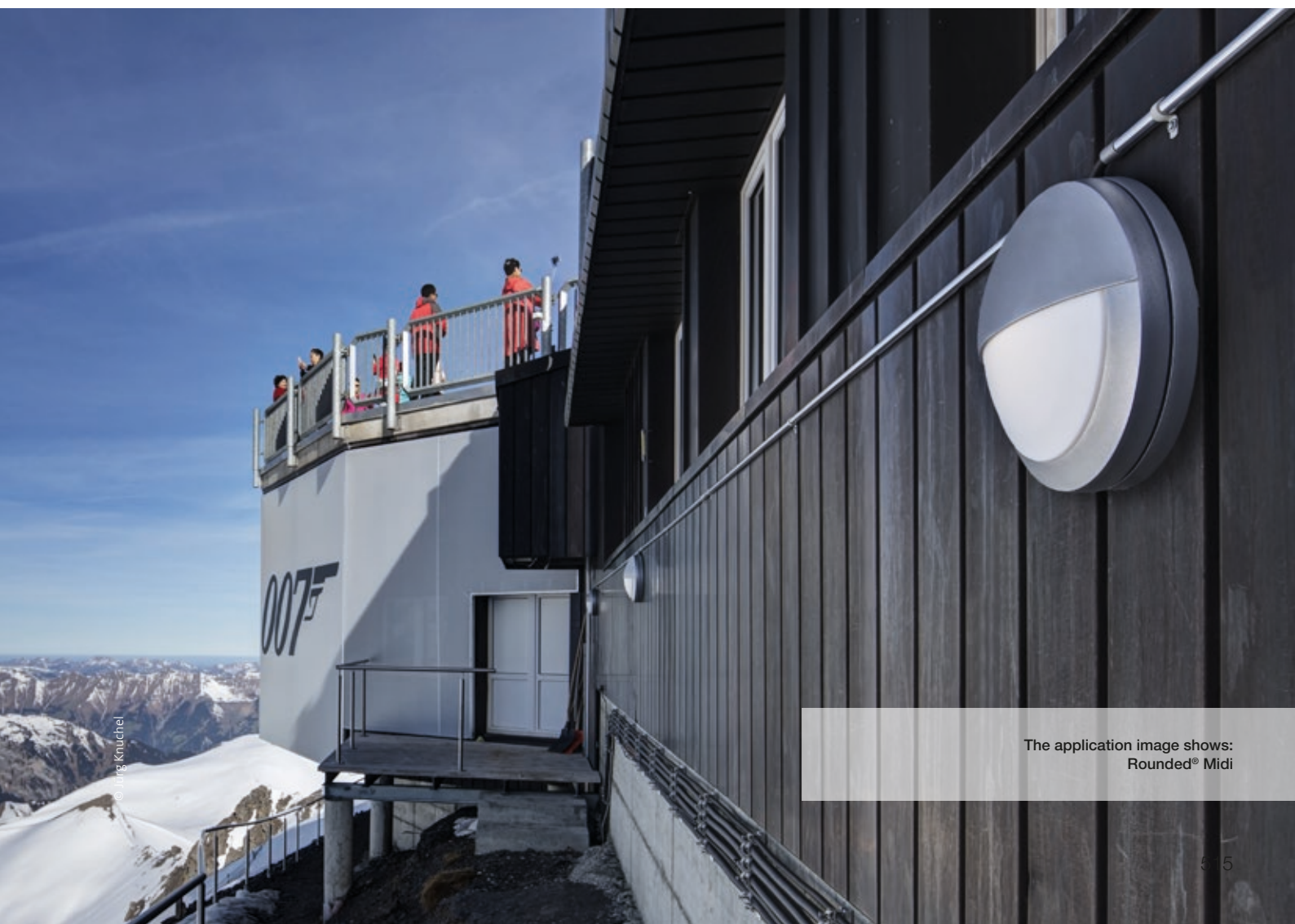


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Wall luminaires with visor							
Glass							
582012.00X	D 268, H 96	LED	840	290 lm	10 W	on/off	A+ A+
582010.00X	D 268, H 96	1 x QA60 (clear)	57 W			on/off	A, C, E A+
Plastic (polycarbonate)							
582013.00X	D 268, H 96	LED	840	560 lm	10 W	on/off	A+ A+
582011.00X	D 268, H 96	1 x QA60 (clear)	57 W			on/off	A, C, E A+
Replacement diffusers							
08-581019.012	D 226, H 60	Plastic (polycarbonate)					
Replacement glasses							
05-581023.002	D 226, H 60						

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 10 W TC-D (16 W CB)
1 x 18 W TC-D (26 W CB)



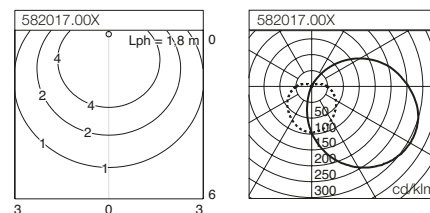
The application image shows:
Rounded® Midi



ALU-DESIGN

Wall luminaires

- Elegant appearance without visible screw featuring bayonet lock and safety catch.
- Longevity by use of corrosion-resistant aluminium alloy, glass or PC diffuser
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Drill-hole tolerance-adjustment via perpendicular fixing slots possible.
- Second cable inlet for loop through



Further luminaires of this series, see:
Outdoor lighting | Ceiling and wall luminaires

Wall luminaires | Series: Alu-Design

 Type of Protection: **IP 65**

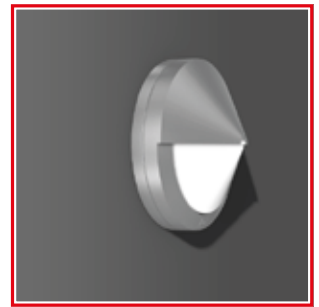
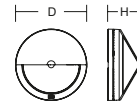
Protection Class: I

Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Opal glass cone diffuser retained in cover ring, screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Wall luminaires with visor								
582017.00X	D 268, H 120	LED ⁽¹⁾	830	310 lm	10 W	on/off	A+ A+	
582017.00X.1	D 268, H 120	LED ⁽¹⁾	840	310 lm	10 W	on/off	A+ A+	
582016.00X .Q	D 268, H 120	1 x QA60 (clear)	57 W			on/off	A,C,E A+	

**Comparison
LED vs. conventional lamps**

LED 10 W ≈
1 x 10 W TC-D (16 W CB)

Wall luminaires | Series: Alu-Design

 Type of Protection: **IP 65**

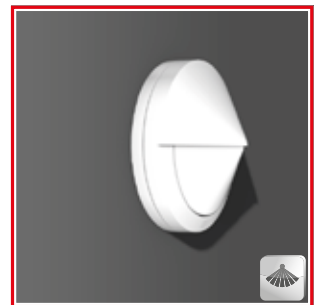
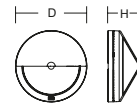
Protection Class: I

Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Opal glass cone diffuser retained in cover ring, screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Wall luminaires with visor with movement sensor								
582017.00X.19	D 268, H 120	LED ⁽¹⁾	830	260 lm	10 W	on/off	A+ A+	
582017.00X.1.19	D 268, H 120	LED ⁽¹⁾	840	260 lm	10 W	on/off	A+ A+	

**Comparison
LED vs. conventional lamps**

LED 10 W ≈
1 x 10 W TC-D (16 W CB)

Wall luminaires | Series: Alu-Design

 Type of Protection: **IP 65**

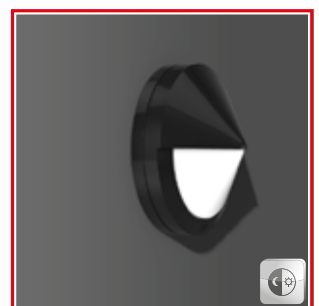
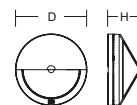
Protection Class: I

Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Opal glass cone diffuser retained in cover ring, screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and light-sensitive switch. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



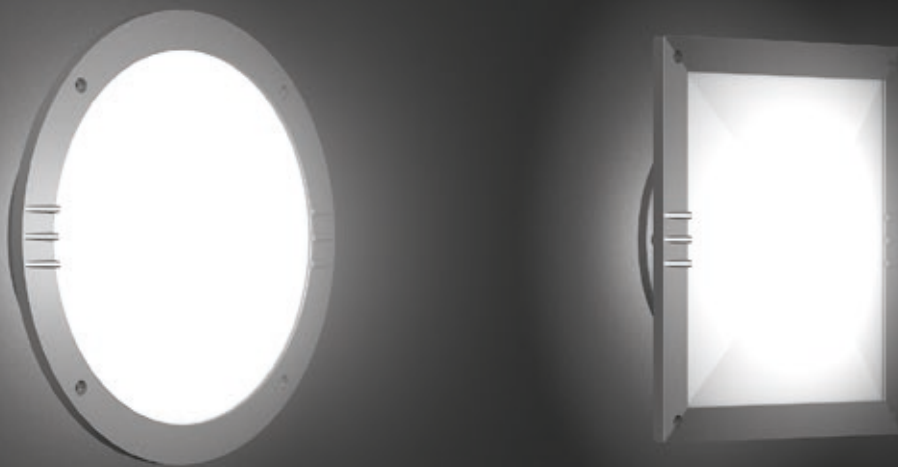
Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Wall luminaires with visor with daylight sensor								
582017.00X.25	D 268, H 120	LED ⁽¹⁾	830	260 lm	10 W	on/off	A+ A+	
582017.00X.1.25	D 268, H 120	LED ⁽¹⁾	840	260 lm	10 W	on/off	A+ A+	

**Comparison
LED vs. conventional lamps**

LED 10 W ≈
1 x 10 W TC-D (16 W CB)

Theft protection								Price Category 12
982410.003	L 13, B 11, H 16							

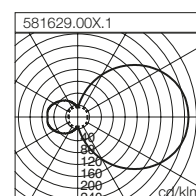
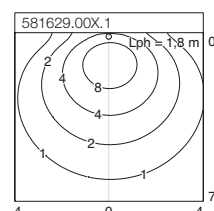
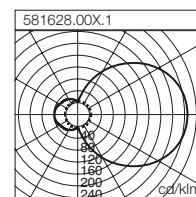
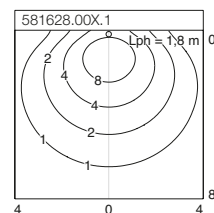
Replacement glasses								Price Category 13
05-3143.002	D 226, H 83							



ROUNDED® EVO

Wall luminaires

- Selection of square or circular front for optimum design flexibility with avant-garde luminaire design
- Rear light effect from the diffuser provides a smooth transition from the front to circular luminaire base and its background by dissolving hard shadows
- Smart, cost-effective LED modules for mains voltage with high total LED luminous efficiency for energy-saving operation
- Durability by using high-quality materials like aluminium, PC and stainless steel as well as long-lasting powder-coating.
- Selection of two light colours 830 or 840 enables harmonising direct surrounding with remote ambient lighting
- The high type of protection IP 65 enables maintenance-free, plain LED operation



Wall luminaires | Series: Rounded® EVO Circle

 Type of Protection: **IP 65**

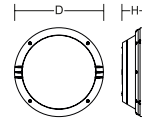
Protection Class: I

Impact Protection: IK06

Base and cover frame made of pressure die-cast aluminium, powder-coated. Stainless steel screws. Diffuser: plastic (polycarbonate), opal. Direct/indirect light distribution.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Price Category 12							
581628.00X	D 270, H 67	LED	830	530 lm	18 W	on/off	A+ A+
581628.00X.1	D 270, H 67	LED	840	560 lm	18 W	on/off	A+ A+

Replacement diffusers							
Price Category 13							
08-581628.002	D 233, H 21	Plastic (polycarbonate)					

**Comparison
LED vs. conventional lamps**
LED 18 W ≈

1 x 75 W GLS (75 W)

1 x 13 W TC-D (19 W CB)

Wall luminaires | Series: Rounded® EVO Square

 Type of Protection: **IP 65**

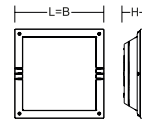
Protection Class: I

Impact Protection: IK06

Base and cover frame made of pressure die-cast aluminium, powder-coated. Stainless steel screws. Diffuser: plastic (polycarbonate), opal. Direct/indirect light distribution.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Price Category 12							
581629.00X	L 270, B 270, H 64	LED	830	590 lm	18 W	on/off	A+ A+
581629.00X.1	L 270, B 270, H 64	LED	840	620 lm	18 W	on/off	A+ A+

Replacement diffusers							
Price Category 13							
08-581629.002	L 266, B 266, H 21	Plastic (polycarbonate)					

**Comparison
LED vs. conventional lamps**
LED 18 W ≈

1 x 75 W GLS (75 W)

1 x 13 W TC-D (19 W CB)



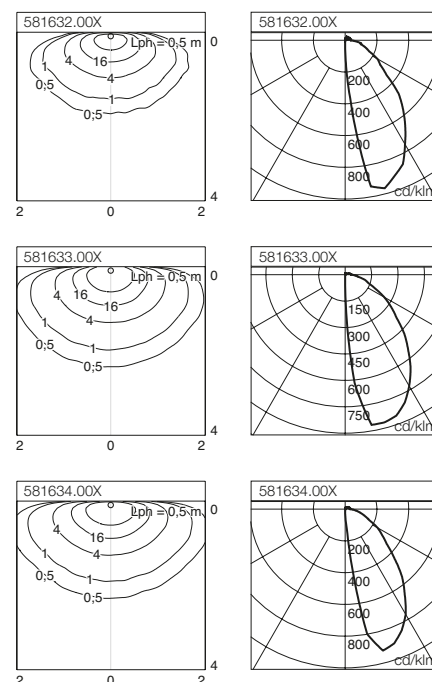
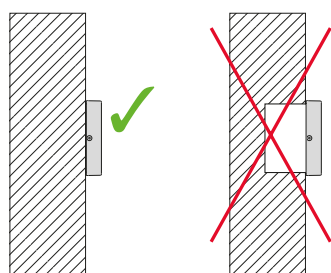
BRICK® EVO

Wall luminaires

- Flat surface-mounted LED fitting for illumination of wall related areas such as stairs, ramps or corridors
- Only 24 mm depth, can be mounted directly over the cable outlet
- Choice of three models for ideal adaption to the surroundings
- Sturdy housing of non-corrosive pressure die-cast aluminium for outdoor application, powder coated with stainless steel screws
- Drill hole deviations can be compensated to achieve precise positioning

Brick® EVO

The revolutionary surface-mounted luminaire with recessed appearance



Wall luminaires | Series: Brick® EVO

Type of Protection: **IP 65**

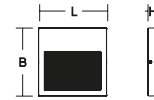
Protection Class: I

Impact Protection: IK09

Corrosion-resistant aluminium pressure die-cast housing, powder coated. With compensation for drill hole deviations. Integral driver. Toughened glass cover. With connecting terminal up to 1 x 3 x 1.5 mm², for max. 13 mm diameter mains cable.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Brick Evo Mini, asymmetrical light distribution							
581632.00X	L 120, B 120, H 24	LED	830	60 lm	4 W	on/off	A+ A+
581632.00X.1	L 120, B 120, H 24	LED	840	60 lm	4 W	on/off	A+ A+

Price Category 12

Comparison LED vs. conventional lamps

LED 4 W ≈

1 x 20 W QT12 (22 W CB)

Wall luminaires | Series: Brick® EVO

Type of Protection: **IP 65**

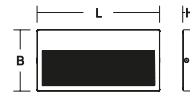
Protection Class: I

Impact Protection: IK09

Corrosion-resistant aluminium pressure die-cast housing, powder coated. With compensation for drill hole deviations. Integral driver. Toughened glass cover. With connecting terminal up to 1 x 3 x 1.5 mm², for max. 13 mm diameter mains cable.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Brick Evo Duo, asymmetrical light distribution							
581634.00X	L 240, B 120, H 24	LED	830	180 lm	10 W	on/off	A+ A+
581634.00X.1	L 240, B 120, H 24	LED	840	180 lm	10 W	on/off	A+ A+

Price Category 12

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 8 W T16 (11 W EB)
1 x 50 W QT12 (50 W)

Wall luminaires | Series: Brick® EVO

Type of Protection: **IP 65**

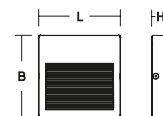
Protection Class: I

Impact Protection: IK09

Corrosion-resistant aluminium pressure die-cast housing, powder coated. With compensation for drill hole deviations. Integral driver. Toughened glass cover. With connecting terminal up to 1 x 3 x 1.5 mm², for max. 13 mm diameter mains cable.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Brick Evo Midi, asymmetrical light distribution							
581633.00X	L 200, B 200, H 24	LED	830	190 lm	10 W	on/off	A+ A+
581633.00X.1	L 200, B 200, H 24	LED	840	190 lm	10 W	on/off	A+ A+

Price Category 12

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 8 W T16 (11 W EB)
1 x 50 W QT12 (50 W)



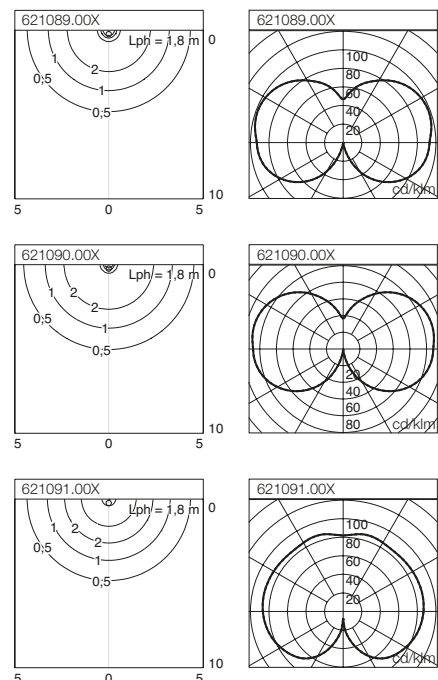
ZYLINDER OPAL | KUGEL OPAL

Wall luminaires

- Wall mounted luminaires with classic design
- Opal glass for glare-free appearance
- Robust plastic cylinders made of UV-stabilised polyethylene also allow use in environments with increased mechanical stress
- High quality choice of material (Glass, Aluminium, Stainless Steel) for long service life
- Various lamp equipment for best appearance and energy saving operation



Further luminaires of this series, see:
Outdoor lighting | Bollards



Wall luminaires | Series: Zylinder Opal

 Type of Protection: **IP 54** (with motion detector), **IP 65**

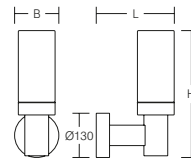
Protection Class: I

Impact Protection: IK02

Housing of corrosion-resistant pressure die-cast aluminium, powder-coated. Diffuser mouth blown opal glass, satin finish or opal plastic (PE) with bayonet lock. With mains voltage LED module.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Price Category 12							
Cylinder opal glass, Ø 115							
621089.00X	L 230, B 130, H 370	LED ⁽¹⁾	830	550 lm	8,5 W	on/off	A+ A+
621089.00X.1	L 230, B 130, H 370	LED ⁽¹⁾	840	570 lm	10 W	on/off	A+ A+
621092.00X	L 230, B 130, H 370	1 x QA60 (clear)	77 W			on/off	A, C, E A+
Cylinder opal glass, Ø 156							
621090.00X	L 250, B 156, H 490	LED ⁽¹⁾	830	590 lm	8,5 W	on/off	A+ A+
621090.00X.1	L 250, B 156, H 490	LED ⁽¹⁾	840	610 lm	10 W	on/off	A+ A+
621093.00X	L 250, B 156, H 490	1 x QA60 (clear)	116 W			on/off	A, C A+
Cylinder opal plastic (Polyethylene), Ø 115							
621095.00X	L 230, B 130, H 370	LED ⁽¹⁾	830	610 lm	8,5 W	on/off	A+ A+
621095.00X.1	L 230, B 130, H 370	LED ⁽¹⁾	840	610 lm	10 W	on/off	A+ A+
621096.00X	L 230, B 130, H 370	1 x QA60 (clear)	57 W			on/off	C, E A+

**Comparison
LED vs. conventional lamps**
LED 8,5 / 10 W ≈

1 x 60 W GLS (60 W)

1 x 26 W TC-D (34 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with motion detector (integral daylight sensor)							
Price Category 12							
Cylinder opal glass, Ø 115							
621089.00X.19	L 230, B 130, H 410	LED ⁽¹⁾	830	550 lm	8,5 W	on/off	A+ A+
621089.00X.1.19	L 230, B 130, H 410	LED ⁽¹⁾	840	570 lm	10 W	on/off	A+ A+
621092.00X.19	L 230, B 130, H 410	1 x QA60 (clear)	77 W			on/off	C A+
Cylinder opal glass, Ø 156							
621090.00X.19	L 250, B 156, H 530	LED ⁽¹⁾	830	590 lm	8,5 W	on/off	A+ A+
621090.00X.1.19	L 250, B 156, H 530	LED ⁽¹⁾	840	610 lm	10 W	on/off	A+ A+
621093.00X.19	L 250, B 156, H 530	1 x QA60 (clear)	116 W			on/off	C A+
Cylinder opal plastic (Polyethylene), Ø 115							
621095.00X.19	L 230, B 130, H 410	LED ⁽¹⁾	830	610 lm	8,5 W	on/off	A+ A+
621095.00X.1.19	L 230, B 130, H 410	LED ⁽¹⁾	840	610 lm	10 W	on/off	A+ A+
621096.00X.19	L 230, B 130, H 410	1 x QA60 (clear)	57 W			on/off	C, E A+



Replacement glasses							
Price Category 13							
982108.002	D 115, H 230	Opal glass, satin finish, h 210 mm					
982151.002	D 156, H 352	Opal glass, satin finish, h 330 mm					

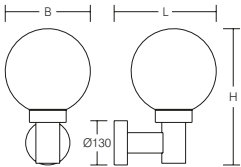


Wall luminaires | Series: Kugel Opal

Type of Protection: **IP 54** (with motion detector), **IP 65**
Protection Class: I
Impact Protection: IK02

Housing of corrosion-resistant pressure die-cast aluminium, powder-coated. Diffuser: mouth-blown opal glass, satin finish with bayonet lock. With mains voltage LED module. LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



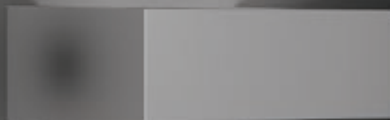
Comparison
LED vs. conventional lamps

LED 8,5 / 10 W ≈
1 x 60 W GLS (60 W)
1 x 26 W TC-D (34 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Glass sphere D 300 mm							
621091.00X	L 325, B 300, H 440	LED ⁽¹⁾	830	580 lm	8,5 W	on/off	A+ A+
621091.00X.1	L 325, B 300, H 440	LED ⁽¹⁾	840	600 lm	10 W	on/off	A+ A+
621094.00X	L 325, B 300, H 440	1 x QA60 (clear)	77 W			on/off	A,C,E A+



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with motion detector (integral daylight sensor)							
Glass sphere D 300 mm							
621091.00X.19	L 325, B 300, H 480	LED ⁽¹⁾	830	580 lm	8,5 W	on/off	A+ A+
621091.00X.1.19	L 325, B 300, H 480	LED ⁽¹⁾	840	600 lm	10 W	on/off	A+ A+
621094.00X.19	L 325, B 300, H 480	1 x QA60 (clear)	77 W			on/off	C A+
Replacement glasses							
982110.002	D 300, H 301						



Wall luminaires | Series: Trima

Type of Protection: **IP 66**

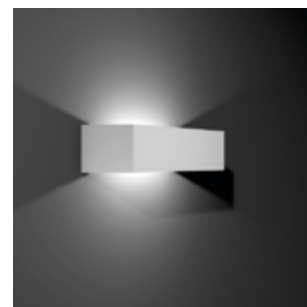
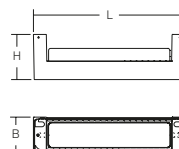
Protection Class: I

Impact Protection: IK10

Housing: pressure die-cast aluminium, powder-coated. Diffuser: plastic (polycarbonate), transparent, textured. Stainless steel screws. With mains voltage LED module. For cables 3 x 1,5 mm², max Ø 10 mm.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Wall luminaires

Price Category 12



Double-side light output

581593.00X.2	L 260, B 75, H 120	LED ⁽¹⁾	830	670 lm	9 W	on/off	A+ A+
581593.00X.3	L 260, B 75, H 120	LED ⁽¹⁾	840	700 lm	9 W	on/off	A+ A+

Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 50 W QR51 (55 W CB)





WALLSCAPING ...

... highlight for wall design

The term wallscaping is made up of the English words „wall“ and „(land)scaping“ for (landscape) design. The WALLSCAPING series by RZB is exactly that: the enhancement of outer walls through light. For this purpose, the four successful wall luminaires TECHNO, CYL, ZONO and NADELSPOT were redeveloped from scratch.

What all four product families have in common is a clear form language which supports their use in modern architecture. The housings have a two-part design and are extremely easy to install. The basis is a plate which is mounted on the wall and which is the same for all types of the WALLSCAPING series. The electrical connection is effected directly on the wall plate. A large cable inlet is fitted as standard, allowing a loop-through without an additional connection box.

The innovative Gravalock lock - a new word created by RZB - promises quick and easy installation of the luminaire head. This is mounted without screws on the housing base. A latch prevents this from being unintentionally removed later. The well thought-out housing concept with a diaphragm valve also reliably protects the light source and the converter from environmental influences.

Power is reliably supplied by means of a plug connector between the base and the head. The luminaire is closed at the top and bottom by a frameless glass cover. This can easily be removed at any time by a bayonet connection. The gentle light emission at the edge of the glass gives the WALLSCAPING luminaires their unmistakable character. ZONO and NADELSPOT are available with light emission one or both sides. With all four luminaire families, it is also possible to choose between wide-beam and narrow-beam light distribution. The versions with light distribution on both sides even allow a combination of narrow-beam light emission upwards and wide-beam light emission downwards.

The starting point of all luminaire head designs within the WALLSCAPING series are the timeless basic forms of cuboid and cylinder. TECHNO and CYL use square and circular cross-sections in an elegant longitudinal orientation. ZONO and NADELSPOT form the more compact equivalent with a flush transition to the wall. In this way the right shape can be found for practically every environment – and the perfect solution for an architectural highlight.



Nadelspot

Page 531



Cyl

Page 531



Zono

Page 532



Techno

Page 532



Innovation

The innovative Gravalock lock - a new word created by RZB - promises quick and easy installation of the luminaire head.



Long service life

The use of state-of-the-art LED technology allows reduced energy consumption and a long LED service life. Corrosion-resistant, powder-coated housing die-cast aluminum prevents corrosion.



Impermeability

The innovative housing concept protects the light source safely from all weather. The integrated vent valve avoids condensation in the luminaire.



Flexibility

A selection of different versions of the heads ensures creative freedom. Cylindrical and cubic Types with several light characteristics are available for the planner.

The powder coated parts can, in addition to the two standard colours silver metallic and anthracite metallic, be coated to suit specific customer requirements.

Functional structure of the RZB Gravalock system

RZB Gravalock system

Quick and easy installation of the lamp head, without tools on the housing.

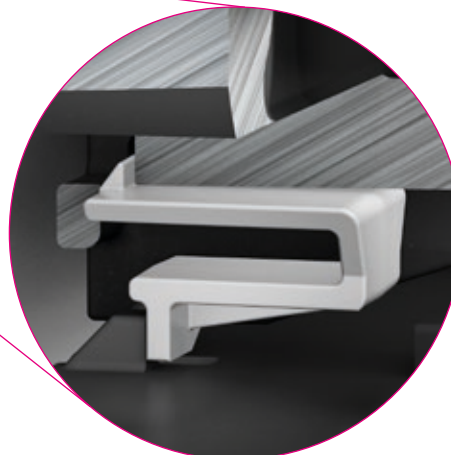


Comfortable installation

A connector between base and head provides safe power supply.

Distinctive character

The lamp top and bottom forms a frame-less Glass cover made of ceramic coated ESG with side-glow effect.



Safety

A latch prevents this from being unintentionally removed later.



NADELSPOT | CYL | ZONO | TECHNO

Wall luminaires

- Made in Germany
- The elegant linear shape suits excellent to modern architecture
- A soft light emission around the glass trim creates its distinctive character
- The innovative housing concept protects light source and driver reliably against all weather conditions
- Quick installation: fixing and electrical connection is done only at the fixing plate, the luminaire is screwlessly plugged on thereafter and held into position via RZB Gravalock-System
- The standard large cable inlet allows a simple loop-through without an additional connection box
- LEDPAR16 version featuring GU10 socket available

Wall luminaires | Series: Nadelspot

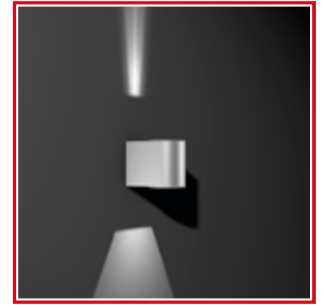
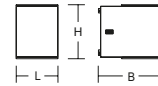
Type of Protection: **IP 65**

Protection Class: I

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Diffuser of toughened glass with ceramic coating and bayonet lock, featuring side-glow effect. Fixing on the wall outside the gasketed volume, drill hole deviations can be compensated. Screwless luminaire fixing via RZB Gravalock-System. With membrane valve as a standard to prevent condensed water. Electrical plug and play featuring quick connector. With mains voltage LED module. Cable entry granting two cables for loop-through.

Integral LED module, please place a separate order for LEDPAR16 lamps.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Price Category 12							
Light emission: upwards, Spot							
582036.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	100 lm	4 W	on/off	A+ A+
582036.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	100 lm	4 W	on/off	A+ A+
Light emission: upwards, Flood							
582035.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	90 lm	4 W	on/off	A+ A+
582035.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	90 lm	4 W	on/off	A+ A+
Light emission: downwards, Flood							
582025.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	90 lm	4 W	on/off	A+ A+
582025.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	90 lm	4 W	on/off	A+ A+
Light emission: upwards and downwards, Spot/Flood							
582026.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	180 lm	8 W	on/off	A+ A+
582026.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	190 lm	8 W	on/off	A+ A+
Light emission: upwards and downwards, Flood/Flood							
582027.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	170 lm	8 W	on/off	A+ A+
582027.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	180 lm	8 W	on/off	A+ A+

Reference number	Dimensions	Lamp	dimmable	EEC
Wall luminaires for LEDPAR16 lamps				
Price Category 12				
Light emission: upwards				
582046.00X *	L 100, B 154, H 127	1 x QPAR16 7 W	on/off	A+
Light emission: downwards				
582045.00X *	L 100, B 154, H 127	1 x QPAR16 7 W	on/off	A+

* Beam angle depends on the LEDPAR16 lamp used

Wall luminaires | Series: Cyl

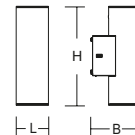
Type of Protection: **IP 65**

Protection Class: I

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Diffuser of toughened glass with ceramic coating and bayonet lock, featuring side-glow effect. Fixing on the wall outside the gasketed volume, drill hole deviations can be compensated. Screwless luminaire fixing via RZB Gravalock-System. With membrane valve as a standard to prevent condensed water. Electrical plug and play featuring quick connector. With mains voltage LED module. Cable entry granting two cables for loop-through.

Integral LED module, please place a separate order for LEDPAR16 lamps.

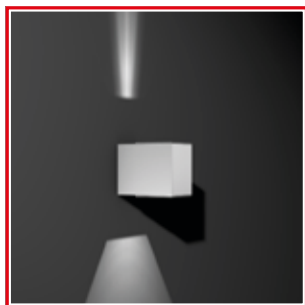
Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Price Category 12							
Light emission: upwards and downwards, Spot/Flood							
582020.00X	L 100, B 154, H 307	LED ⁽¹⁾	830	180 lm	8 W	on/off	A+ A+
582020.00X.1	L 100, B 154, H 307	LED ⁽¹⁾	840	190 lm	8 W	on/off	A+ A+
Light emission: upwards and downwards, Flood/Flood							
582021.00X	L 100, B 154, H 307	LED ⁽¹⁾	830	170 lm	8 W	on/off	A+ A+
582021.00X.1	L 100, B 154, H 307	LED ⁽¹⁾	840	180 lm	8 W	on/off	A+ A+

Reference number	Dimensions	Lamp	dimmable	EEC
Wall luminaires for LEDPAR16 lamps				
Price Category 12				
Light emission: upwards and downwards				
582041.00X *	L 100, B 154, H 307	1 x QPAR16 7 W	on/off	A+

* Beam angle depends on the LEDPAR16 lamp used

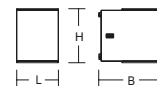
**Wall luminaires | Series: Zono**Type of Protection: **IP 65**

Protection Class: I

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Diffuser of toughened glass with ceramic coating and bayonet lock, featuring side-glow effect. Fixing on the wall outside the gasketed volume, drill hole deviations can be compensated. Screwless luminaire fixing via RZB Gravalock-System. With membrane valve as a standard to prevent condensed water. Electrical plug and play featuring quick connector. With mains voltage LED module. Cable entry granting two cables for loop-through.

Integral LED module, please place a separate order for LEDPAR16 lamps.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Wall luminaires							
Price Category 12							
Light emission: upwards, Spot							
582038.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	100 lm	4 W	on/off	A+ A+
582038.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	100 lm	4 W	on/off	A+ A+
Light emission: upwards, Flood							
582037.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	90 lm	4 W	on/off	A+ A+
582037.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	90 lm	4 W	on/off	A+ A+
Light emission: downwards, Flood							
582028.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	90 lm	4 W	on/off	A+ A+
582028.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	90 lm	4 W	on/off	A+ A+
Light emission: upwards and downwards, Spot/Flood							
582029.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	180 lm	8 W	on/off	A+ A+
582029.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	190 lm	8 W	on/off	A+ A+
Light emission: upwards and downwards, Flood/Flood							
582030.00X	L 100, B 154, H 127	LED ⁽¹⁾	830	170 lm	8 W	on/off	A+ A+
582030.00X.1	L 100, B 154, H 127	LED ⁽¹⁾	840	180 lm	8 W	on/off	A+ A+

Reference number	Dimensions	Lamp	dim-able	EEC
Wall luminaires for LEDPAR16 lamps				
Price Category 12				
Light emission: upwards				
582049.00X *	L 100, B 154, H 127	1 x QPAR16 7 W	on/off	A+
Light emission: downwards				
582048.00X *	L 100, B 154, H 127	1 x QPAR16 7 W	on/off	A+

* Beam angle depends on the LEDPAR16 lamp used

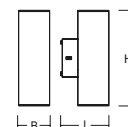
**Wall luminaires | Series: Techno**Type of Protection: **IP 65**

Protection Class: I

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Diffuser of toughened glass with ceramic coating and bayonet lock, featuring side-glow effect. Fixing on the wall outside the gasketed volume, drill hole deviations can be compensated. Screwless luminaire fixing via RZB Gravalock-System. With membrane valve as a standard to prevent condensed water. Electrical plug and play featuring quick connector. With mains voltage LED module. Cable entry granting two cables for loop-through.

Integral LED module, please place a separate order for LEDPAR16 lamps.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Wall luminaires							
Price Category 12							
Light emission: upwards and downwards, Spot/Flood							
582023.00X	L 100, B 154, H 307	LED ⁽¹⁾	830	180 lm	8 W	on/off	A+ A+
582023.00X.1	L 100, B 154, H 307	LED ⁽¹⁾	840	190 lm	8 W	on/off	A+ A+
Light emission: upwards and downwards, Flood/Flood							
582024.00X	L 100, B 154, H 307	LED ⁽¹⁾	830	170 lm	8 W	on/off	A+ A+
582024.00X.1	L 100, B 154, H 307	LED ⁽¹⁾	840	180 lm	8 W	on/off	A+ A+

Reference number	Dimensions	Lamp	dim-able	EEC
Wall luminaires for LEDPAR16 lamps				
Price Category 12				
Light emission: upwards and downwards				
582044.00X *	L 100, B 154, H 307	2 x QPAR16 7 W	on/off	A+

* Beam angle depends on the LEDPAR16 lamp used



Wall luminaires | Series: Slopia®

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK10

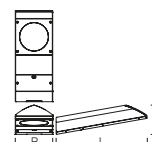
Housing made of corrosion-resistant Aluminium profiles and modular inserts as well as covers of pressure die-cast Aluminium, powder coated. Stainless steel wall bracket. With opal toughened glass diffuser. With mains voltage LED module.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Luminaire tilted 10° or 30° upwards.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Tilt angle 10 degrees							
611867.00X	L 535, B 220, H 172	LED ⁽¹⁾	830	710 lm	17 W	on/off	A A+
611867.00X.1	L 535, B 220, H 172	LED ⁽¹⁾	840	820 lm	17 W	on/off	A+ A+
Tilt angle 30 degrees							
611868.00X	L 470, B 220, H 300	LED ⁽¹⁾	830	710 lm	17 W	on/off	A A+
611868.00X.1	L 470, B 220, H 300	LED ⁽¹⁾	840	820 lm	17 W	on/off	A+ A+

Price Category 21

Comparison LED vs. conventional lamps

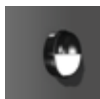
LED 17 W ≈
1 x 100 W GLS (100 W)



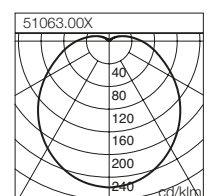
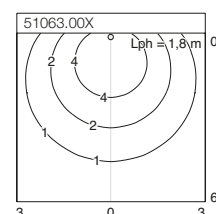
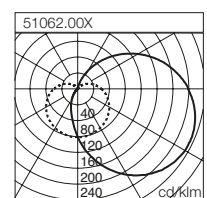
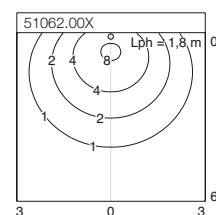
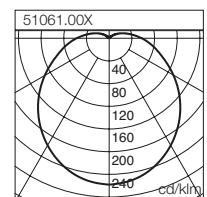
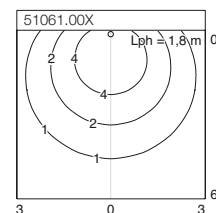
ALU-SUPERIOR

Wall luminaires

- Impact resistant plastic diffuser is suitable for robust neighborhood requirements
- High ingress protection rating supports continuous trouble-free operation
- A stainless steel bracket outside the sealed lamp compartment is used to certainly prevent installation failures. Additionally, drill hole tolerances can be compensated.
- A second cable gland provides simple loop through without connection box



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires



Wall luminaires | Series: Alu-Superior

 Type of Protection: **IP 65**

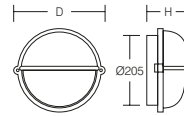
Protection Class: I

Impact Protection: IK08

Base and cover cap: die cast aluminium, powder coated. Stainless steel mounting bracket with compensation for drill hole deviations. Diffuser: plastic (polycarbonate), opal. With membrane valve to prevent condensation. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Wall luminaires with visor
Price Category 12

51062.00X	D 245, H 125	LED ⁽¹⁾	840	220 lm	9 W	on/off	A,A+ A+
51051.00X	D 245, H 125	1 x QA60 (clear)	57 W			on/off	A,C,E A+

**Comparison
LED vs. conventional lamps**

LED 9 W ≈
1 x 40 W GLS (40 W)

Ceiling and wall luminaires | Series: Alu-Superior

 Type of Protection: **IP 65**

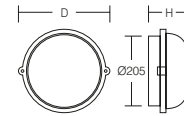
Protection Class: I

Impact Protection: IK08

Base and cover ring: die cast aluminium, powder coated. Stainless steel mounting bracket with compensation for drill hole deviations. Diffuser: plastic (polycarbonate), opal. With membrane valve to prevent condensation. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Ceiling and wall luminaires
Price Category 12

51061.00X	D 245, H 120	LED ⁽¹⁾	840	350 lm	9 W	on/off	A,A+ A+
51050.00X	D 245, H 120	1 x QA60 (clear)	57 W			on/off	A,C,E A+

**Comparison
LED vs. conventional lamps**

LED 9 W ≈
1 x 60 W GLS (60 W)

Ceiling and wall luminaires | Series: Alu-Superior

 Type of Protection: **IP 65**

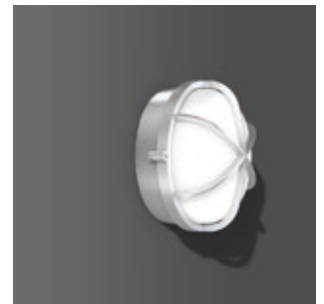
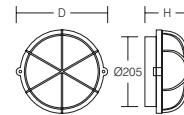
Protection Class: I

Impact Protection: IK08

Base and guard: die-cast aluminium, powder-coated. Stainless steel mounting bracket with compensation for drill hole deviations. Diffuser: plastic (polycarbonate), opal. With membrane valve to prevent condensation. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Ceiling and wall luminaires with grille
Price Category 12

51063.00X	D 245, H 125	LED ⁽¹⁾	840	350 lm	9 W	on/off	A,A+ A+
51052.00X	D 245, H 125	1 x QA60 (clear)	57 W			on/off	A,C,E A+

Replacement diffusers
Price Category 13

08-1837.002	D 214, H 68	Plastic (polycarbonate)					
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**Comparison
LED vs. conventional lamps**

LED 9 W ≈
1 x 60 W GLS (60 W)



Wall luminaires | Series: Alu-Rund

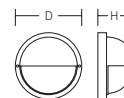
Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC
Wall luminaires with visor				
Price Category 12				
58121.00X.Q	D 195, H 100	1 x QA60 (clear) 57 W	on/off	A,C,E A+
58123.00X.Q	D 255, H 140	1 x QA60 (clear) 77 W	on/off	A,C,E A+
Replacement glasses				
Price Category 13				
05-58033	D 170, H 70			
05-58090	D 230, H 100			



Oval bulkhead luminaires | Series: Alu-Lux oval

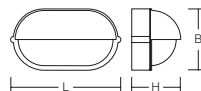
Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

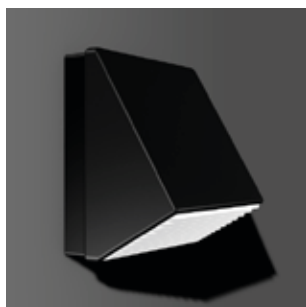
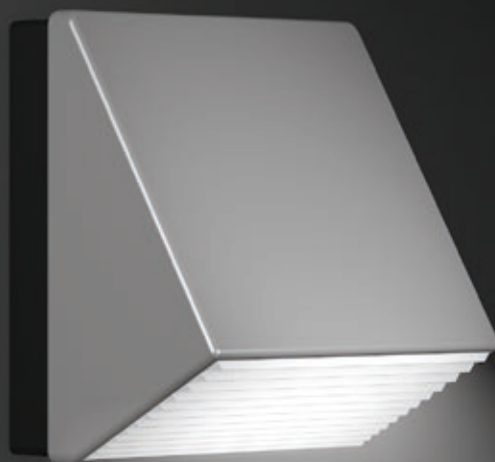
Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dimmi-able	EEC	
Wall luminaires with visor					Price Category 12
anti-glare					
58138.00X.Q	L 280, B 160, H 130	1 x QA60 (clear) 57 W	on/off	A,C,E A+	
Anti-glare with struts					
50031.00X.1	L 280, B 160, H 130	1 x QA60 (clear) 57 W	on/off	A,C,E A+	
Replacement glasses					Price Category 13
05-58010	L 260, B 150, H 100				





Comparison LED vs. conventional lamps

LED 15 W ≈

1 x 40 W GLS (40 W) 1 x 18 W
TC-D (26 W CB)



Rectangular luminaires | Series: Wall Head

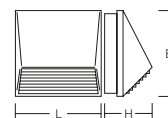
Type of Protection: **IP 44**

Protection Class: I, II = E27

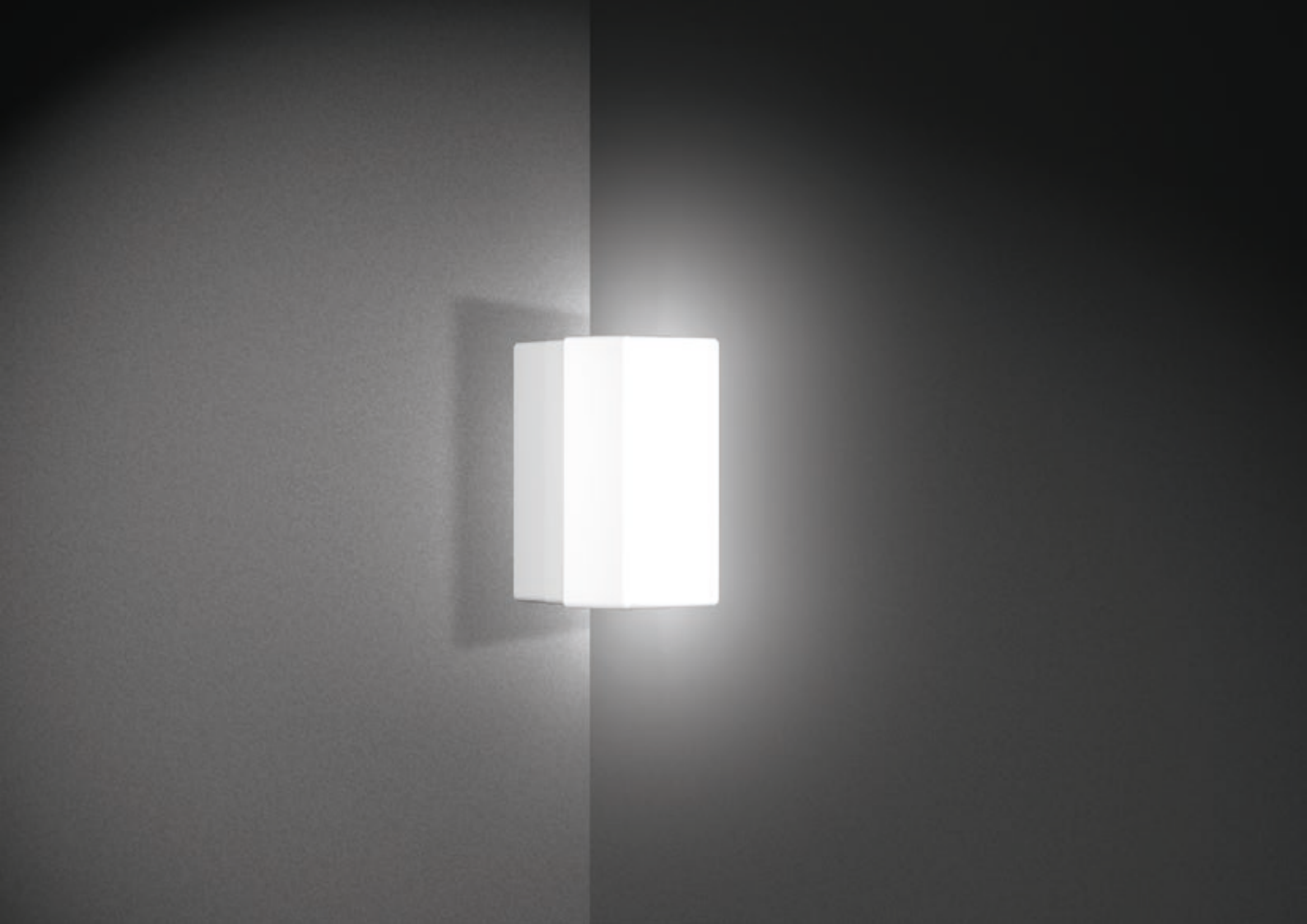
Impact Protection: IK02

Base: plastic, black. Opal glass: mouth-blown, partially painted. Diffuser fastening: spring system.

Available colours (X): 3 = black, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
Short version							
201010.00X	L 225, B 125, H 100	1 x QA60 (clear)	30 W			on/off	A,C,E A+
Long version							
201030.00X	L 235, B 235, H 140	LED	830	260 lm	15 W	on/off	A+ A+
201030.00X.1	L 235, B 235, H 140	LED	840	280 lm	15 W	on/off	A+ A+
201012.00X	L 235, B 235, H 140	1 x QA60 (clear)	77 W			on/off	A,C,E A+
Replacement glasses							
05-251007.00X	L 225, B 125, H 85	Partially painted					
05-251005.00X	L 235, B 235, H 125	Partially painted					



Wall luminaires | Series: Rechteck

Type of Protection: **IP 44**

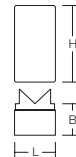
Protection Class: II

Impact Protection: IK02

Base: plastic, for corner mounting. Mouth-blown opal glass, satin finish or silk finish.

Diffuser fastening: spring system.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC	
Wall luminaires					Price Category 11
Glass: opal, silk finish,					
20136.00X	L 120, B 95, H 220	1 x E27® 60 W	on/off	A,C,E A+	
Opal glass, satin finish					
21136.00X .Q	L 120, B 95, H 220	1 x E27® 60 W	on/off	A,C,E A+	
Replacement glasses					Price Category 13
05-20136	L 220, B 120, H 82	Glass, opal, silk finish			
05-21136	L 220, B 120, H 82	Opal glass, satin finish			



The application image shows:
Rounded® Midi

© Fotostudio Lippmann



Rounded® Midi
542-543

543



The Ultimate Ultra-flat
House Number Luminaire
544-545



545

545



Quadrat
546-548



546

547



548



Opal glass luminaires
549

549



549



Kreis
550

550

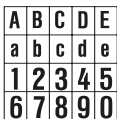


Opal glass luminaires
551-552

551



552



Self-adhesive black
numbers and letters
553

553



ROUNDED® MIDI

House number luminaires

- Elegant appearance without visible screw featuring bayonet lock and safety catch.
- LED: Smart and cost-saving LED modules for mains voltage on high LED-efficiency level applied for energy saving operation
- Sturdy housing made of corrosion resistant pressure die cast aluminium, powder coated
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables. Wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Second cable inlet for loop through
- Marine grade coating available as an option



Further luminaires of this series, see:
Outdoor lighting | Ceiling and wall luminaires

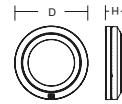
House number luminaires | Series: Rounded® Midi

Type of Protection: **IP 65**
Protection Class: I

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and daylight sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with daylight sensor: On abt. 5 lx, Off abt. 40 lx							
Glass							
582004.00X.25	D 268, H 70	LED	840	160 lm	4 W	on/off	A+ A+
Plastic (polycarbonate)							
582005.00X.25	D 268, H 70	LED	840	200 lm	4 W	on/off	A+ A+
Replacement glasses							
05-581208.002	D 226, H 39						
Replacement diffusers							
08-581150.012	D 226, H 39	Plastic (polycarbonate)					
Theft protection							
982410.003	L 13, B 11, H 16						

Comparison LED vs. conventional lamps

LED 4 W ≈
1 x 40 W GLS (40 W)

Self-adhesive black digits and letters can be found at the end of the chapter

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0



THE ULTIMATE ULTRA-FLAT HOUSE NUMBER LUMINAIRE

House number luminaires

- Square visible area to match standard door designs in residential construction
- Choice of positive or negative display of the house number
- Model without daylight sensor is also suitable, e.g. for illuminating passages
- Housing and equipment made of sturdy and durable materials to ensure years of trouble free operation

House number luminaires |

Series: The Ultimate Ultra-flat House Number Luminaire

Type of Protection: **IP 44**

Protection Class: I

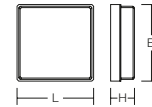
Impact Protection: IK06

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colours (X): 2 = white, 3 = black, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
with daylight sensor: On abt. 5 lx, Off abt. 40 lx							
221167.00X.25.Q	L 226, B 226, H 70	LED	840	210 lm	4,8 W	on/off	A,A+ A+
without daylight sensor							
221167.00X	L 226, B 226, H 70	LED	840	210 lm	4,8 W	on/off	A,A+ A+
Replacement diffusers							
08-221066.002	L 226, B 226, H 50						

Price Category 12

Comparison

LED vs. conventional lamps

LED 4,8 W ≈

1 x 40 W GLS (40 W)

1 x 7 W TC-S (14 W CB)

House number luminaires |

Series: The Ultimate Ultra-flat House Number Luminaire

Type of Protection: **IP 44**

Protection Class: I

Impact Protection: IK06

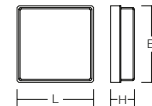
Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Lettering on negative film included.

Please specify lettering when ordering!

Available colours (X): 3 = black, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires							
with transparency negative, black background							
221167.003.1	L 226, B 226, H 70	LED	840	210 lm	4,8 W	on/off	A,A+ A+
with transparency negative, silver background							
221167.004.2	L 226, B 226, H 70	LED	840	210 lm	4,8 W	on/off	A,A+ A+
Replacement diffusers							
08-221040/0001	L 226, B 226, H 50	with transparency negative, black background					
08-221040/0002	L 226, B 226, H 50	with transparency negative, silver background					

Price Category 12

Price Category 13

Accessories | Self-adhesive black numbers and letters for The Ultimate Ultra-flat House Number Luminaire series

Sturdy, firmly adhesive

The viewing distance depends on the height of the number. A 10 cm high number can still be read at a distance of 25 m. When ordering, please specify the required numbers or letters after the reference number.

Order example for lettering

99223.013.2 = Number 2 (number height: 120 mm)

99222.013.B = Capital letter B (letter height: 100 mm)

99222.013.B/K = Small letter b (letter height: 100 mm)

Reference number	Dimensions
------------------	------------

Adhesive lettering		Price Category 12
99221.013	H 60 mm	
99222.013	H 100 mm	
99223.013 .Q*	H 120 mm	

* Only digits and upper-case letters can be supplied

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0



Comparison LED vs. conventional lamps

LED 4,8 W ≈

1 x 40 W GLS (40 W)
1 x 7 W TC-S (14 W CB)

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0

House number luminaires | Series: Quadrat with daylight sensor

Type of Protection: **IP 44**

Protection Class: I

Impact Protection: IK02

Base: plastic. Diffuser: plastic, opal, satin finish. Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colour: 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with daylight sensor: On abt. 5 lx, Off abt. 40 lx							
Diffuser L 226 x B 226 mm							
221190.003.25	L 226, B 226, H 110	LED	840	260 lm	4,8 W	on/off	A+ A+
Diffuser L 270 x B 115 mm							
221191.003.25	L 270, B 115, H 270	LED	840	270 lm	4,8 W	on/off	A+ A+
Replacement diffusers							
08-22146	L 226, B 226, H 88						
08-22148	L 270, B 270, H 94						

Price Category 12

Price Category 13

Self-adhesive black digits and letters can be found at the end of the chapter



House number luminaires | Series: Quadrat with daylight sensor

Type of Protection: **IP 44**

Protection Class: I

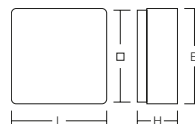
Impact Protection: IK02

Base: plastic. Opal glass: mouth blown, silk finish. Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colour: 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with daylight sensor: On abt. 5 lx, Off abt. 40 lx							
Glass L 240 x B 240 mm							
201026.003.1.25	L 240, B 240, H 110	LED	840	260 lm	4,8 W	on/off	A+ A+
Glass L 280 x B 280 mm							
201027.003.1.25	L 280, B 280, H 120	LED	840	270 lm	4,8 W	on/off	A+ A+
Replacement glasses							
05-20128	L 240, B 240, H 95	Glass neck, round					
05-20129	L 280, B 280, H 106	Glass neck, round					

Price Category 12

Price Category 13

Comparison LED vs. conventional lamps

LED 4,8 W ≈

1 x 40 W GLS (40 W)

1 x 7 W TC-S (14 W CB)

Self-adhesive black digits and letters can be found at the end of the chapter

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0



Comparison LED vs. conventional lamps

LED 4,5 W ≈

1 x 40 W GLS (40 W)
1 x 7 W TC-S (14 W CB)

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0

House number luminaires | Series: Alu-Quadrat with daylight sensor

Type of Protection: **IP 44**

Protection Class: I

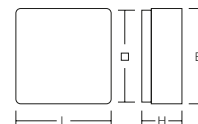
Impact Protection: IK02

Base: pressure die-cast aluminium, powder-coated. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colour: 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with daylight sensor: On abt. 5 lx, Off abt. 40 lx							
Glass L 240 x B 240 mm							
251050.003.1.25	L 240, B 240, H 110	LED	840	250 lm	4,8 W	on/off	A+ A+
Glass L 280 x B 280 mm							
251051.003.1.25	L 280, B 280, H 120	LED	840	250 lm	4,8 W	on/off	A+ A+
Replacement glasses							
05-21128	L 240, B 240, H 95	Glass neck, round					
05-21129	L 280, B 280, H 106	Glass neck, round					

Self-adhesive black digits and letters can be found at the end of the chapter



House number luminaires | Series: Opal glass luminaires

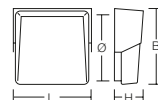
Type of Protection: **IP 44** Protection Class: I, II for 20224.003 Impact Protection: IK02

Base: plastic. Top: aluminium, powder-coated. Opal glass: mouth blown, silk finish.
Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colour: 3 = black



Wall luminaires

Price Category 12

with daylight sensor: On abt. 5 lx, Off abt. 40 lx

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
201028.003.1.25	L 260, B 240, H 130	LED	840	210 lm	4,8 W	on/off	A+ A+

without daylight sensor

201028.003.1	L 260, B 240, H 130	LED	840	210 lm	4,8 W	on/off	A+ A+
20224.003 .Q	L 260, B 240, H 130	1 x E27*	60 W			on/off	A,C,E A+

House number luminaires | Series: Opal glass luminaires

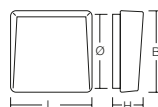
Type of Protection: **IP 44** Protection Class: I, II for 20124.003 Impact Protection: IK02

Base: plastic. Opal glass: mouth blown, silk finish. Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colour: 3 = black



Wall luminaires

Price Category 12

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
201029.003.1	L 235, B 225, H 125	LED	840	270 lm	4,8 W	on/off	A+ A+
20124.003 .Q	L 235, B 225, H 125	1 x E27*	60 W			on/off	A,C,E A+

Replacement glasses

Price Category 13

05-20124	L 235, B 225, H 109
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Comparison LED vs. conventional lamps

LED 4,7 W ≈

1 x 40 W GLS (40 W)
1 x 7 W TC-S (14 W CB)

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0

House number luminaires | Series: Kreis with daylight sensor

Type of Protection: **IP 44**

Protection Class: I

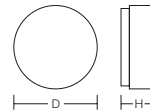
Impact Protection: IK02

Base: plastic. Opal glass: mouth blown, silk finish. Diffuser fastening: spring system.

LED included.

Please place a separate order for your lettering!

Available colour: 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Wall luminaires with daylight sensor: On abt. 5 lx, Off abt. 40 lx							
Glass D 230 mm							
201024.003.1.25	D 230, H 110	LED	840	270 lm	4,7 W	on/off	A+ A+
Glass D 280 mm							
201025.003.1.25	D 280, H 120	LED	840	280 lm	4,7 W	on/off	A+ A+
Replacement glasses							
05-20101	D 230, H 90						
05-20102	D 280, H 99						

Price Category 12

Price Category 13

Self-adhesive black digits and letters can be found at the end of the chapter



House number luminaires | Series: Opal glass luminaires

Type of Protection: **IP 44**

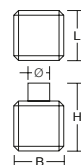
Protection Class: II

Impact Protection: IK02

Base: plastic. Diffuser: mouth-blown opal glass, satin finish. Glass fastening: retaining screws. Lettering can be applied on several sides.

Please place a separate order for your lettering!

Available colour: 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC	Price Category 12
61734.003	L 215, B 215, H 285	1 x QA60 (clear) 77 W	on/off	A, C, E A+	
Ceiling luminaires					Price Category 12
05-61034	L 215, B 215, H 237				Price Category 13
Replacement glasses					

Self-adhesive black digits and letters can be found at the end of the chapter

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0



House number luminaires | Series: Opal glass luminaires

Type of Protection: **IP 44**

Protection Class: I

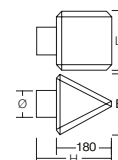
Impact Protection: IK02

Base: metal, powder-coated. Opal glass: mouth blown, silk finish.

Glass fastening: retaining screws. Lettering can be applied on several sides.

Please place a separate order for your lettering!

Available colour: 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC	Price Category 12
61818.003 .Q	L 205, B 205, H 220	1 x QA60 (clear) 57 W	on/off	A,C,E A+	
Replacement glasses					Price Category 13
05-61818	L 205, B 205, H 202				

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0

Self-adhesive black digits and letters can be found at the end of the chapter

Accessories | Self-adhesive black numbers and letters (not for The Ultimate Ultra-flat House Number Luminaire series)

The viewing distance depends on the height of the number. A 10 cm high number can still be read at a distance of 25 m. When ordering, please specify the required numbers or letters after the reference number.

Order example for lettering

99220.003.2 = Number 2

99220.003.B = Capital letter B

99220.003.B/K = Small letter b

Reference number	Dimensions
------------------	------------

Adhesive lettering

Price Category 12

99220.003 .Q	H 40 mm
99221.003 .Q	H 60 mm
99222.003	H 100 mm
99223.003 .Q*	H 120 mm
99224.003 .Q*	H 200 mm

* Only digits and capital letters can be supplied

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0

Accessories | Self-adhesive black numbers and letters for The Ultimate Ultra-flat House Number Luminaire series

Sturdy, firmly adhesive

The viewing distance depends on the height of the number. A 10 cm high number can still be read at a distance of 25 m. When ordering, please specify the required numbers or letters after the reference number.

Order example for lettering

99223.013.2 = Number 2 (number height: 120 mm)

99222.013.B = Capital letter B (letter height: 100 mm)

99222.013.B/K = Small letter b (letter height: 100 mm)

Reference number	Dimensions
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Adhesive lettering

Price Category 12

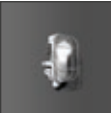
99221.013	H 60 mm
99222.013	H 100 mm
99223.013 .Q*	H 120 mm

* Only digits and capital letters can be supplied

A	B	C	D	E
a	b	c	d	e
1	2	3	4	5
6	7	8	9	0



The application image shows:
Rounded® superflach

			Flat Slim 556-561
			Mondana®-A 562-563
		563	
			Rounded® Midi 564-567
565	566	567	
			Rounded® Maxi 568-571
	569	570	
			Cadéro® 572-575
	573	574	
			Alu-Design 576-577
		577	
			Alu-Rund 578-579
579	579	579	
			Alu-Superior 580-581
	581	581	
			Alu oval bulkhead luminaires 582-583
583	583	583	
			Alu-Lux oval 584-585
584	585	585	
			Flat Polymero® Sensation Kreis 586-587
		587	

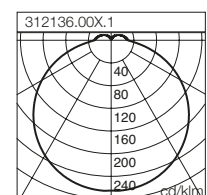


FLAT SLIM

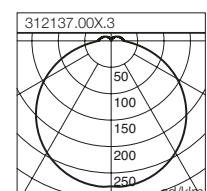
Ceiling and wall luminaires

- Superflat ceiling and wall luminaires with glass or plastic diffuser
- Base made of die-cast aluminium
- Available in three diameters and colours
- Mouth-blown three layer (triplex) opal glass satin finish or plastic diffuser (PMMA/PC) opal satin finish
- Diffuser mounting without use of tools, with bayonet fitting
- Particularly homogeneous, soft and glare-free light through the use of AC surface-mounted boards
- High ingress protection rating: IP 65
- Standard Gore™ Protective Vents diaphragm valve to prevent condensation
- Easy plug-in installation
- LED module can be replaced without use of tools
- Also available for DALI control and with movement sensor (master and slave)
- Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download
- Two different light colours 830 and 840
- Good colour consistency within 3-steps MacAdam (3 SDCM)
- LED rated life 50,000 h (L70, B10)
- DC voltage from 176-276 V; luminous flux in DC mode 25%
- On/Off with integrated phase section dimming

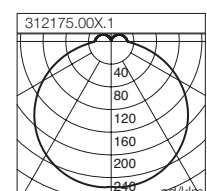
312136.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
4	6	8
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
6	8	14



312137.00X.3		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
2	4	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
3	5	8



312175.00X.1		
Floor 12 x 2,5 x 3m (0,2m)		
100 lx	150 lx	200 lx
3	5	6
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
4	6	10



Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: **IP 65**

Protection Class: I

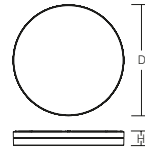
Impact Protection: IK03

Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: bayonet system.

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass D 230 mm							
312132.00X.Q*	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	on/off	A+ A+
312132.00X.76	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	DALI	A+ A+
312132.00X.1.Q*	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	on/off	A+ A+
312132.00X.1.76	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	DALI	A+ A+
Glass D 300 mm							
312133.00X.Q*	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	on/off	A+ A+
312133.00X.730	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	smart+free	A+ A+
312133.00X.76	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	DALI	A+ A+
312133.00X.1.Q*	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	on/off	A+ A+
312133.00X.1.730	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	smart+free	A+ A+
312133.00X.1.76	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	DALI	A+ A+
Glass D 400 mm							
312174.00X.*	D 400, H 70	LED ⁽¹⁾	830	2200 lm	27 W	on/off	A+ A+
312174.00X.730	D 400, H 70	LED ⁽¹⁾	830	2200 lm	27 W	smart+free	A+ A+
312174.00X.1.*	D 400, H 70	LED ⁽¹⁾	840	2300 lm	27 W	on/off	A+ A+
312174.00X.1.730	D 400, H 70	LED ⁽¹⁾	840	2300 lm	27 W	smart+free	A+ A+
Glass D 480 mm							
312134.00X	D 480, H 70	LED ⁽¹⁾	830	2600 lm	33 W	on/off	A+ A+
312134.00X.1	D 480, H 70	LED ⁽¹⁾	840	2700 lm	33 W	on/off	A+ A+

* With integrated phase section dimming

Replacement LED module			Price Category 11				
E90-6706.000	D 170, H 22	1 x LED 13,5 W 3000 K					
E90-6706.010	D 170, H 22	1 x LED 13,5 W 4000 K					
E90-6843.020	D 170, H 22	1 x LED 13,5 W 3000 K, DALI					
E90-6843.020.1	D 170, H 22	1 x LED 13,5 W 4000 K, DALI					
E90-6707.000	D 240, H 22	1 x LED 21 W 3000 K					
E90-6707.010	D 240, H 22	1 x LED 21 W 4000 K					
E90-6844.020	D 240, H 22	1 x LED 21 W 3000 K, DALI					
E90-6844.020.1	D 240, H 22	1 x LED 21 W 4000 K, DALI					
E90-6823.000	D 335, H 25	1 x LED 27 W 3000 K					
E90-6823.010	D 335, H 25	1 x LED 27 W 4000 K					
E90-6708.000	D 420, H 22	1 x LED 33 W 3000 K					
E90-6708.010	D 420, H 22	1 x LED 33 W 4000 K					

Replacement glasses		Price Category 13					
05-1969.002	D 230, H 51						
05-1970.002	D 300, H 51						
05-312174.002	D 400, H 58						
05-1971.002	D 480, H 59						

Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 18 W TC-D (52 W CB)

LED 27 W ≈

2 x 26 W TC-D (68 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)





Comparison LED vs. conventional lamps

LED 13,5 W ≈
1 x 26 W TC-D (34 W CB)

LED 21 W ≈
2 x 18 W TC-D (52 W CB)



Applies to versions
with **.19**

Ceiling and wall luminaires | Series: Flat Slim

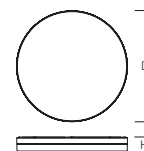
Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK03

Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: mouth-blown opal glass, satin finish. Diffuser fastening: bayonet system.

LED included.



Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 V)
- Only suitable for outdoor use to a limited extent, as it is sensitive to all movements.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
Ceiling and wall luminaires with integrated movement sensor								
Price Category 11								
Glass D 230 mm								
312132.00X.19	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	Master	on/off	A+ A+
312132.00X.191	D 230, H 63	LED ⁽¹⁾	830	1000 lm	13,5 W	Slave	on/off	A+ A+
312132.00X.1.19	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	Master	on/off	A+ A+
312132.00X.1.191	D 230, H 63	LED ⁽¹⁾	840	1000 lm	13,5 W	Slave	on/off	A+ A+
Glass D 300 mm								
312133.00X.19	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	Master	on/off	A+ A+
312133.00X.191	D 300, H 63	LED ⁽¹⁾	830	1500 lm	21 W	Slave	on/off	A+ A+
312133.00X.1.19	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	Master	on/off	A+ A+
312133.00X.1.191	D 300, H 63	LED ⁽¹⁾	840	1600 lm	21 W	Slave	on/off	A+ A+
Replacement glasses								
Price Category 13								
05-1969.002	D 230, H 51							
05-1970.002	D 300, H 51							
Replacement LED module								
Price Category 11								
E90-6843.000	D 170, H 22	1 x LED	13,5 W 3000 K, Slave					
E90-6843.000.1	D 170, H 22	1 x LED	13,5 W 4000 K, Slave					
E90-6843.010	D 170, H 22	1 x LED	13,5 W 3000 K, Master					
E90-6843.010.1	D 170, H 22	1 x LED	13,5 W 4000 K, Master					
E90-6844.000	D 240, H 22	1 x LED	21 W 3000 K, Slave					
E90-6844.000.1	D 240, H 22	1 x LED	21 W 4000 K, Slave					
E90-6844.010	D 240, H 22	1 x LED	21 W 3000 K, Master					
E90-6844.010.1	D 240, H 22	1 x LED	21 W 4000 K, Master					
Replacement LED module								
Price Category 11								
E90-6706.000	D 170, H 22	1 x LED	13,5 W 3000 K					
E90-6706.010	D 170, H 22	1 x LED	13,5 W 4000 K					
E90-6843.020	D 170, H 22	1 x LED	13,5 W 3000 K, DALI					
E90-6843.020.1	D 170, H 22	1 x LED	13,5 W 4000 K, DALI					
E90-6707.000	D 240, H 22	1 x LED	21 W 3000 K					
E90-6707.010	D 240, H 22	1 x LED	21 W 4000 K					
E90-6844.020	D 240, H 22	1 x LED	21 W 3000 K, DALI					
E90-6844.020.1	D 240, H 22	1 x LED	21 W 4000 K, DALI					
E90-6823.000	D 335, H 25	1 x LED	27 W 3000 K					
E90-6823.010	D 335, H 25	1 x LED	27 W 4000 K					
E90-6708.000	D 420, H 22	1 x LED	33 W 3000 K					
E90-6708.010	D 420, H 22	1 x LED	33 W 4000 K					

Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: IP 65

Protection Class: I

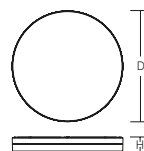
Impact Protection: IK02 (PMMA), IK08 (Polycarbonate)

Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: bayonet system.

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Versions with smart+free Bluetooth control for wireless network and operation using Android / iOS devices, free app available for download.



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Ceiling and wall luminaires

Price Category 11

Diffuser: plastic (PMMA)

D 230 mm

312135.00X.Q*	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	on/off	A+ A+
312135.00X.76	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	DALI	A+ A+
312135.00X.1.Q*	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	on/off	A+ A+
312135.00X.1.76	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	DALI	A+ A+

D 300 mm

312136.00X.Q*	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	on/off	A+ A+
312136.00X.730	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	smart+free	A+ A+
312136.00X.76	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+ A+
312136.00X.1.Q*	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	on/off	A+ A+
312136.00X.1.730	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	smart+free	A+ A+
312136.00X.1.76	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	DALI	A+ A+

D 400 mm

312175.00X.*	D 400, H 70	LED ⁽¹⁾	830	2400 lm	27 W	on/off	A+ A+
312175.00X.730	D 400, H 70	LED ⁽¹⁾	830	2400 lm	27 W	smart+free	A+ A+
312175.00X.1.*	D 400, H 70	LED ⁽¹⁾	840	2500 lm	27 W	on/off	A+ A+
312175.00X.1.730	D 400, H 70	LED ⁽¹⁾	840	2500 lm	27 W	smart+free	A+ A+

D 480 mm

312137.00X	D 480, H 70	LED ⁽¹⁾	830	3000 lm	33 W	on/off	A+ A+
312137.00X.1	D 480, H 70	LED ⁽¹⁾	840	3100 lm	33 W	on/off	A+ A+

Diffuser: plastic (polycarbonate)

D 230 mm

312135.00X.2.*	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	on/off	A+ A+
312135.00X.2.76	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	DALI	A+ A+
312135.00X.3.*	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	on/off	A+ A+
312135.00X.3.76	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	DALI	A+ A+

D 300 mm

312136.00X.2.*	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	on/off	A+ A+
312136.00X.2.730	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	smart+free	A+ A+
312136.00X.2.76	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	DALI	A+ A+
312136.00X.3.*	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	on/off	A+ A+
312136.00X.3.730	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	smart+free	A+ A+
312136.00X.3.76	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	DALI	A+ A+

D 400 mm

312175.00X.2.*	D 400, H 70	LED ⁽¹⁾	830	2700 lm	27 W	on/off	A+ A+
312175.00X.2.730	D 400, H 70	LED ⁽¹⁾	830	2700 lm	27 W	smart+free	A+ A+
312175.00X.3.*	D 400, H 70	LED ⁽¹⁾	840	2800 lm	27 W	on/off	A+ A+
312175.00X.3.730	D 400, H 70	LED ⁽¹⁾	840	2800 lm	27 W	smart+free	A+ A+

D 480 mm

312137.00X.2	D 480, H 70	LED ⁽¹⁾	830	3300 lm	33 W	on/off	A+ A+
312137.00X.3	D 480, H 70	LED ⁽¹⁾	840	3400 lm	33 W	on/off	A+ A+

* With integrated phase section dimming

Replacement diffusers

Price Category 13

08-2118.002	D 230, H 55	Plastic (PMMA)
08-2118.012	D 230, H 55	Plastic (polycarbonate)
08-2119.002	D 300, H 55	Plastic (PMMA)
08-2119.012	D 300, H 55	Plastic (polycarbonate)
08-312175.002	D 400, H 62	Plastic (PMMA)
08-312175.012	D 400, H 62	Plastic (polycarbonate)
08-2120.002	D 480, H 62	Plastic (PMMA)
08-2120.012	D 480, H 62	Plastic (polycarbonate)

Comparison

LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

LED 33 W ≈

3 x 26 W TC-D (102 W CB)

DALI



Applies to
versions with
.76



Comparison LED vs. conventional lamps

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

2 x 26 W TC-D (68 W CB)



Applies to versions
with .19

Ceiling and wall luminaires | Series: Flat Slim

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK02 (PMMA), IK08 (Polycarbonate)

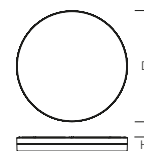
Base: pressure die-cast aluminium, powder-coated. LED module can be connected without use of tools. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: bayonet system.

LED included.

Functional parameters of a master luminaire with a ceiling height of approx. 2.8 m:

- HF detector 24 GHz with integrated corridor function
- Detection range approx. 130° radial
- Easy adjustment of functions via 3 associated push button switches
- Sensitivity/Range 0.5 - 5 m radial, adjustable from 10-100%
- Time control 1 second to 15 minutes in 8 different levels
- Daylight detection with 5 brightness levels and learning mode
- Up to 9 slave luminaires can be operated with one master luminaire (max. up to 150 W / 230 V)
- Only suitable for outdoor use to a limited extent, as it is sensitive to all movements.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Ceiling and wall luminaires with integrated movement sensor								
Diffuser: plastic (PMMA)								
D 230 mm								
312135.00X.19	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	Master	on/off	A+ A+
312135.00X.191	D 230, H 63	LED ⁽¹⁾	830	1150 lm	13,5 W	Slave	on/off	A+ A+
312135.00X.1.19	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	Master	on/off	A+ A+
312135.00X.1.191	D 230, H 63	LED ⁽¹⁾	840	1150 lm	13,5 W	Slave	on/off	A+ A+
D 300 mm								
312136.00X.19	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	Master	on/off	A+ A+
312136.00X.191	D 300, H 63	LED ⁽¹⁾	830	1800 lm	21 W	Slave	on/off	A+ A+
312136.00X.1.19	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	Master	on/off	A+ A+
312136.00X.1.191	D 300, H 63	LED ⁽¹⁾	840	1900 lm	21 W	Slave	on/off	A+ A+
Diffuser: plastic (polycarbonate)								
D 230 mm								
312135.00X.2.19	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	Master	on/off	A+ A+
312135.00X.2.191	D 230, H 63	LED ⁽¹⁾	830	1300 lm	13,5 W	Slave	on/off	A+ A+
312135.00X.3.19	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	Master	on/off	A+ A+
312135.00X.3.191	D 230, H 63	LED ⁽¹⁾	840	1350 lm	13,5 W	Slave	on/off	A+ A+
D 300 mm								
312136.00X.2.19	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	Master	on/off	A+ A+
312136.00X.2.191	D 300, H 63	LED ⁽¹⁾	830	1950 lm	21 W	Slave	on/off	A+ A+
312136.00X.3.19	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	Master	on/off	A+ A+
312136.00X.3.191	D 300, H 63	LED ⁽¹⁾	840	2000 lm	21 W	Slave	on/off	A+ A+

Replacement LED module			Price Category 11					
E90-6843.000	D 170, H 22	1 x LED 13,5 W 3000 K, Slave						
E90-6843.000.1	D 170, H 22	1 x LED 13,5 W 4000 K, Slave						
E90-6843.010	D 170, H 22	1 x LED 13,5 W 3000 K, Master						
E90-6843.010.1	D 170, H 22	1 x LED 13,5 W 4000 K, Master						
E90-6844.000	D 240, H 22	1 x LED 21 W 3000 K, Slave						
E90-6844.000.1	D 240, H 22	1 x LED 21 W 4000 K, Slave						
E90-6844.010	D 240, H 22	1 x LED 21 W 3000 K, Master						
E90-6844.010.1	D 240, H 22	1 x LED 21 W 4000 K, Master						

Replacement diffusers			Price Category 13					
08-2118.002	D 230, H 55	Plastic (PMMA)						
08-2118.012	D 230, H 55	Plastic (polycarbonate)						
08-2119.002	D 300, H 55	Plastic (PMMA)						
08-2119.012	D 300, H 55	Plastic (polycarbonate)						





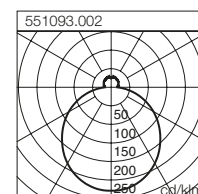
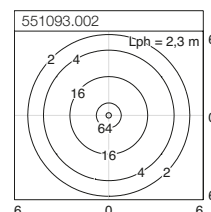
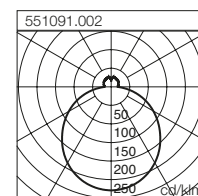
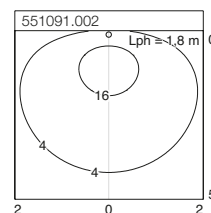
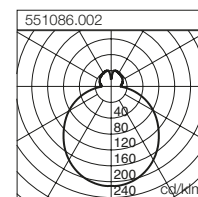
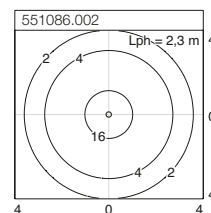
MONDANA®-A

Ceiling and wall luminaires

- Comprehensive range consisting of:
 - Ceiling and wall luminaires
 - Semi-recessed ceiling and wall luminaires
 - Recessed ceiling and wall luminaires
- For indoor and outdoor lighting
- The IP 65 type of protection provides excellent guard against rain and humidity and the luminaire is kept free from dirt and insects
- Integral membrane valve for ventilation against condensed water
- With mouth-blown, 3-layer opal glass satin finish or opal plastic (PE) diffuser
- On/Off with integrated phase section dimming



Further luminaires of this series, see:
Indoor lighting | Recessed ceiling and wall luminaires



Ceiling and wall luminaires | Series: Mondana®-A Opal glass

 Type of Protection: **IP 65**

Protection Class: I, II upon request

Impact Protection: IK03

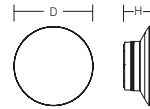
Base: plastic (polycarbonate). Diffuser: mouth-blown opal glass, satin finish.

Diffuser fastening: screwneck.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Opal glass, satin finish D 280 mm							
551086.002.1	D 280, H 105	LED ⁽¹⁾	830	570 lm	9 W	on/off	A+ A+
551086.002	D 280, H 105	LED ⁽¹⁾	840	600 lm	9 W	on/off	A+ A+
Opal glass, satin finish D 390 mm							
551091.002.1 *	D 390, H 101	LED ⁽¹⁾	830	1050 lm	13,5 W	on/off	A+ A+
551091.002.1.76	D 390, H 101	LED ⁽¹⁾	830	1050 lm	13,5 W	DALI	A+ A+
551091.002 *	D 390, H 101	LED ⁽¹⁾	840	1050 lm	13,5 W	on/off	A+ A+
551091.002.76	D 390, H 101	LED ⁽¹⁾	840	1050 lm	13,5 W	DALI	A+ A+
Opal glass, satin finish D 500 mm							
551093.002.1 *	D 500, H 128	LED ⁽¹⁾	830	1800 lm	21 W	on/off	A+ A+
551093.002.1.76	D 500, H 128	LED ⁽¹⁾	830	1800 lm	21 W	DALI	A+ A+
551093.002 *	D 500, H 128	LED ⁽¹⁾	840	1950 lm	21 W	on/off	A+ A+
551093.002.76	D 500, H 128	LED ⁽¹⁾	840	1950 lm	21 W	DALI	A+ A+

* With integrated phase section dimming

Price Category 11

Replacement glasses							
05-2008.002	D 280, H 88						
05-2009.002	D 390, H 83						
05-2010.002	D 500, H 109						

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

1 x 75 W GLS (75 W)

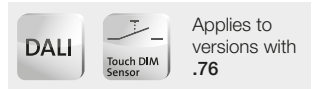
LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)

2 x 100 W GLS (200 W)


Ceiling and wall luminaires | Series: Mondana®-A PE

 Type of Protection: **IP 65**

Protection Class: I, II upon request

Impact Protection: IK10

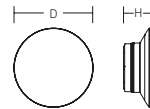
Base: plastic (polycarbonate). Diffuser: plastic (polyethylene) opal, satin finish.

Diffuser fastening: screwneck.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Diffuser: plastic (polyethylene) D 280 mm							
551087.002.1	D 280, H 105	LED ⁽¹⁾	830	650 lm	9 W	on/off	A+ A+
551087.002	D 280, H 105	LED ⁽¹⁾	840	700 lm	9 W	on/off	A+ A+
Diffuser: plastic (polyethylene) D 440 mm							
551092.002.1 *	D 440, H 109	LED ⁽¹⁾	830	1250 lm	13,5 W	on/off	A+ A+
551092.002.1.76	D 440, H 109	LED ⁽¹⁾	830	1250 lm	13,5 W	DALI	A+ A+
551092.002 *	D 440, H 109	LED ⁽¹⁾	840	1250 lm	13,5 W	on/off	A+ A+
551092.002.76	D 440, H 109	LED ⁽¹⁾	840	1250 lm	13,5 W	DALI	A+ A+
Diffuser: plastic (polyethylene) D 550 mm							
551094.002.1 *	D 550, H 135	LED ⁽¹⁾	830	2200 lm	21 W	on/off	A+ A+
551094.002.1.76	D 550, H 135	LED ⁽¹⁾	830	2200 lm	21 W	DALI	A+ A+
551094.002 *	D 550, H 135	LED ⁽¹⁾	840	2150 lm	21 W	on/off	A+ A+
551094.002.76	D 550, H 135	LED ⁽¹⁾	840	2150 lm	21 W	DALI	A+ A+

* With integrated phase section dimming

Price Category 11

Replacement diffusers							
08-2036.002	D 280, H 88	Plastic (polyethylene)					
08-2037.002	D 440, H 83	Plastic (polyethylene)					
08-2038.002	D 550, H 114	Plastic (polyethylene)					

Price Category 13

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 13 W TC-D (19 W CB)

1 x 75 W GLS (75 W)

LED 13,5 W ≈

1 x 26 W TC-D (34 W CB)

LED 21 W ≈

1 x 42 W TC-TEL (47 W EB)

2 x 100 W GLS (200 W)



ROUNDED® MIDI

Ceiling and wall luminaires

- Elegant appearance without visible screws featuring bayonet lock and safety catch.
- LED: Smart and cost-saving LED modules for mains voltage on high LED-efficiency level applied for energy saving operation
- Sturdy housing made of corrosion resistant pressure die cast aluminium, powder coated
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables. Wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Huge choice of variants: 24 different models for each lamp, based on
 - Two diffuser types: pressed glass with satin finish or shock resistant opal plastic (PC)
 - Three standard colours
 - Four housing types: Flat cover or cover with spherical cap, visor or grill
- Fixing points outside the gasketed area guarantee a steady mounting quality by consequently preventing mistakes
- Seawater resistant coating
- Second cable inlet for loop through
- Further options:
 - House number luminaire with integral daylight sensor
 - Emergency version for escape route lighting with central battery supply



Further luminaires of this series, see:
Outdoor lighting | House number luminaires
Emergency lighting

Ceiling and wall luminaires | Series: Rounded® Midi

 Type of Protection: **IP 65**

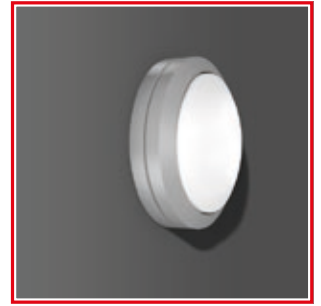
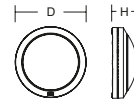
Protection Class: I

Impact Protection: IK06 (Glass), IK10 (polycarbonate)

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires							
Glass							
582002.00X .Q	D 268, H 91	LED ⁽¹⁾	840	490 lm	10 W	on/off	A+ A+
582000.00X	D 268, H 91	1 x QA60 (clear)	57 W			on/off	A, C, E A+
Plastic (polycarbonate)							
582003.00X	D 268, H 91	LED ⁽¹⁾	840	790 lm	10 W	on/off	A+ A+
582001.00X	D 268, H 91	1 x QA60 (clear)	57 W			on/off	A, C, E A+
Replacement glasses							
05-581023.002	D 226, H 60						
Replacement diffusers							
08-581019.012	D 226, H 60	Plastic (polycarbonate)					
Theft protection							
982410.003	L 13, B 11, H 16						

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

 1 x 13 W TC-D (19 W CB)
 1 x 26 W TC-D (34 W CB)

Ceiling and wall luminaires | Series: Rounded® Midi

 Type of Protection: **IP 65**

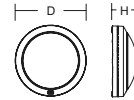
Protection Class: I

Impact Protection: IK10

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

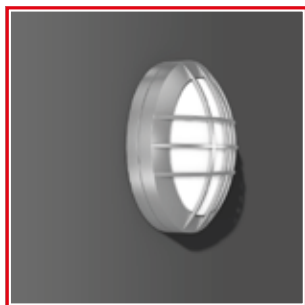
Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires with integrated HF movement sensor							
Plastic (polycarbonate)							
582003.00X.19	D 268, H 91	LED ⁽¹⁾	840	710 lm	10 W	on/off	A+ A+
Replacement diffusers							
08-581019.012	D 226, H 60	Plastic (polycarbonate)					
Theft protection							
982410.003	L 13, B 11, H 16						

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

1 x 18 W TC-D (26 W CB)



Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 13 W TC-D (19 W CB)
1 x 18 W TC-D (26 W CB)



Ceiling and wall luminaires | Series: Rounded® Midi

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK06 (Glass), IK10 (polycarbonate)

Base, housing and guard made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

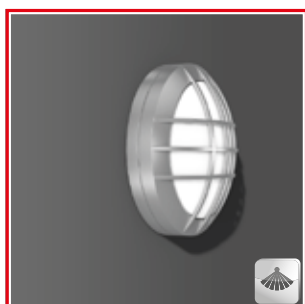


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires with protective guard							
Glass							
582008.00X	D 268, H 100	LED ⁽¹⁾	840	440 lm	10 W	on/off	A+ A+
582006.00X	D 268, H 100	1 x QA60 (clear)	57 W			on/off	A,C,E A+
Plastic (polycarbonate)							
582009.00X	D 268, H 100	LED ⁽¹⁾	840	720 lm	10 W	on/off	A+ A+
582007.00X	D 268, H 100	1 x QA60 (clear)	57 W			on/off	A,C,E A+
Replacement glasses							
05-581023.002	D 226, H 60						
Replacement diffusers							
08-581019.012	D 226, H 60	Plastic (polycarbonate)					
Theft protection							
982410.003	L 13, B 11, H 16						

Price Category 12

Price Category 13

Price Category 12



Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 18 W TC-D (26 W CB)



Ceiling and wall luminaires | Series: Rounded® Midi

Type of Protection: **IP 65**

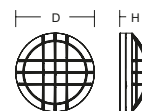
Protection Class: I

Impact Protection: IK10

Base, housing and guard made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser made of opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Ceiling and wall luminaires with protective guard							
Plastic (polycarbonate)							
582009.00X.19	D 268, H 100	LED ⁽¹⁾	840	660 lm	10 W	on/off	A+ A+
Replacement diffusers							
08-581019.012	D 226, H 60	Plastic (polycarbonate)					
Theft protection							
982410.003	L 13, B 11, H 16						

Price Category 12

Price Category 13

Price Category 12

Ceiling and wall luminaires | Series: Rounded® Midi

 Type of Protection: **IP 65**

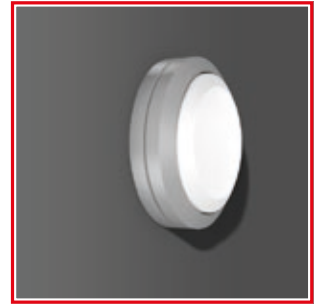
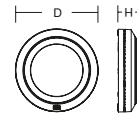
Protection Class: I

Impact Protection: IK06 (Glass), IK10 (polycarbonate)

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC	Price Category 12
Ceiling and wall luminaires								
Flat glass								
582004.00X	D 268, H 70	LED ⁽¹⁾	840	490 lm	10 W	on/off	A+ A+	
Flat plastic (polycarbonate) diffuser								
582005.00X .Q	D 268, H 70	LED ⁽¹⁾	840	590 lm	10 W	on/off	A+ A+	
Replacement glasses								
05-581208.002	D 226, H 39							Price Category 13
Replacement diffusers								
08-581150.012	D 226, H 39	Plastic (polycarbonate)						Price Category 13
Theft protection								
982410.003	L 13, B 11, H 16							Price Category 12


**Comparison
LED vs. conventional lamps**

LED 10 W ≈
1 x 13 W TC-D (19 W CB)

Ceiling and wall luminaires | Series: Rounded® Midi

 Type of Protection: **IP 65**

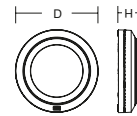
Protection Class: I

Impact Protection: IK10

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

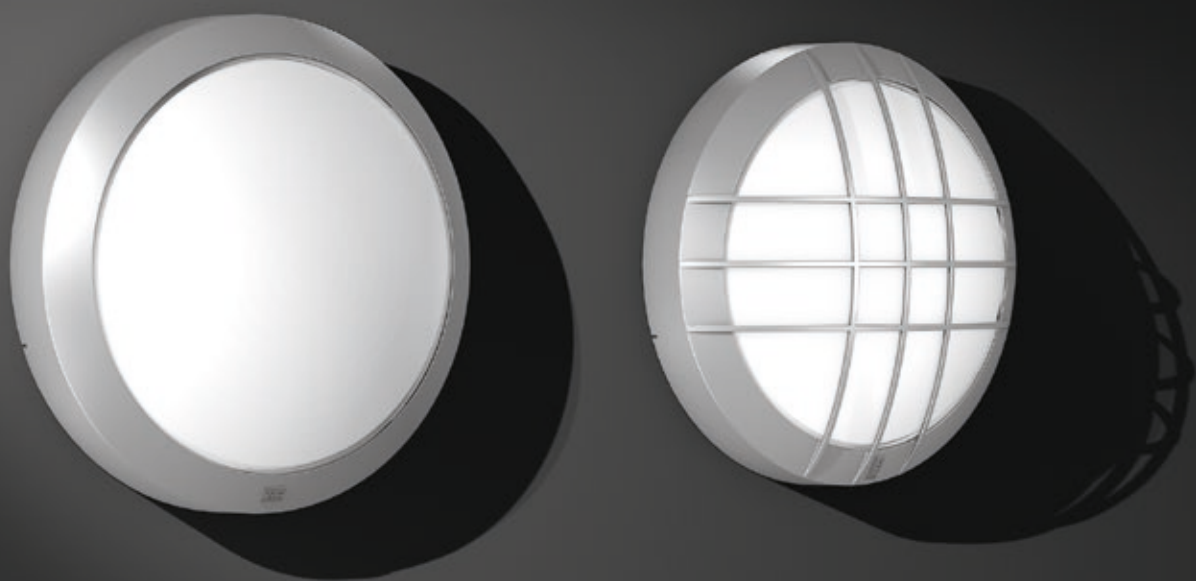
Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC	Price Category 12
Ceiling and wall luminaires with integrated HF movement sensor								
Flat plastic (polycarbonate) diffuser								
582005.00X.19	D 268, H 70	LED ⁽¹⁾	840	500 lm	10 W	on/off	A+ A+	
Replacement diffusers								
08-581150.012	D 226, H 39	Plastic (polycarbonate)						Price Category 13
Theft protection								
982410.003	L 13, B 11, H 16							Price Category 12


**Comparison
LED vs. conventional lamps**

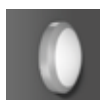
LED 10 W ≈
1 x 13 W TC-D (19 W CB)



ROUNDED® MAXI

Ceiling and wall luminaires

- Elegant appearance without visible screws featuring bayonet lock and safety catch.
- The adequate size also allows them to be used in generously dimensioned outdoor areas without them appearing lost
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables, wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Second cable inlet for loop through
- Can also be fitted with lamps for E27 lampholder
- Emergency versions for escape route lighting and central battery feed available



Further luminaires of this series, see:
Emergency lighting

Ceiling and wall luminaires | Series: Rounded® Maxi

 Type of Protection: **IP 65**

Protection Class: I

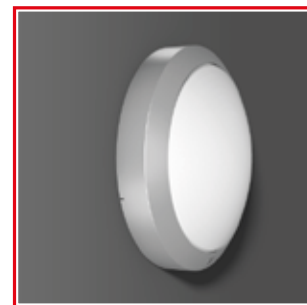
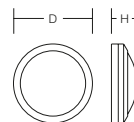
Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) with diffuser fixing. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module.

 Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	
Ceiling and wall luminaires								Price Category 12
581638.00X	D 400, H 121	2 x QA60 (clear)	57 W			on/off	A, C, E A+	
581639.00X	D 400, H 121	LED ⁽¹⁾	830	1300 lm	22 W	on/off	A+ A+	
581639.00X.1	D 400, H 121	LED ⁽¹⁾	840	1300 lm	22 W	on/off	A+ A+	
Replacement glasses								Price Category 13
981212.002	D 355, H 66							
Theft protection								Price Category 12
982410.003	L 13, B 11, H 16							

**Comparison
LED vs. conventional lamps**
LED 22 W ≈

2 x 18 W TC-D (52 W CB)

Ceiling and wall luminaires | Series: Rounded® Maxi

 Type of Protection: **IP 65**

Protection Class: I

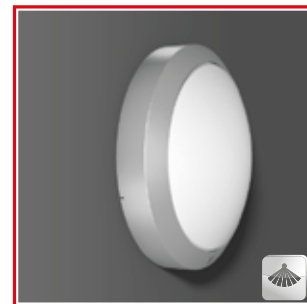
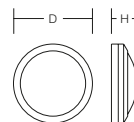
Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) with diffuser fixing. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor.

 Mains connection 2 x 3 x 1.5 mm².

LED included.

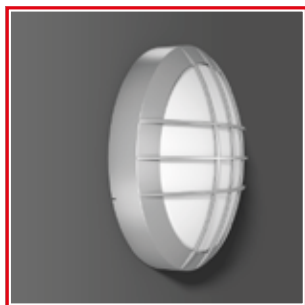
Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	
Ceiling and wall luminaires with integrated HF movement sensor								Price Category 12
581639.00X.19	D 400, H 121	LED ⁽¹⁾	830	1300 lm	22 W	on/off	A+ A+	
581639.00X.1.19	D 400, H 121	LED ⁽¹⁾	840	1300 lm	22 W	on/off	A+ A+	
581639.00X.19	D 400, H 125	LED ⁽¹⁾	830	1300 lm	22 W	on/off	A+ A+	
Replacement glasses								Price Category 13
981212.002	D 355, H 66							
Theft protection								Price Category 12
982410.003	L 13, B 11, H 16							

**Comparison
LED vs. conventional lamps**
LED 22 W ≈

2 x 18 W TC-D (52 W CB)



Comparison LED vs. conventional lamps

LED 22 W ≈
2 x 13 W TC-D (38 W CB)

Ceiling and wall luminaires | Series: Rounded® Maxi

Type of Protection: **IP 65**

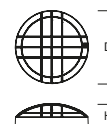
Protection Class: I

Impact Protection: IK04

Base, housing and guard made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

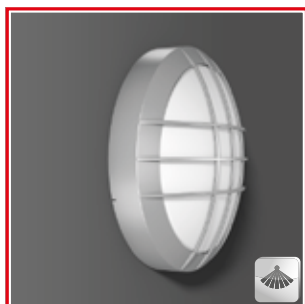
Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC	Price Category 12
Ceiling and wall luminaires with protective guard								
581641.00X	D 400, H 127	LED ⁽¹⁾	830	1150 lm	22 W	on/off	A+ A+	
581641.00X.1	D 400, H 127	LED ⁽¹⁾	840	1150 lm	22 W	on/off	A+ A+	
581640.00X	D 400, H 127	2 x QA60 (clear)	57 W			on/off	A,C,E A+	

Replacement glasses								Price Category 13
981212.002	D 355, H 66							

Theft protection								Price Category 12
982410.003	L 13, B 11, H 16							



Comparison LED vs. conventional lamps

LED 22 W ≈
2 x 13 W TC-D (38 W CB)

Ceiling and wall luminaires | Series: Rounded® Maxi

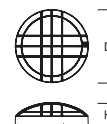
Type of Protection: **IP 65**

Protection Class: I

Base, housing and guard made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

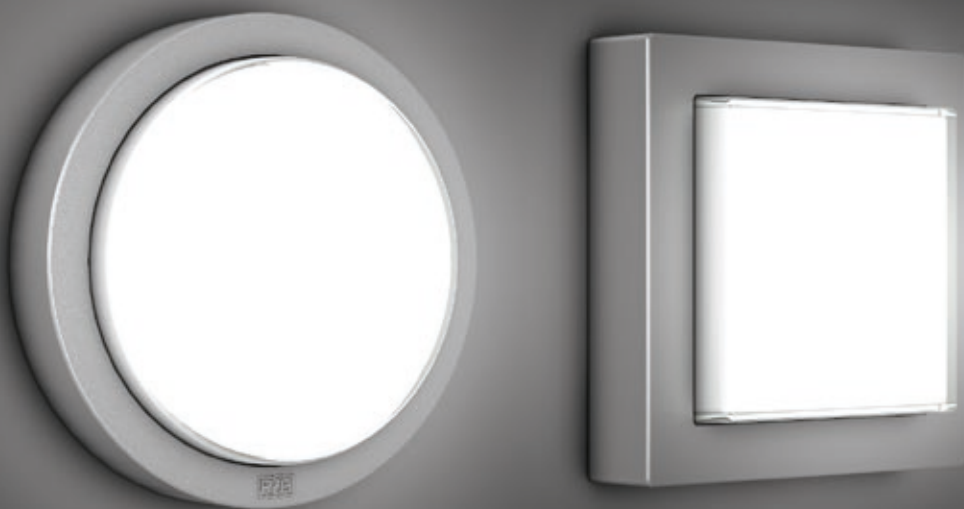


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC	Price Category 12
Ceiling and wall luminaires with protective guard and integrated HF movement sensor								
581641.00X.19	D 400, H 127	LED ⁽¹⁾	830	1150 lm	22 W	on/off	A+ A+	
581641.00X.1.19	D 400, H 127	LED ⁽¹⁾	840	1150 lm	22 W	on/off	A+ A+	

Replacement glasses								Price Category 13
981212.002	D 355, H 66							

Theft protection								Price Category 12
982410.003	L 13, B 11, H 16							





CADERO®

Ceiling and wall luminaires

- The flat design provides universal applicability with circular or square glass cover option
- The inside matte crystal glass diffuser appears brilliant also in the daytime.
- Smart, cost-effective LED modules for mains voltage with high total LED luminous efficiency for energy-saving operation
- Durability by using high-quality materials like aluminium, crystal glass and stainless steel as well as long-lasting powder-coating
- Selection of two light colours 830 or 840 enables harmonising direct surrounding with remote ambient lighting
- The high type of protection IP 65 enables maintenance-free, plain LED operation
- Also available as emergency lighting version



Further luminaires of this series, see:
Emergency lighting

Ceiling and wall luminaires | Series: Cadero® Disca

 Type of Protection: **IP 65**

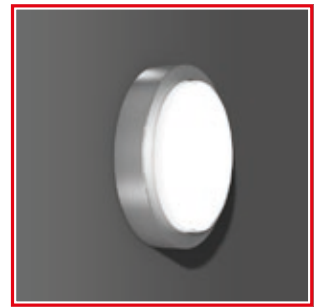
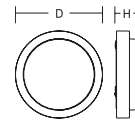
Protection Class: I

Impact Protection: IK07

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Clear crystal glass diffuser, inside satin finish, retained in cover. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
582018.00X	D 276, H 66	LED	830	760 lm	13,5 W	on/off	A+ A+	
582018.00X.1	D 276, H 66	LED	840	760 lm	13,5 W	on/off	A+ A+	

Replacement glasses	Price Category 13
981211.002 D 245, H 33	

**Comparison
LED vs. conventional lamps**

LED 13,5 W ≈
1 x 18 W TC-D (26 W CB)

Ceiling and wall luminaires | Series: Cadero® Disca

 Type of Protection: **IP 65**

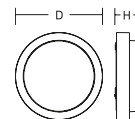
Protection Class: I

Impact Protection: IK07

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Clear crystal glass diffuser, inside satin finish, retained in cover. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
582018.00X.19	D 276, H 66	LED	830	760 lm	13,5 W	on/off	A+ A+	
582018.00X.1.19	D 276, H 66	LED	840	760 lm	13,5 W	on/off	A+ A+	

Replacement glasses	Price Category 13
981211.002 D 245, H 33	

**Comparison
LED vs. conventional lamps**

LED 13,5 W ≈
1 x 18 W TC-D (26 W CB)



Comparison LED vs. conventional lamps

LED 13,5 W ≈
1 x 18 W TC-D (26 W CB)

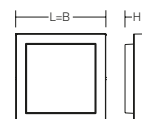
Ceiling and wall luminaires | Series: Cadero® Quadra

Type of Protection: **IP 65**
Protection Class: I
Impact Protection: IK05

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Clear crystal glass diffuser, inside satin finish, retained in cover. Simple mounting spring system for installation without tools. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Ceiling and wall luminaires								
581637.00X.Q	L 257, B 257, H 81	LED	830	670 lm	13,5 W	on/off	A+ A+	
581637.00X.1.Q	L 257, B 257, H 81	LED	840	670 lm	13,5 W	on/off	A+ A+	
Replacement glasses								
981210.002	L 233, B 233, H 35							Price Category 13



Comparison LED vs. conventional lamps

LED 13,5 W ≈
1 x 18 W TC-D (26 W CB)

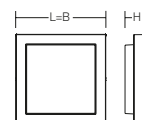
Ceiling and wall luminaires | Series: Cadero® Quadra

Type of Protection: **IP 65**
Protection Class: I
Impact Protection: IK05

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Clear crystal glass diffuser, inside satin finish, retained in cover. Simple mounting spring system for installation without tools. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Recessed ceiling and wall luminaires with integrated movement sensor								
581637.00X.19	L 257, B 257, H 81	LED	830	670 lm	13,5 W	on/off	A+ A+	
581637.00X.1.19	L 257, B 257, H 81	LED	840	670 lm	13,5 W	on/off	A+ A+	
Replacement glasses								
981210.002	L 233, B 233, H 35							Price Category 13





ALU-DESIGN

Ceiling and wall luminaires

- Elegant appearance without visible screws featuring bayonet lock and safety catch.
- LED: Smart and cost-saving LED modules for mains voltage on high LED-efficiency level applied for energy saving operation
- Sturdy housing made of corrosion resistant pressure die-cast aluminium, powder coated
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables, wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Seawater resistant coating
- Second cable inlet for loop through
- Emergency versions for escape route lighting and central battery feed available



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires
Emergency lighting

Ceiling and wall luminaires | Series: Alu-Design

 Type of Protection: **IP 65**

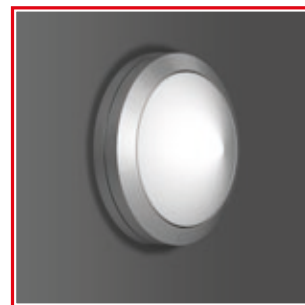
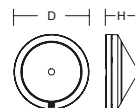
Protection Class: I

Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: opal glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Ceiling and wall luminaires								
582015.00X	D 268, H 115	LED	830	490 lm	10 W	on/off	A+ A+	
582015.00X.1	D 268, H 115	LED	840	490 lm	10 W	on/off	A+ A+	
582014.00X.Q	D 268, H 115	1 x QA60 (clear)	57 W			on/off	A,C,E A+	

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

1 x 13 W TC-D (19 W CB)

Ceiling and wall luminaires | Series: Alu-Design

 Type of Protection: **IP 65**

Protection Class: I

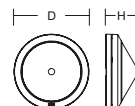
Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: opal glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and daylight sensor.

 Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Ceiling and wall luminaires with daylight sensor								
582015.00X.25	D 268, H 115	LED	830	490 lm	10 W	on/off	A+ A+	
582015.00X.1.25	D 268, H 115	LED	840	490 lm	10 W	on/off	A+ A+	

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

1 x 13 W TC-D (19 W CB)

Ceiling and wall luminaires | Series: Alu-Design

 Type of Protection: **IP 65**

Protection Class: I

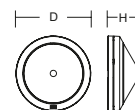
Impact Protection: IK04

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: opal glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed area, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module and HF movement sensor.

 Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC	Price Category 12
Ceiling and wall luminaires with integrated HF movement sensor								
582015.00X.19	D 268, H 115	LED	830	420 lm	10 W	on/off	A+ A+	
582015.00X.1.19	D 268, H 115	LED	840	420 lm	10 W	on/off	A+ A+	

**Comparison
LED vs. conventional lamps**
LED 10 W ≈

1 x 13 W TC-D (19 W CB)

Reference number	Dimensions	Price Category 13
05-3143.002	D 226, H 83	

Reference number	Dimensions	Price Category 12
982410.003	L 13, B 11, H 16	



ALU-RUND

Ceiling and wall luminaires

- Base: pressure die-cast aluminium, powder-coated
- High ingress protection rating supports continuous trouble-free operation



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires

Ceiling and wall luminaires | Series: Alu-Rund

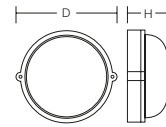
 Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC	
Ceiling and wall luminaires					Price Category 12
58090.00X .Q	D 240, H 130	1 x QA60 (clear) 77 W	on/off	A, C, E A+	
58091.00X .Q	D 190, H 90	1 x QA60 (clear) 57 W	on/off	A, C, E A+	
Replacement glasses					Price Category 13
05-58033	D 170, H 70				
05-58090	D 230, H 100				

Ceiling and wall luminaires | Series: Alu-Rund

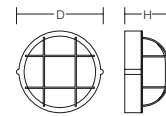
 Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC	
Ceiling and wall luminaires with protective guard					Price Category 12
51060.00X.1 .Q	D 240, H 130	1 x QA60 (clear) 77 W	on/off	A, C, E A+	
Replacement glasses					Price Category 13
05-51060.000	D 227, H 100				

Ceiling and wall luminaires | Series: Alu-Rund

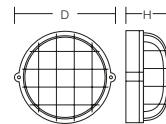
 Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



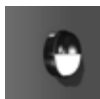
Reference number	Dimensions	Lamp	dimmable	EEC	
Ceiling and wall luminaires with protective guard					Price Category 12
58110.00X .Q	D 240, H 130	1 x QA60 (clear) 77 W	on/off	A, C, E A+	
Replacement glasses					Price Category 13
05-58090	D 230, H 100				



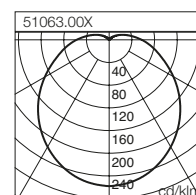
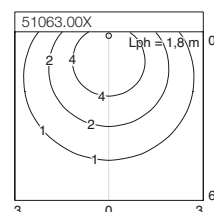
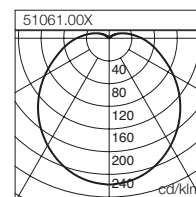
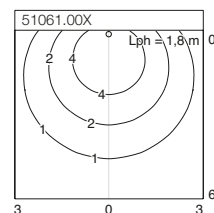
ALU-SUPERIOR

Ceiling and wall luminaires

- Impact resistant plastic diffuser is suitable for robust neighbourhood requirements
- High ingress protection rating supports continuous trouble-free operation
- A stainless steel bracket outside the sealed lamp compartment is used to certainly prevent installation failures. Additionally, drill hole tolerances can be compensated.
- A second cable gland provides simple loop through without additional connection box



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires



Ceiling and wall luminaires | Series: Alu-Superior

 Type of Protection: **IP 65**

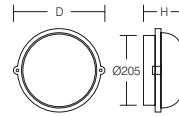
Protection Class: I

Impact Protection: IK08

Base and cover ring: die cast aluminium, powder coated. Stainless steel mounting bracket with compensation for drill hole deviations. Diffuser: plastic (polycarbonate), opal. With membrane valve to prevent condensation. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Ceiling and wall luminaires
Price Category 12

51061.00X	D 245, H 120	LED ⁽¹⁾	840	350 lm	9 W	on/off	A, A+ A+
51050.00X	D 245, H 120	1 x QA60 (clear)	57 W			on/off	A, C, E A+

**Comparison
LED vs. conventional lamps**

LED 9 W ≈
1 x 60 W GLS (60 W)

Ceiling and wall luminaires | Series: Alu-Superior

 Type of Protection: **IP 65**

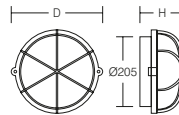
Protection Class: I

Impact Protection: IK08

Base and guard: die-cast aluminium, powder-coated. Stainless steel mounting bracket with compensation for drill hole deviations. Diffuser: plastic (polycarbonate), opal. With membrane valve to prevent condensation. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Ceiling and wall luminaires with protective guard
Price Category 12

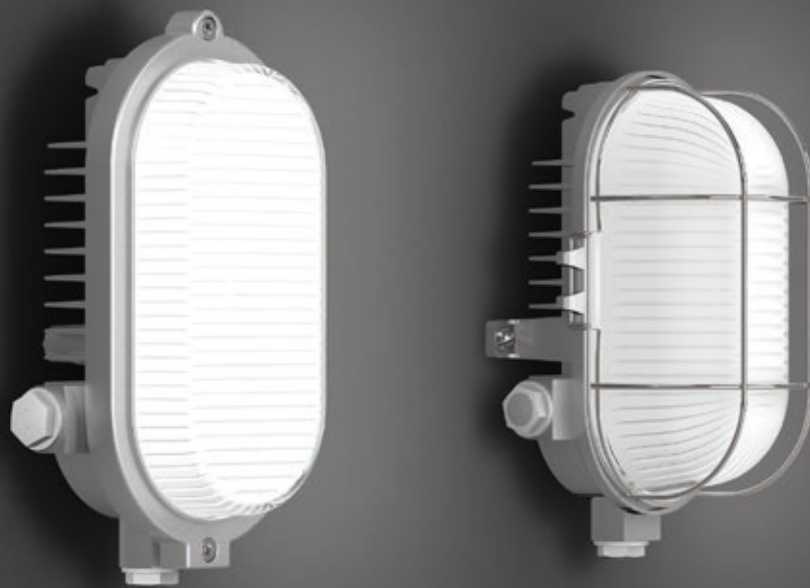
51063.00X	D 245, H 125	LED ⁽¹⁾	840	350 lm	9 W	on/off	A, A+ A+
51052.00X	D 245, H 125	1 x QA60 (clear)	57 W			on/off	A, C, E A+

**Comparison
LED vs. conventional lamps**

LED 9 W ≈
1 x 60 W GLS (60 W)

Replacement diffusers
Price Category 13

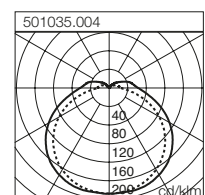
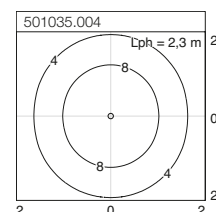
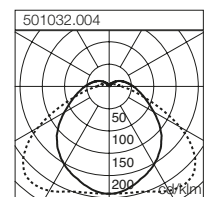
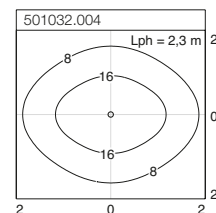
08-1837.002	D 214, H 68	Plastic (polycarbonate)					
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ALU OVAL BULKHEAD LUMINAIRES

Ceiling and wall luminaires

- The oval bulkhead luminaire, a RZB classic re-interpreted.
- LED technology for high levels of energy efficiency
- Virtually maintenance-free operation
- Base made of die-cast aluminium
- Impact resistant crystal glass, coated on the inside
- Suitable for use in harsh conditions (e.g. industry and wind power stations, cold storage areas, etc.)
- Operating range: -30°C to +40°C
- LED rated life 32,000 hours (L70, B50)



Ceiling and wall luminaires | Series: Areno®

 Type of Protection: **IP 65**

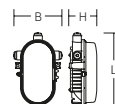
Protection Class: I

Impact Protection: IK03

Base: pressure die-cast aluminium, powder-coated. With three cable inlets: M20x1.5.
Cover: glass, painted white inside, textured. Bezel ring: powder-coated die-cast aluminium, screwed on the luminaire. Drill holes at the inside, with silicone scaling ring.

LED included.

Available colour: 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Ceiling and wall luminaires							
Price Category 11							
501036.004.1	L 227, B 141, H 87	LED ⁽¹⁾	830	220 lm	9 W	on/off	A A
501036.004	L 227, B 141, H 87	LED ⁽¹⁾	840	220 lm	9 W	on/off	A,A+ A+
501035.004.1	L 227, B 141, H 87	LED ⁽¹⁾	830	420 lm	18 W	on/off	A A
501035.004	L 227, B 141, H 87	LED ⁽¹⁾	840	430 lm	18 W	on/off	A,A+ A+

Replacement glasses							
Price Category 13							
05-50200.042	L 188, B 97, H 40						

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 40 W GLS (40 W)

LED 18 W ≈

1 x 60 W GLS (60 W)

Die-cast aluminium oval bulkhead luminaires, impact resistant |
Series: Alu-Standard LED

 Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK02

Base: pressure die-cast aluminium, powder-coated. Screw mounting for with protective guard. With three cable inlets: M20x1.5. Crystal glass: textured, satin finish. Protective guard: steel wire, galvanised.

LED included.

Available colour: 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Ceiling and wall luminaires							
Price Category 11							
501031.004.1	L 210, B 130, H 115	LED ⁽¹⁾	830	380 lm	9 W	on/off	A,A+ A
501031.004	L 210, B 130, H 115	LED ⁽¹⁾	840	380 lm	9 W	on/off	A+ A+
501032.004.1	L 210, B 130, H 120	LED ⁽¹⁾	830	720 lm	18 W	on/off	A,A+ A
501032.004	L 210, B 130, H 120	LED ⁽¹⁾	840	720 lm	18 W	on/off	A,A+ A+

Replacement glasses							
Price Category 13							
05-50200.020	L 188, B 97, H 64						

**Comparison
LED vs. conventional lamps**
LED 9 W ≈

1 x 40 W GLS (40 W)

LED 18 W ≈

1 x 60 W GLS (60 W)

Die-cast aluminium oval bulkhead luminaires, impact resistant |
Series: Alu-Standard

 Type of Protection: **IP 43**

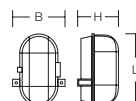
Protection Class: I

Impact Protection: IK07

Base: pressure die-cast aluminium, powder-coated. Screw mounting for with protective guard. With three cable inlets: M20x1.5. Crystal glass: transparent. Protective guard: steel wire, galvanised.

The lampholder must be pointed downwards for wall mounting (lamp upright).

Available colour: 4 = silver coloured



Reference number	Dimensions	Lamp	dimm-able	EEC
Ceiling and wall luminaires				
Price Category 11				
50700.004	L 210, B 130, H 120	1 x E27* 60 W	on/off	A,C,E A+
50702.004	L 210, B 130, H 120	1 x E27* 100 W	on/off	A,C,E A+

Replacement glasses				
Price Category 13				
05-50200	L 188, B 97, H 64			



Ceiling and wall luminaires | Series: Alu-Lux oval

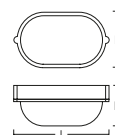
Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dim-able	EEC	
Ceiling and wall luminaires					Price Category 12
58010.00X.Q	L 270, B 160, H 120	1 x QA60 (clear) 57 W	on/off	A,C,E A+	
Replacement glasses					Price Category 13
05-58010	L 260, B 150, H 100				

Ceiling and wall luminaires | Series: Alu-Lux oval

Type of Protection: **IP 54**

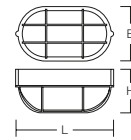
Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

LED included.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Ceiling and wall luminaires with protective guard							
581636.00X	L 270, B 160, H 130	LED	830	720 lm	15,3 W	on/off	A+ A+
581636.00X.1	L 270, B 160, H 130	LED	840	780 lm	15,3 W	on/off	A+ A+
50730.00X.1	L 280, B 160, H 140	1 x QA60 (clear)	57 W			on/off	A, C, E A+

Price Category 12

Replacement glasses							
05-50031	L 255, B 148, H 90						

Price Category 13

Comparison LED vs. conventional lamps

LED 15,3 W ≈

1 x 75 W GLS (75 W)

1 x 26 W TC-D (34 W CB)

Ceiling and wall luminaires | Series: Alu-Lux oval

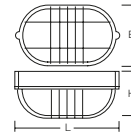
Type of Protection: **IP 54**

Protection Class: I

Impact Protection: IK04

Base: pressure die-cast aluminium, powder-coated. Glass, frosted inside.

Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	dimmable	EEC
Ceiling and wall luminaires with protective guard				
58070.00X .Q	L 270, B 160, H 130	1 x QA60 (clear) 57 W	on/off	A, C, E A+

Price Category 12

Replacement glasses				
05-58010	L 260, B 150, H 100			

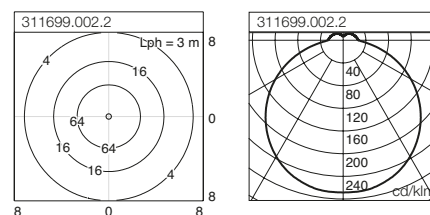
Price Category 13



FLAT POLYMERO® KREIS

Ceiling and wall luminaires

- Comprehensive range consisting of:
 - Pendant luminaires
 - Ceiling luminaires
 - Wall luminaires
- High degree of protection: IP 44 for use in wet areas
- Available in different diameters
- Depending on the version, high-quality polycarbonate or acrylic glass (PMMA) are available as diffusers
- Personalisation possible with foil print



Further luminaires of this series, see:
 Indoor lighting | Pendant luminaires
 Indoor lighting | Ceiling and wall luminaires

Ceiling and wall luminaires | Series: Flat Polymero® Sensation Kreis

Type of Protection: IP 44

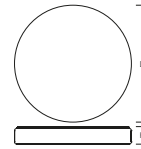
Protection Class: I

Impact Protection: IK07 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal or plastic (polycarbonate with ball impact protection in accordance with DIN 18032-3), opal. Diffuser fastening: sash lock.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
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Ceiling and wall luminaires

Price Category 21

Diffuser: plastic (PMMA) D 1040 mm

311699.002	D 1040, H 150	LED	830	9650 lm	100 W	on/off	A++ A++
311699.002.76	D 1040, H 150	LED	830	9650 lm	100 W	DALI	A++ A++
311699.002.1	D 1040, H 150	LED	840	10500 lm	100 W	on/off	A++ A++
311699.002.1.76	D 1040, H 150	LED	840	10500 lm	100 W	DALI	A++ A++

Diffuser: plastic (polycarbonate) D 1040 mm, ball impact proof in accordance with DIN 18032-03

311699.002.2	D 1040, H 150	LED	830	10500 lm	100 W	on/off	A++ A++
311699.002.2.76	D 1040, H 150	LED	830	10500 lm	100 W	DALI	A++ A++
311699.002.3	D 1040, H 150	LED	840	11400 lm	100 W	on/off	A++ A++
311699.002.3.76	D 1040, H 150	LED	840	11400 lm	100 W	DALI	A++ A++

Replacement diffusers

Price Category 13

08-311292.002	D 1040, H 150	Plastic (PMMA)
08-311292.012	D 1040, H 150	Plastic (polycarbonate)

Comparison LED vs. conventional lamps

LED 100 W ≈

4 x 55 W TC-L (232 W EB)



The application image shows:
Flat Polymero® Kreis
Nadelspot



The application image shows:
Bocaro®

© Caroline Féraud



593



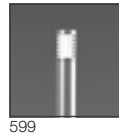
593

Slopia®
592-593

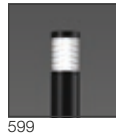


595

Bocaro®
594-595



599

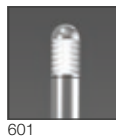


599

Mega Tower
598-599

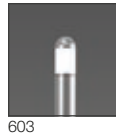


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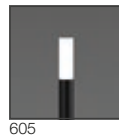
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Mega Lamelle
600-601

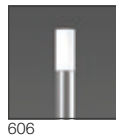


603

Mega Laterne
600, 603



605



606

Mega Tube
604-607

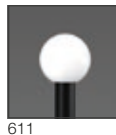


609



609

Mega Square
608-609



611

Mega Kugel
610-611



613



613

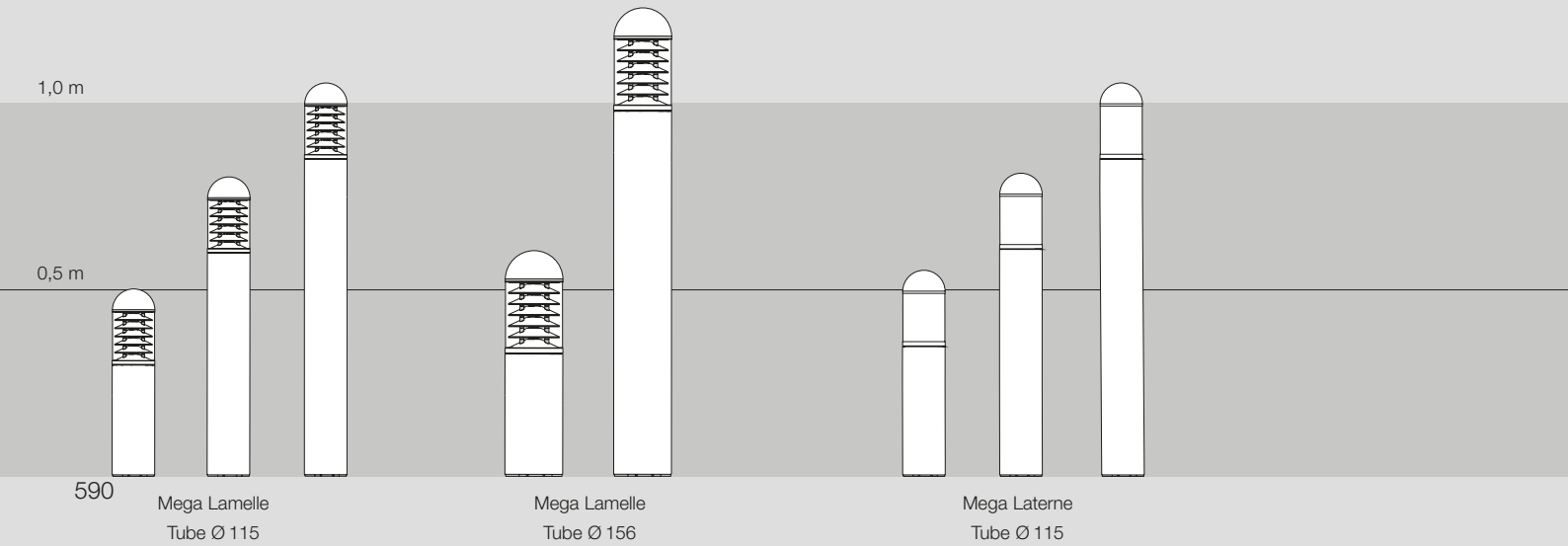
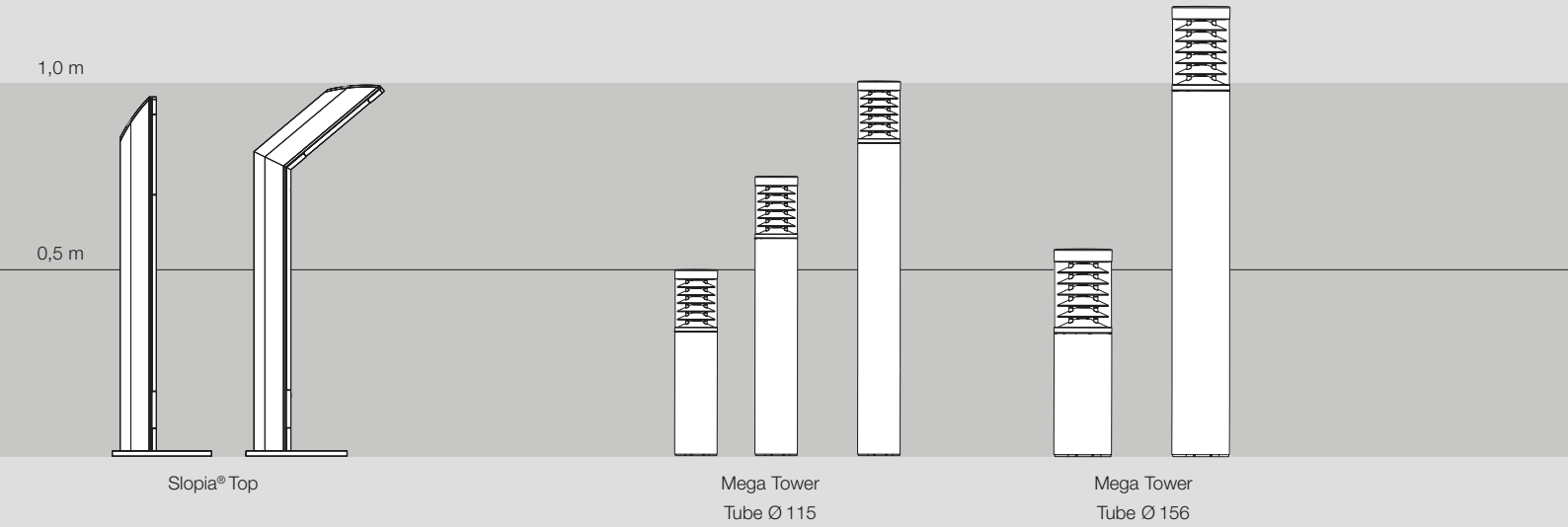
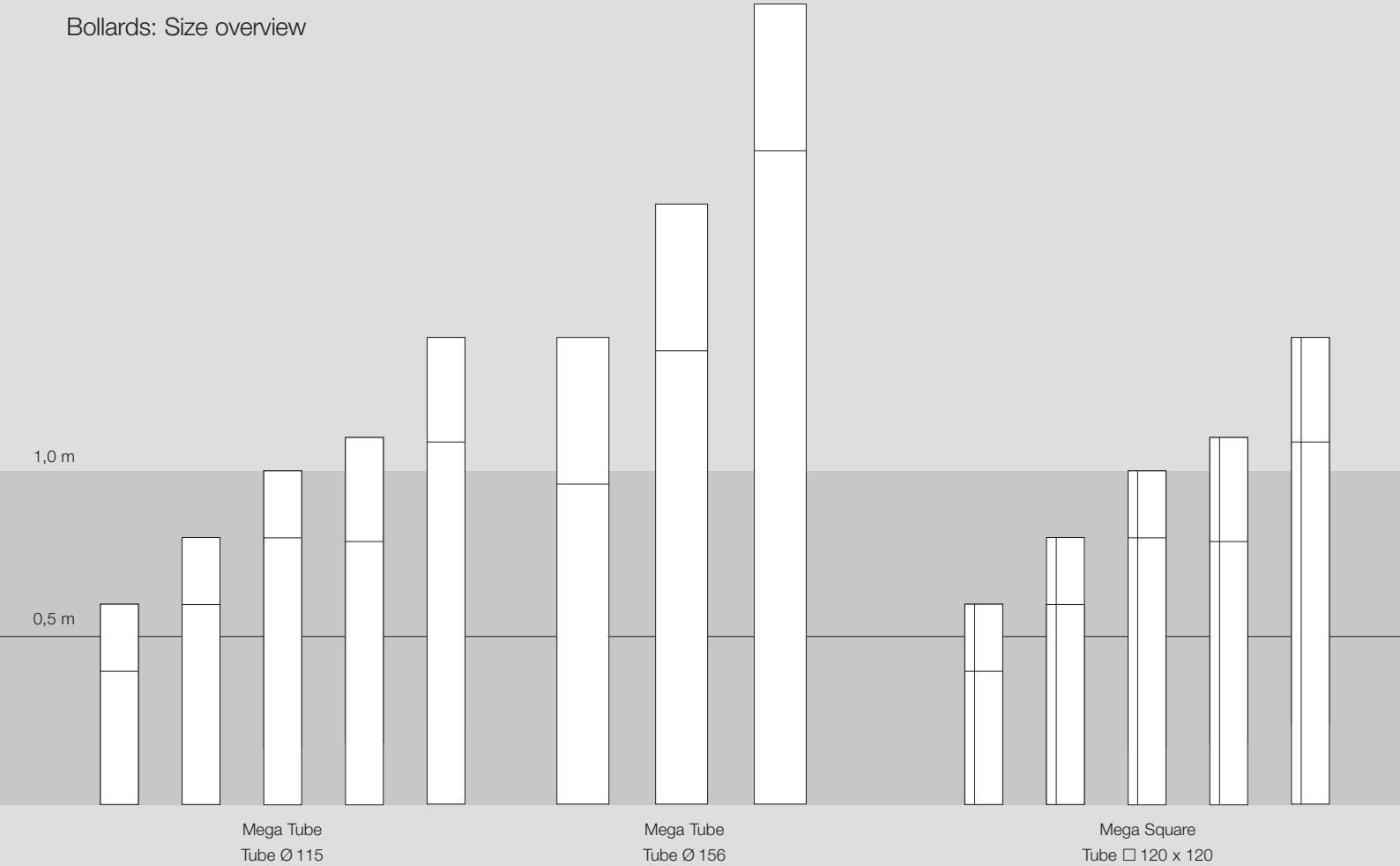
Mega Gürtellinse
612-613

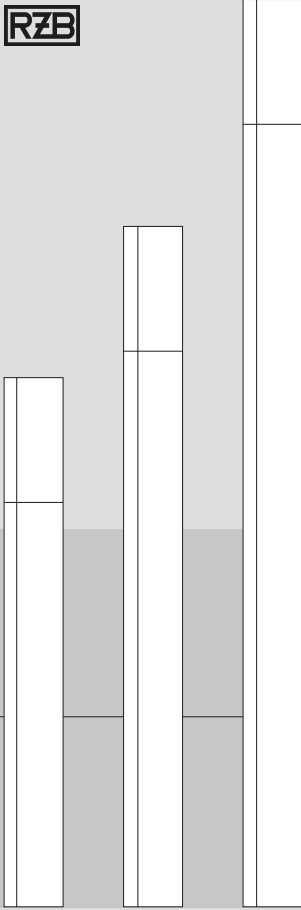


615

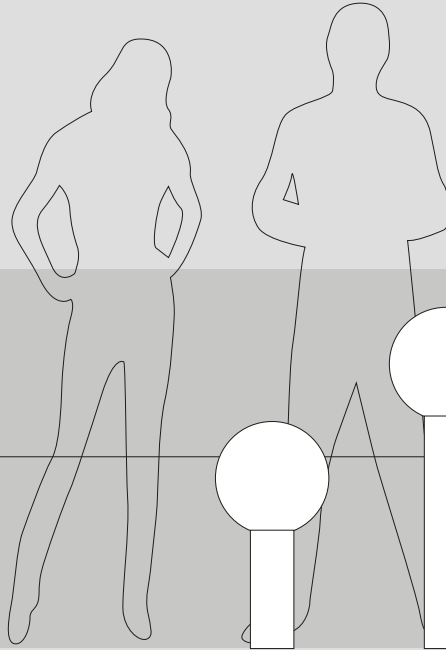
Mega Glaspoller
614-615

Bollards: Size overview

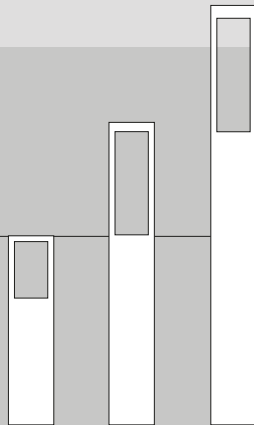




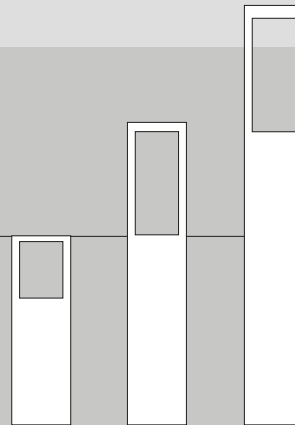
Mega Square
Tube □ 156 x 156



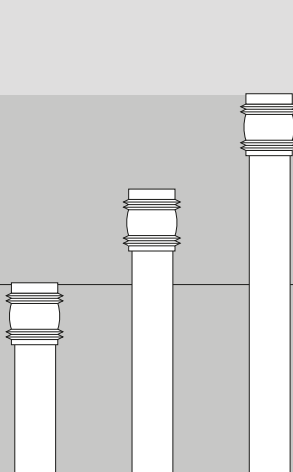
Mega Kugel
Tube Ø 115



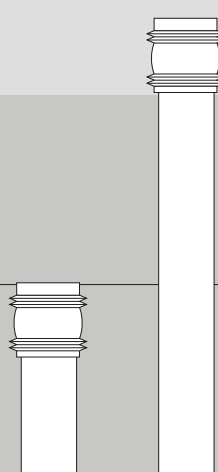
Bocaro
Tube □ 120 x 120



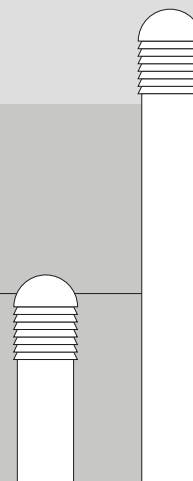
Bocaro
Tube □ 156 x 156



Mega Gürtellinse
Tube Ø 115



Mega Gürtellinse
Tube Ø 156



Mega Glaspoller
Tube Ø 156



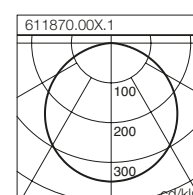
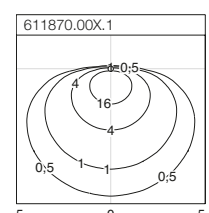
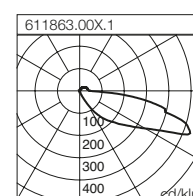
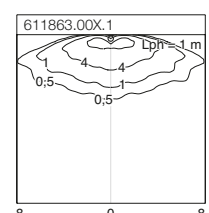
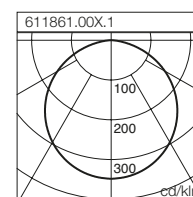
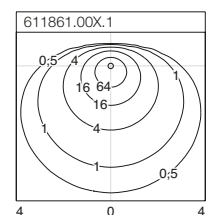
SLOPIA®

Pathway luminaires

- LED bollard for pathway lighting
- Housing made of corrosion-resistant aluminium die-cast and extrusions for outdoor application, powder coated.
- Integral refractor-optics producing a single-sided asymmetrical light distribution.
- No house-side light emission.
- Multi-chip LEDs, selection of light colours 830 and 840.
- With Gore™ Protective Vents diaphragm valve for reduction of condensation
- Choice of integral two Schuko sockets (IP 44)



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires
Outdoor lighting | Pole top luminaires



Pathway luminaires | Series: Slopia® 0'Top

Type of Protection: **IP 44** with socket, **IP 65** without socket

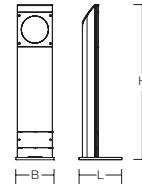
Protection Class: I

Impact Protection: IK08 (with sockets), IK10 (without sockets)

Straight upright column made of aluminium profiles with modular inserts. Covers and ground-plate made of corrosion-resistant aluminium pressure die-cast for outdoor use, powder coated. Module with integrated LED refractor optics and transparent toughened glass cover (asymmetrical) or with LED and cover in opal glass (symmetrical). Electronic ballast included. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Mains connection box inside housing profile for max. 2 x 3 x 2,5 mm² (without socket) or 2 x 5 x 1,5 mm² (with socket) and cable diameter max. Ø 13 mm. Option of IP 44 rated double Schuko socket.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pathway luminaires							
Asymmetrical light distribution, Glass, transparent							
611863.00X	L 270, B 240, H 970	LED	830	360 lm	5 W	on/off	A+ A+
611863.00X.1	L 270, B 240, H 970	LED	840	380 lm	5 W	on/off	A+ A+
With double Schuko socket							
611864.00X	L 270, B 240, H 970	LED	830	360 lm	5 W	on/off	A+ A+
611864.00X.1	L 270, B 240, H 970	LED	840	380 lm	5 W	on/off	A+ A+
Symmetrical light distribution, Glass, opal							
611870.00X	L 270, B 240, H 970	LED ⁽¹⁾	830	710 lm	17 W	on/off	A A+
611870.00X.1	L 270, B 240, H 970	LED ⁽¹⁾	840	820 lm	17 W	on/off	A+ A+
With double Schuko socket							
611871.00X	L 270, B 240, H 970	LED ⁽¹⁾	830	710 lm	17 W	on/off	A A+
611871.00X.1	L 270, B 240, H 970	LED ⁽¹⁾	840	820 lm	17 W	on/off	A+ A+

Comparison LED vs. conventional lamps

LED 5 W ≈

1 x 57 W QA60 (57 W)
1 x 20 W HIT-TC-CE (23 W EB)

LED 17 W ≈

1 x 77 W QA60 (77 W)
1 x 26 W TC-D (34 W CB)

Pathway luminaires | Series: Slopia® 40'Top

Type of Protection: **IP 44** with socket, **IP 65** without socket

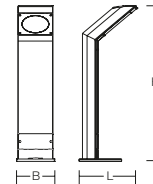
Protection Class: I

Impact Protection: IK08 (with sockets), IK10 (without sockets)

Upright column with head tilted 40 degrees downwards. Column made of powder coated aluminium profiles with modular inserts. Covers and ground-plate made of corrosion-resistant aluminium pressure die-cast for outdoor use, powder coated. Module with LED and cover in opal glass. Integral driver. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Mains connection box inside housing profile for max. 2 x 3 x 2,5 mm² (without socket) or 2 x 5 x 1,5 mm² (with socket) and cable diameter max. Ø 13 mm. Option of IP 44 rated double Schuko socket.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Pathway luminaires: Luminaire top: 40° tilted							
Symmetrical light distribution							
611861.00X	L 310, B 240, H 1000	LED ⁽¹⁾	830	710 lm	17 W	on/off	A A+
611861.00X.1	L 310, B 240, H 1000	LED ⁽¹⁾	840	820 lm	17 W	on/off	A+ A+
With double Schuko socket							
611862.00X	L 310, B 240, H 1000	LED ⁽¹⁾	830	710 lm	17 W	on/off	A A+
611862.00X.1	L 310, B 240, H 1000	LED ⁽¹⁾	840	820 lm	17 W	on/off	A+ A+

Comparison LED vs. conventional lamps

LED 17 W ≈

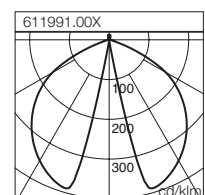
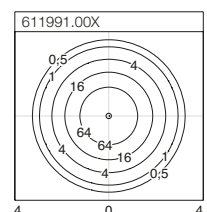
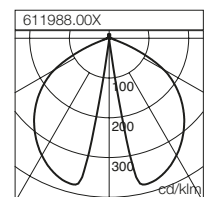
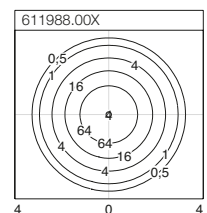
1 x 77 W QA60 (77 W)
1 x 26 W TC-D (34 W CB)



BOCARO®

Bollards

- Two in one: an interesting light sculpture and an efficient LED light source
- Choice of six sizes: from the compact short bollard to the slender standard bollard
- Exceedingly sturdy design through stainless steel fixing base and integrated columns in the profile cross section
- Highly efficient LED technology



Bollards | Series: Bocaro®

Type of Protection: IP 66

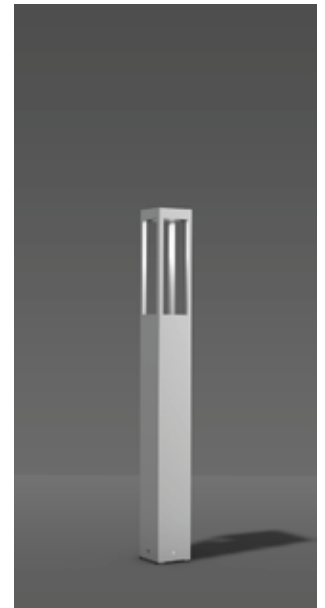
Protection Class: I

Impact Protection: IK06

Decorative bollard with square cross section made of corrosion resistant aluminium, powder coated. With recessed stainless steel fixing bracket. Clear glass LED protection cover. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							
Price Category 12							
Cross section 120 mm x 120 mm							
Height H 500 mm							
611986.00X	L 120, B 120, H 500	LED ⁽¹⁾	830	1500 lm	20 W	on/off	A+ A+
611986.00X.1	L 120, B 120, H 500	LED ⁽¹⁾	840	1550 lm	20 W	on/off	A+ A+
Height H 800 mm							
611987.00X	L 120, B 120, H 800	LED ⁽¹⁾	830	1650 lm	20 W	on/off	A+ A+
611987.00X.1	L 120, B 120, H 800	LED ⁽¹⁾	840	1700 lm	20 W	on/off	A+ A+
Height H 1100 mm							
611988.00X	L 120, B 120, H 1100	LED ⁽¹⁾	830	1700 lm	20 W	on/off	A+ A+
611988.00X.1	L 120, B 120, H 1100	LED ⁽¹⁾	840	1750 lm	20 W	on/off	A+ A+
Cross section 156 mm x 156 mm							
Height H 500 mm							
611989.00X	L 156, B 156, H 500	LED ⁽¹⁾	830	1450 lm	20 W	on/off	A+ A+
611989.00X.1	L 156, B 156, H 500	LED ⁽¹⁾	840	1450 lm	20 W	on/off	A+ A+
Height H 800 mm							
611990.00X	L 156, B 156, H 800	LED ⁽¹⁾	830	1600 lm	20 W	on/off	A+ A+
611990.00X.1	L 156, B 156, H 800	LED ⁽¹⁾	840	1650 lm	20 W	on/off	A+ A+
Height H 1100 mm							
611991.00X	L 156, B 156, H 1100	LED ⁽¹⁾	830	1650 lm	20 W	on/off	A+ A+
611991.00X.1	L 156, B 156, H 1100	LED ⁽¹⁾	840	1700 lm	20 W	on/off	A+ A+
Accessory for ground installation							
Price Category 12							
982103.010	L 120, B 120, H 401	Buried base					
982155.010	L 156, B 156, H 401	Buried base					

Comparison LED vs. conventional lamps

LED 20 W ≈

1 x 150 W GLS (150 W)

1 x 42 W TC-TEL (47 W EB)



The application image shows:
Bocaro

MEGA ...

... Attractive design with inner values.

With their slender design, the attractive light columns from the Mega range make graceful and yet powerful light statements.

Various installation depths guarantee optimum integration in the architecture. The different tops distinguish themselves with a high level of light comfort, as well as achieving maximum clearance when complying with the relevant lighting regulations.

For the entire range, a great deal of importance has been placed on inner values:

The efficient LED Array saves energy. High-quality material and innovative detail solutions guarantee a long-lasting and maintenance-free service life. Versions with shock-resistant plastic are also available for operation in tough ambient conditions.



Innovation

A light transmission bar made of highly transparent, clear plastic (PMMA) diverts the light horizontally, ensuring optimum light distribution on the floor.



Long service life

The use of state-of-the-art LED technology allows reduced energy consumption and a long LED service life. A stable stainless steel fixing plate guarantees an exceptionally firm hold for the luminaire. Corrosion resistant, powder coated posts made of aluminium profile and stainless steel screw connections help prevent corrosion from the outset.



Impermeability

The innovative housing concept reliably protects the light source and driver from all environmental conditions. A multi-level ventilation system prevents condensation from building up in the light insert. The use of a dual compound thermoplastic luminaire insert prevents corrosion and provides a problem-free, lasting seal. The high protection class (IP 66) of the socket (terminals included) guarantees safe wiring that is protected from water.



Flexibility

The wide choice of luminaire top versions ensures a high level of design freedom. Whether they choose a circular or square post cross-section, opal cylinders, spheres, lenses or a highly efficient louvred look to maximise the spacing, planners can make their decisions based purely on the design, since the functional security is in any case guaranteed thanks to the inner values.

The powder coated parts can, in addition to the two standard colours silver metallic and anthracite metallic, be coated to suit specific customer requirements.



Mega Tower

Page 598



Mega Lamelle/Laterne

Page 600



Mega Tube

Page 604



Mega Square

Page 608



Mega Kugel

Page 610



Mega Gürtellinse

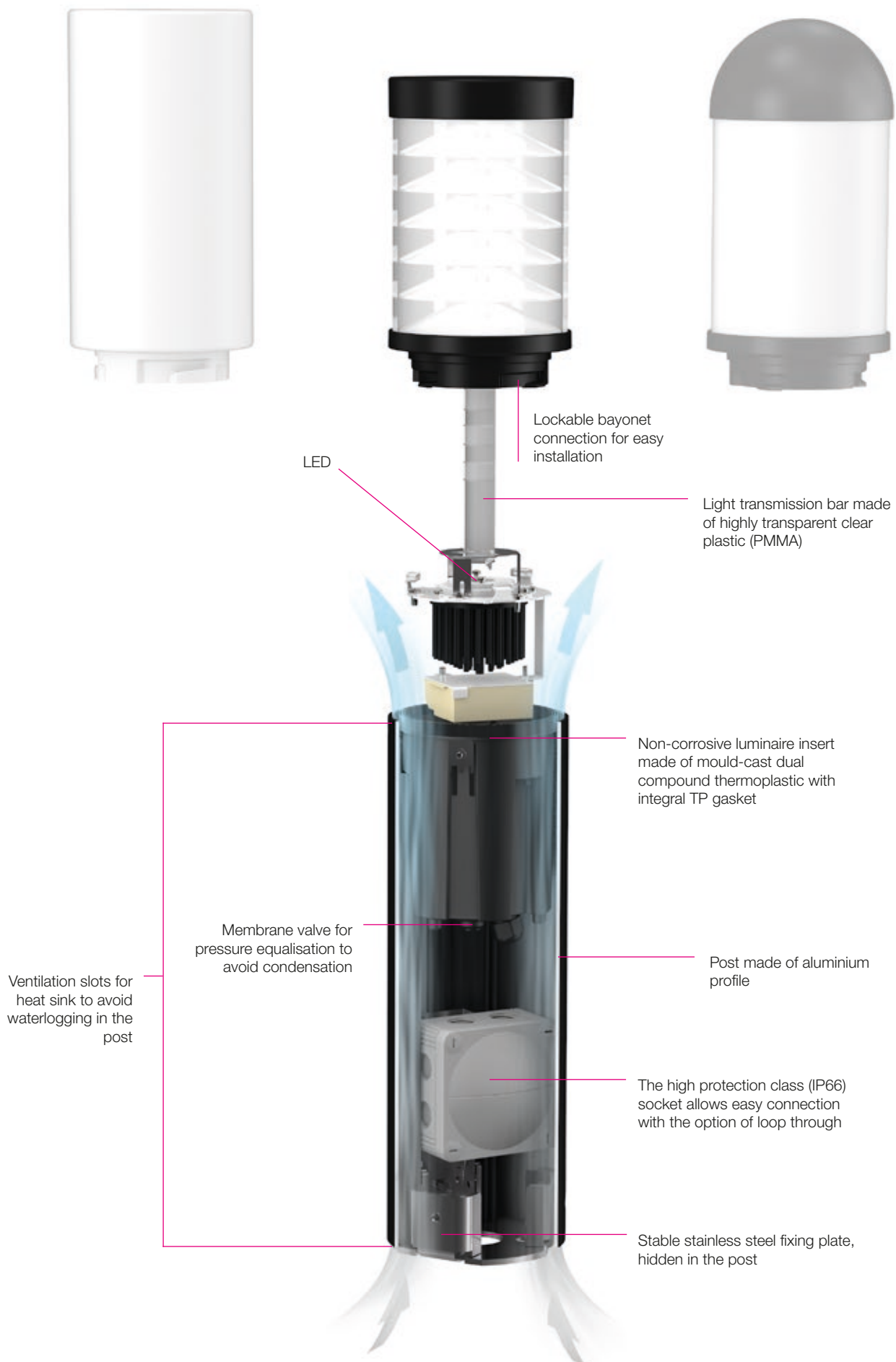
Page 612

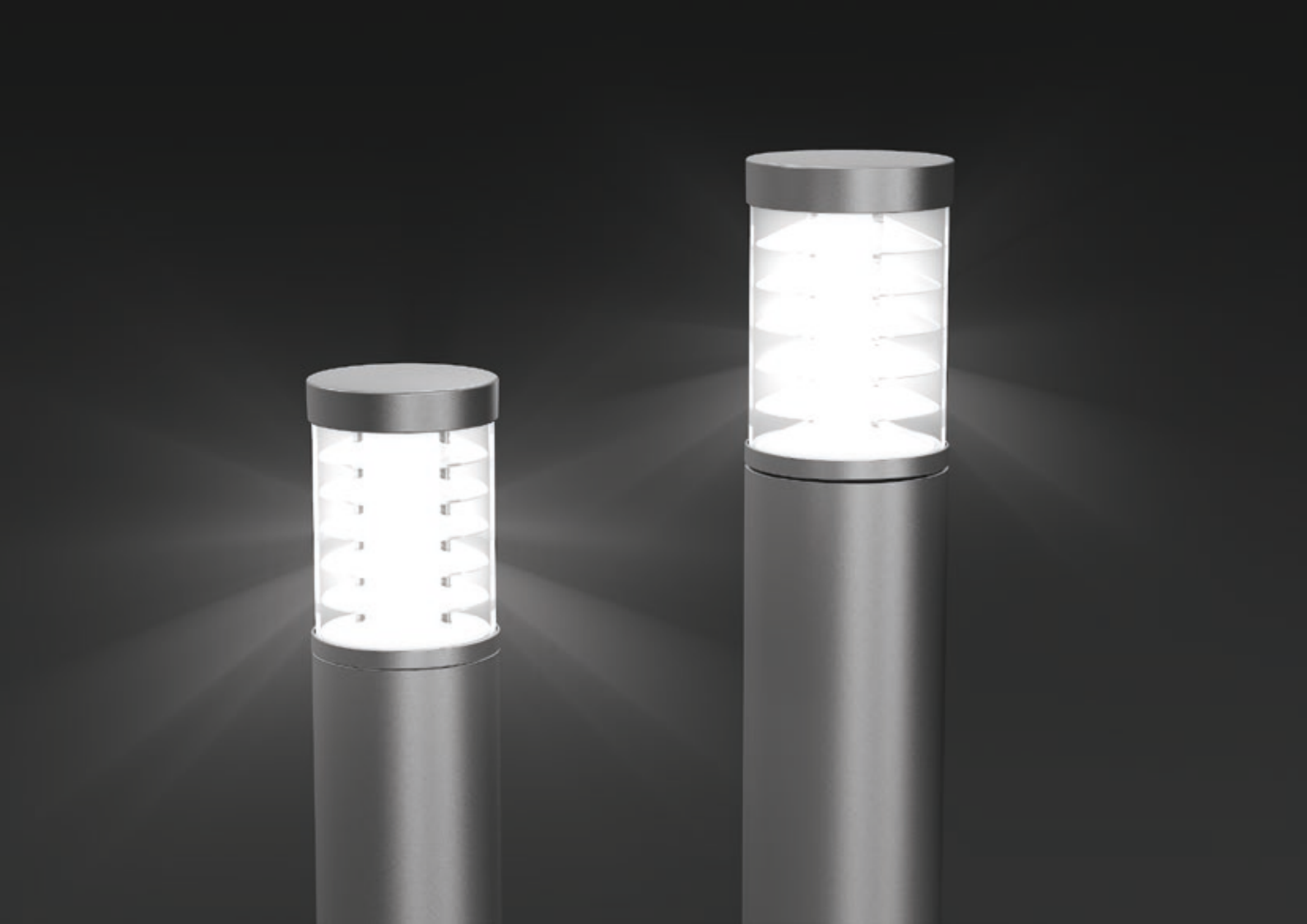


Mega Glaspoller

Page 614

System design of MEGA range

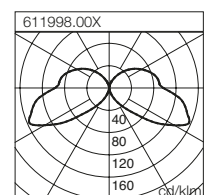
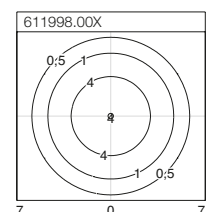
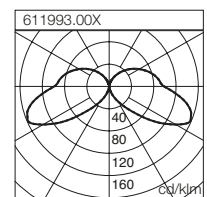
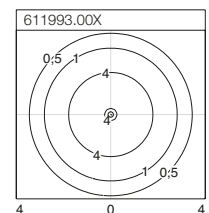




MEGA TOWER

Bollards

- The post made of powder coated corrosion resistant aluminium is anchored to the ground with a sturdy stainless steel plate. This innovative assembly concept guarantees a long service life.
- The innovative housing concept protects light source and driver reliably against all weather conditons
- The flush fitting cover made of corrosion resistant pressure die-cast aluminium satisfies stringent aesthetic and functional requirements.
- A sophisticated vent system avoids successfully any condensed water
- The high quality LED optics provide balanced brightness while minimising energy consumption.



Bollards | Series: Mega TowerType of Protection: **IP 65**

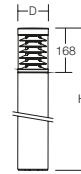
Protection Class: I

Impact Protection: IK05

Bollard tube Ø 115 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Cover made of corrosion-resistant pressure die-cast aluminium, powder coated, with transparent cylinder (glass) and translucent anti-glare louvres. With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							
Price Category 12							
Height H 500 mm							
611992.00X	D 115, H 500	LED	830	600 lm	10 W	on/off	A+ A+
611992.00X.1	D 115, H 500	LED	840	620 lm	10 W	on/off	A+ A+
Height H 750 mm							
612146.00X	D 115, H 750	LED	830	600 lm	10 W	on/off	A+ A+
612146.00X.1	D 115, H 750	LED	840	620 lm	10 W	on/off	A+ A+
Height H 1000 mm							
611993.00X	D 115, H 1000	LED	830	600 lm	10 W	on/off	A+ A+
611993.00X.1	D 115, H 1000	LED	840	620 lm	10 W	on/off	A+ A+
Accessory for ground installation							
Price Category 12							
982103.000	D 115, H 401	Buried base					
Replacement glasses							
Price Category 12							
982260.00X	D 115, H 190	Spare diffuser with integral louvres					

**Comparison
LED vs. conventional lamps****LED 10 W ≈**

1 x 57 W QA60 (57 W)

1 x 26 W TC-D (34 W CB)

Bollards | Series: Mega TowerType of Protection: **IP 65**

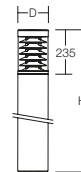
Protection Class: I

Impact Protection: IK05

Bollard tube Ø 156 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Cover made of corrosion-resistant pressure die-cast aluminium, powder coated, with transparent cylinder (glass) and translucent anti-glare louvres. With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							
Price Category 12							
Height H 550 mm							
611997.00X	D 156, H 550	LED ⁽¹⁾	830	1250 lm	20 W	on/off	A+ A+
611997.00X.1	D 156, H 550	LED ⁽¹⁾	840	1300 lm	20 W	on/off	A+ A+
Height H 1200 mm							
611998.00X	D 156, H 1200	LED ⁽¹⁾	830	1250 lm	20 W	on/off	A+ A+
611998.00X.1	D 156, H 1200	LED ⁽¹⁾	840	1300 lm	20 W	on/off	A+ A+
Replacement glasses							
Price Category 12							
982263.00X	D 156, H 256	Spare diffuser with integral louvres					
Accessory for ground installation							
Price Category 12							
982155.000	D 153, H 396	Buried base					

**Comparison
LED vs. conventional lamps****LED 20 W ≈**

1 x 116 W QA60 (116 W)

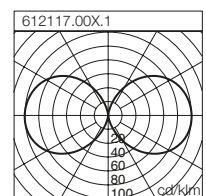
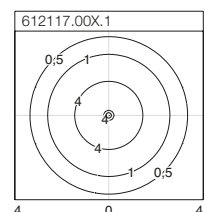
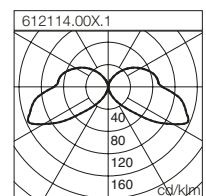
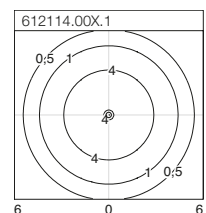
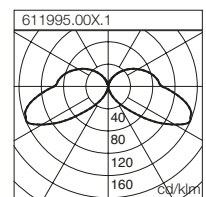
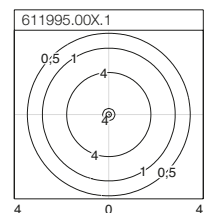
1 x 32 W TC-TEL (36 W EB)



MEGA LAMELLE | MEGA LATERNE

Bollards

- The post made of powder coated corrosion resistant aluminium is anchored to the ground with a sturdy stainless steel plate. This innovative assembly concept guarantees a long service life.
- The innovative housing concept protects light source and driver reliably against all weather conditons
- The flush fitting cover made of corrosion resistant pressure die-cast aluminium satisfies stringent aesthetic and functional requirements.
- A sophisticated vent system avoids successfully any condensed water
- The high quality LED optics provide balanced brightness while minimising energy consumption.



Bollards | Series: Mega Lamelle

Type of Protection: **IP 65**

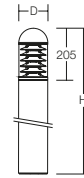
Protection Class: I

Impact Protection: IK05

Bollard tube Ø 115 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Cover made of corrosion-resistant pressure die-cast aluminium, powder coated, with transparent cylinder (glass) and translucent anti-glare louvres. With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Bollards							
Price Category 12							
Height H 550 mm							
611994.00X	D 115, H 550	LED	830	600 lm	10 W	on/off	A+ A+
611994.00X.1	D 115, H 550	LED	840	620 lm	10 W	on/off	A+ A+
Height H 800 mm							
612147.00X	D 115, H 800	LED	830	600 lm	10 W	on/off	A+ A+
612147.00X.1	D 115, H 800	LED	840	620 lm	10 W	on/off	A+ A+
Height H 1050 mm							
611995.00X	D 115, H 1050	LED	830	600 lm	10 W	on/off	A+ A+
611995.00X.1	D 115, H 1050	LED	840	620 lm	10 W	on/off	A+ A+
Accessory for ground installation							
Price Category 12							
982103.000	D 115, H 401	Buried base					
Replacement glasses							
Price Category 12							
982261.00X	D 115, H 228	Spare diffuser with integral louvres					

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 57 W QA60 (57 W)

1 x 26 W TC-D (34 W CB)

Bollards | Series: Mega Lamelle

Type of Protection: **IP 65**

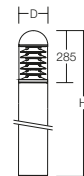
Protection Class: I

Impact Protection: IK05

Bollard tube Ø 156 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Cover made of corrosion-resistant pressure die-cast aluminium, powder coated, with transparent cylinder (glass) and translucent anti-glare louvres. With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Bollards							
Price Category 12							
Height H 600 mm							
611999.00X	D 156, H 600	LED ⁽¹⁾	830	1250 lm	20 W	on/off	A+ A+
611999.00X.1	D 156, H 600	LED ⁽¹⁾	840	1300 lm	20 W	on/off	A+ A+
Height H 1250 mm							
612114.00X	D 156, H 1250	LED ⁽¹⁾	830	1250 lm	20 W	on/off	A+ A+
612114.00X.1	D 156, H 1250	LED ⁽¹⁾	840	1300 lm	20 W	on/off	A+ A+
Accessory for ground installation							
Price Category 12							
982155.000	D 153, H 396	Buried base					
Replacement glasses							
Price Category 12							
982264.00X	D 156, H 316	Spare diffuser with integral louvres					

Comparison LED vs. conventional lamps

LED 20 W ≈

1 x 116 W QA60 (116 W)

1 x 32 W TC-TEL (36 W EB)



The application image shows:
Mega Laterne

Bollards | Series: Mega Laterne

Type of Protection: **IP 65**

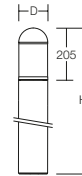
Protection Class: I

Impact Protection: IK05

Bollard tube Ø 115 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Cover made of die cast aluminium, powder coated, with opal cylinder (glass). With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Bollards							Price Category 12
Height H 550 mm							
611996.00X	D 115, H 550	LED	830	460 lm	10 W	on/off	A+ A+
611996.00X.1	D 115, H 550	LED	840	480 lm	10 W	on/off	A+ A+
612115.00X	D 115, H 550	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 800 mm							
612149.00X	D 115, H 800	LED	830	460 lm	10 W	on/off	A+ A+
612149.00X.1	D 115, H 800	LED	840	480 lm	10 W	on/off	A+ A+
612148.00X	D 115, H 800	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 1050 mm							
612117.00X	D 115, H 1050	LED	830	460 lm	10 W	on/off	A+ A+
612117.00X.1	D 115, H 1050	LED	840	480 lm	10 W	on/off	A+ A+
612116.00X	D 115, H 1050	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Accessory for ground installation							Price Category 12
982103.000	D 115, H 401	Buried base					
Replacement glasses							Price Category 13
982262.00X	D 115, H 228	Spare diffuser with integral louvres					

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 57 W QA60 (57 W)

1 x 26 W TC-D (34 W CB)



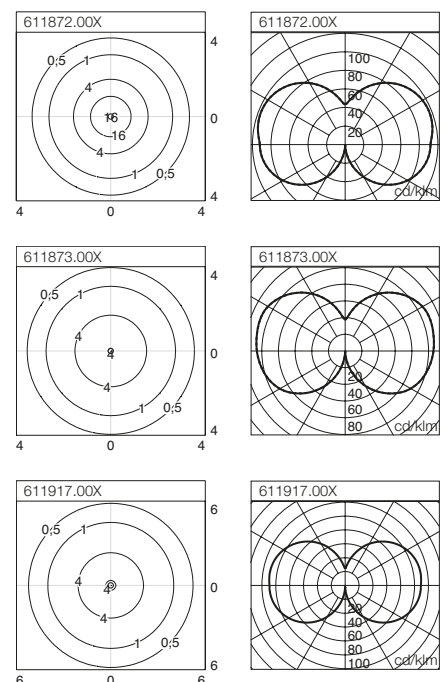
MEGA TUBE

Bollards

- The inconspicuous, slim and well-proportioned design fits easily into any environment
- The innovative housing concept protects light source and driver reliably against all weather conditons
- A sophisticated vent system avoids successfully any condensed water
- The highly efficient LED solution effectively saves energy over a long period of time, providing balanced brightness
- Robust plastic cylinders made of UV-stabilised polyethylene also allow use in environments with increased mechanical stress



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires



Bollards | Series: Mega Tube

Type of Protection: **IP 65**

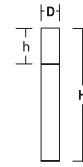
Protection Class: I

Impact Protection: IK03 (Glass), IK07 (Plastic)

Bollard tube Ø 115 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Diffuser: Opal glass, mouth-blown, satin finish, or opal plastic (polyethylene), satin finish. With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Bollards							Price Category 12
Opal glass, satin finish							
Height H 600 mm, h 210 mm							
611872.00X	D 115, H 600	LED	830	660 lm	10 W	on/off	A+ A+
611872.00X.1	D 115, H 600	LED	840	680 lm	10 W	on/off	A+ A+
611875.00X	D 115, H 600	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 800 mm, h 210 mm							
612151.00X	D 115, H 800	LED	830	610 lm	10 W	on/off	A+ A+
612151.00X.1	D 115, H 800	LED	840	630 lm	10 W	on/off	A+ A+
612150.00X	D 115, H 800	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 1000 mm, h 210 mm							
611876.00X	D 115, H 1000	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 1100 mm, h 310 mm							
611873.00X	D 115, H 1100	LED	830	610 lm	10 W	on/off	A+ A+
611873.00X.1	D 115, H 1100	LED	840	630 lm	10 W	on/off	A+ A+
Height H 1400 mm, h 310 mm							
611874.00X	D 115, H 1400	LED	830	610 lm	10 W	on/off	A+ A+
611874.00X.1	D 115, H 1400	LED	840	630 lm	10 W	on/off	A+ A+
Diffuser: plastic (polyethylene), opal, satin finish							
Height H 600 mm, h 210 mm							
611913.00X	D 115, H 600	LED	830	750 lm	10 W	on/off	A+ A+
611913.00X.1	D 115, H 600	LED	840	780 lm	10 W	on/off	A+ A+
Height H 1100 mm, h 310 mm							
611914.00X	D 115, H 1100	LED	830	640 lm	10 W	on/off	A+ A+
611914.00X.1	D 115, H 1100	LED	840	660 lm	10 W	on/off	A+ A+
Height H 1400 mm, h 310 mm							
611915.00X	D 115, H 1400	LED	830	640 lm	10 W	on/off	A+ A+
611915.00X.1	D 115, H 1400	LED	840	660 lm	10 W	on/off	A+ A+
Accessory for ground installation							Price Category 12
982103.000	D 115, H 401	Buried base					
Replacement glasses							Price Category 13
982108.002	D 115, H 230	Opal glass, satin finish, h 210 mm					
982109.002	D 115, H 330	Opal glass, satin finish, h 310 mm					
Replacement diffusers							Price Category 13
982142.002	D 115, H 230	plastic (polyethylene), opal, satin finish, h 210 mm					
982143.002	D 115, H 330	plastic (polyethylene), opal, satin finish, h 310 mm					

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 100 W GLS (100 W)

1 x 26 W TC-D (34 W CB)





Comparison
LED vs. conventional lamps

LED 20 W ≈
1 x 150 W GLS (150 W)
1 x 32 W TC-TEL (36 W EB)

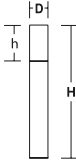
Bollards | Series: Mega Tube

Type of Protection: **IP 65**
Protection Class: I
Impact Protection: IK03 (Glass), IK07 (Plastic)

Bollard tube Ø 156 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Diffuser: Opal glass, mouth-blown, satin finish, or opal plastic (polyethylene), satin finish. With membrane valve to prevent condensation. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

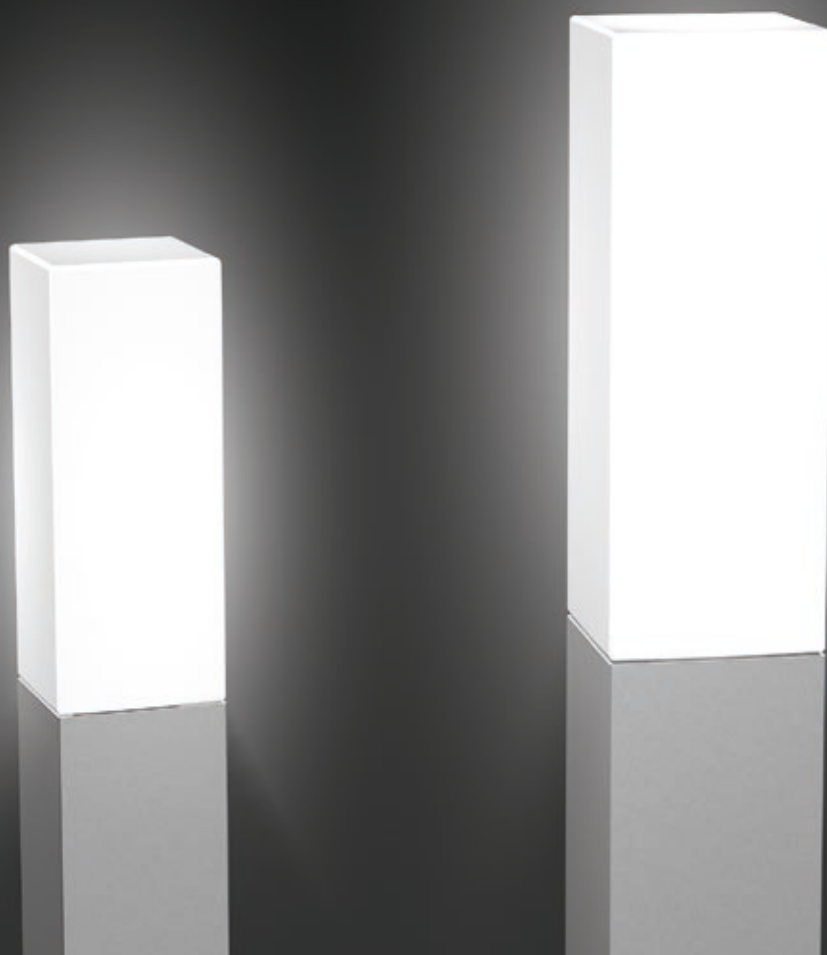
LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Bollards							Price Category 12
Opal glass, satin finish							
Height H 1400 mm, h 440 mm							
611916.00X	D 156, H 1400	LED ⁽¹⁾	830	1400 lm	20 W	on/off	A+ A+
611916.00X.1	D 156, H 1400	LED ⁽¹⁾	840	1450 lm	20 W	on/off	A+ A+
Height H 1800 mm, h 440 mm							
611917.00X	D 156, H 1800	LED ⁽¹⁾	830	1400 lm	20 W	on/off	A+ A+
611917.00X.1	D 156, H 1800	LED ⁽¹⁾	840	1450 lm	20 W	on/off	A+ A+
Height H 2400 mm, h 440 mm							
611918.00X	D 156, H 2400	LED ⁽¹⁾	830	1400 lm	20 W	on/off	A+ A+
611918.00X.1	D 156, H 2400	LED ⁽¹⁾	840	1450 lm	20 W	on/off	A+ A+
Diffuser: plastic (polyethylene), opal, satin finish							
Height H 1400 mm, h 440 mm							
611919.00X	D 156, H 1400	LED ⁽¹⁾	830	1700 lm	20 W	on/off	A+ A+
611919.00X.1	D 156, H 1400	LED ⁽¹⁾	840	1750 lm	20 W	on/off	A+ A+
Height H 1800 mm, h 440 mm							
611920.00X	D 156, H 1800	LED ⁽¹⁾	830	1700 lm	20 W	on/off	A+ A+
611920.00X.1	D 156, H 1800	LED ⁽¹⁾	840	1750 lm	20 W	on/off	A+ A+
Height H 2400 mm, h 440 mm							
611921.00X	D 156, H 2400	LED ⁽¹⁾	830	1700 lm	20 W	on/off	A+ A+
611921.00X.1	D 156, H 2400	LED ⁽¹⁾	840	1750 lm	20 W	on/off	A+ A+
Accessory for ground installation							Price Category 12
982155.000	D 153, H 396	Buried base					
982156.000	D 153, H 600	Buried base					
Replacement glasses							Price Category 13
982152.002	D 156, H 462	Opal glass, satin finish, h 440 mm					
Replacement diffusers							Price Category 13
982154.002	D 157, H 467	plastic (polyethylene), opal, satin finish, h 443 mm					

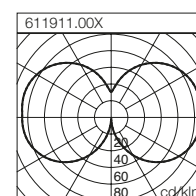
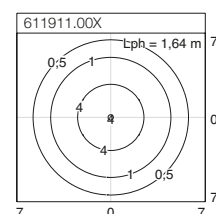
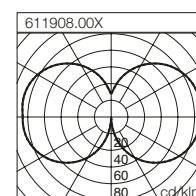
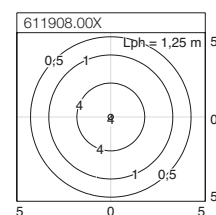
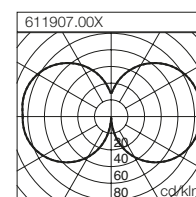
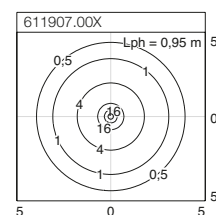




MEGA SQUARE

Bollards

- Light and shade in cubic design approach
- The innovative housing concept protects light source and driver reliably against all weather conditons
- A sophisticated vent system avoids successfully any condensed water
- The highly efficient LED solution effectively saves energy over a long period of time, providing balanced brightness



Bollards | Series: Mega Square

Type of Protection: **IP 65**

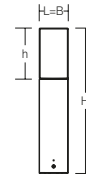
Protection Class: I

Impact Protection: IK02

Bollard tube made of corrosion-resistant Aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Diffuser: mouth-blown opal glass, satin finish. With membrane valve as a standard to prevent condensed water. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							
Price Category 12							
Height H 600 mm, h 210 mm							
611905.00X	L 120, B 120, H 600	LED	830	740 lm	10 W	on/off	A+ A+
611905.00X.1	L 120, B 120, H 600	LED	840	750 lm	10 W	on/off	A+ A+
611904.00X	L 120, B 120, H 600	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 800 mm, h 210 mm							
612153.00X	L 120, B 120, H 800	LED	830	640 lm	10 W	on/off	A+ A+
612153.00X.1	L 120, B 120, H 800	LED	840	760 lm	10 W	on/off	A+ A+
612152.00X	L 120, B 120, H 800	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 1000 mm, h 210 mm							
611909.00X	L 120, B 120, H 1000	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 1100 mm, h 310 mm							
611907.00X	L 120, B 120, H 1100	LED	830	640 lm	10 W	on/off	A+ A+
611907.00X.1	L 120, B 120, H 1100	LED	840	760 lm	10 W	on/off	A+ A+
Height H 1400 mm, h 310 mm							
611908.00X	L 120, B 120, H 1400	LED	830	640 lm	10 W	on/off	A+ A+
611908.00X.1	L 120, B 120, H 1400	LED	840	760 lm	10 W	on/off	A+ A+
Accessory for ground installation							
Price Category 12							
982103.010	L 120, B 120, H 401	Buried base					
Replacement glasses							
Price Category 13							
982132.002	L 120, B 120, H 235	Opal glass, satin finish, h 210 mm					
982133.002	L 120, B 120, H 335	Opal glass, satin finish, h 310 mm					

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 100 W GLS (100 W)
1 x 26 W TC-D (34 W CB)

Bollards | Series: Mega Square

Type of Protection: **IP 65**

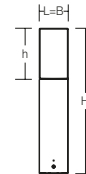
Protection Class: I

Impact Protection: IK02

Bollard tube made of corrosion-resistant Aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Diffuser: mouth-blown opal glass, satin finish. With membrane valve as a standard to prevent condensed water. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Bollards							
Price Category 12							
Height H 1400 mm, h 330 mm							
611910.00X	L 156, B 156, H 1400	LED ⁽¹⁾	830	1350 lm	20 W	on/off	A+ A+
611910.00X.1	L 156, B 156, H 1400	LED ⁽¹⁾	840	1400 lm	20 W	on/off	A+ A+
Height H 1800 mm, h 330 mm							
611911.00X	L 156, B 156, H 1800	LED ⁽¹⁾	830	1350 lm	20 W	on/off	A+ A+
611911.00X.1	L 156, B 156, H 1800	LED ⁽¹⁾	840	1400 lm	20 W	on/off	A+ A+
Height H 2400 mm, h 330 mm							
611912.00X	L 156, B 156, H 2400	LED ⁽¹⁾	830	1350 lm	20 W	on/off	A+ A+
611912.00X.1	L 156, B 156, H 2400	LED ⁽¹⁾	840	1400 lm	20 W	on/off	A+ A+
Replacement glasses							
Price Category 13							
982176.002	L 156, B 156, H 352	Opal glass, satin finish, h 330 mm					
Accessory for ground installation							
Price Category 12							
982155.010	L 156, B 156, H 401	Buried base					
982157.000	L 156, B 156, H 596	Buried base					

Comparison LED vs. conventional lamps

LED 20 W ≈

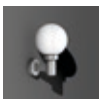
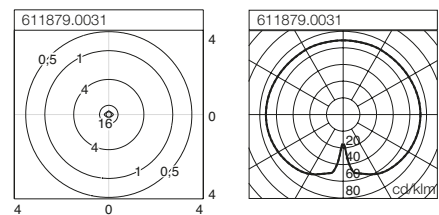
1 x 150 W GLS (150 W)
1 x 32 W TC-TEL (36 W EB)



MEGA KUGEL

Bollards

- The classic spherical luminaire combines harmony with a high degree of freedom of design
- The high protection rating ensures absolutely trouble-free operation
- An ingenious ventilation system successfully prevents the formation of any condensation
- The highly efficient LED solution effectively saves energy over a long period of time, providing controlled brightness



Further luminaires of this series, see:
Outdoor lighting | Wall luminaires

Bollards | Series: Mega Kugel

Type of Protection: **IP 65**

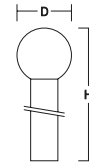
Protection Class: I

Impact Protection: IK02

Bollard tube Ø 115 mm made of corrosion resistant Aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Opal glass diffuser with satin finish. With membrane valve as a standard to prevent condensed water. Integral electronic gear. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colour: 31 = anthracite metallic



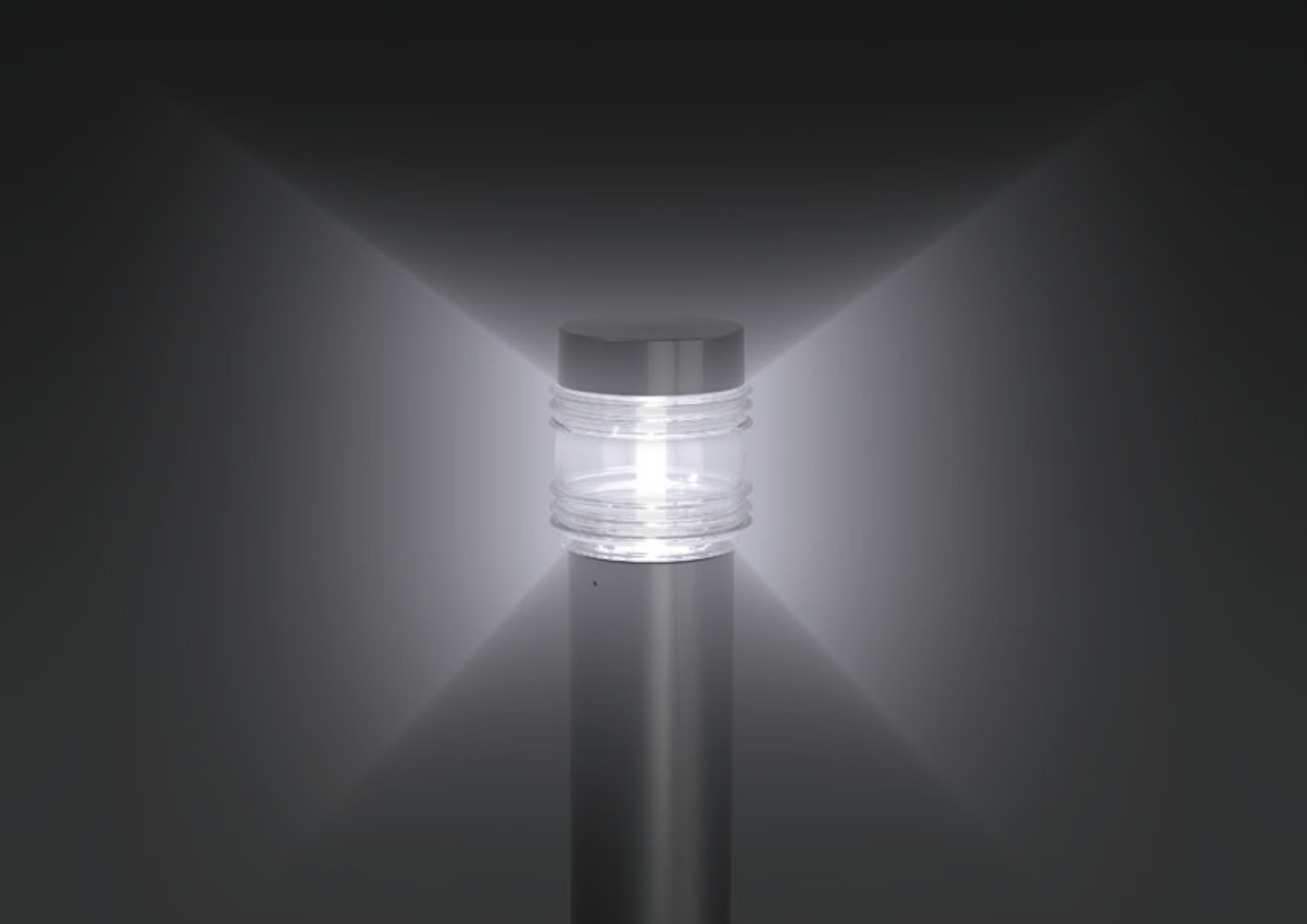
Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							Price Category 12
Height H 600 mm							
611877.0031	D 300, H 600	LED	830	710 lm	10 W	on/off	A+ A+
611877.0031.1	D 300, H 600	LED	840	770 lm	10 W	on/off	A+ A+
611880.0031	D 300, H 600	1 x QA60 (clear) 57 W				on/off	A,C A+
Height H 900 mm							
611878.0031	D 300, H 900	LED	830	710 lm	10 W	on/off	A+ A+
611878.0031.1	D 300, H 900	LED	840	770 lm	10 W	on/off	A+ A+
611890.0031	D 300, H 900	1 x QA60 (clear) 57 W				on/off	A,C A+
Height H 1200 mm							
611879.0031	D 300, H 1200	LED	830	710 lm	10 W	on/off	A+ A+
611879.0031.1	D 300, H 1200	LED	840	770 lm	10 W	on/off	A+ A+
611881.0031	D 300, H 1200	1 x QA60 (clear) 57 W				on/off	A,C A+
Height H 2000 mm							
611889.0031	D 300, H 2000	LED	830	710 lm	10 W	on/off	A+ A+
611889.0031.1	D 300, H 2000	LED	840	770 lm	10 W	on/off	A+ A+
611888.0031	D 300, H 2000	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Accessory for ground installation							Price Category 12
982103.000	D 115, H 401	Buried base					
982236.000	D 115, H 601	Buried base					
Replacement glasses							Price Category 13
982110.002	D 300, H 301						

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 77 W QA60 (77 W)

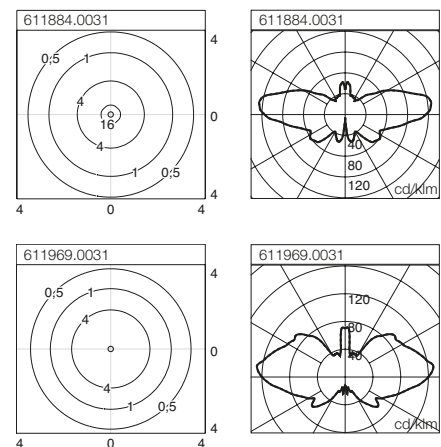
1 x 26 W TC-D (34 W CB)



MEGA GÜRTELLINSE

Bollards

- The drum lens is attractive during the day, and at night guarantees unlimited bright light in the entire surroundings
- The fully integrated, encapsulated housing guarantees a high protection rating for trouble-free operation without the formation of condensation
- The robust stainless steel mounting base ensures long-term stability



Bollards | Series: Mega Gürtellinse

Type of Protection: **IP 65**

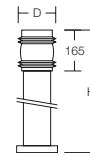
Protection Class: I

Impact Protection: IK07

Bollard tube Ø 115 mm made of corrosion resistant Aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Clear, drum-lens shaped glass diffuser. With membrane valve as a standard to prevent condensed water. Integral electronic gear. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colour: 31 = anthracite metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							
Price Category 12							
Height H 500 mm							
611882.0031	D 140, H 500	LED	830	510 lm	10 W	on/off	A+ A+
611882.0031.1	D 140, H 500	LED	840	530 lm	10 W	on/off	A+ A+
611885.0031	D 140, H 500	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 750 mm							
611883.0031	D 140, H 750	LED	830	510 lm	10 W	on/off	A+ A+
611883.0031.1	D 140, H 750	LED	840	530 lm	10 W	on/off	A+ A+
611886.0031	D 140, H 750	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Height H 1000 mm							
611884.0031	D 140, H 1000	LED	830	510 lm	10 W	on/off	A+ A+
611884.0031.1	D 140, H 1000	LED	840	530 lm	10 W	on/off	A+ A+
611887.0031	D 140, H 1000	1 x QA60 (clear) 57 W				on/off	A,C,E A+
Accessory for ground installation							
Price Category 12							
982103.000	D 115, H 401	Buried base					
Replacement glasses							
Price Category 13							
982104.0031	D 140, H 172	Transparent glass with metal cap, anthracite metallic					

Comparison LED vs. conventional lamps

LED 10 W ≈

1 x 57 W QA60 (57 W)

1 x 26 W TC-D (34 W CB)

Bollards | Series: Mega Gürtellinse

Type of Protection: **IP 65**

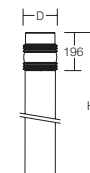
Protection Class: I

Impact Protection: IK02

Bollard tube Ø 156 mm made of corrosion resistant Aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Clear, drum-lens shaped glass diffuser. With membrane valve as a standard to prevent condensed water. Integral electronic gear. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colour: 31 = anthracite metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Bollards							
Price Category 12							
Height H 500 mm							
611968.0031	D 179, H 500	LED ⁽¹⁾	830	1250 lm	20 W	on/off	A+ A+
611968.0031.1	D 179, H 500	LED ⁽¹⁾	840	1350 lm	20 W	on/off	A+ A+
611966.0031	D 179, H 500	1 x QA60 (clear) 77 W				on/off	A,C,E A+
Height H 1200 mm							
611969.0031	D 179, H 1200	LED ⁽¹⁾	830	1250 lm	20 W	on/off	A+ A+
611969.0031.1	D 179, H 1200	LED ⁽¹⁾	840	1350 lm	20 W	on/off	A+ A+
611967.0031	D 179, H 1200	1 x QA60 (clear) 77 W				on/off	A,C,E A+
Accessory for ground installation							
Price Category 12							
982155.000	D 153, H 396	Buried base					
Replacement glasses							
Price Category 13							
981142.0131	D 176, H 232	Transparent glass with metal cap, anthracite metallic					

Comparison LED vs. conventional lamps

LED 20 W ≈

1 x 77 W QA60 (77 W)

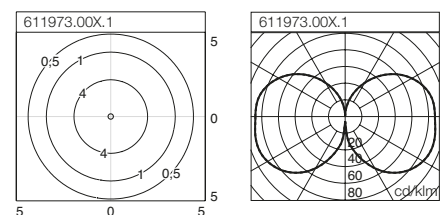
1 x 26 W TC-D (34 W CB)



MEGA GLASPOLLER

Bollards

- A different take on lamellas - the mouth blown opal glass is tiered and plays with light and shadow both day and night.
- The high protection rating ensures absolutely trouble-free operation
- A sophisticated vent system avoids successfully any condensed water
- Simple and sturdy design allows cost-effective installation



Bollards | Series: Mega Glaspoller

Type of Protection: **IP 65**

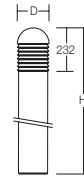
Protection Class: I

Impact Protection: IK03

Bollard tube Ø 156 mm made of corrosion-resistant aluminium profile, powder coated. Recessed stainless steel fixing plate. Non-corrosive gear compartment made of mould-cast dual compound thermoplastic with integral TP gasket. Opal glass cover with satin finish, powder coated metal cap. With membrane valve as a standard to prevent condensed water. Connection box on base, max. 2 x 3 x 2.5 mm² for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimm-able	EEC
Bollards							Price Category 12
Height H 550 mm							
611972.00X	D 169, H 550	LED ⁽¹⁾	830	870 lm	20 W	on/off	A+ A+
611972.00X.1	D 169, H 550	LED ⁽¹⁾	840	890 lm	20 W	on/off	A+ A+
611970.00X	D 169, H 550	1 x QA60 (clear) 77 W				on/off	A,C,E A+
Height H 1200 mm							
611973.00X	D 169, H 1200	LED ⁽¹⁾	830	870 lm	20 W	on/off	A+ A+
611973.00X.1	D 169, H 1200	LED ⁽¹⁾	840	890 lm	20 W	on/off	A+ A+
611971.00X	D 169, H 1200	1 x QA60 (clear) 77 W				on/off	A,C,E A+
Accessory for ground installation							Price Category 12
982155.000	D 153, H 396	Buried base					
Replacement glasses							Price Category 13
981143.01X	D 169, H 248	Replacement glass with metal cap					

Comparison LED vs. conventional lamps

LED 20 W ≈

1 x 77 W QA60 (77 W)

1 x 26 W TC-D (34 W CB)



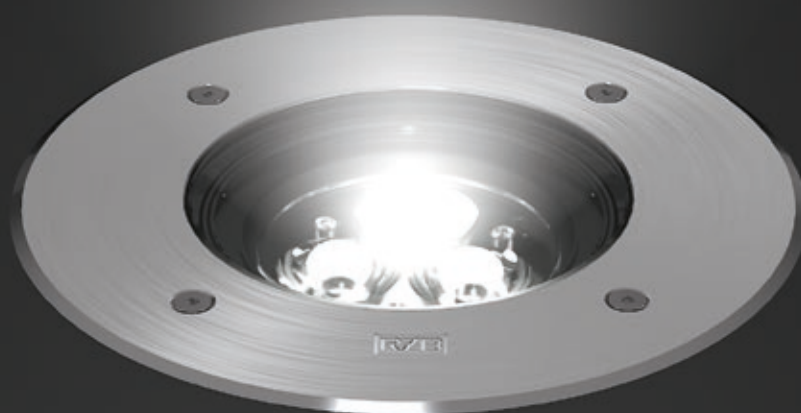
The application image shows:
Terra Edelstahl 190



Terra Edelstahl 130
618-619

Terra Edelstahl 190
620-623

Terra Edelstahl 245
624-627

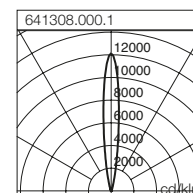


TERRA EDELSTAHL 130

In-ground luminaires

- Choice of three different light distributions: Narrow Spot, Medium Spot and Flood
- LEDPAR16 version featuring GU10 socket available
- No condensed water inside by hermetically sealed inner compartment and vapour seal
- Durable corrosion resistance even in aggressive soil warranted by housing of thermoset material, cover ring made of marine grade stainless steel
- High object illuminance due to precise optics despite low power

641308.000.1		
h [m]	Ø [m]	E [lx]
5,0	1,12	109
4,0	0,90	171
3,0	0,67	304
2,0	0,45	684
1,0	0,22	2734



In-ground luminaires | Series: Terra Edelstahl 130

Type of Protection: **IP 68**

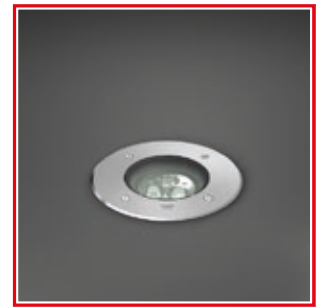
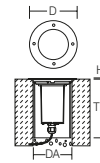
Protection Class: I

Housing made of epoxy resin thermoset, stainless steel, aluminium. Round marine grade stainless steel cover, mill finish. Flush mounted toughened glass with secondary sealing glass. High performance LED refractor optics with different beam angles. Choice of GU10 socket for LEDPAR16 lamps. Integral vapour seal against condensed water. The interior of the housing is sealed in accordance with IP68 even during installation. With H07RN-F 3G1 connecting cable, L 500 mm.

The use of the installation support is necessary, please order separately.

LED included.

Available colour: 0 = stainless steel



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							
Cut out DA 125 mm, TE 200 mm							
641308.000	D 130, H 2	LED	830	250 lm	4 W	12° on/off	A+ A+
641308.000.1	D 130, H 2	LED	840	280 lm	4 W	12° on/off	A+ A+
641309.000	D 130, H 2	LED	830	250 lm	4 W	20° on/off	A+ A+
641309.000.1	D 130, H 2	LED	840	280 lm	4 W	20° on/off	A+ A+
641310.000	D 130, H 2	LED	830	250 lm	4 W	37° on/off	A+ A+
641310.000.1	D 130, H 2	LED	840	280 lm	4 W	37° on/off	A+ A+
Lamp not included							
641314.000	D 130, H 2	1 x LEDPAR16			5 W	on/off	A, A+

Price Category 12

Comparison LED vs. conventional lamps

LED 4 W ≈
1 x 30 W QA60 (30 W)

In-ground luminaires | Series: Terra Edelstahl 130

Type of Protection: **IP 68**

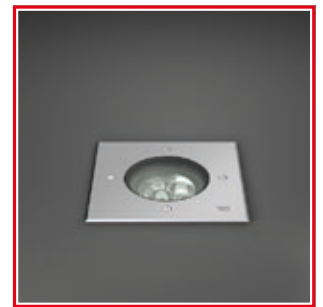
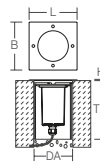
Protection Class: I

Housing made of epoxy resin thermoset, stainless steel, aluminium. Square marine grade stainless steel cover, mill finish. Flush mounted toughened glass with secondary sealing glass. High performance LED refractor optics with different beam angles. Choice of GU10 socket for LEDPAR16 lamps. Integral vapour seal against condensed water. The interior of the housing is sealed in accordance with IP68 even during installation. With H07RN-F 3G1 connecting cable, L 500 mm.

The use of the installation support is necessary, please order separately.

LED included.

Available colour: 0 = stainless steel



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							
Cut out DA 125 mm, TE 200 mm							
641311.000	L 130, B 130, H 2	LED	830	250 lm	4 W	12° on/off	A+ A+
641311.000.1	L 130, B 130, H 2	LED	840	280 lm	4 W	12° on/off	A+ A+
641312.000	L 130, B 130, H 2	LED	830	250 lm	4 W	20° on/off	A+ A+
641312.000.1	L 130, B 130, H 2	LED	840	280 lm	4 W	20° on/off	A+ A+
641313.000	L 130, B 130, H 2	LED	830	250 lm	4 W	37° on/off	A+ A+
641313.000.1	L 130, B 130, H 2	LED	840	280 lm	4 W	37° on/off	A+ A+
Lamp not included							
641315.000	L 130, B 130, H 2	1 x LEDPAR16			5 W	on/off	A, A+

Price Category 12

Comparison LED vs. conventional lamps

LED 4 W ≈
1 x 30 W QA60 (30 W)

In-ground support, mandatory, can be cut on site

982194.003	D 125, H 540
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Price Category 12

Accessories

982398.003	L 81 x B 35, H 35	IP 68 plug connector
982399.003	L 170 x B 71, H 35	H-distributor IP 68
982408.010	D 78, H 10	Glass, non-slip with seal

Price Category 11

Replacement glass

982408.000	D 78, H 10
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Price Category 13



TERRA EDELSTAHL 190

Out of this world?

When you think what effort, usually unsuccessful, is put into the search for the „perfect“ recessed ground luminaire, one does in fact tend to describe the TERRA EDELSTAHL family as „out of this world“. Yet its members are by no means extraterrestrials - they are simply heavenly solutions for earthly problems like condensation, corrosion, wiring etc.



Long service life

Durable corrosion resistance even in aggressive soil thanks to housing made of thermoset material, cover ring made of marine grade stainless steel and flush mounted toughened glass. The use of state-of-the-art LED technology allows a long luminaire service life and reduced energy consumption.



Impermeability

The innovative housing concept (IP 68) reliably protects the light source and converter from all environmental conditions. No condensed water inside thanks to hermetically sealed inner compartment and vapour seal. The inside of the housing is completely airtight even during connection and adjustment.



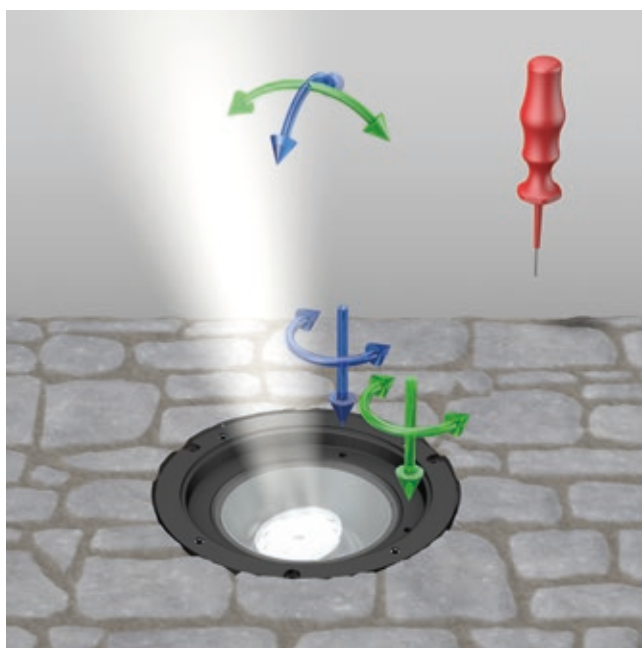
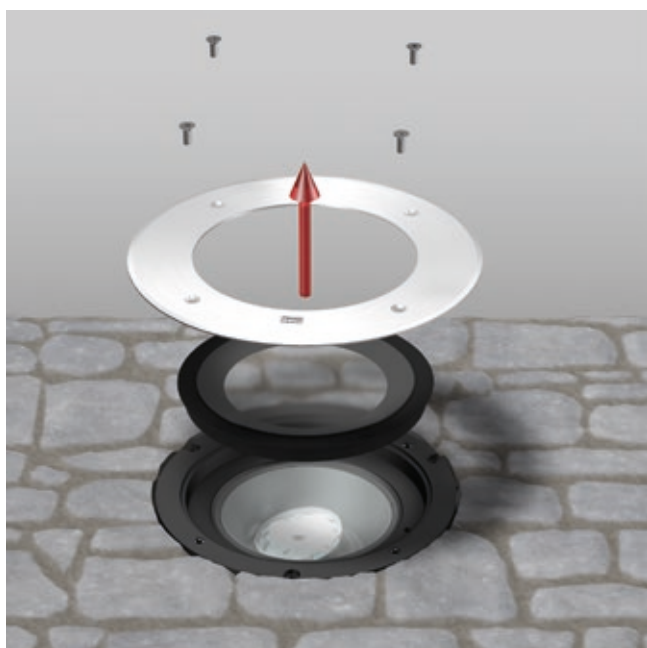
Flexibility

High-quality LED optics provide balanced brightness. 3 different LED beam angles ensure planning flexibility. The LED can be continuously adjusted up to a max. of 15 degrees in all directions in its installed state. Hence the light cone can be precisely directed and provides perfect illumination.

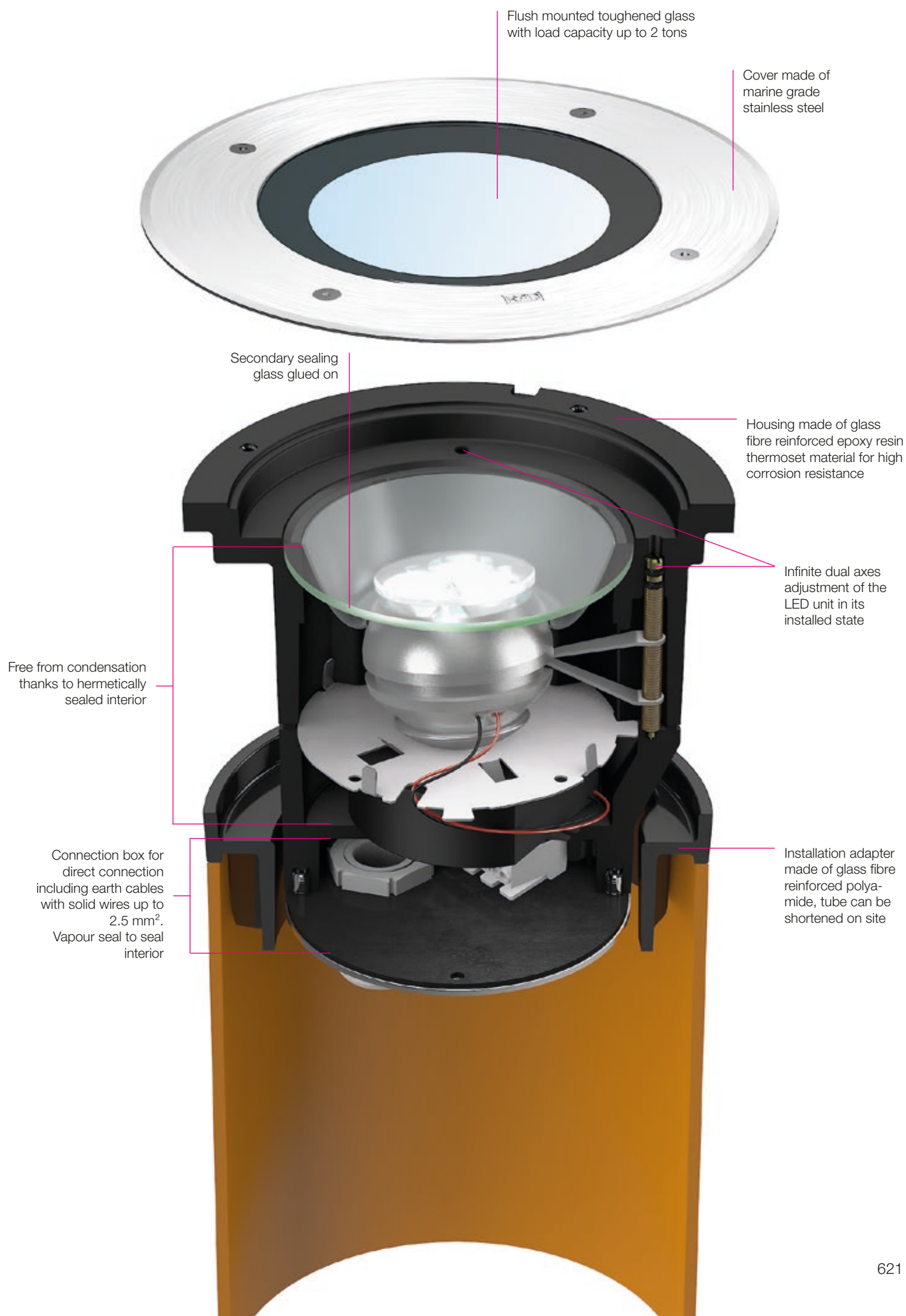


Connection options

Separate connection compartment for direct connection of rigid cables up to 3 x 2.5 mm². This means that an external connection box is no longer required. The recess housing can offer enough space for through wiring.



Infinite adjustment of the LED unit up to a max. of 15° in all directions in its installed state.



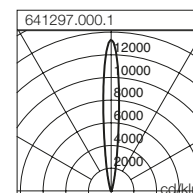


TERRA EDELSTAHL 190

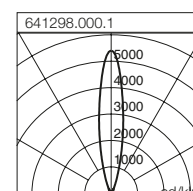
In-ground luminaires

- Selection of three beam angles, beam direction can be adjusted from 0 to 15 degrees in all directions
- Beam adjusting is performed from outside while fitting is already mounted in place and sealed
- No condensed water inside by hermetically sealed inner compartment and vapour seal
- Durable corrosion resistance even in aggressive soil warranted by housing of thermoset material, cover ring made of marine grade stainless steel
- Direct mains connection inside luminaire's connection compartment, no separate connection box required
- High object illuminance due to precise optics despite low power

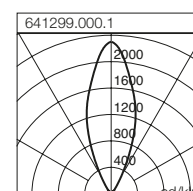
641297.000.1		
h [m]	Ø [m]	E [lx]
5,0	1,03	367
4,0	0,83	574
3,0	0,62	1020
2,0	0,41	2294
1,0	0,21	9177



641298.000.1		
h [m]	Ø [m]	E [lx]
5,0	1,71	148
4,0	1,37	232
3,0	1,03	412
2,0	0,68	927
1,0	0,34	3706



641299.000.1		
h [m]	Ø [m]	E [lx]
5,0	3,35	63
4,0	2,68	99
3,0	2,01	176
2,0	1,34	396
1,0	0,67	1583



In-ground luminaires | Series: Terra Edelstahl 190

Type of Protection: **IP 68**

Protection Class: I

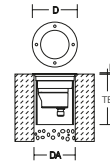
Impact Protection: IK08

Housing made of epoxy resin thermoset, stainless steel, aluminium. Round marine grade stainless steel cover, mill finish. Flush mounted toughened glass with secondary sealing glass. High performance LED refractor optics with different beam angles. Aiming can be adjusted by up to 15° from the vertical from the outside while fitting is already mounted in place and sealed. Integral vapour seal against condensed water. The interior of the housing is sealed in accordance with IP68 even during installation. Separate connection compartment for direct connection of rigid cables up to 3 x 2.5 mm².

The use of the installation support is necessary, please order separately.

LED included.

Available colour: 0 = stainless steel



Comparison LED vs. conventional lamps

LED 12 W ≈
1 x 50 W QT12 (50 W)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							Price Category 12
Cut out DA 175 mm, TE 250 mm							
Rotation symmetrical light distribution, aiming can be circular adjusted up to 15 degrees from outside							
641294.000	D 190, H 2	LED	830	810 lm	12 W	12° on/off	A+ A+
641295.000	D 190, H 2	LED	830	810 lm	12 W	20° on/off	A+ A+
641296.000	D 190, H 2	LED	830	810 lm	12 W	37° on/off	A+ A+
641294.000.1	D 190, H 2	LED	840	860 lm	12 W	12° on/off	A+ A+
641295.000.1	D 190, H 2	LED	840	860 lm	12 W	20° on/off	A+ A+
641296.000.1	D 190, H 2	LED	840	860 lm	12 W	37° on/off	A+ A+

In-ground luminaires | Series: Terra Edelstahl 190

Type of Protection: **IP 68**

Protection Class: I

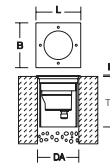
Impact Protection: IK08

Housing made of epoxy resin thermoset, stainless steel, aluminium. Square marine grade stainless steel cover, mill finish. Flush mounted toughened glass with secondary sealing glass. High performance LED refractor optics with different beam angles. Aiming can be adjusted by up to 15° from the vertical from the outside while fitting is already mounted in place and sealed. Integral vapour seal against condensed water. The interior of the housing is sealed in accordance with IP68 even during installation. Separate connection compartment for direct connection of rigid cables up to 3 x 2.5 mm².

The use of the installation support is necessary, please order separately.

LED included.

Available colour: 0 = stainless steel



Comparison LED vs. conventional lamps

LED 12 W ≈
1 x 50 W QT12 (50 W)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							Price Category 12
Cut out DA 175 mm, TE 250 mm							
Rotation symmetrical light distribution, aiming can be circular adjusted up to 15 degrees from outside							
641297.000	L 190, B 190, H 2	LED	830	810 lm	12 W	12° on/off	A+ A+
641298.000	L 190, B 190, H 2	LED	830	810 lm	12 W	20° on/off	A+ A+
641299.000	L 190, B 190, H 2	LED	830	810 lm	12 W	37° on/off	A+ A+
641297.000.1	L 190, B 190, H 2	LED	840	860 lm	12 W	12° on/off	A+ A+
641298.000.1	L 190, B 190, H 2	LED	840	860 lm	12 W	20° on/off	A+ A+
641299.000.1	L 190, B 190, H 2	LED	840	860 lm	12 W	37° on/off	A+ A+

In-ground support, mandatory, can be cut on site

982089.003	D 172, H 500	Installation support, mandatory	Price Category 12
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Accessories

982088.010	D 132, H 12	Glass, non-slip with seal	Price Category 13
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Replacement glass

982088.000	D 132, H 12	Glass with seal	Price Category 13
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TERRA EDELSTAHL 245

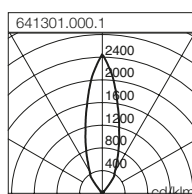
In-ground luminaires

- In-ground luminaire for pedestrian areas, maximum load 2000 kg
- Selection of circular or square shape marine grade stainless steel cover with flush mounted toughened glass
- Choice of five different beam angles: 24 deg, 62 deg and asymmetrical distribution featuring fixed beam direction as well as 10 deg and 28 deg featuring an adjustable reflector
- Choice of two light colours: 3000 K - 830, 4000 K - 840
- Non corrosive pressure die-cast aluminium housing
- Flexible power cord H07-RN8F compatible with IP 68 quick connectors and cast resin boxes for electrical connection outside luminaire housing
- Housing with integral vapour seal preventing condensed water

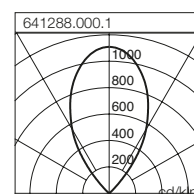
- Choice of 3 in-ground supports for underground cable or cabling with empty conduits

- Slip resistant glass (R12) and anti-glare louvre available as accessories

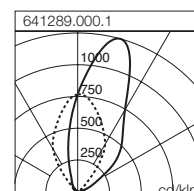
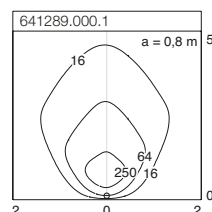
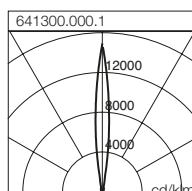
641301.000.1			
h [m]	Ø [m]	E [lx]	
5,0	2,47	165	
4,0	1,98	259	
3,0	1,48	460	
2,0	0,99	1034	
1,0	0,49	4137	



641288.000.1			
h [m]	Ø [m]	E [lx]	
5,0	5,80	78	
4,0	4,64	122	
3,0	3,48	217	
2,0	2,32	487	
1,0	1,16	1949	



641300.000.1			
h [m]	Ø [m]	E [lx]	
5,0	0,91	1150	
4,0	0,73	1797	
3,0	0,55	3194	
2,0	0,36	7187	
1,0	0,18	28746	



In-ground luminaires | Series: Terra Edelstahl 245

Type of Protection: **IP 68**

Protection Class: I

Impact Protection: IK10

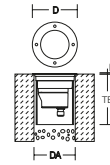
Maximum Static Load: 2000 kg

Corrosion-resistant aluminium pressure die-cast housing, powder coated. Marine grade stainless steel circular shaped cover and screws. Flush mounted toughened glass. High-performance LED freeform mirror optics. Integral flexible power cord H07-RN8F. Integral vapour seal against condensed water.

Use of in-ground support is necessary, please order chosen version for your application separately.

LED included.

Available colour: 0 = stainless steel



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							
Price Category 12							
Cut out DA 225 mm, TE 145 mm							
Rotation symmetrical light distribution							
641284.000	D 245, H 2	LED	830	2150 lm	28 W	24° on/off	A+ A+
641284.000.1	D 245, H 2	LED	840	2250 lm	28 W	24° on/off	A+ A+
641285.000	D 245, H 2	LED	830	2150 lm	28 W	62° on/off	A+ A+
641285.000.1	D 245, H 2	LED	840	2200 lm	28 W	62° on/off	A+ A+
Asymmetrical light distribution							
641286.000	D 245, H 2	LED	830	2150 lm	28 W	on/off	A+ A+
641286.000.1	D 245, H 2	LED	840	2200 lm	28 W	on/off	A+ A+

Comparison LED vs. conventional lamps

LED 28 W ≈

1 x 150 W QT12 (150 W)
1 x 42 W TC-TEL (47 W EB)
1 x 35 W HIT (45 W CB)

In-ground luminaires | Series: Terra Edelstahl 245

Type of Protection: **IP 68**

Protection Class: I

Impact Protection: IK10

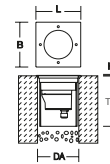
Maximum Static Load: 2000 kg

Corrosion-resistant aluminium pressure die-cast housing, powder coated. Marine grade stainless steel square shaped cover and screws. Flush mounted toughened glass. High-performance LED freeform mirror optics. Integral flexible power cord H07-RN8F. Integral vapour seal against condensed water.

Use of in-ground support is necessary, please order chosen version for your application separately.

LED included.

Available colour: 0 = stainless steel



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							
Price Category 12							
Cut out DA 225 mm, TE 145 mm							
Rotation symmetrical light distribution							
641287.000	L 245, B 245, H 2	LED	830	2150 lm	28 W	24° on/off	A+ A+
641287.000.1	L 245, B 245, H 2	LED	840	2250 lm	28 W	24° on/off	A+ A+
641288.000	L 245, B 245, H 2	LED	830	2150 lm	28 W	62° on/off	A+ A+
641288.000.1	L 245, B 245, H 2	LED	840	2200 lm	28 W	62° on/off	A+ A+
Asymmetrical light distribution							
641289.000	L 245, B 245, H 2	LED	830	2150 lm	28 W	on/off	A+ A+
641289.000.1	L 245, B 245, H 2	LED	840	2200 lm	28 W	on/off	A+ A+

Comparison LED vs. conventional lamps

LED 28 W ≈

1 x 150 W QT12 (150 W)
1 x 42 W TC-TEL (47 W EB)
1 x 35 W HIT (45 W CB)

In-ground support, mandatory, can be cut on site			Price Category 12
982011.000	D 220, H 130	In-ground support for empty conduits cabling	
982016.000	D 234, H 134	Stainless steel in-ground support for empty conduits cabling	
982013.000	D 300, H 60	Closure for large in-ground support	
982012.000	D 302, H 320	Large in-ground support for underground cable	
Accessories			Price Category 12
982014.010	D 185, H 15	Slip resistant glass R12	
982015.003	D 130, H 19	Lamellar insert	
Replacement glass			Price Category 12
982014.000	D 185, H 15	Replacement glass	

**In-ground luminaires | Series: Terra Edelstahl 245**

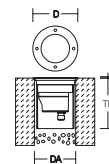
Type of Protection: **IP 68**
 Protection Class: I
 Impact Protection: IK10
 Maximum Static Load: 2000 kg

Corrosion-resistant aluminium pressure die-cast housing, powder coated. Marine grade stainless steel circular shaped cover and screws. Flush mounted toughened glass. High-performance LED freeform mirror optics. Beam angle can be adjusted up to 10 degrees from vertical. Integral flexible power cord H07-RN8F. Integral vapour seal against condensed water.

Use of in-ground support is necessary, please order separately

LED included.

Available colour: 0 = stainless steel

**Comparison
LED vs. conventional lamps****LED 26 W ≈**

1 x 150 W QT16 (150 W)
 1 x 35 W HIT (45 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							Price Category 12
Installation slot DA 300 mm, TE 320 mm, cut out 225 mm							
Rotation symmetrical light distribution, aiming can be circular adjusted up to 10 degrees							
641300.000	D 245, H 2	LED	830	2300 lm	26 W	10° on/off	A+ A+
641300.000.1	D 245, H 2	LED	840	2400 lm	26 W	10° on/off	A+ A+
641301.000	D 245, H 2	LED	830	2000 lm	26 W	28° on/off	A+ A+
641301.000.1	D 245, H 2	LED	840	2100 lm	26 W	28° on/off	A+ A+

**In-ground luminaires | Series: Terra Edelstahl 245**

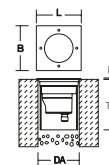
Type of Protection: **IP 68**
 Protection Class: I
 Impact Protection: IK10
 Maximum Static Load: 2000 kg

Corrosion-resistant aluminium pressure die-cast housing, powder coated. Marine grade stainless steel square shaped cover and screws. Flush mounted toughened glass. High-performance LED freeform mirror optics. Beam angle can be adjusted up to 10 degrees from vertical. Integral flexible power cord H07-RN8F. Integral vapour seal against condensed water.

Use of in-ground support is necessary, please order separately

LED included.

Available colour: 0 = stainless steel

**Comparison
LED vs. conventional lamps****LED 26 W ≈**

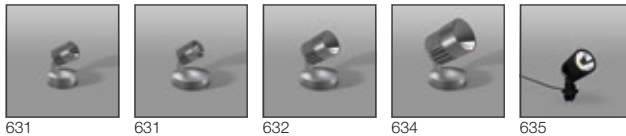
1 x 150 W QT16 (150 W)
 1 x 35 W HIT (45 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
In-ground luminaires							Price Category 12
Installation slot DA 300 mm, TE 320 mm, cut out 225 mm							
Rotation symmetrical light distribution, aiming can be circular adjusted up to 10 degrees							
641302.000	L 245, B 245, H 2	LED	830	2300 lm	26 W	10° on/off	A+ A+
641302.000.1	L 245, B 245, H 2	LED	840	2400 lm	26 W	10° on/off	A+ A+
641303.000	L 245, B 245, H 2	LED	830	2000 lm	26 W	28° on/off	A+ A+
641303.000.1	L 245, B 245, H 2	LED	840	2100 lm	26 W	28° on/off	A+ A+
In-ground support, mandatory, can be cut on site							Price Category 12
982013.000	D 300, H 60	Closure for large in-ground support					
982012.000	D 302, H 320	Large in-ground support for underground cable					
Accessories							Price Category 13
982014.030	D 185, H 15	Accessory glass, non-slip R12					
Replacement glass							Price Category 13
982014.020	D 185, H 15	Replacement glass					





The application image shows:
Alu-Star



631

631

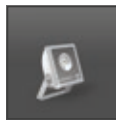
632

634

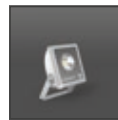
635



637-639



637-639



637-639



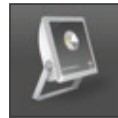
649



641-643



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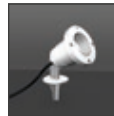
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655



657



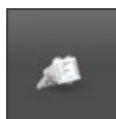
658



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Alu-Star
630-635

Lightstream® LED Mini
636-639 | 648-649

Lightstream® LED Midi
640-643 | 650-651

Lightstream® LED Maxi
646-647 | 652-653

Steel poles
654-655

PAR16
657-658

Double Schuko power
socket for garden
applications
658

Standard-Spot
659

Lightstream® Box-Type
660-661



DALI



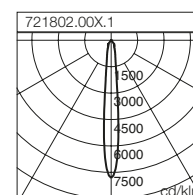
ALU-STAR

Spotlights

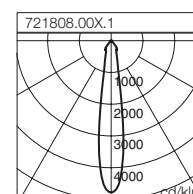
- Made in Germany
- High efficient LED outdoor floodlight by strict thermal separation of LED and driver compartment
- Reflectors made of reflex boosted **MIRO-SILVER®** with choice of four beam angles for ultimate flexibility in application
- Universal mounting position allowed due to sophisticated design details like generous space for cable placement
- Beam direction can be precisely adjusted and locked into position for tilt and rotation by sophisticated stepped mechanics

- Robust outdoor operation ensured by use of high quality material like powder coated, corrosion-resistant pressure die-cast aluminium, toughened glass and stainless steel
- Corrosion-resistant fixing straps of stainless steel; drill hole deviations can be easily compensated

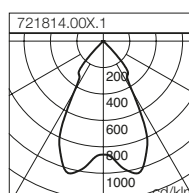
721802.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,20	23846
2,0	0,40	5961
3,0	0,60	2650
4,0	0,80	1490
5,0	1,00	954



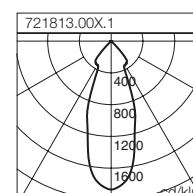
721808.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,30	24932
2,0	0,60	6233
3,0	0,91	2770
4,0	1,21	1558
5,0	1,51	997



721814.00X.1		
h [m]	Ø [m]	E [lx]
1,0	1,10	6924
2,0	2,20	1731
3,0	3,30	769
4,0	4,40	433
5,0	5,50	277



721813.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,68	15127
2,0	1,35	3782
3,0	2,03	1681
4,0	2,71	945
5,0	3,38	605



Spotlights | Series: Alu-Star Mini

Type of Protection: **IP 65**

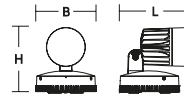
Protection Class: I

Impact Protection: IK07

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Stainless steel fixing clips with compensation for drill hole deviations. Rotation angle can be adjusted and locked in 3 degree steps, tilt angle in 5 degree steps with angular scale. Thermally decoupled driver compartment, integral driver. Toughened glass cover. COB-LEDs with socket, selection of light colour 830 or 840. Rotation-symmetric reflector made of reflex-boosted **MIRO-SILVER®**. With membrane valve as a standard to prevent condensed water. Piano-key terminal up to 2 x 5 x 2,5 mm², max cable Ø 13 mm, comes with second cable gland for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Comparison LED vs. conventional lamps

LED 40 / 42 W ≈

1 x 70 W HIT-CE (84 W CB)

DALI-Version



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Floodlight								
Spot, narrow beam								
721802.00X	L 200, B 180, H 210	LED	830	3850 lm	42 W	10°	on/off	A+ A+
721802.00X.1	L 200, B 180, H 210	LED	840	3950 lm	42 W	10°	on/off	A+ A+
721802.00X.76	L 240, B 240, H 215	LED	830	3850 lm	42 W	10°	DALI	A+ A+
721802.00X.1.76	L 240, B 240, H 215	LED	840	3950 lm	42 W	10°	DALI	A+ A+
Spot, medium beam								
721803.00X	L 200, B 180, H 210	LED	830	4550 lm	40 W	26°	on/off	A++ A++
721803.00X.1	L 200, B 180, H 210	LED	840	4700 lm	40 W	26°	on/off	A++ A++
721803.00X.76	L 240, B 240, H 215	LED	830	4550 lm	40 W	26°	DALI	A++ A++
721803.00X.1.76	L 240, B 240, H 215	LED	840	4700 lm	40 W	26°	DALI	A++ A++
Spot, wide beam								
721804.00X	L 200, B 180, H 210	LED	830	4450 lm	40 W	40°	on/off	A++ A++
721804.00X.1	L 200, B 180, H 210	LED	840	4600 lm	40 W	40°	on/off	A++ A++
721804.00X.76	L 240, B 240, H 215	LED	830	4450 lm	40 W	40°	DALI	A++ A++
721804.00X.1.76	L 240, B 240, H 215	LED	840	4600 lm	40 W	40°	DALI	A++ A++

Accessories | Anti-glare shield

Snap-on hood. Can be rotated 360 degrees stainless steel, powder coated.

Anti-glare shield			Price Category 12
982165.003	L 140, B 121, H 130	black	

Accessories | Louvres

Louvre as push-on attachment. Can be rotated 360 degrees stainless steel, powder coated.

Louvres			Price Category 12
982162.003	L 129D 120, H 85	black	

Accessories | Barn door shutter

Barn door shutter with mounting attachment. Can be rotated 360 degrees stainless steel, powder coated.

Barn door shutter			Price Category 12
982168.003	L 266, B 266, H 31	black	

Accessories | Frame attachment with colour filter

Colour filters with mounting attachment. Can be rotated 360 degrees Filters toughened glass. stainless steel, powder coated.

Frame attachment with colour filter			Price Category 12
982159.006	D 121, H 58	Filters: blue	
982159.007	D 121, H 58	Filters: yellow	
982159.0077	D 121, H 58	Filters: green	
982159.008	D 121, H 58	Filters: red	

Accessory for ground installation

			Price Category 12
982241.0031	D 180, H 40, HE 400	Buried base	





Spotlights | Series: Alu-Star Midi

Type of Protection: **IP 65**

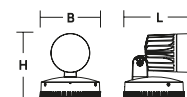
Protection Class: I

Impact Protection: IK07

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Stainless steel fixing clips with compensation for drill hole deviations. Rotation angle can be adjusted and locked in 3,6 degree steps, tilt angle in 5 degree steps with angular scale. Thermally decoupled driver compartment, integral driver. Toughened glass cover. COB-LEDs with socket, selection of light colour 830 or 840. Rotation-symmetric reflector made of reflex-boosted **MIRO-SILVER®**. With membrane valve as a standard to prevent condensed water. Piano-key terminal up to 2 x 5 x 2,5 mm², max cable Ø 13 mm, comes with second cable gland for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Comparison LED vs. conventional lamps

LED 56 / 57 W ≈

1 x 100 W HIT-CE (115 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	EEC
Floodlight								Price Category 12
Spot, narrow beam								
721807.00X	L 255, B 240, H 255	LED	830	5100 lm	57 W	10°	on/off	A++ A++
721807.00X.76	L 255, B 240, H 255	LED	830	5100 lm	57 W	10°	DALI	A++ A++
721807.00X.1	L 255, B 240, H 255	LED	840	5250 lm	57 W	10°	on/off	A++ A++
721807.00X.1.76	L 255, B 240, H 255	LED	840	5250 lm	57 W	10°	DALI	A++ A++
Spot, medium beam								
721808.00X	L 255, B 240, H 255	LED	830	6300 lm	56 W	24°	on/off	A++ A++
721808.00X.76	L 255, B 240, H 255	LED	830	6300 lm	56 W	24°	DALI	A++ A++
721808.00X.1	L 255, B 240, H 255	LED	840	6500 lm	56 W	24°	on/off	A++ A++
721808.00X.1.76	L 255, B 240, H 255	LED	840	6500 lm	56 W	24°	DALI	A++ A++
Spot, wide beam								
721809.00X	L 255, B 240, H 255	LED	830	6250 lm	56 W	34°	on/off	A++ A++
721809.00X.76	L 255, B 240, H 255	LED	830	6250 lm	56 W	34°	DALI	A++ A++
721809.00X.1	L 255, B 240, H 255	LED	840	6400 lm	56 W	34°	on/off	A++ A++
721809.00X.1.76	L 255, B 240, H 255	LED	840	6400 lm	56 W	34°	DALI	A++ A++
Wide flood								
721810.00X	L 255, B 240, H 255	LED	830	6350 lm	56 W	63°	on/off	A++ A++
721810.00X.76	L 255, B 240, H 255	LED	830	6350 lm	56 W	63°	DALI	A++ A++
721810.00X.1	L 255, B 240, H 255	LED	840	6550 lm	56 W	63°	on/off	A++ A++
721810.00X.1.76	L 255, B 240, H 255	LED	840	6550 lm	56 W	63°	DALI	A++ A++

Accessories | Anti-glare shield

Snap-on hood. Can be rotated 360 degrees stainless steel, powder coated.

Anti-glare shield								Price Category 12
982166.003	L 185, B 161, H 170	black						

Accessories | Louvres

Louvre as push-on attachment. Can be rotated 360 degrees stainless steel, powder coated.

Louvres								Price Category 12
982163.003	L 169D 160, H 97	black						

Accessories | Barn door shutter

Barn door shutter with mounting attachment. Can be rotated 360 degrees stainless steel, powder coated.

Barn door shutter								Price Category 12
982169.003	L 340, B 340, H 31	black						

Accessories | Frame attachment with colour filter

Colour filters with mounting attachment. Can be rotated 360 degrees Filters toughened glass. stainless steel, powder coated.

Frame attachment with colour filter								Price Category 12
982160.008	D 160, H 58	Filters: red						
982160.006	D 161, H 58	Filters: blue						
982160.007	D 161, H 58	Filters: yellow						
982160.0077	D 161, H 58	Filters: green						

Accessory for ground installation

982242.0031 D 240, H 40, HE 400 Buried base

Price Category 12

Spotlights | Series: Alu-Star Maxi

Type of Protection: **IP 65**

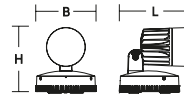
Protection Class: I

Impact Protection: IK07

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Stainless steel fixing clips with compensation for drill hole deviations. Rotation angle can be adjusted and locked in 3,6 degree steps, tilt angle in 5 degree steps with angular scale. Thermally decoupled driver compartment, integral driver. Toughened glass cover. COB-LEDs with socket, selection of light colour 830 or 840. Rotation-symmetric reflector made of reflex-boosted **MIRO-SILVER®**. With membrane valve as a standard to prevent condensed water. Plano-key terminal up to 2 x 5 x 2,5 mm², max cable Ø 13 mm, comes with second cable gland for loop through.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Comparison LED vs. conventional lamps

LED 88 W ≈
1 x 150 W HIT-CE (170 W CB)

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	EEC
Floodlight								
Spot, narrow beam								
721811.00X	L 305, B 240, H 310	LED	830	9550 lm	88 W	12°	on/off	A++ A++
721811.00X.76	L 305, B 240, H 310	LED	830	9550 lm	88 W	12°	DALI	A++ A++
721811.00X.1	L 305, B 240, H 310	LED	840	9800 lm	88 W	12°	on/off	A++ A++
721811.00X.1.76	L 305, B 240, H 310	LED	840	9800 lm	88 W	12°	DALI	A++ A++
Spot, medium beam								
721812.00X	L 305, B 240, H 310	LED	830	9700 lm	88 W	24°	on/off	A++ A++
721812.00X.76	L 305, B 240, H 310	LED	830	9700 lm	88 W	24°	DALI	A++ A++
721812.00X.1	L 305, B 240, H 310	LED	840	10000 lm	88 W	24°	on/off	A++ A++
721812.00X.1.76	L 305, B 240, H 310	LED	840	10000 lm	88 W	24°	DALI	A++ A++
Spot, wide beam								
721813.00X	L 305, B 240, H 310	LED	830	9750 lm	88 W	36°	on/off	A++ A++
721813.00X.76	L 305, B 240, H 310	LED	830	9750 lm	88 W	36°	DALI	A++ A++
721813.00X.1	L 305, B 240, H 310	LED	840	10100 lm	88 W	36°	on/off	A++ A++
721813.00X.1.76	L 305, B 240, H 310	LED	840	10100 lm	88 W	36°	DALI	A++ A++
Wide flood								
721814.00X	L 305, B 240, H 310	LED	830	9800 lm	88 W	56°	on/off	A++ A++
721814.00X.76	L 305, B 240, H 310	LED	830	9800 lm	88 W	56°	DALI	A++ A++
721814.00X.1	L 305, B 240, H 310	LED	840	10100 lm	88 W	56°	on/off	A++ A++
721814.00X.1.76	L 305, B 240, H 310	LED	840	10100 lm	88 W	56°	DALI	A++ A++

Accessories | Anti-glare shield

Snap-on hood. Can be rotated 360 degrees stainless steel, powder coated.

Anti-glare shield			Price Category 12
982167.003	L 241, B 212, H 221	black	

Accessories | Louvres

Louvre as push-on attachment. Can be rotated 360 degrees stainless steel, powder coated.

Louvres			Price Category 12
982164.003	L 220D 211, H 100	black	

Accessories | Barn door shutter

Barn door shutter with mounting attachment. Can be rotated 360 degrees stainless steel, powder coated.

Barn door shutter			Price Category 12
982170.003	L 438, B 438, H 31	black	

Accessories | Frame attachment with colour filter

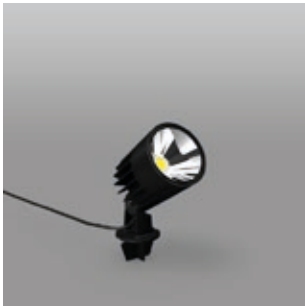
Colour filters with mounting attachment. Can be rotated 360 degrees Filters toughened glass. stainless steel, powder coated.

Frame attachment with colour filter			Price Category 12
982161.006	D 211, H 58	Filters: blue	
982161.007	D 211, H 58	Filters: yellow	
982161.0077	D 211, H 58	Filters: green	
982161.008	D 211, H 58	Filters: red	

Accessory for ground installation

			Price Category 12
982242.0031	D 240, H 40, HE 400	Buried base	





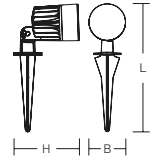
Garden spotlights | Series: Alu-Star Mini

Type of Protection: **IP 65**
Protection Class: I
Impact Protection: IK07

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, powder-coated. Peg made of fiber reinforced plastic. Tilt angle can be adjusted and locked in 5 degree steps featuring angular scale. Toughened glass cover. LED with integral driver. Rotation-symmetric reflector made of reflex-boosted **MIRO-SILVER®**. With membrane valve as a standard to prevent condensed water. With power cord and Schuko plug.

LED included.

Available colour: 31 = anthracite metallic



Comparison LED vs. conventional lamps

LED 24 / 26 W ≈
1 x 35 W HIT (45 W KVG)
1 x 200 W QT32 (200 W)



Garden spotlights

Spot, medium beam

721806.0031.1 L 400, B 115, H 205

721806.0031 L 400, B 115, H 205

Spot, wide beam

721815.0031.1 L 400, B 115, H 205

721815.0031 L 400, B 115, H 205

Lamp

Light
colour

Luminaire
flux

System
power



dim-
able

EEC

Price Category 12

Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	Beam angle	dim-able	EEC
721806.0031.1	L 400, B 115, H 205	LED	840	1750 lm	24 W	20°	on/off	A+ A+
721806.0031	L 400, B 115, H 205	LED	830	1750 lm	26 W	20°	on/off	A+ A+
721815.0031.1	L 400, B 115, H 205	LED	840	1800 lm	24 W	36°	on/off	A+ A+
721815.0031	L 400, B 115, H 205	LED	830	1750 lm	26 W	36°	on/off	A+ A+

Accessories | Anti-glare shield

Snap-on hood. Can be rotated 360 degrees stainless steel, powder coated.

Anti-glare shield

Price Category 12

982165.003	L 140, B 121, H 130	black
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Accessories | Louvres

Louvre as push-on attachment. Can be rotated 360 degrees stainless steel, powder coated.

Louvres

Price Category 12

982162.003	L 129D 120, H 85	black
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Accessories | Barn door shutter

Barn door shutter with mounting attachment. Can be rotated 360 degrees stainless steel, powder coated.

Barn door shutter

Price Category 12

982168.003	L 266, B 266, H 31	black
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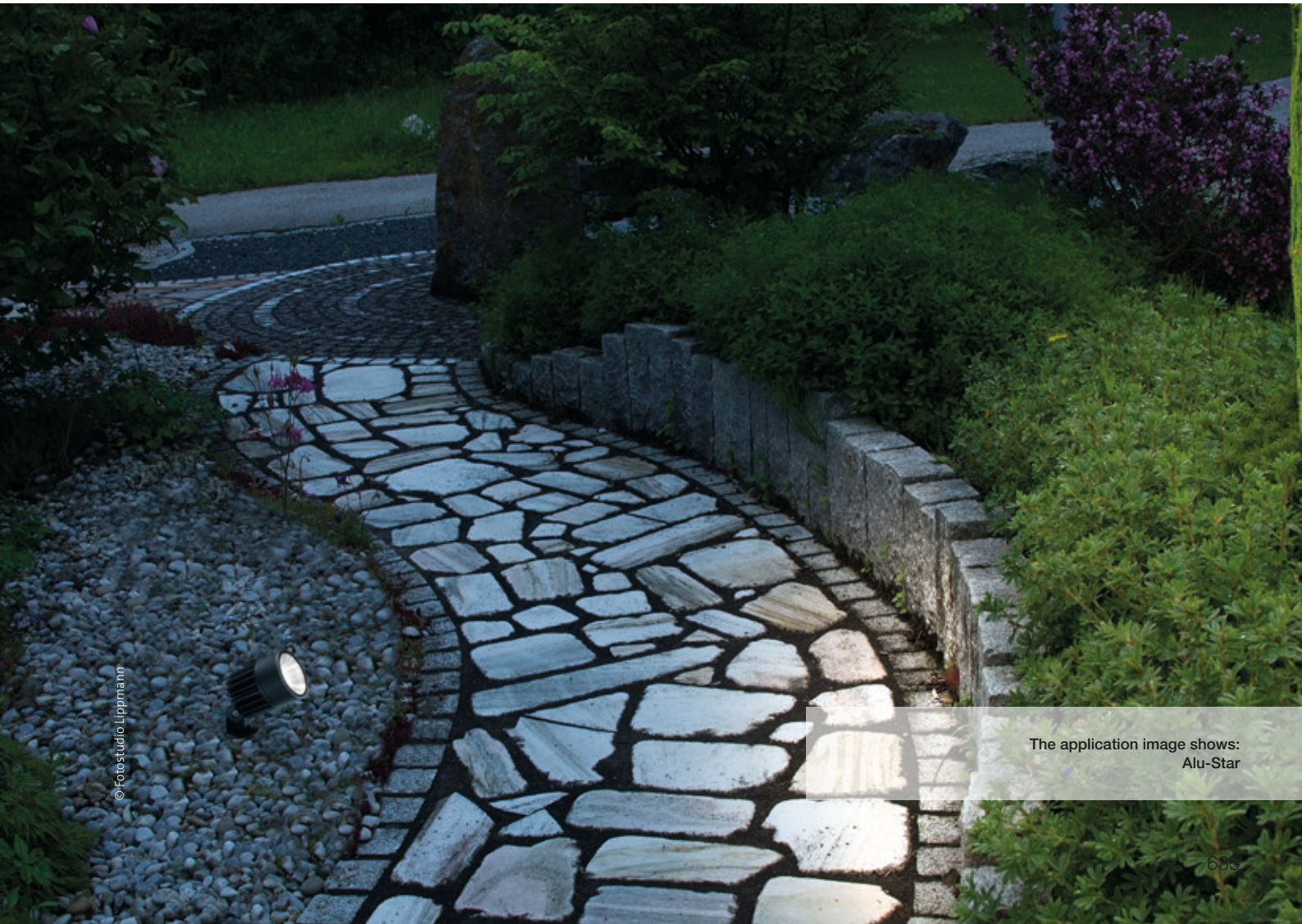

Accessories | Frame attachment with colour filter

Colour filters with mounting attachment. Can be rotated 360 degrees Filters toughened glass. stainless steel, powder coated.

Frame attachment with colour filter

Price Category 12

982159.006	D 121, H 58	Filters: blue
982159.007	D 121, H 58	Filters: yellow
982159.0077	D 121, H 58	Filters: green
982159.008	D 121, H 58	Filters: red



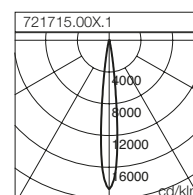


LIGHTSTREAM® LED MINI

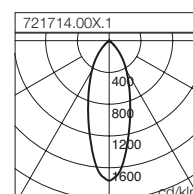
Spotlights

- Made in Germany
- Choice of three different light distributions: Narrow Spot, Medium Spot and Flood
- Fixed installation or mobile types with 5 m power cord and plug
- Marine grade coating available as an option
- Peg available as accessory
- Emergency lighting version for central battery feed available
- Second cable inlet for loop through
- Reduced power consumption maintaining the same luminaire flux for energy savings at switchable version
- Dali-Version with increased luminaire flux
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- LED rated life 50,000 h (L80, B10)
- Mounting accessories available for pole and wall mounting
- Suitable for use in the food and drink industry

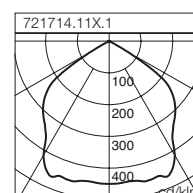
721715.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,21	26104
2,0	0,41	6526
3,0	0,62	2900
4,0	0,83	1632
5,0	1,03	1044



721714.00X.1		
h [m]	Ø [m]	E [lx]
1,0	0,63	3178
2,0	1,26	795
3,0	1,89	353
4,0	2,52	199
5,0	3,15	127



721714.11X.1		
h [m]	Ø [m]	E [lx]
1,0	2,66	826
2,0	5,33	207
3,0	7,99	92
4,0	10,66	52
5,0	13,32	33



Spotlights | Series: Lightstream® LED Mini

 Type of Protection: **IP 65**

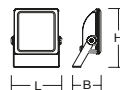
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Toughened glass cover. LED module with highly efficient narrow beam optics of 9 discrete refractors. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Second cable gland for loop through available as accessory.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	EEC
Floodlight direct mains connection for fixed installation								Price Category 12
Spot, Rotationally symmetric narrow beam light distribution								
721715.00X	L 194, B 109, H 226	LED	830	1550 lm	31 W	12°	on/off	A A
721715.00X.1	L 194, B 109, H 226	LED	840	1750 lm	31 W	12°	on/off	A A
Spare glass								Price Category 12
981933.01X	L 175, B 170, H 13							
Replacement converter								Price Category 21
981959.002	L 97, B 43, H 30	on/off						
Replacement LED module								Price Category 21
982084.000	L 70, B 70, H 14	830						
982084.000.1	L 70, B 70, H 14	840						
Cable gland								Price Category 11
982367.009	M16x1,5							

**Comparison
LED vs. conventional lamps**
LED 31 W ≈

1 x 20 W HIT-CE (23 W EB)

1 x 150 W QT-DE (150 W)

Spotlights | Series: Lightstream® LED Mini

 Type of Protection: **IP 65**

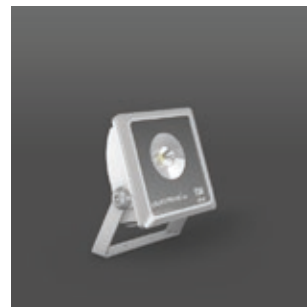
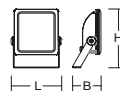
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Ceramic coated toughened glass. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodized. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Second cable gland for loop through available as accessory.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dimmable	CB	EEC
Floodlight direct mains connection for fixed installation								Price Category 12	
Spot, Rotationally symmetric medium beam light distribution									
721714.00X	L 194, B 109, H 226	LED	830	2150 lm	23 W	32°	on/off	A++ A++	
721714.00X.1	L 194, B 109, H 226	LED	840	2250 lm	23 W	32°	on/off	A++ A++	
721714.00X.76	L 194, B 109, H 226	LED	830	2700 lm	30 W	35°	DALI	A++ A++	
721714.00X.1.76	L 194, B 109, H 226	LED	840	2850 lm	30 W	35°	DALI	A++ A++	
Flood, Rotationally symmetric wide beam light distribution									
721714.11X.Q	L 194, B 109, H 226	LED	830	2200 lm	23 W	106°	on/off	✓ A++ A++	
721714.11X.1	L 194, B 109, H 226	LED	840	2300 lm	23 W	106°	on/off	✓ A++ A++	
721714.11X.76	L 194, B 109, H 226	LED	830	2800 lm	30 W	101°	DALI	A++ A++	
721714.11X.1.76	L 194, B 109, H 226	LED	840	2900 lm	30 W	101°	DALI	A++ A++	
Spare glass								Price Category 12	
981933.00X	L 175, B 170, H 13								
Replacement converter								Price Category 21	
981959.002	L 97, B 43, H 30		on/off						
Replacement LED module								Price Category 21	
982081.000	L 19, B 19, H 1		830						
982081.000.1	L 19, B 19, H 1		840						
Cable gland								Price Category 11	
982367.009			M16x1,5						

**Comparison
LED vs. conventional lamps**
LED 23 W ≈

1 x 35 W HIT (45 W CB)

1 x 200 W QT-DE (200 W)

LED 30 W ≈

1 x 50 W HIT (60 W CB)

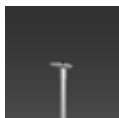


**Accessories | Wall arm for Lightstream LED**

Display bracket for Lightstream® LED Mini and Midi for wall mounting. Made of stainless steel, blasted or powder coated finish. Option of top or lateral mounting at frontal bracket. Hidden cabling inside tubular profile with additional inlet at wall mounting plate.

Display arm for wall mounting**Price Category 12**

982058.000	L 500, B 180, H 180	Overall length 500 mm
982058.0031	L 500, B 180, H 180	Overall length 500 mm
982086.000	L 1000, B 180, H 180	Overall length 1000 mm
982086.0031	L 1000, B 180, H 180	Overall length 1000 mm

**Accessories | Pole-top bracket for Lightstream LED Mini, Midi**

Pole attachment for Lightstream® LED Mini / Midi for installation on the pole top. Steel, hot-dip galvanised, unpainted or powder coated. Set of stainless steel fixing screws included. Cable gland into the pole as strain-relief and protection against rainwater

Pole-top bracket**Price Category 12****Pole top fixings, single**

982047.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982047.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982047.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982048.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm
982048.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm
982048.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm

Pole top fixings opposite mounting

982049.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982049.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982049.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982050.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm
982050.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm
982050.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm

**Accessories | Pole clip for Lightstream LED**

Mounting bracket for Lightstream® LED Mini or Midi for lateral attachment along the pole. Stainless steel bracket with galvanised screws. Smooth span width for different mounting heights.

Powder coating on request.

Pole clip**Price Category 12**

982090.000	L 178, B 174, H 38	for Ø 95 - 113 mm
982091.000	L 178, B 194, H 38	for Ø 114 - 132 mm



The application image shows:
Lightstream® LED

Garden spotlights | Series: Lightstream® LED Mini, portable

 Type of Protection: **IP 65**

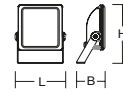
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Toughened glass cover. LED module with highly efficient narrow beam optics of 9 discrete refractors. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. With power cord and Schuko plug, IP 54; (luminaire housing: IP 65).

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Floodlight, with cable and Schuko plug Price Category 12								
Spot, Rotationally symmetric narrow beam light distribution								
721723.00X	L 194, B 109, H 226	LED	830	1550 lm	31 W	12°	on/off	A A
721723.00X.1	L 194, B 109, H 226	LED	840	1750 lm	31 W	12°	on/off	A A
Spare glass Price Category 12								
981933.01X	L 175, B 170, H 13							
Replacement converter Price Category 21								
981959.002	L 97, B 43, H 30	on/off						
Replacement LED module Price Category 21								
982084.000	L 70, B 70, H 14	830						
982084.000.1	L 70, B 70, H 14	840						
Earth spike kit Price Category 12								
981962.003	D 86, L 80, B 80, H 246							


Comparison LED vs. conventional lamps
LED 31 W ≈

1 x 20 W HIT-CE (23 W EB)

1 x 150 W QT-DE (150 W)

Garden spotlights | Series: Lightstream® LED Mini, portable

 Type of Protection: **IP 65**

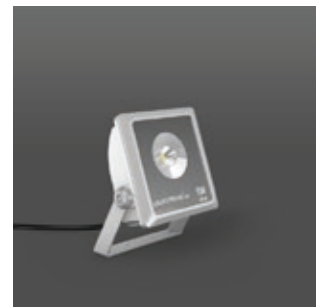
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Ceramic coated toughened glass. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodised. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. With power cord and Schuko plug, IP 54; (luminaire housing: IP 65).

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

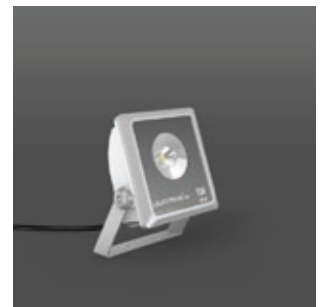


Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power		dim-able	EEC
Floodlight, with cable and Schuko plug Price Category 12								
Spot, Rotationally symmetric medium beam light distribution								
721721.00X	L 194, B 109, H 226	LED	830	2150 lm	23 W	32°	on/off	A++ A++
721721.00X.1	L 194, B 109, H 226	LED	840	2250 lm	23 W	32°	on/off	A++ A++
Flood, Rotationally symmetric wide beam light distribution								
721721.11X	L 194, B 109, H 226	LED	830	2200 lm	23 W	106°	on/off	A++ A++
721721.11X.1	L 194, B 109, H 226	LED	840	2300 lm	23 W	106°	on/off	A++ A++
Spare glass Price Category 12								
981933.00X	L 175, B 170, H 13							
Replacement converter Price Category 21								
981959.002	L 97, B 43, H 30	on/off						
Replacement LED module Price Category 21								
982081.000	L 19, B 19, H 1	830						
982081.000.1	L 19, B 19, H 1	840						
Earth spike kit Price Category 12								
981962.003	D 86, L 80, B 80, H 246							


Comparison LED vs. conventional lamps
LED 23 W ≈

1 x 35 W HIT (45 W CB)

1 x 200 W QT-DE (200 W)



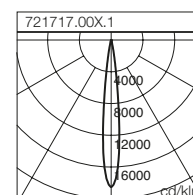


LIGHTSTREAM® LED MIDI

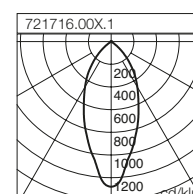
Spotlights

- Made in Germany
- Choice of three different light distributions: Narrow Spot, Medium Spot and Flood
- Fixed installation or mobile types with 5 m power cord and plug
- Marine grade coating available as an option
- Emergency lighting version for central battery feed available
- Second cable inlet for loop through
- Reduced power consumption maintaining the same luminaire flux for energy savings at switchable version
- Dali-Version with increased luminaire flux
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- LED rated life 50,000 h (L80, B10)
- Mounting accessories available for pole and wall mounting
- Suitable for use in the food and drink industry

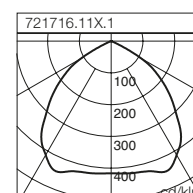
721717.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,21	46834	
2,0	0,42	11709	
3,0	0,63	5204	
4,0	0,84	2927	
5,0	1,05	1873	



721716.00X.1			
h [m]	Ø [m]	E [lx]	
1,0	0,82	4401	
2,0	1,63	1100	
3,0	2,45	489	
4,0	3,26	275	
5,0	4,08	176	



721716.11X.1			
h [m]	Ø [m]	E [lx]	
1,0	2,39	1431	
2,0	4,78	358	
3,0	7,18	159	
4,0	9,57	89	
5,0	11,96	57	



Spotlights | Series: Lightstream® LED Midi

Type of Protection: **IP 65**

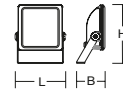
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Toughened glass cover. LED assembly with highly efficient narrow beam optics of 15 discrete refractors. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Second cable gland for loop through available as accessory.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	EEC
Projector for direct mains connection								
Spot, Rotationally symmetric narrow beam light distribution								
721717.00X	L 267, B 142, H 336	LED	830	2900 lm	51 W	12°	on/off	A A
721717.00X.76	L 267, B 142, H 336	LED	830	2900 lm	51 W	12°	DALI	A A
721717.00X.1	L 267, B 142, H 336	LED	840	3150 lm	51 W	12°	on/off	A A
721717.00X.1.76	L 267, B 142, H 336	LED	840	3150 lm	51 W	12°	DALI	A A
Spare glass								
981934.01X	L 255, B 240, H 13							Price Category 12
Replacement converter								
981960.003	L 110, B 76, H 30	on/off						Price Category 21
Replacement LED module								
982085.000	L 129, B 66, H 14	830						Price Category 21
982085.000.1	L 129, B 66, H 14	840						
Cable gland								
982060.004		M20x1.5 SW 24						Price Category 12

Comparison LED vs. conventional lamps

LED 51 W ≈

1 x 50 W HIT-CE (60 W CB)

1 x 300 W QT-DE (300 W)

Spotlights | Series: Lightstream® LED Midi

Type of Protection: **IP 65**

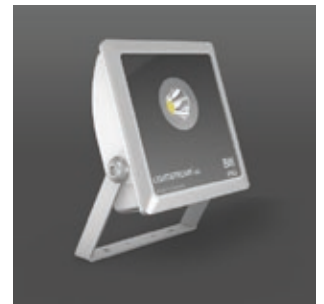
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Ceramic coated toughened glass. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodised. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Second cable gland for loop through available as accessory.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	CB	EEC
Projector for direct mains connection									
Spot, Rotationally symmetric medium beam light distribution									
721716.00X	L 267, B 142, H 336	LED	830	4200 lm	37 W	44°	on/off		A++ A++
721716.00X.1	L 267, B 142, H 336	LED	840	4300 lm	37 W	44°	on/off		A++ A++
721716.00X.76	L 267, B 142, H 336	LED	830	6050 lm	56 W	44°	DALI		A++ A++
721716.00X.1.76	L 267, B 142, H 336	LED	840	6250 lm	56 W	44°	DALI		A++ A++
Flood, Rotationally symmetric wide beam light distribution									
721716.11X	L 267, B 142, H 336	LED	830	4200 lm	37 W	98°	on/off	✓	A++ A++
721716.11X.1 .Q	L 267, B 142, H 336	LED	840	4300 lm	37 W	98°	on/off	✓	A++ A++
721716.11X.76	L 267, B 142, H 336	LED	830	5900 lm	56 W	98°	DALI		A++ A++
721716.11X.1.76	L 267, B 142, H 336	LED	840	6050 lm	56 W	98°	DALI		A++ A++
Spare glass									
981934.00X	L 255, B 240, H 13								Price Category 12
Replacement converter									
981960.003	L 110, B 76, H 30	on/off							Price Category 21
Replacement LED module									
982082.000	L 28, B 28, H 1	830							Price Category 21
982082.000.1	L 28, B 28, H 1	840							
Cable gland									
982060.004		M20x1.5 SW 24							Price Category 12

Comparison LED vs. conventional lamps

LED 37 W ≈

1 x 70 W HIT (84 W CB)

1 x 300 W QT-DE (300 W)

LED 56 W ≈

1 x 100 W HIT-CE (115 W CB)

1 x 500 W QT-DE (500 W)

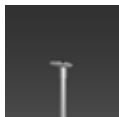


**Accessories | Wall arm for Lightstream LED**

Display bracket for Lightstream® LED Mini and Midi for wall mounting. Made of stainless steel, blasted or powder coated finish. Option of top or lateral mounting at frontal bracket. Hidden cabling inside tubular profile with additional inlet at wall mounting plate.

Display arm for wall mounting**Price Category 12**

982058.000	L 500, B 180, H 180	Overall length 500 mm
982058.0031	L 500, B 180, H 180	Overall length 500 mm
982086.000	L 1000, B 180, H 180	Overall length 1000 mm
982086.0031	L 1000, B 180, H 180	Overall length 1000 mm

**Accessories | Pole-top bracket for Lightstream LED Mini, Midi**

Pole attachment for Lightstream® LED Mini / Midi for installation on the pole top. Steel, hot-dip galvanised, unpainted or powder coated. Set of stainless steel fixing screws included. Cable gland into the pole as strain-relief and protection against rainwater

Pole-top bracket**Price Category 12****Pole top fixings, single**

982047.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982047.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982047.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982048.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm
982048.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm
982048.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm

Pole top fixings opposite mounting

982049.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982049.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982049.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982050.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm
982050.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm
982050.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm

**Accessories | Pole clip for Lightstream LED**

Mounting bracket for Lightstream® LED Mini or Midi for lateral attachment along the pole. Stainless steel bracket with galvanised screws. Smooth span width for different mounting heights.

Powder coating on request.

Pole clip**Price Category 12**

982092.000	L 178, B 174, H 38	for Ø 95 - 114 mm
982093.000	L 178, B 194, H 38	for Ø 115 - 135 mm



The application image shows:
Lightstream® LED

Spotlights | Series: Lightstream® LED Midi

Type of Protection: **IP 65**

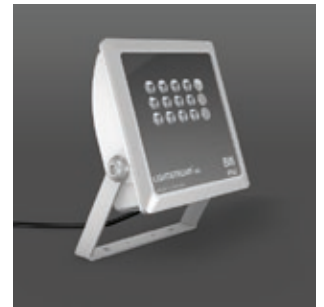
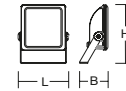
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Toughened glass cover. LED assembly with highly efficient narrow beam optics of 15 discrete refractors. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. With power cord and Schuko plug, IP 54; (luminaire housing: IP 65).

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dimmable	EEC
Floodlight, with cable and Schuko plug								
Spot, Rotationally symmetric narrow beam light distribution								
721724.00X	L 267, B 142, H 336	LED	830	2900 lm	51 W	12°	on/off	A A
721724.00X.1	L 267, B 142, H 336	LED	840	3150 lm	51 W	12°	on/off	A A
Spare glass								
981934.01X	L 255, B 240, H 13							Price Category 12
Replacement converter								
981960.003	L 110, B 76, H 30	on/off						Price Category 21
Replacement LED module								
982085.000	L 129, B 66, H 14	830						Price Category 21
982085.000.1	L 129, B 66, H 14	840						

Comparison LED vs. conventional lamps

LED 51 W ≈

1 x 50 W HIT-CE (60 W CB)

1 x 300 W QT-DE (300 W)

Spotlights | Series: Lightstream® LED Midi

Type of Protection: **IP 65**

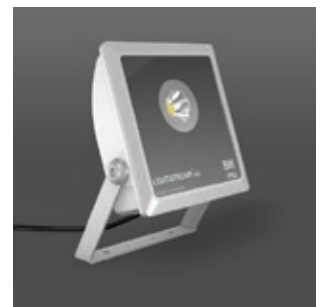
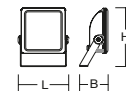
Protection Class: I

Impact Protection: IK07

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodised. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. With power cord and Schuko plug, IP 54; (luminaire housing: IP 65).

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dimmable	EEC
Floodlight, with cable and Schuko plug								
Spot, Rotationally symmetric medium beam light distribution								
721722.00X	L 267, B 142, H 336	LED	830	4200 lm	37 W	44°	on/off	A++ A++
721722.00X.1	L 267, B 142, H 336	LED	840	4300 lm	37 W	44°	on/off	A++ A++
Flood, Rotationally symmetric wide beam light distribution								
721722.11X	L 267, B 142, H 336	LED	830	4200 lm	37 W	98°	on/off	A++ A++
721722.11X.1	L 267, B 142, H 336	LED	840	4300 lm	37 W	98°	on/off	A++ A++
Spare glass								
981934.00X	L 255, B 240, H 13							Price Category 12
Replacement converter								
981960.003	L 110, B 76, H 30	on/off						Price Category 21
Replacement LED module								
982082.000	L 28, B 28, H 1	830						Price Category 21
982082.000.1	L 28, B 28, H 1	840						

Comparison LED vs. conventional lamps

LED 37 W ≈

1 x 70 W HIT (84 W CB)

1 x 500 W QT-DE (500 W)







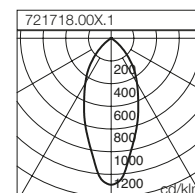


LIGHTSTREAM® LED MAXI

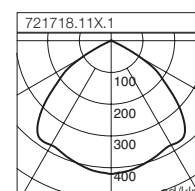
Spotlights

- Made in Germany
- LED floodlight for accent and area lighting
- Rotation-symmetric optics made of spun, glossy brightened and anodised high purity aluminium
- Rotation-symmetric medium-wide and wide beam distribution
- Housing made of corrosion-resistant pressure die-cast aluminium for outdoor application, stainless steel bracket, powder coated
- Tilt angle can be precisely adjusted and locked in 6° degrees
- Thermally decoupled driver compartment
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- With Gore™ Protective Vents diaphragm valve for reduction of condensation
- DALI dimmable as an option
- Suitable for use in the food and drink industry

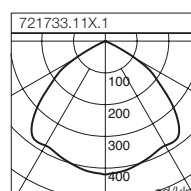
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h [m]	Ø [m]	E [lx]
1,0	0,80	25268
2,0	1,59	6317
3,0	2,39	2808
4,0	3,18	1579
5,0	3,98	1011



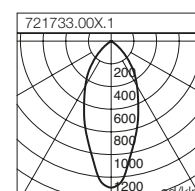
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h [m]	Ø [m]	E [lx]
1,0	2,60	8023
2,0	5,19	2006
3,0	7,79	891
4,0	10,39	501
5,0	12,99	321



721733.11X.1		
h [m]	Ø [m]	E [lx]
1,0	2,60	4028
2,0	5,19	1007
3,0	7,79	448
4,0	10,39	252
5,0	12,99	161



721733.00X.1		
h [m]	Ø [m]	E [lx]
3,0	2,39	1410
6,0	4,78	352
9,0	7,16	157
12,0	9,55	88
15,0	11,94	56



Spotlights | Series: Lightstream® LED Maxi

Type of Protection: **IP 65**

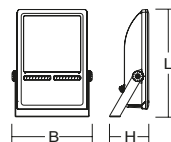
Protection Class: I

Impact Protection: IK08

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, bracket stainless steel, powder-coated. Tilt angle can be adjusted and locked in 6° steps with precise angular scale. Thermally decoupled driver compartment. Toughened glass cover. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodised. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Windage area $A_w = 0.155 \text{ m}^2$.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	α	dim-able	EEC
Projector for direct mains connection								
Rotationally symmetric medium beam light distribution								
721733.00X	L 501, B 374, H 182	LED	830	11900 lm	112 W	43°	on/off	A++ A++
721733.00X.76	L 501, B 374, H 182	LED	830	11900 lm	112 W	43°	DALI	A++ A++
721733.00X.1	L 501, B 374, H 182	LED	840	12300 lm	112 W	43°	on/off	A++ A++
721733.00X.1.76	L 501, B 374, H 182	LED	840	12300 lm	112 W	43°	DALI	A++ A++
721718.00X	L 501, B 374, H 182	LED	830	23800 lm	225 W	43°	on/off	A++ A++
721718.00X.76	L 501, B 374, H 182	LED	830	23800 lm	225 W	43°	DALI	A++ A++
721718.00X.1	L 501, B 374, H 182	LED	840	24500 lm	225 W	43°	on/off	A++ A++
721718.00X.1.76	L 501, B 374, H 182	LED	840	24500 lm	225 W	43°	DALI	A++ A++
Rotationally symmetric wide beam light distribution								
721733.11X	L 501, B 374, H 182	LED	830	11700 lm	112 W	102°	on/off	A++ A++
721733.11X.76	L 501, B 374, H 182	LED	830	11700 lm	112 W	102°	DALI	A++ A++
721733.11X.1	L 501, B 374, H 182	LED	840	12000 lm	112 W	102°	on/off	A++ A++
721733.11X.1.76	L 501, B 374, H 182	LED	840	12000 lm	112 W	102°	DALI	A++ A++
721718.11X	L 501, B 374, H 182	LED	830	23300 lm	225 W	102°	on/off	A++ A++
721718.11X.76	L 501, B 374, H 182	LED	830	23300 lm	225 W	102°	DALI	A++ A++
721718.11X.1.Q	L 501, B 374, H 182	LED	840	23900 lm	225 W	102°	on/off	A++ A++
721718.11X.1.76	L 501, B 374, H 182	LED	840	23900 lm	225 W	102°	DALI	A++ A++
Spare glass								
981984.00X	L 465, B 325, H 32							
Replacement converter								
982019.000	L 244, B 68, H 39	on/off						
Replacement LED module								
982083.000	L 28, B 28, H 1	830						
982083.000.1	L 28, B 28, H 1	840						
Cable gland								
982060.004		M20x1.5 SW 24						

Accessories | Pole-top bracket for Lightstream LED Maxi

Pole top bracket for mounting 2 Lightstream® LED Maxi axially symmetrical rotated 180°. Steel, hot-dip galvanised, unpainted or powder coated. Set of stainless steel fixing screws included. Cable gland into the pole as strain-relief and protection against rainwater.

Pole-top bracket			Price Category 12
Adapter set for 3-fold configuration			
982401.0031	L 525, B 381, H 87		
982401.004	L 525, B 381, H 87		
Pole top fixings, single			
982045.000	L 346, B 97, H 154	Pole top fixing, single, for spigot 60 mm	
982045.0031	L 346, B 97, H 154	Pole top fixing, single, for spigot 60 mm	
982045.004	L 346, B 97, H 154	Pole top fixing, single, for spigot 60 mm	
982002.000	L 346, B 97, H 154	Pole top fixing, single, for spigot 76 mm	
982002.0031	L 346, B 97, H 154	Pole top fixing, single, for spigot 76 mm	
982002.004	L 346, B 97, H 154	Pole top fixing, single, for spigot 76 mm	
982046.000	L 346, B 110, H 204	Pole top fixing, single, for spigot 89 mm	
982046.0031	L 346, B 110, H 204	Pole top fixing, single, for spigot 89 mm	
982046.004	L 346, B 110, H 204	Pole top fixing, single, for spigot 89 mm	
Pole top fixings opposite mounting			
982003.000	L 346, B 112, H 154	Pole top fixing, double, for spigot 76 mm	
982003.0031	L 346, B 112, H 154	Pole top fixing, double, for spigot 76 mm	
982003.004	L 346, B 112, H 154	Pole top fixing, double, for spigot 76 mm	
982004.000	L 346, B 136, H 204	Pole top fixing, double, for spigot 89 mm	
982004.0031	L 346, B 136, H 204	Pole top fixing, double, for spigot 89 mm	
982004.004	L 346, B 136, H 204	Pole top fixing, double, for spigot 89 mm	
982005.000	L 346, B 136, H 204	Pole top fixing, double, for spigot 108 mm	
982005.0031	L 346, B 136, H 204	Pole top fixing, double, for spigot 108 mm	
982005.004	L 346, B 136, H 204	Pole top fixing, double, for spigot 108 mm	
Exchange Brackets for alternative mounting method			Price Category 12
982052.00X	L 346, B 248, H 47	Bracket for Maxi, symmetrical for pole top mounting	

Comparison LED vs. conventional lamps

LED 112 W ≈

1 x 150 W HIT (160 W CB)
1 x 750 W QT-DE (750 W)

LED 225 W ≈

1 x 400 W HIT (444 W CB)
1 x 1500 W QT-DE (1500 W)



225 W

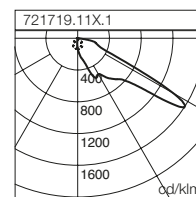
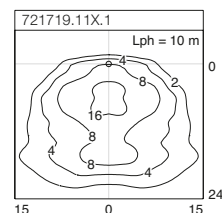




LIGHTSTREAM® LED MINI

Spotlights

- Made in Germany
- Quick connection possible without opening the housing by screw-less plug connector on bayonet locked slide
- Asymmetrical reflector of **MIRO-SILVER®** with reflex-boosted coating
- Asymmetrical flood light distribution – **No backwards light trespass**
- Housing made of corrosion-resistant pressure die-cast aluminium for outdoor application, stainless steel bracket, powder coated
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- The comprehensive installation accessories for mounting on the pole or wall are matched exactly to the Lightstream® family
- Marine grade coating available as an option



Spotlights | Series: Lightstream® LED Mini

Type of Protection: **IP 66**

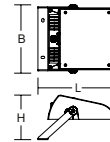
Protection Class: I

Impact Protection: IK04

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, bracket stainless steel, powder-coated. Tilt angle can be adjusted with angular scale. Toughened glass cover. COB-LEDs with socket, selection of light colour 830 or 840. Asymmetrical area flood reflector of **MIRO-SILVER®** with reflex-boosted coating. With membrane valve as a standard to prevent condensed water. Quick connection possible without opening the housing by screw-less plug connector on bayonet locked slide. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Windage area A_w = 0,023 m².

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Comparison LED vs. conventional lamps

LED 54 W ≈
1 x 100 W HIT-CE (115 W CB)



Area floodlight

Price Category 12

Asymmetrical light distribution

721719.11X	L 315, B 276, H 180	LED	830	6100 lm	54 W	on/off	A++ A++
721719.11X.76	L 315, B 276, H 180	LED	830	6100 lm	54 W	DALI	A++ A++
721719.11X.1	L 315, B 276, H 180	LED	840	6250 lm	54 W	on/off	A++ A++
721719.11X.1.76	L 315, B 276, H 180	LED	840	6250 lm	54 W	DALI	A++ A++

Spare glass

Price Category 11

982407.003	L 220, B 241, H 4
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Replacement converter

Price Category 11

982412.003	L 110, B 76, H 30
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Replacement LED module

Price Category 21

982081.000	L 19, B 19, H 1	830
982081.000.1	L 19, B 19, H 1	840

Accessories | Wall arm for Lightstream LED

Display bracket for Lightstream® LED Mini and Midi for wall mounting. Made of stainless steel, blasted or powder coated finish. Option of top or lateral mounting at frontal bracket. Hidden cabling inside tubular profile with additional inlet at wall mounting plate.

Display arm for wall mounting

Price Category 12

982058.000	L 500, B 180, H 180	Overall lenght 500 mm
982058.0031	L 500, B 180, H 180	Overall lenght 500 mm
982086.000	L 1000, B 180, H 180	Overall lenght 1000 mm
982086.0031	L 1000, B 180, H 180	Overall lenght 1000 mm



Accessories | Pole-top bracket for Lightstream LED Mini, Midi

Pole attachment for Lightstream® LED Mini / Midi for installation on the pole top. Steel, hot-dip galvanised, unpainted or powder coated. Set of stainless steel fixing screws included. Cable gland into the pole as strain-relief and protection against rainwater

Pole-top bracket

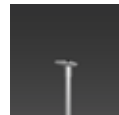
Price Category 12

Pole top fixings, single

982047.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982047.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982047.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm
982048.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm
982048.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm
982048.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm

Pole top fixings opposite mounting

982049.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982049.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982049.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm
982050.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm
982050.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm
982050.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm



Accessories | Pole clip for Lightstream LED

Mounting bracket for Lightstream® LED Mini or Midi for lateral attachment along the pole. Stainless steel bracket with galvanised srews. Smooth span width for different mounting heights.

Powder coating on request.

Pole clip

Price Category 12

982092.000	L 178, B 174, H 38	for Ø 95 - 114 mm
982093.000	L 178, B 194, H 38	for Ø 115 - 135 mm

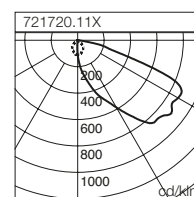
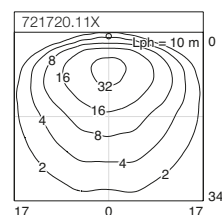




LIGHTSTREAM® LED MIDI

Spotlights

- Made in Germany
- Quick connection possible without opening the housing by screw-less plug connector on bayonet locked slide
- Heat sink optimised for long term LED operation
- Asymmetrical reflector of **MIRO-SILVER®** with reflex-boosted coating
- Asymmetrical flood light distribution – **No backwards light trespass**
- Housing made of corrosion-resistant pressure die-cast aluminium for outdoor application, stainless steel bracket, powder coated
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- Versions in DALI dimmable
- Wide range of pole mounting accessories available
- Marine grade coating available as an option
- Emergency lighting version for central battery feed available
- Suitable for use in the food and drink industry



Spotlights | Series: Lightstream® LED Midi

Type of Protection: **IP 65**

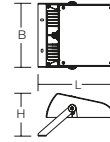
Protection Class: I

Impact Protection: IK05

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, bracket stainless steel, powder-coated. Tilt angle can be adjusted with angular scale. Toughened glass cover. COB-LEDs with socket, selection of light colour 830 or 840. Asymmetrical area flood reflector of **MIRO-SILVER®** with reflex-boosted coating. With membrane valve as a standard to prevent condensed water. Quick connection possible without opening the housing by screw-less plug connector on bayonet locked slide. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Windage area A_w = 0,036 m².

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	CB	EEC
Area floodlight							Price Category 12
Asymmetrical light distribution							
721720.11X	L 382, B 330, H 214	LED	830	12200 lm	114 W on/off	✓	A++ A++
721720.11X.76	L 382, B 330, H 215	LED	830	12200 lm	114 W DALI		A++ A++
721720.11X.1.Q	L 382, B 330, H 214	LED	840	12400 lm	114 W on/off	✓	A++ A++
721720.11X.1.76	L 382, B 330, H 215	LED	840	12400 lm	114 W DALI		A++ A++
Spare glass							Price Category 12
982275.003	L 272, B 294, H 4						
Replacement converter							Price Category 21
982454.000	L 204, B 59, H 40	on/off					
Replacement LED module							Price Category 21
982453.000	L 28, B 28, H 1	830					
982453.000.1	L 28, B 28, H 1	840					

Accessories | Pole-top bracket for Lightstream LED Mini, Midi

Pole attachment for Lightstream® LED Mini / Midi for installation on the pole top. Steel, hot-dip galvanised, unpainted or powder coated. Set of stainless steel fixing screws included. Cable gland into the pole as strain-relief and protection against rainwater

Pole-top bracket			Price Category 12
Pole top fixings, single			
982047.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm	
982047.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm	
982047.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 60 mm	
982048.000	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm	
982048.0031	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm	
982048.004	L 250, B 95, H 153	Pole top fixing, single, for spigot 76 mm	
Pole top fixings opposite mounting			
982049.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm	
982049.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm	
982049.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 60 mm	
982050.000	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm	
982050.0031	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm	
982050.004	L 250, B 114, H 153	Pole top fixing, double, for spigot 76 mm	



Comparison LED vs. conventional lamps

LED 114 W ≈

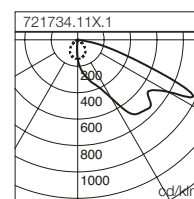
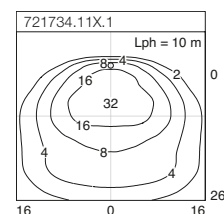
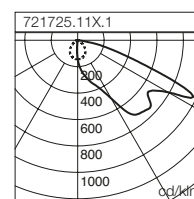
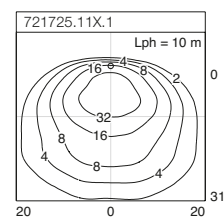
1 x 150 W HIT (160 W CB)
1 x 750 W QT-DE (750 W)



LIGHTSTREAM® LED MAXI

Spotlights

- Made in Germany
- LED floodlight for area lighting
- Asymmetrical area flood optics with reflector of reflex-boosted **MIRO-SILVER®**
- Asymmetrical flood light distribution – **No backwards light trespass**
- Housing made of corrosion-resistant pressure die-cast aluminium for outdoor application, stainless steel bracket, powder coated
- Tilt angle can be precisely adjusted and locked in 6° degrees
- Thermally decoupled driver compartment
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- With Gore™ Protective Vents diaphragm valve for reduction of condensation
- Suitable for use in the food and drink industry



Spotlights | Series: Lightstream® LED Maxi

Type of Protection: **IP 65**

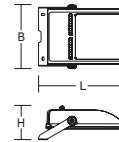
Protection Class: I

Impact Protection: IK08

Housing of corrosion-resistant pressure die-cast aluminium for outdoor use, bracket stainless steel, powder-coated. Tilt angle can be adjusted and locked in 6° steps with precise angular scale. Thermally decoupled driver compartment. Toughened glass cover. COB LED with socket for easy replacement. Asymmetrical reflector made of **MIRO-SILVER®**. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal up to 5 x 2,5 mm², max cable Ø 13 mm. Wind-exposed area $A_w = 0.052 \text{ m}^2$.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Projector for direct mains connection							Price Category 12
Asymmetrical light distribution							
721734.11X	L 509, B 374, H 174	LED	830	12600 lm	112 W	on/off	A++ A++
721734.11X.76	L 509, B 374, H 174	LED	830	12600 lm	112 W	DALI	A++ A++
721734.11X.1	L 509, B 374, H 174	LED	840	13200 lm	112 W	on/off	A++ A++
721734.11X.1.76	L 509, B 374, H 174	LED	840	13200 lm	112 W	DALI	A++ A++
721725.11X	L 509, B 374, H 174	LED	830	25200 lm	225 W	on/off	A++ A++
721725.11X.76	L 509, B 374, H 174	LED	830	25200 lm	225 W	DALI	A++ A++
721725.11X.1.Q	L 509, B 374, H 174	LED	840	26300 lm	225 W	on/off	A++ A++
721725.11X.1.76	L 509, B 374, H 174	LED	840	26300 lm	225 W	DALI	A++ A++
Spare glass							Price Category 12
981984.00X	L 465, B 325, H 32						
Replacement converter							Price Category 21
982019.000	L 244, B 68, H 39	on/off					
Replacement LED module							Price Category 21
982083.000	L 28, B 28, H 1	830					
982083.000.1	L 28, B 28, H 1	840					

Accessories | Pole-top bracket for Lightstream LED Maxi

Pole top bracket for mounting double Lightstream® LED Maxi axially symmetrical rotated 180°. Steel, hot-dip galvanised, unpainted or powder coated. Set of stainless steel fixing screws included. Cable gland into the pole as strain-relief and protection against rainwater

Pole-top bracket			Price Category 12
Adapter set for 3-fold configuration			
982401.0031	L 525, B 381, H 87		
982401.004	L 525, B 381, H 87		
Pole top fixings, single			
982045.000	L 346, B 97, H 154	Pole top fixing, single, for spigot 60 mm	
982045.0031	L 346, B 97, H 154	Pole top fixing, single, for spigot 60 mm	
982045.004	L 346, B 97, H 154	Pole top fixing, single, for spigot 60 mm	
982002.000	L 346, B 97, H 154	Pole top fixing, single, for spigot 76 mm	
982002.0031	L 346, B 97, H 154	Pole top fixing, single, for spigot 76 mm	
982002.004	L 346, B 97, H 154	Pole top fixing, single, for spigot 76 mm	
982046.000	L 346, B 110, H 204	Pole top fixing, single, for spigot 89 mm	
982046.0031	L 346, B 110, H 204	Pole top fixing, single, for spigot 89 mm	
982046.004	L 346, B 110, H 204	Pole top fixing, single, for spigot 89 mm	
Pole top fixings opposite mounting			
982059.000	L 346, B 112, H 154	Pole top fixing, double, for spigot 60 mm	
982059.0031	L 346, B 112, H 154	Pole top fixing, double, for spigot 60 mm	
982059.004	L 346, B 112, H 154	Pole top fixing, double, for spigot 60 mm	
982003.000	L 346, B 112, H 154	Pole top fixing, double, for spigot 76 mm	
982003.0031	L 346, B 112, H 154	Pole top fixing, double, for spigot 76 mm	
982003.004	L 346, B 112, H 154	Pole top fixing, double, for spigot 76 mm	
982004.000	L 346, B 136, H 204	Pole top fixing, double, for spigot 89 mm	
982004.0031	L 346, B 136, H 204	Pole top fixing, double, for spigot 89 mm	
982004.004	L 346, B 136, H 204	Pole top fixing, double, for spigot 89 mm	
982005.000	L 346, B 136, H 204	Pole top fixing, double, for spigot 108 mm	
982005.0031	L 346, B 136, H 204	Pole top fixing, double, for spigot 108 mm	
982005.004	L 346, B 136, H 204	Pole top fixing, double, for spigot 108 mm	
Exchange Brackets for alternative mounting method			Price Category 12
982053.00X	L 346, B 152, H 210	Bracket for Maxi, asymmetrical for socket and wall mounting	



Comparison
LED vs. conventional lamps

LED 112 W ≈
1 x 150 W HIT-CE (170 W CB)
1 x 750 W QT-DE (750 W)

LED 225 W ≈
1 x 250 W HIT-CE (280 W CB)
1 x 400 W HIT (444 W CB)



STEEL POLES

Accessories

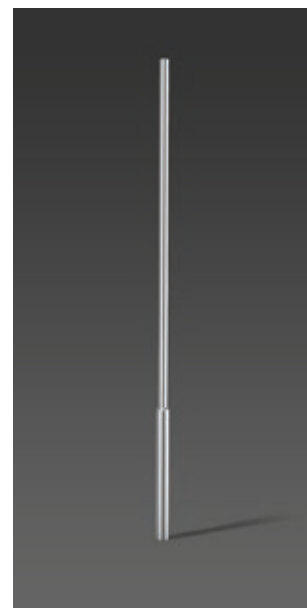
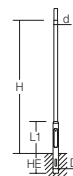
- CE-certified steel poles, complying with EN 40, with continuous root as a standard, on request available with flange plate
- Conical poles come with stripped seam
- Precise door cut out for accurate flush fitting
- Powder-coated with RZB standard colours for optimum consistency with the luminaire paint, RAL or DB colours possible on request
- Careful smoothing of the visible area as pre-treatment for powder-coating
- Direct transport with special vehicles from the production plant to the place of delivery to avoid transport damage

Accessories | Steel poles, spigot Ø: 76 mm

Cylindrical stepped pole made of steel according to DIN EN 40. Hot-dip galvanised in compliance with DIN EN ISO 1461. Flush pole door, 85 x 400 mm. Triangular lock, other locks on request. C-slot with two sliding nuts M6 and earthing stud M8. Cable hole 50 x 150 mm (UKK 500 mm below level).

We charge additional shipping costs for small pole volumes up to 5 poles per place of delivery, independent of the order value. Please ask for exact conditions for specific orders.

Available colours: 0 = blank, 31 = anthracite metallic, 4 = silver metallic



Reference
number

Dimensions

Straight light poles cylindrical, stepped with swaged joint, according to EN 40

Price Category 12

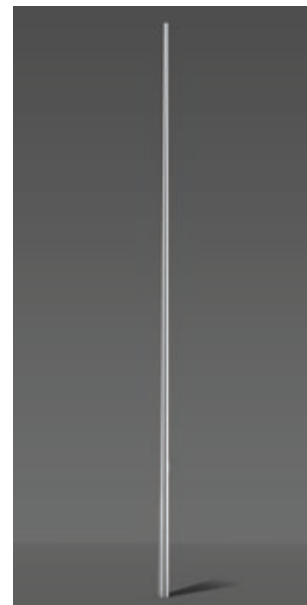
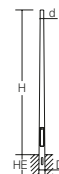
611891.000	D 114, H 3500, HE 600
611891.0031	D 114, H 3500, HE 600
611891.004	D 114, H 3500, HE 600
611892.000	D 114, H 4000, HE 800
611892.0031	D 114, H 4000, HE 800
611892.004	D 114, H 4000, HE 800
611893.000	D 114, H 4500, HE 800
611893.0031	D 114, H 4500, HE 800
611893.004	D 114, H 4500, HE 800
611894.000	D 114, H 5000, HE 800
611894.0031	D 114, H 5000, HE 800
611894.004	D 114, H 5000, HE 800
611895.000	D 114, H 6000, HE 1000
611895.0031	D 114, H 6000, HE 1000
611895.004	D 114, H 6000, HE 1000

Accessories | Steel poles, spigot Ø: 76 mm

Conical steel pole with stripped welding-seam, according to DIN EN 40. Hot-dip galvanised in compliance with DIN EN ISO 1461. Flush pole door, 85 x 400 mm. Triangular lock, other locks on request. C-slot with two sliding nuts M6 and earthing stud M8. Cable hole 50 x 150 mm (UKK 500 mm below level).

We charge additional shipping costs for small pole volumes up to 5 poles per place of delivery, independent of the order value. Please ask for exact conditions for specific orders.

Available colours: 0 = blank, 31 = anthracite metallic, 4 = silver metallic



Reference
number

Dimensions

Straight light poles conical round according to EN40

Price Category 12

611896.000	D 134, H 3500, HE 600
611896.0031	D 134, H 3500, HE 600
611896.004	D 134, H 3500, HE 600
611897.000	D 124, H 4000, HE 800
611897.0031	D 124, H 4000, HE 800
611897.004	D 124, H 4000, HE 800
611898.000	D 129, H 4500, HE 800
611898.0031	D 129, H 4500, HE 800
611898.004	D 129, H 4500, HE 800
611899.000	D 134, H 5000, HE 800
611899.0031	D 134, H 5000, HE 800
611899.004	D 134, H 5000, HE 800
611900.000	D 146, H 6000, HE 1000
611900.0031	D 146, H 6000, HE 1000
611900.004	D 146, H 6000, HE 1000
611901.000	D 156, H 7000, HE 1000
611901.0031	D 156, H 7000, HE 1000
611901.004	D 156, H 7000, HE 1000
611902.000	D 168, H 8000, HE 1200
611902.0031	D 168, H 8000, HE 1200
611902.004	D 168, H 8000, HE 1200
611903.000	D 191, H 10000, HE 1500
611903.0031	D 191, H 10000, HE 1500
611903.004	D 191, H 10000, HE 1500

Footplate set

Price Category 12

982099.000	L 300, B 300	loose incl. fastening screws
982100.000	L 400, B 400	loose incl. fastening screws

Accessories | Fuse box

Protection type IP 44

Protection class II

Housing: plastic. Input for three cables 5 x 16 mm². One D01 / E14 Fuse. Two luminaire outgoing lines.

Fuse box

Price Category 12

61199.009	L 265, B 72, H 75
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Edge guard for cable hole

Price Category 12

982098.003	50 x 150 mm
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Shrink sleeve

Price Category 12

982101.003	plastic, H to 9,500 mm
982102.003	plastic, H from 10,000 mm

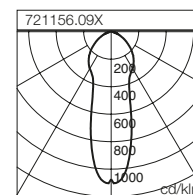


PAR16

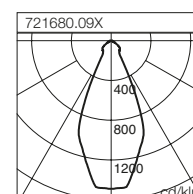
Spotlights

- Reduced form language together with a high degree of functionality are characteristics of the PAR 16 luminaires
- The high protection class housing carries and protects standard PAR16 reflector lamps for mains voltage with GU10 base.
- The choice of three front panel versions allows these models to be adapted to all applications:
 - Grille for operation in robust conditions
 - Guard for shielding upwards when using wide beam lamps
 - Flat glass cover for narrow beam lamps for targeted accentuation

721156.09X		
h [m]	Ø [m]	E [lx]
1,0	0,53	629
2,0	1,06	157
3,0	1,59	70
4,0	2,11	39
5,0	2,64	25



721680.09X		
h [m]	Ø [m]	E [lx]
1,0	0,53	629
2,0	1,06	157
3,0	1,59	70
4,0	2,11	39
5,0	2,64	25



Spotlights | Series: PAR16

 Type of Protection: **IP 55**

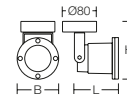
Protection Class: I

Impact Protection: IK08

Housing and junction box: die-cast aluminium, powder-coated.

Bracket: aluminium, powder-coated. Safety glass, clear.

Available colours (X): 2 = white, 31 = anthracite metallic



Reference number	Dimensions	Lamp	System power	dimmable	EEC
Ceiling and wall spotlights with connection box					
721156.09X .Q	L 100, B 95, H 140	1 x LEDPAR16 5 W	50 W	on/off	D A,A+

LED lamps						Price Category 11
10-3311		LEDPAR16	828 360 lm	5 W	GU10	A+
10-3312		LEDPAR16	840 360 lm	5 W	GU10	A+

Spotlights | Series: PAR16

 Type of Protection: **IP 55**

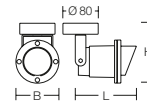
Protection Class: I

Impact Protection: IK08

Housing, junction box and anti-glare shield: die-cast aluminium, powder-coated.

Bracket: aluminium, powder-coated. Safety glass, clear.

Available colours (X): 2 = white, 31 = anthracite metallic



Reference number	Dimensions	Lamp	System power	dimmable	EEC
Ceiling and wall spotlights with connection box and anti-glare shield					
721157.09X	L 125, B 95, H 140	1 x LEDPAR16 5 W	50 W	on/off	D A,A+

LED lamps						Price Category 11
10-3311		LEDPAR16	828 360 lm	5 W	GU10	A+
10-3312		LEDPAR16	840 360 lm	5 W	GU10	A+

Spotlights | Series: PAR16

 Type of Protection: **IP 55**

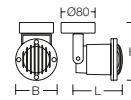
Protection Class: I

Impact Protection: IK08

Housing, junction box and protective grille: die-cast aluminium, powder-coated.

Bracket: aluminium, powder-coated. Safety glass, clear.

Available colours (X): 2 = white, 31 = anthracite metallic



Reference number	Dimensions	Lamp	System power	dimmable	EEC
Ceiling and wall spotlights with connection box and protective grille					
721158.09X	L 110, B 95, H 140	1 x LEDPAR16 5 W	50 W	on/off	D A,A+

LED lamps						Price Category 11
10-3311		LEDPAR16	828 360 lm	5 W	GU10	A+
10-3312		LEDPAR16	840 360 lm	5 W	GU10	A+

**Garden spotlights | Series: PAR16, portable**Type of Protection: **IP 55**

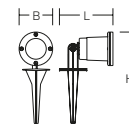
Protection Class: I

Impact Protection: IK04

Housing: pressure die-cast aluminium, powder-coated. Fiber reinforced plastic peg.

Safety glass, clear. 3 m power cord and Schuko plug.

Available colours (X): 2 = white, 31 = anthracite metallic



Reference number	Dimensions	Lamp	System power	dimmi-able	EEC
Garden spotlight with earth spike					
721680.09X	L 157, B 98, H 275	1 x LEDPAR16 5 W	50 W	on/off	D A,A+
Price Category 12					
LED lamps					
10-3311		LEDPAR16 828 360 lm 5 W	GU10		A+
10-3312		LEDPAR16 840 360 lm 5 W	GU10		A+
Price Category 11					

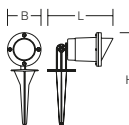
**Garden spotlights | Series: PAR16, portable**Type of Protection: **IP 55**

Protection Class: I

Impact Protection: IK04

Housing and antiglare hood: die-cast aluminium, powder-coated. Fiber reinforced plastic peg. Safety glass, clear. 3 m power cord and Schuko plug.

Available colours (X): 2 = white, 31 = anthracite metallic



Reference number	Dimensions	Lamp	System power	dimmi-able	EEC
Garden spotlight with earth spike and anti-glare shield					
721681.09X	L 191, B 98, H 275	1 x LEDPAR16 5 W	50 W	on/off	D A,A+
Price Category 12					
LED lamps					
10-3311		LEDPAR16 828 360 lm 5 W	GU10		A+
10-3312		LEDPAR16 840 360 lm 5 W	GU10		A+
Price Category 11					

**Garden spotlights | Series: PAR16, portable**Type of Protection: **IP 55**

Protection Class: I

Impact Protection: IK04

Housing and protective grill: die-cast aluminium, powder-coated. Fiber reinforced plastic peg. Safety glass, clear. 3 m power cord and Schuko plug.

Available colours (X): 2 = white, 31 = anthracite metallic



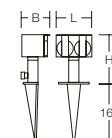
Reference number	Dimensions	Lamp	System power	dimmi-able	EEC
Garden spotlight with earth spike and protective grille					
721682.09X	L 170, B 98, H 275	1 x LEDPAR16 5 W	50 W	on/off	D A,A+
Price Category 12					
LED lamps					
10-3311		LEDPAR16 828 360 lm 5 W	GU10		A+
10-3312		LEDPAR16 840 360 lm 5 W	GU10		A+
Price Category 11					

**Double Schuko power socket, for garden applications with earth spike**Type of Protection: **IP 43**

Protection Class: I

Plastic, black. With earth spike and 5 m power supply cable and plug.

Available colour: 3 = black

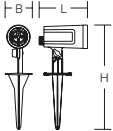


Reference number	Dimensions
Double Schuko power socket, for garden applications	
60565.003 .Q	L 105, B 70, H 315
Price Category 12	



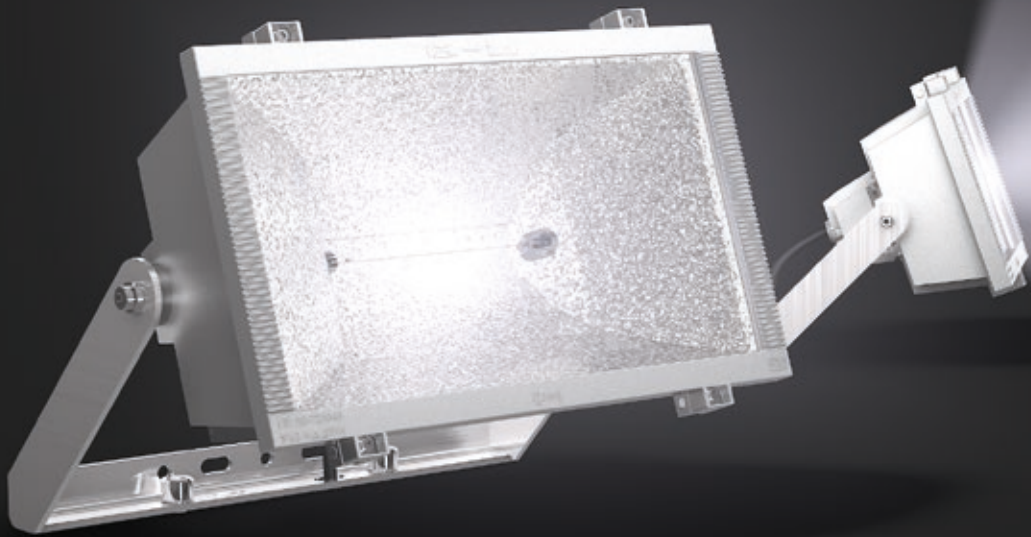
Garden spotlights | Series: Standard-Spot, portable

Type of Protection: **IP 44**
 Protection Class: II
 Impact Protection: IK07
 Housing and peg: plastic. Vertical swivel range: 80°. With cable 6 m mains plug included.
 Available colours (X): 2 = white, 3 = black



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	 dimmable	EEC
Garden spotlight with earth spike							Price Category 12
Single projector							
721683.00X	L 145, B 68, H 307	1 x QPAR38 100 W				on/off	D A
Spotlight with earth spike. Lamp included.							
721691.00X	L 195, B 120, H 350	1 x LEDPAR38 16 W	830	1400 lm	16 W	36° on/off	A,A+ A+
721690.00X	L 195, B 120, H 350	1 x TCPAR38-SE 20 W	827			100° on/off	A A
Anti-glare ring-louvre							Price Category 12
70873.00X	D 140, H 50						
LED lamps							Price Category 11
10-3313		PAR38	830	1400 lm	16 W	E27	A+
10-3314		PAR38	840	1400 lm	16 W	E27	A+



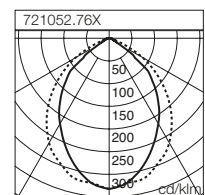


LIGHTSTREAM BOX-TYPE®

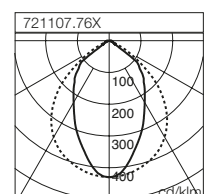
Spotlights

- Projector family in classical cubic design for varied application
- Broad range of fittings from halogen lamps available
- Selection of light distributions with quality reflectors made in Germany
- Die-cast aluminium, glass and stainless steel ensure smooth operation
- For a targeted light application, a broad portfolio of screens, protection shields and filters is available

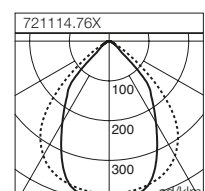
721052.76X		
h [m]	Ø [m]	E [lx]
2,0	3,32 / 4,37	1605
4,0	6,64 / 8,73	401
6,0	9,96 / 13,10	178
8,0	13,28 / 17,46	100
10,0	16,60 / 21,83	64



721107.76X		
h [m]	Ø [m]	E [lx]
1,5	1,84 / 3,16	1451
3,0	3,68 / 6,32	363
4,5	5,52 / 9,48	161
6,0	7,35 / 12,65	91
7,5	9,19 / 15,81	58



721114.76X		
h [m]	Ø [m]	E [lx]
1,0	1,38 / 2,01	793
2,0	2,76 / 4,03	198
3,0	4,14 / 6,04	88
4,0	5,52 / 8,06	50
5,0	6,90 / 10,07	32



Spotlights | Series: Lightstream Box-Type® Mini

 Type of Protection: **IP 65**

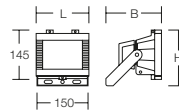
Protection Class: I

Impact Protection: IK08

Housing: pressure die-cast aluminium, powder-coated. Mounting bracket: stainless steel.

 Safety glass, clear. Reflector: aluminium, mirror finish, textured. Connection cable can be looped (2 x M20 x 1.5). 3-pole screw terminal, 6 mm². Separate earthing conductor.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	dimmable	EEC
Flood, with triangular bracket				
Symmetrical wide beam light distribution				
721114.76X .Q	L 160, B 170, H 160	1 x QT-DE12 (74,9mm) 150 W	on/off	C,D,E


Spotlights | Series: Lightstream Box-Type® Midi

 Type of Protection: **IP 65**

Protection Class: I

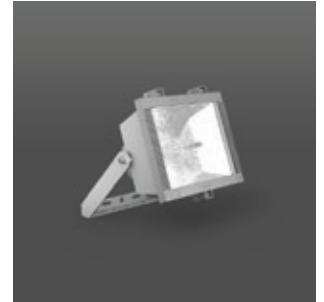
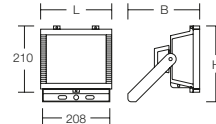
Impact Protection: IK08

Housing: pressure die-cast aluminium, powder-coated. Mounting bracket: stainless steel.

 Safety glass, clear. Reflector: aluminium, mirror finish, textured. Connection cable can be looped (2 x M20 x 1.5). 3-pole screw terminal, 6 mm². Separate earthing conductor.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	dimmable	EEC
Flood, with triangular bracket				
Symmetrical wide beam light distribution				
721107.76X	L 225, B 220, H 240	1 x QT-DE12 500 W	on/off	C,D,E



Replacement covers				Price Category 13
05-721044	L 216, B 180, H 5			

Floodlights | Series: Lightstream Box-Type® Maxi

 Type of Protection: **IP 65**

Protection Class: I

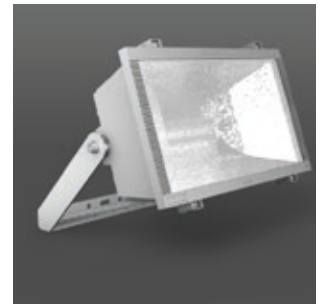
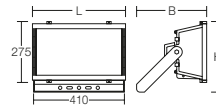
Impact Protection: IK08

Housing: pressure die-cast aluminium, powder-coated. Mounting bracket: stainless steel.

 Safety glass, clear. Reflector: aluminium, mirror finish, textured. Connection cable can be looped (2 x M20 x 1.5). 3-pole screw terminal, 6 mm². Separate earthing conductor.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



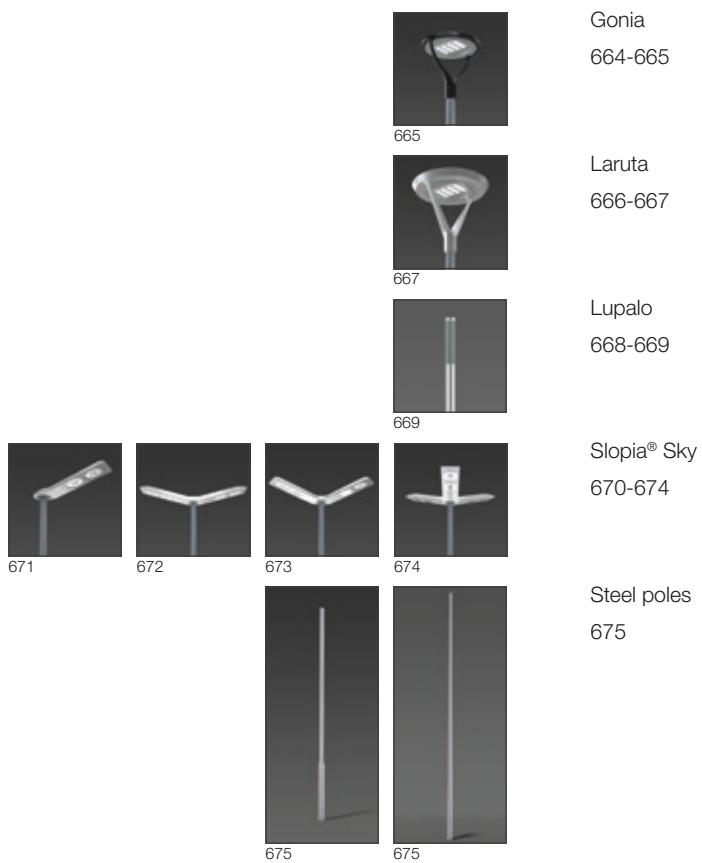
Reference number	Dimensions	Lamp	dimmable	EEC
Flood, with triangular bracket				
Symmetrical wide beam light distribution				
721052.76X	L 420, B 320, H 320	1 x QT-DE12 1000 W	on/off	B,C,E
721096.76X	L 420, B 320, H 320	1 x QT-DE12 1500 W	on/off	B,C,E





The application image shows:
Lupalo

© Fotostudio Lippmann



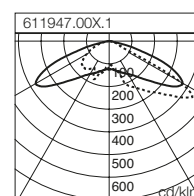
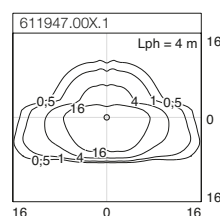
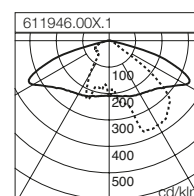
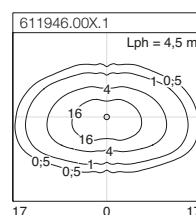
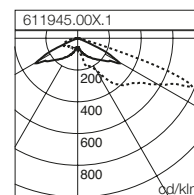
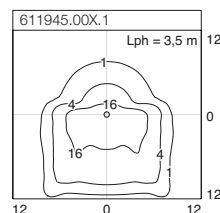


GONIA®

Pole top luminaires

- The classically linear design supports applications in small scale surroundings
- In addition to the standard switch version, various customer-specific light management requirements can be satisfied
- Gonia and Laruta series are CityTouch ready and can be delivered on demand with CityTouch components

- Comprehensive selection of light distributions and luminous flux enables universal application range starting with private pathways to main roads with public lighting
- Plug and play design with pre-assembled connecting cable for easy installation and small transport volume
- Quick maintenance due to plug & play standard lighting inserts



Pole top luminaires | Series: Gonia®

Type of Protection: IP 65

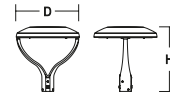
Protection Class: II

Impact Protection: IK07

Luminaire body aluminium, arm cast aluminium with integrated wiring and stainless steel threaded inserts, powder-coated. Pole attachment for 76 mm spigot. With stainless steel screws. Aluminium light insert with toughened glazing, powder coated. Twist-lock and plug connector for quick replacement. Refractor optics with multichip LED. Light distribution optimised for either M classes, P and C classes or area lighting. 2 x 0,75 mm² connecting cable included.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dimmable	EEC
Luminaires for spigot Ø 76 mm							
Asymmetrical light distribution for M lighting classes							
611940.00X	D 500, H 525	LED	730	1800 lm	24 W	on/off	A+ A+
611940.00X.1	D 500, H 525	LED	740	2100 lm	24 W	on/off	A+ A+
611943.00X	D 500, H 525	LED	730	3500 lm	45 W	on/off	A+ A+
611943.00X.1	D 500, H 525	LED	740	4050 lm	45 W	on/off	A+ A+
611946.00X	D 500, H 525	LED	730	5350 lm	65 W	on/off	A+ A+
611946.00X.1	D 500, H 525	LED	740	6250 lm	65 W	on/off	A+ A+
611949.00X	D 500, H 525	LED	730	7050 lm	86 W	on/off	A+ A+
611949.00X.1	D 500, H 525	LED	740	8200 lm	86 W	on/off	A+ A+
Asymmetrical light distribution for P and C lighting classes							
611941.00X	D 500, H 525	LED	730	1800 lm	24 W	on/off	A+ A+
611941.00X.1	D 500, H 525	LED	740	2100 lm	24 W	on/off	A+ A+
611944.00X	D 500, H 525	LED	730	3500 lm	45 W	on/off	A+ A+
611944.00X.1	D 500, H 525	LED	740	4050 lm	45 W	on/off	A+ A+
611947.00X	D 500, H 525	LED	730	5350 lm	65 W	on/off	A+ A+
611947.00X.1	D 500, H 525	LED	740	6200 lm	65 W	on/off	A+ A+
611950.00X	D 500, H 525	LED	730	7100 lm	86 W	on/off	A+ A+
611950.00X.1	D 500, H 525	LED	740	8250 lm	86 W	on/off	A+ A+
Asymmetrical light distribution for area lighting (P or C lighting classes)							
611942.00X	D 500, H 525	LED	730	1850 lm	24 W	on/off	A+ A+
611942.00X.1	D 500, H 525	LED	740	2150 lm	24 W	on/off	A+ A+
611945.00X	D 500, H 525	LED	730	3650 lm	45 W	on/off	A+ A+
611945.00X.1	D 500, H 525	LED	740	4250 lm	45 W	on/off	A+ A+
611948.00X	D 500, H 525	LED	730	5550 lm	65 W	on/off	A+ A+
611948.00X.1	D 500, H 525	LED	740	6450 lm	65 W	on/off	A+ A+
611951.00X	D 500, H 525	LED	730	7300 lm	86 W	on/off	A+ A+
611951.00X.1	D 500, H 525	LED	740	8500 lm	86 W	on/off	A+ A+

Accessories | Spigot adaptor

Spigot adaptor for mounting Ø 76 mm pole-top on Ø 60 mm spigot, with 6 headless screws for replacement. Stainless steel, uncoated.

Spigot adaptor	Price Category 12
982436.000 D 77, H 90	

Comparison LED vs. conventional lamps

LED 24 W ≈

1 x 35 W HIT (45 W CB)

LED 45 W ≈

1 x 70 W HIT (84 W CB)

LED 65 W ≈

1 x 100 W HIT (106 W CB)

LED 86 W ≈

1 x 150 W HIT (160 W CB)

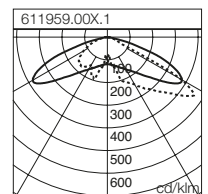
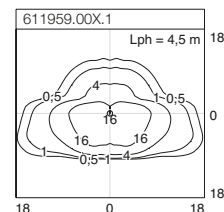
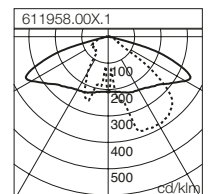
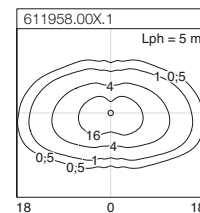
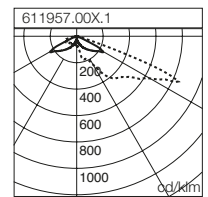
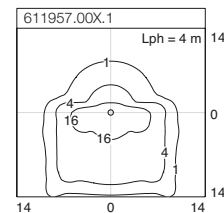


LARUTA®

Pole top luminaires

- The elegant linear shape excellently suits modern architecture
- Comprehensive selection of light distributions and luminous flux enables universal application range starting with private pathways to main roads with public lighting
- In addition to the standard switch version, various customer-specific light management requirements can be satisfied

- Gonia and Laruta series are CityTouch ready and can be delivered on demand with CityTouch components
- Plug and play design with pre-assembled connecting cable for easy installation and small transport volume
- Quick maintenance due to plug & play standard lighting inserts



Pole top luminaires | Series: Laruta®

Type of Protection: **IP 65**

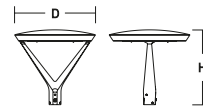
Protection Class: II

Impact Protection: IK07

Luminaire body aluminium, arm cast aluminium with integrated wiring and stainless steel threaded inserts, powder-coated. Pole attachment for 76 mm spigot. With stainless steel screws. Aluminium light insert with toughened glazing, powder coated. Twist-lock and plug connector for quick replacement. Refractor optics with multichip LED. Light distribution optimised for either M classes, P and C classes or area lighting. 2 x 0,75 mm² connecting cable included.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Luminaires for spigot Ø 76 mm							
Asymmetrical light distribution for M lighting classes							
611952.00X	D 650, H 610	LED	730	1750 lm	24 W	on/off	A+ A+
611952.00X.1	D 650, H 610	LED	740	2050 lm	24 W	on/off	A+ A+
611955.00X	D 650, H 610	LED	730	3400 lm	45 W	on/off	A+ A+
611955.00X.1	D 650, H 610	LED	740	3950 lm	45 W	on/off	A+ A+
611958.00X	D 650, H 610	LED	730	5250 lm	65 W	on/off	A+ A+
611958.00X.1	D 650, H 610	LED	740	6100 lm	65 W	on/off	A+ A+
611961.00X	D 650, H 610	LED	730	7000 lm	86 W	on/off	A+ A+
611961.00X.1	D 650, H 610	LED	740	8050 lm	86 W	on/off	A+ A+
Asymmetrical light distribution for P and C lighting classes							
611953.00X	D 650, H 610	LED	730	1800 lm	24 W	on/off	A+ A+
611953.00X.1	D 650, H 610	LED	740	2050 lm	24 W	on/off	A+ A+
611956.00X	D 650, H 610	LED	730	3400 lm	45 W	on/off	A+ A+
611956.00X.1	D 650, H 610	LED	740	3950 lm	45 W	on/off	A+ A+
611959.00X	D 650, H 610	LED	730	5250 lm	65 W	on/off	A+ A+
611959.00X.1	D 650, H 610	LED	740	6100 lm	65 W	on/off	A+ A+
611962.00X	D 650, H 610	LED	730	7000 lm	86 W	on/off	A+ A+
611962.00X.1	D 650, H 610	LED	740	8100 lm	86 W	on/off	A+ A+
Asymmetrical light distribution for area lighting (P or C lighting classes)							
611954.00X	D 650, H 610	LED	730	1850 lm	24 W	on/off	A+ A+
611954.00X.1	D 650, H 610	LED	740	2150 lm	24 W	on/off	A+ A+
611957.00X	D 650, H 610	LED	730	3600 lm	45 W	on/off	A+ A+
611957.00X.1	D 650, H 610	LED	740	4200 lm	45 W	on/off	A+ A+
611960.00X	D 650, H 610	LED	730	5500 lm	65 W	on/off	A+ A+
611960.00X.1	D 650, H 610	LED	740	6400 lm	65 W	on/off	A+ A+
611963.00X	D 650, H 610	LED	730	7200 lm	86 W	on/off	A+ A+
611963.00X.1	D 650, H 610	LED	740	8400 lm	86 W	on/off	A+ A+

Accessories | Spigot adaptor

Spigot adaptor for mounting Ø 76 mm pole-top on Ø 60 mm spigot, with 6 headless screws for replacement. Stainless steel, uncoated.

Spigot adaptor	Price Category 12
982436.000	D 77, H 90

Comparison LED vs. conventional lamps

LED 24 W ≈

1 x 35 W HIT (45 W CB)

LED 45 W ≈

1 x 70 W HIT (84 W CB)

LED 65 W ≈

1 x 100 W HIT (106 W CB)

LED 86 W ≈

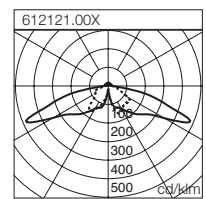
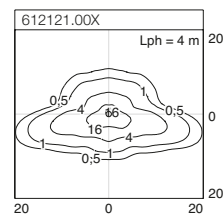
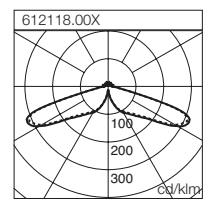
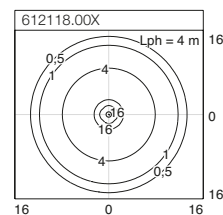
1 x 150 W HIT (160 W CB)



LUPALO

Light stack

- Light stack for public areas like pedestrian zones, squares, bridges, car parks and park areas
- ATA - Adaptive, temperature sensitive compensation of elongation for long-term watertightness
- Aluminium profile with access door to fuse box and integral LED driver
- Clear impact resistant PMMA cylinder for optimum light output
- Multichip-LED with high performance refractor optics, selection of light distribution optimised for C- and P-classes for road or area lighting



Light stack | Series: Lupalo

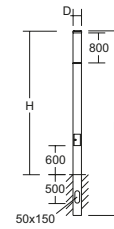
Type of Protection: **IP 65**

Protection Class: II

Light stack for public lighting application. Column aluminium profile with door and continuous base. Top assembly made of corrosion resistant aluminium for outdoor use, powder coated, stainless steel screws. Clear, impact resistant PMMA diffuser. Adaptive compensation for heat related expansion. Multi chip LED with high performance refractor optics, optimised for either C or P classes for road or area lighting. Integral driver located inside the column. C-track for fuse box mounting behind the pole door.

LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	EEC
Light stacks							
Price Category 12							
Height H 4000 mm, Diameter D 180 mm							
Asymmetrical light distribution for P and C lighting classes							
612121.00X	D 187, L 4800, H 4000	1 x LED	730	4350 lm	56 W	on/off	A+ A+
612121.00X.1	D 187, L 4800, H 4000	1 x LED	740	4600 lm	56 W	on/off	A+ A+
Symmetrical light distribution for space illumination (P or C lighting classes)							
612118.00X	D 187, L 4800, H 4000	1 x LED	730	5100 lm	56 W	on/off	A+ A+
612118.00X.1	D 187, L 4800, H 4000	1 x LED	740	5450 lm	56 W	on/off	A+ A+
Height H 4500 mm, Diameter D 180 mm							
Asymmetrical light distribution for P and C lighting classes							
612122.00X	D 187, L 5300, H 4500	1 x LED	730	4350 lm	56 W	on/off	A+ A+
612122.00X.1	D 187, L 5300, H 4500	1 x LED	740	4600 lm	56 W	on/off	A+ A+
Symmetrical light distribution for space illumination (P or C lighting classes)							
612119.00X	D 187, L 5300, H 4500	1 x LED	730	5100 lm	56 W	on/off	A+ A+
612119.00X.1	D 187, L 5300, H 4500	1 x LED	740	5450 lm	56 W	on/off	A+ A+
Height H 5000 mm, Diameter D 180 mm							
Asymmetrical light distribution for P and C lighting classes							
612123.00X	D 187, L 5800, H 5000	1 x LED	730	4350 lm	56 W	on/off	A+ A+
612123.00X.1	D 187, L 5800, H 5000	1 x LED	740	4600 lm	56 W	on/off	A+ A+
Symmetrical light distribution for space illumination (P or C lighting classes)							
612120.00X	D 187, L 5800, H 5000	1 x LED	730	5100 lm	56 W	on/off	A+ A+
612120.00X.1	D 187, L 5800, H 5000	1 x LED	740	5450 lm	56 W	on/off	A+ A+

Gaskets			Price Category 11
982411.003	D 182, H 4	Set of gaskets for Lupalo 180	

Accessories | Fuse box

Protection type IP 44

Protection class II

Housing: plastic. Input for three cables 5 x 16 mm². One D01 / E14 Fuse. Two luminaire outgoing lines.

Fuse box		Price Category 12					
61199.009	L 265, B 72, H 75						

**Comparison
LED vs. conventional lamps**

LED 56 W ≈
1 x 70 W HIT (84 W CB)
1 x 300 W QT-DE (300 W)



Pole top luminaires | Series: Slopia® Sky

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK10

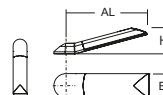
Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Reference number	Dimensions	Lamp	dimm-able	EEC	
Slopia Sky Mono, with 1 module					Price Category 21
with wide beam reflector					
611817.26X	B 220, H 190, AL 550	1 x HIT-TC-CE 35 W	on/off	A+	
with asymmetric reflector					
611843.26X	B 220, H 190, AL 550	1 x HIT-TC-CE 35 W	on/off	A+	
Pole-fitters for Slopia Sky series					Price Category 12
90-6054.00X	D 148, H 60	for 60 mm spigot			
90-6055.00X	D 148, H 60	for 76 mm spigot			
90-6056.00X	D 148, H 60	for 90 mm spigot			



Pole top luminaires | Series: Slopia® Sky

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK10

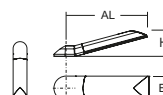
Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Reference number	Dimensions	Lamp	dimm-able	EEC	
Slopia Sky Mono, with 2 modules					Price Category 21
with wide beam reflector					
611819.26X	B 220, H 245, AL 760	2 x HIT-TC-CE 35 W	on/off	A+	
with asymmetric reflector					
611845.26X	B 220, H 245, AL 760	2 x HIT-TC-CE 35 W	on/off	A+	
Pole-fitters for Slopia Sky series					Price Category 12
90-6054.00X	D 148, H 60	for 60 mm spigot			
90-6055.00X	D 148, H 60	for 76 mm spigot			
90-6056.00X	D 148, H 60	for 90 mm spigot			



**Pole top luminaires | Series: Slopia® Sky**Type of Protection: **IP 65**

Protection Class: I

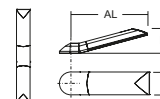
Impact Protection: IK10

Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	dim-able	EEC
Slopia Sky Twin, with 1 module per opposite arm				
with wide beam reflector				
611825.26X	L 1100, B 220, H 190, AL 550	2 x HIT-TC-CE 35 W	on/off	A+
with asymmetric reflector				
611847.26X	L 1100, B 220, H 190, AL 550	2 x HIT-TC-CE 35 W	on/off	A+
Pole-fitters for Slopia Sky series				
90-6054.00X	D 148, H 60	for 60 mm spigot		
90-6055.00X	D 148, H 60	for 76 mm spigot		
90-6056.00X	D 148, H 60	for 90 mm spigot		

**Pole top luminaires | Series: Slopia® Sky**Type of Protection: **IP 65**

Protection Class: I

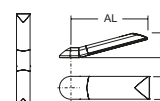
Impact Protection: IK10

Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	dim-able	EEC
Slopia Sky Twin, with 2 modules per arm				
with wide beam reflector				
611827.26X	L 1520, B 220, H 245, AL 760	4 x HIT-TC-CE 35 W	on/off	A+
with asymmetric reflector				
611849.26X	L 1520, B 220, H 245, AL 760	4 x HIT-TC-CE 35 W	on/off	A+
Pole-fitters for Slopia Sky series				
90-6054.00X	D 148, H 60	for 60 mm spigot		
90-6055.00X	D 148, H 60	for 76 mm spigot		
90-6056.00X	D 148, H 60	for 90 mm spigot		



Pole top luminaires | Series: Slopia® Sky

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK10

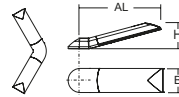
Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Reference number	Dimensions	Lamp	dimmable	EEC
Slopia Sky Twin, with 1 module per arm at 120 degrees				
with wide beam reflector				
611821.26X	B 220, H 190, AL 550	2 x HIT-TC-CE 35 W	on/off	A+
with asymmetric reflector				
611835.26X	B 220, H 190, AL 550	2 x HIT-TC-CE 35 W	on/off	A+
Pole-fitters for Slopia Sky series				
90-6054.00X	D 148, H 60	for 60 mm spigot		
90-6055.00X	D 148, H 60	for 76 mm spigot		
90-6056.00X	D 148, H 60	for 90 mm spigot		



Pole top luminaires | Series: Slopia® Sky

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK10

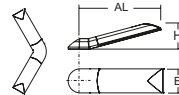
Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Reference number	Dimensions	Lamp	dimmable	EEC
Slopia Sky Twin, with 2 modules per arm at 120 degrees				
with wide beam reflector				
611823.26X	B 220, H 245, AL 760	4 x HIT-TC-CE 35 W	on/off	A+
with asymmetric reflector				
611837.26X	B 220, H 245, AL 760	4 x HIT-TC-CE 35 W	on/off	A+
Pole-fitters for Slopia Sky series				
90-6054.00X	D 148, H 60	for 60 mm spigot		
90-6055.00X	D 148, H 60	for 76 mm spigot		
90-6056.00X	D 148, H 60	for 90 mm spigot		





Pole top luminaires | Series: Slopia® Sky

Type of Protection: **IP 65**

Protection Class: I

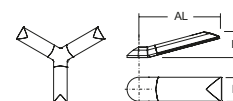
Impact Protection: IK10

Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	dimmable	EEC
Slopia Sky Trio, with 1 module per arm at 120 degrees				
with wide beam reflector				
611829.26X	B 220, H 190, AL 550	3 x HIT-TC-CE 35 W	on/off	A+
with asymmetric reflector				
611839.26X	B 220, H 190, AL 550	3 x HIT-TC-CE 35 W	on/off	A+
Pole-fitters for Slopia Sky series				
90-6054.00X	D 148, H 60	for 60 mm spigot		
90-6055.00X	D 148, H 60	for 76 mm spigot		
90-6056.00X	D 148, H 60	for 90 mm spigot		



Pole top luminaires | Series: Slopia® Sky

Type of Protection: **IP 65**

Protection Class: I

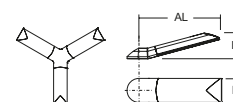
Impact Protection: IK10

Housing made of aluminium profiles with modular inserts, covers and pole-top shaft of corrosion-resistant pressure die-cast aluminium, powder coated. Module with clear toughened glass diffuser. Reflector made of high purity aluminium, glossy brightened and anodised.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

Head tilted 10 degrees upwards at pole-top shaft. Ready-to-connect including 6 m mains cable. All-size mounting flange adapting size specific pole-fitters. **Please order pole-fitter suitable for your spigot size separately.**

Available colours (X): 31 = anthracite metallic, 4 = silver metallic



Reference number	Dimensions	Lamp	dimmable	EEC
Slopia Sky Trio, with 2 modules per arm at 120 degrees				
with wide beam reflector				
611802.26X	B 220, H 245, AL 550	6 x HIT-TC-CE 35 W	on/off	A+
with asymmetric reflector				
611841.26X	B 220, H 245, AL 760	6 x HIT-TC-CE 35 W	on/off	A+
Pole-fitters for Slopia Sky series				
90-6054.00X	D 148, H 60	for 60 mm spigot		
90-6055.00X	D 148, H 60	for 76 mm spigot		
90-6056.00X	D 148, H 60	for 90 mm spigot		

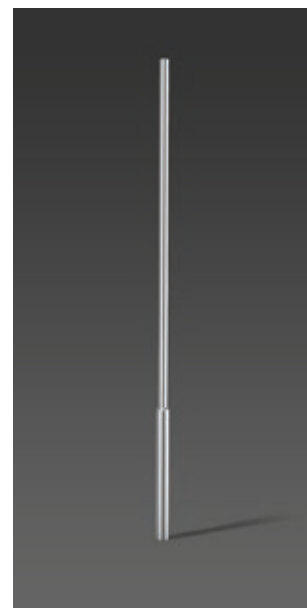
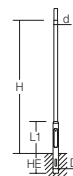


Accessories | Steel poles, spigot Ø: 76 mm

Cylindrical stepped pole made of steel according to DIN EN 40. Hot-dip galvanised in compliance with DIN EN ISO 1461. Flush pole door, 85 x 400 mm. Triangular lock, other locks on request. C-slot with two sliding nuts M6 and earthing stud M8. Cable hole 50 x 150 mm (UKK 500 mm below level).

We charge additional shipping costs for small pole volumes up to 5 poles per place of delivery, independent of the order value. Please ask for exact conditions for specific orders.

Available colours: 0 = blank, 31 = anthracite metallic, 4 = silver metallic



Reference
number

Dimensions

Straight light poles cylindrical, stepped with swaged joint, according to EN 40

Price Category 12

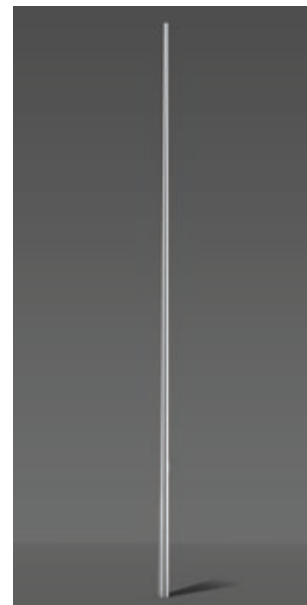
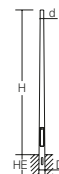
611891.000	D 114, H 3500, HE 600
611891.0031	D 114, H 3500, HE 600
611891.004	D 114, H 3500, HE 600
611892.000	D 114, H 4000, HE 800
611892.0031	D 114, H 4000, HE 800
611892.004	D 114, H 4000, HE 800
611893.000	D 114, H 4500, HE 800
611893.0031	D 114, H 4500, HE 800
611893.004	D 114, H 4500, HE 800
611894.000	D 114, H 5000, HE 800
611894.0031	D 114, H 5000, HE 800
611894.004	D 114, H 5000, HE 800
611895.000	D 114, H 6000, HE 1000
611895.0031	D 114, H 6000, HE 1000
611895.004	D 114, H 6000, HE 1000

Accessories | Steel poles, spigot Ø: 76 mm

Conical steel pole with stripped welding-seam, according to DIN EN 40. Hot-dip galvanised in compliance with DIN EN ISO 1461. Flush pole door, 85 x 400 mm. Triangular lock, other locks on request. C-slot with two sliding nuts M6 and earthing stud M8. Cable hole 50 x 150 mm (UKK 500 mm below level).

We charge additional shipping costs for small pole volumes up to 5 poles per place of delivery, independent of the order value. Please ask for exact conditions for specific orders.

Available colours: 0 = blank, 31 = anthracite metallic, 4 = silver metallic



Reference
number

Dimensions

Straight light poles conical round according to EN40

Price Category 12

611896.000	D 134, H 3500, HE 600
611896.0031	D 134, H 3500, HE 600
611896.004	D 134, H 3500, HE 600
611897.000	D 124, H 4000, HE 800
611897.0031	D 124, H 4000, HE 800
611897.004	D 124, H 4000, HE 800
611898.000	D 129, H 4500, HE 800
611898.0031	D 129, H 4500, HE 800
611898.004	D 129, H 4500, HE 800
611899.000	D 134, H 5000, HE 800
611899.0031	D 134, H 5000, HE 800
611899.004	D 134, H 5000, HE 800
611900.000	D 146, H 6000, HE 1000
611900.0031	D 146, H 6000, HE 1000
611900.004	D 146, H 6000, HE 1000
611901.000	D 156, H 7000, HE 1000
611901.0031	D 156, H 7000, HE 1000
611901.004	D 156, H 7000, HE 1000
611902.000	D 168, H 8000, HE 1200
611902.0031	D 168, H 8000, HE 1200
611902.004	D 168, H 8000, HE 1200
611903.000	D 191, H 10000, HE 1500
611903.0031	D 191, H 10000, HE 1500
611903.004	D 191, H 10000, HE 1500

Footplate set

Price Category 12

982099.000	L 300, B 300	loose incl. fastening screws
982100.000	L 400, B 400	loose incl. fastening screws

Accessories | Fuse box

Protection type IP 44

Protection class II

Housing: plastic. Input for three cables 5 x 16 mm². One D01 / E14 Fuse. Two luminaire outgoing lines.

Fuse box

Price Category 12

61199.009	L 265, B 72, H 75
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Edge guard for cable hole

Price Category 12

982098.003	50 x 150 mm
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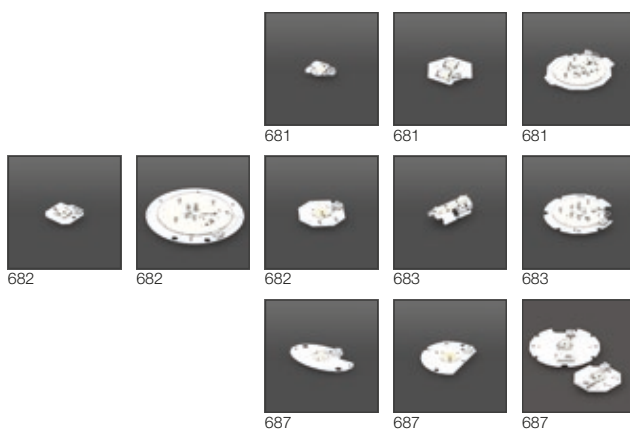
Shrink sleeve

Price Category 12

982101.003	plastic, H to 9,500 mm
982102.003	plastic, H from 10,000 mm



The application image shows:
Rounded® Maxi

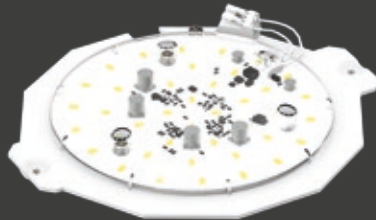


LED conversion kits for
Indoor lighting
678-683

LED conversion kits for
Outdoor lighting
684-687

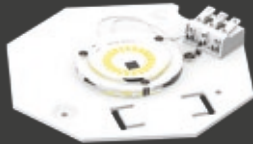
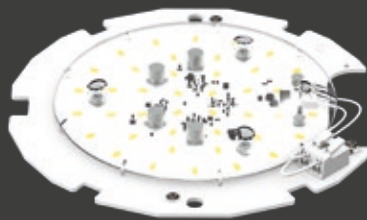
Conversion kit for series:

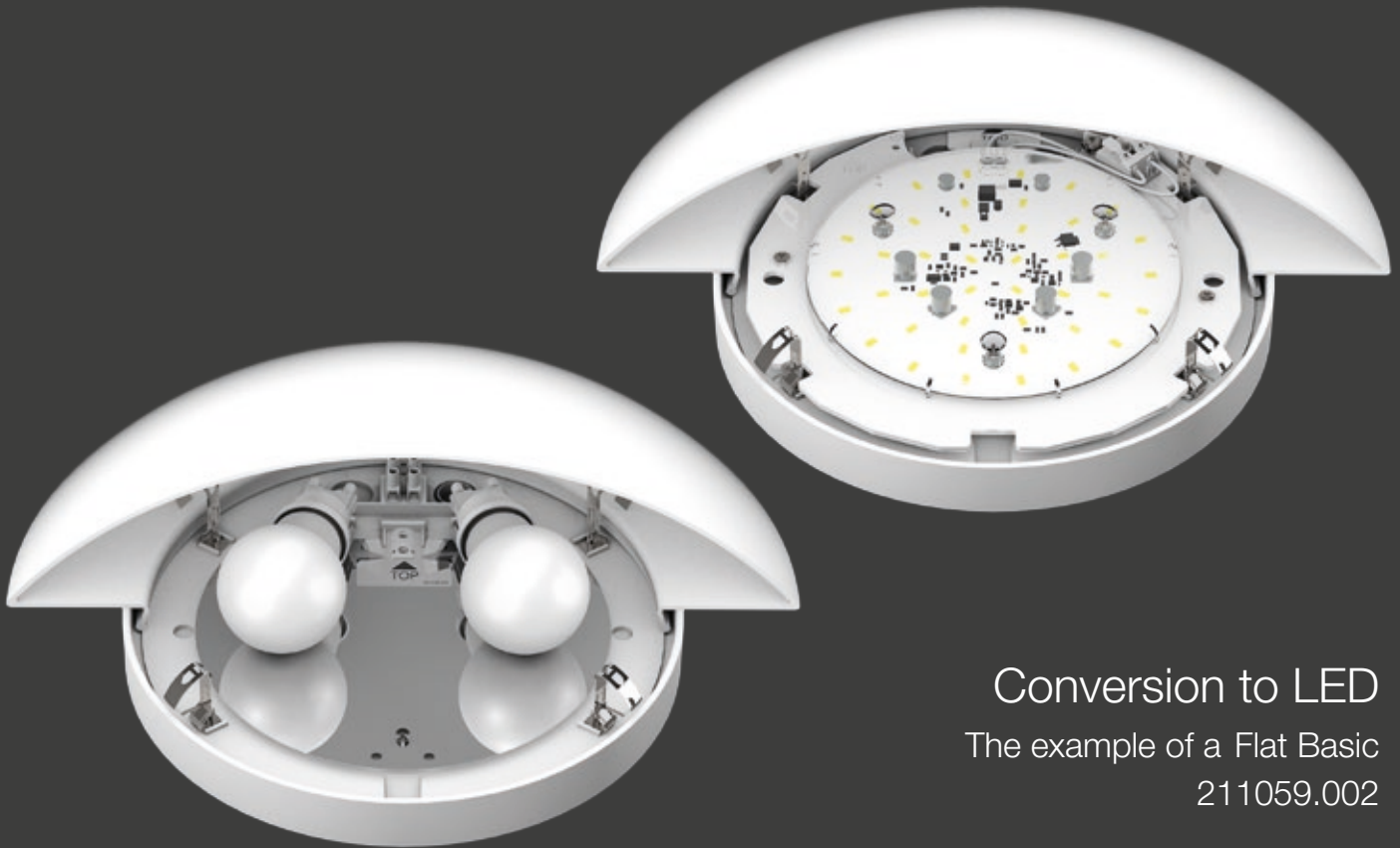
DKN® Kreis | DKN® Classic | DKN® Quadrat

Reference Number	982066.012	982066.002	982067.012	982067.002	982068.012	982068.002
Product image						
Light colour	830	840	830	840	830	840
Module luminous flux	600 lm	600 lm	1200 lm	1200 lm	1500 lm	1500 lm
System power	9 W	9 W	18 W	18 W	13,5 W	13,5 W
LED rated life	35.000 h (L70, B50)		35.000 h (L70, B50)		50.000 h (L80, B50)	
Series						
DKN® Kreis	Ø 160 Ø 250		Ø 300		Ø 370	
DKN® Classic	Ø 160 Ø 250		Ø 300		Ø 400	
DKN® Quadrat	□ 190 □ 235		□ 280		□ 360	

Conversion kit for series (produced from 2005 on):

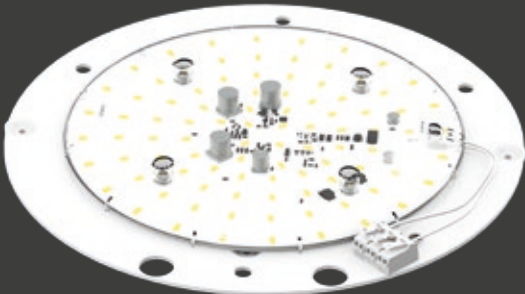
Flat Basic | Flat Kreis | Flat Polymero® IP44 | Flat Crystal | Rechteck | Colonna IP44

Reference Number	982172.002	982172.002.1	982171.002	982171.002.1	982173.002	982173.002.1
Product image						
Light colour	830	840	830	840	830	840
Module luminous flux	600 lm	600 lm	800 lm	800 lm	1500 lm	1500 lm
System power	9 W	9 W	9 W	9 W	13,5 W	13,5 W
LED rated life	35.000 h (L70, B50)		50.000 h (L70, B50)		50.000 h (L80, B50)	
Series						
Flat Basic	Ø 200 Ø 250		Ø 300		Ø 370 Ø 420	
Flat Kreis (glass)	–		Ø 250		Ø 300	
Flat Kreis (plastic)	–		–		Ø 262	
Flat Polymero® IP44	–		–		Ø 305	
Flat Crystal	Ø 250		Ø 300		Ø 370	
Rechteck (glass)	–		–		–	
Rechteck (plastic)	–		–		–	
Colonna IP44	–		–		–	

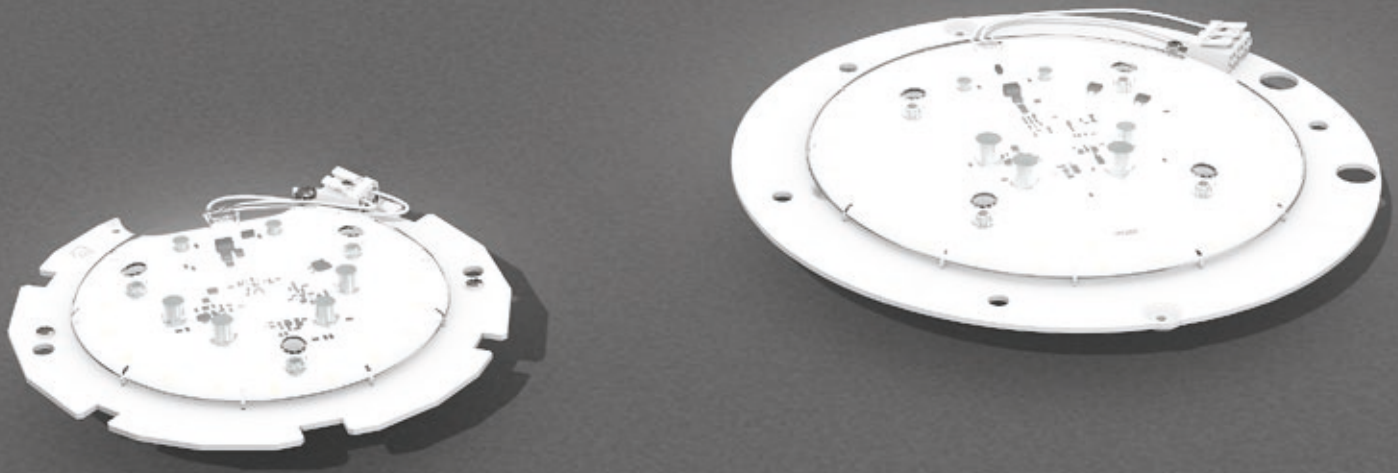


Conversion to LED

The example of a Flat Basic
211059.002

982174.002	982174.002.1	982175.002	982175.002.1
			
830	840	830	840
2300 lm	2500 lm	1200 lm	1200 lm
21 W	21 W	10 W	10 W
50.000 h (L80, B50)		50.000 h (L80, B10)	

Ø 500	–
Ø 500	–
Ø 380	–
Ø 420	–
–	–
–	L 220
–	L 215
–	L 245



CONVERSION KITS WITH MAINS VOLTAGE LED

LED conversion kit

- Up to 90 percent energy savings
- Cost savings and environmental protection
- Easy and quick conversion to efficient LED luminaire
- No ballast needed
- Full illumination when switched on
- Ideal for movement sensors or timers

Conversion kit for series:

DKN® Kreis | DKN® Classic | DKN® Quadrat

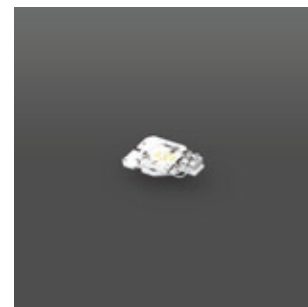
LED conversion kit

Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	Price Category 11
LED conversion kit							
982066.012	L 93, B 74, H 21	LED ⁽¹⁾	830	600 lm	9 W	A+	
982066.002	L 93, B 74, H 21	LED ⁽¹⁾	840	600 lm	9 W	A+	

Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 60 W AGL (60 W)

LED conversion kit

Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	Price Category 11
LED conversion kit							
982067.012	L 165, B 143, H 23	LED ⁽¹⁾	830	1200 lm	18 W	A+	
982067.002	L 165, B 143, H 23	LED ⁽¹⁾	840	1200 lm	18 W	A+	

Comparison LED vs. conventional lamps

LED 18 W ≈
1 x 100 W AGL (100 W)

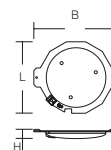
LED conversion kit

Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	Price Category 11
LED conversion kit							
982068.012	L 241, B 210, H 27	LED ⁽¹⁾	830	1500 lm	13,5 W	A+	
982068.002	L 241, B 210, H 27	LED ⁽¹⁾	840	1500 lm	13,5 W	A+	

Comparison LED vs. conventional lamps

LED 13,5 W ≈
1 x 100 W AGL (100 W)

Conversion kit for series (produced from 2005 on):

Flat Basic | Flat Kreis | Flat Polymero® IP44 | Flat Crystal | Rechteck | Colonna IP44



LED conversion kit

Type of Protection: IP 20
Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC
LED conversion kit						
982172.002	L 107, B 104, H 21	LED ⁽¹⁾	830	600 lm	9 W	A A+
982172.002.1	L 107, B 104, H 21	LED ⁽¹⁾	840	600 lm	9 W	A A+

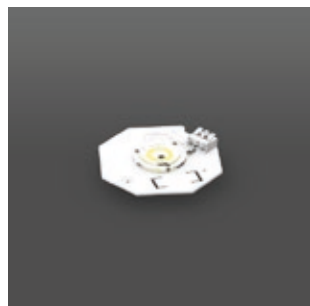
Price Category 11

Comparison

LED vs. conventional lamps

LED 9 W ≈

1 x 60 W GLS (60 W)



LED conversion kit

Type of Protection: IP 20
Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC
LED conversion kit						
982171.002	L 152, B 152, H 25	LED ⁽¹⁾	830	800 lm	9 W	A+ A+
982171.002.1	L 152, B 152, H 25	LED ⁽¹⁾	840	800 lm	9 W	A+ A+

Price Category 11

Comparison

LED vs. conventional lamps

LED 9 W ≈

1 x 75 W GLS (75 W)



LED conversion kit

Type of Protection: IP 20
Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC
LED conversion kit						
982173.002	D 230, H 26	LED ⁽¹⁾	830	1500 lm	13,5 W	A+ A+
982173.002.1	D 230, H 26	LED ⁽¹⁾	840	1500 lm	13,5 W	A+ A+

Price Category 11

Comparison

LED vs. conventional lamps

LED 13,5 W ≈

2 x 75 W GLS (150 W)

2 x 11 W TC-S (36 W CB)

LED conversion kit

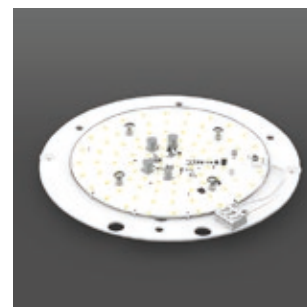
Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	
LED conversion kit							Price Category 11
982174.002	D 320, H 27	LED ⁽¹⁾	830	2500 lm	21 W	A+ A+	
982174.002.1	D 320, H 27	LED ⁽¹⁾	840	2500 lm	21 W	A+ A+	



Comparison

LED vs. conventional lamps

LED 21 W ≈

2 x 100 W GLS (200 W)

2 x 18 W TC-D (52 W CB)

LED conversion kit

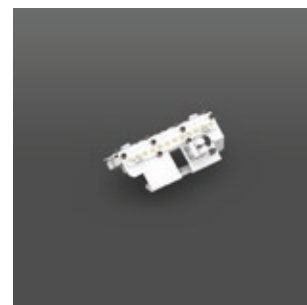
Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	
LED conversion kit							Price Category 11
982175.002	L 164, B 87, H 44	LED	830	1200 lm	9 W	A++	
982175.002.1	L 164, B 87, H 44	LED	840	1200 lm	9 W	A++	



Comparison

LED vs. conventional lamps

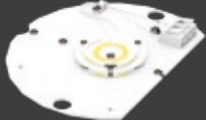
LED 9 W ≈

1 x 100 W GLS (100 W)

1 x 18 W TC-D (26 W CB)

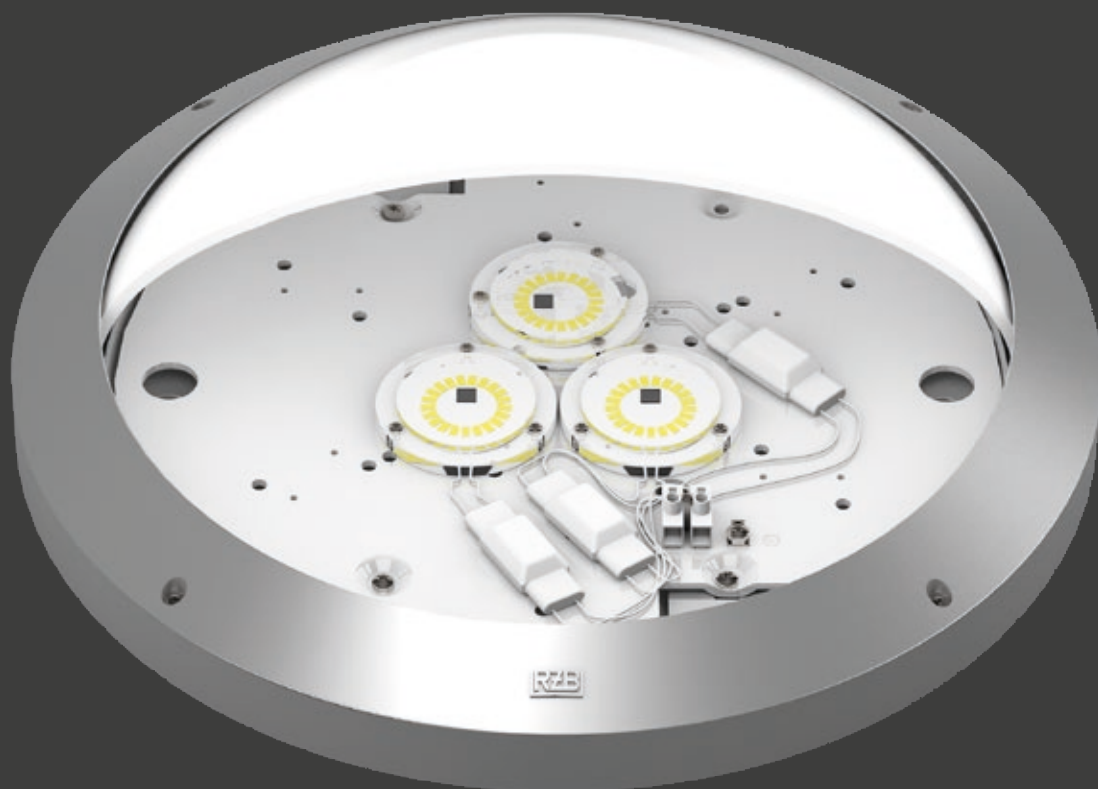
Conversion kit for series:

Quad oval | Rounded® superflach | Quattro superflach | Quad | Rounded® Maxi | Quad Maxi

Reference Number	982032.002	982029.002
Product image		
Light colour	840	840
Module luminous flux	600 lm	800 lm
System power	9 W	8,7 W
LED rated life	35.000 h (L70)	45.000 h (L70)
Series		
Quad oval	□ 300 x 200	–
Rounded® superflach	–	Ø 270
Quattro superflach	–	□ 270
Quad	–	Ø 270
Rounded® Maxi	–	–
Quad Maxi	–	–

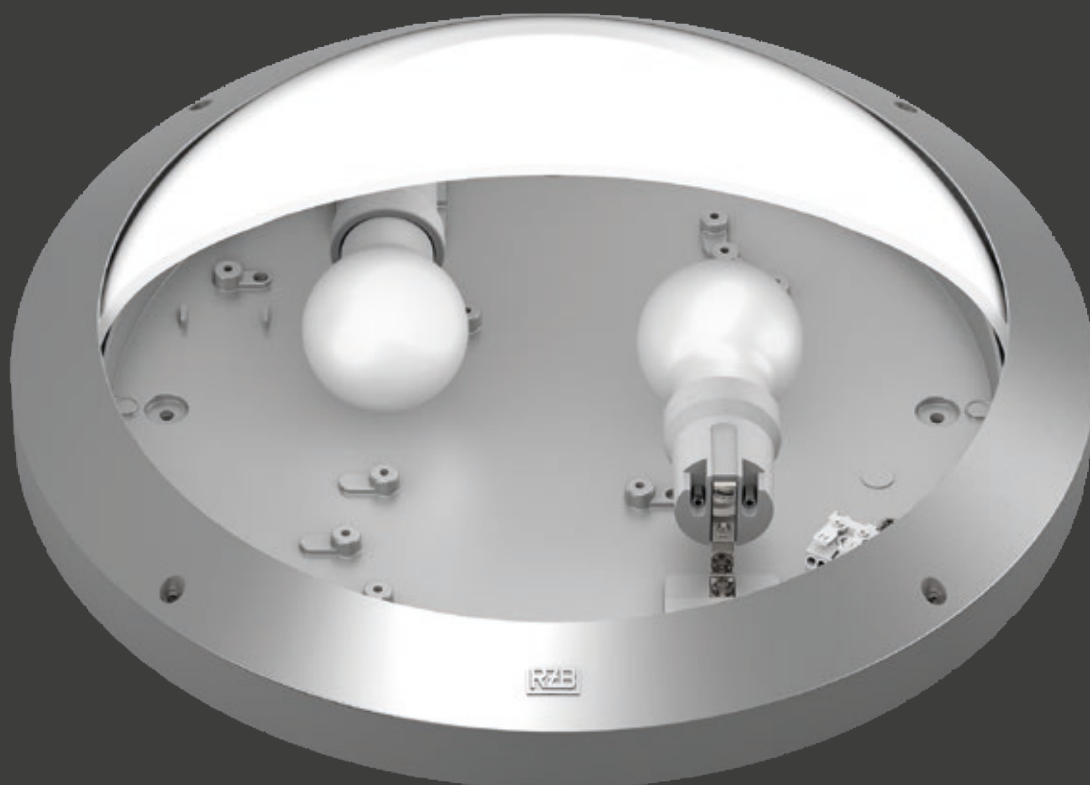
LED conversion kits for house number luminaires:

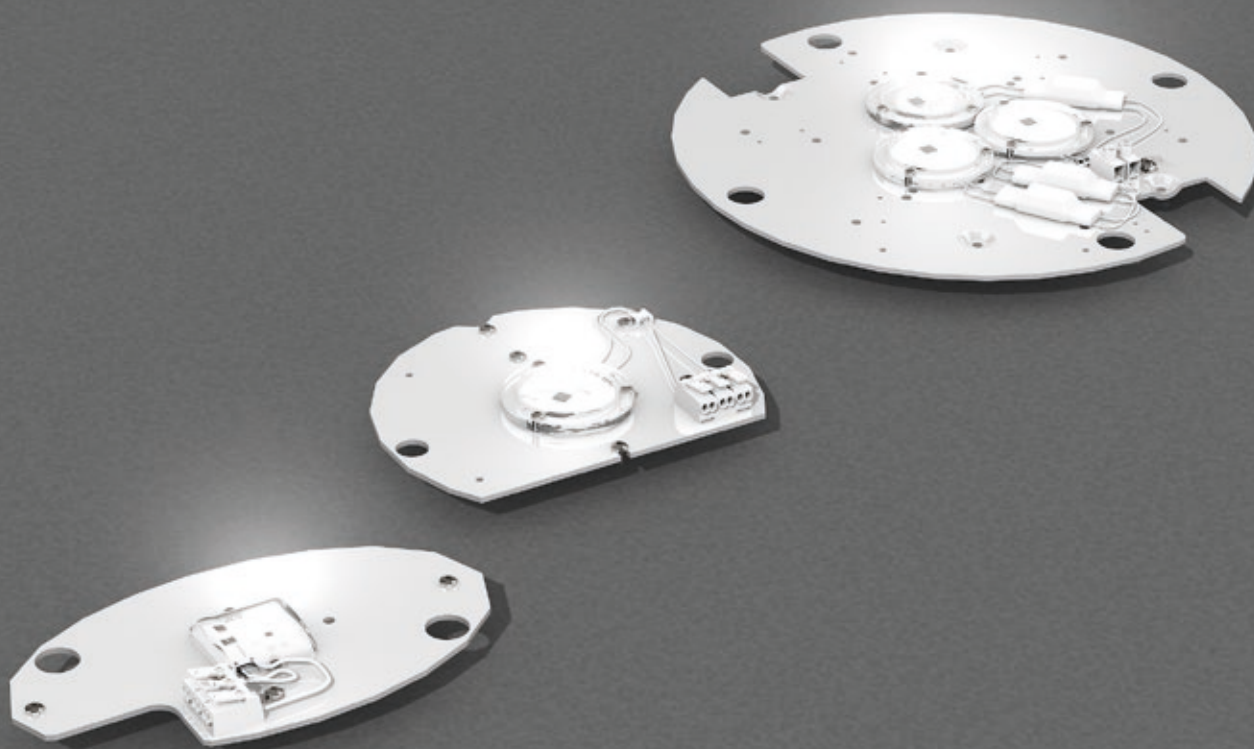
Reference Number	982270.002.25	982271.002.25
Product image		
Light colour	840	840
Module luminous flux	400 lm	400 lm
System power	4,5 W	4,5 W
LED rated life	35.000 h (L70)	35.000 h (L70)
Integral movement sensor	yes	yes
Series		
House number luminaires:		
Kreis with light-sensitive switch	Ø 230	Ø 280
Quadrat with light-sensitive switch	□ 226, □ 240	□ 270, □ 280
Alu-Quadrat with light-sensitive switch	□ 240	□ 280
Opal glass luminaires	□ 260	



Conversion to LED

The example of a Rounded® Maxi LED
581364.004





CONVERSION KITS WITH MAINS VOLTAGE LED

LED conversion kit

- Up to 90 percent energy savings
- Cost savings and environmental protection
- Easy and quick conversion to efficient LED luminaire
- No ballast needed
- Full illumination when switched on
- Ideal for movement sensors or timers

Conversion kit for series:

Quad oval | Rounded® superflach | Quattro superflach | Quad | Rounded® Maxi | Quad Maxi
Hausnummernleuchten Kreis | Quadrat | Opalglas

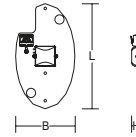
LED conversion kit

Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	Price Category 12
LED conversion kit upgrading E27 versions							
982032.002	L 229, B 129, H 20	LED ⁽¹⁾	840	600 lm	9 W	A+	

Comparison LED vs. conventional lamps

LED 9 W ≈
1 x 60 W AGL (60 W)

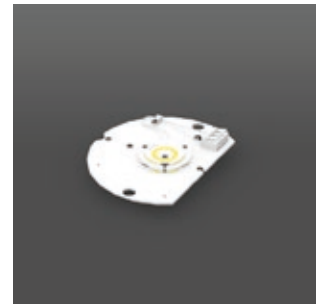
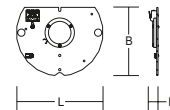
LED conversion kit

Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	Price Category 11
LED conversion kit upgrading E27 versions							
982029.002	D 192, H 21	LED ⁽¹⁾	840	800 lm	8,5 W	A+	

Comparison LED vs. conventional lamps

LED 8,5 W ≈
2 x 40 W AGL (80 W)

LED conversion kit

Type of Protection: IP 20

Protection Class: I

Base plate, powder coated metal.

Available colour: 2 = white

Reference number	Dimensions	Lamp	Light colour	Luminous Flux	System power	EEC	Price Category 11
LED conversion kit upgrading E27 versions							
For house number luminaires							
982271.002.25	D 230, H 25	LED ⁽¹⁾	840	400 lm	4,5 W	A+	
982270.002.25	L 152, B 152, H 25	LED ⁽¹⁾	840	400 lm	4,5 W	A+	

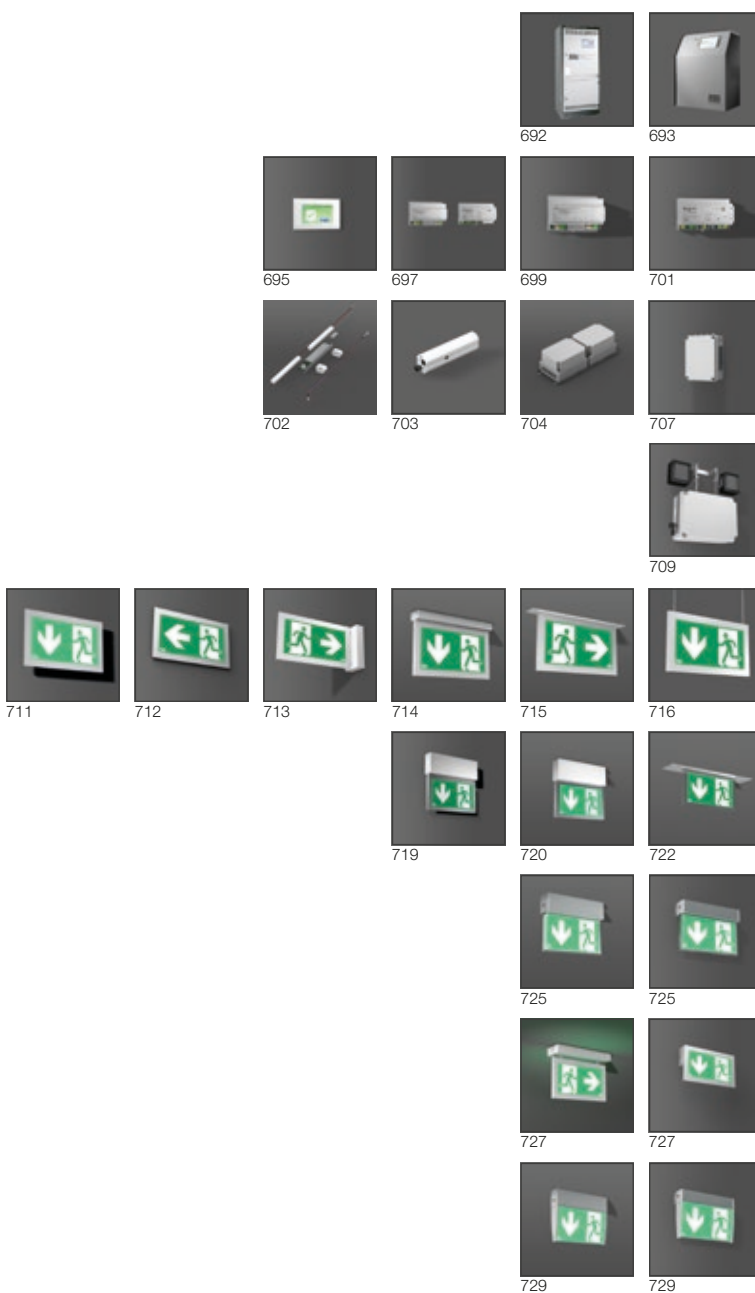


Comparison LED vs. conventional lamps

LED 4,5 W ≈
1 x 25 W AGL (25 W)
1 x 10 W TC-D (16 W CB)



The application image shows:
GSUN® S
Turia® L
Centryxx® W



Central Power Supply (CPS)
Low Power Supply (LPS)
692-693

Self-contained monitoring
systems
694-701

Self-contained technology
702-707

Powerbox Flood
708-709

Tenuo®
710-717

Halyxx®
718-723

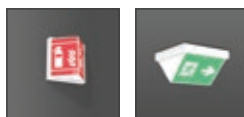
GSUN® S
Universal S
724-725

GSUN® RS
Universal RS
726-727

GSUN® D
Universal D
728-729

Centryxx® D

730-733



731

733

Multivariabel

734-735



735

735

Minisign

736-737



737

Varioplast I

738-741



739

740

GSUN® 2

742-743



743

GSUN® 3 | Universal 3

744-747



745

746

GSUN® 4 | Universal 4

748-751

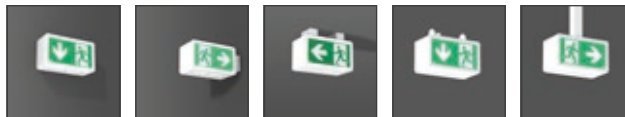


749

750

Rechteck

752-757



753

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Signcube

758-761



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760

Centryxx®

762-773



763, 767, 768

766, 770

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771

772

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Lucio

774-775



775

Turia®

776-779



777

778

779

Edo

780-781

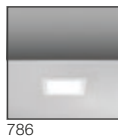


780

781



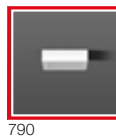
784



786



786



790

Toledo Flat
782-791



793

Sidelite® ECO
792-793



795

Sonis EVO
794-795



797



798

Planos LED
LED Strip
796-799



801

Planox
800-803



805

Flat Polymero®
804-807



809

Flat Polymero® Kreis
808-809



811



811

Cadero®
810-811



813



813

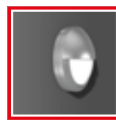
Alu-Design
812-813



815

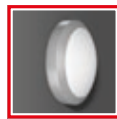


815



816

Rounded® Midi
814-817



819



819

Rounded® Maxi
818-819



821



821

Lightstream® LED
820-821



823

Portable safety spotlight
823



LUXIFAIR
Central Power Supply (CPS)

- Mixed operation mode of all switching modes within one electric circuit
- A PC can be connected for free programming of all system and customer data
 - Visualisation over TCP/IP



LUXIFAIRlight
Central Power Supply (CPS)

- Battery and electronic housings made of sheet steel, separated or as combi possible
- USB interface for connecting a PC
- Mixed operation mode



RZBbasic
Central Power Supply (CPS)

- Free programming of all system and customer data
- Circuit monitoring is optional
- Basic version with battery voltage 216 V, other battery voltages (24 V, 42 V, 48 V, 60 V, 110 V) on request



**RZB KV 1500
Low Power Supply (LPS)**

- Integrated freely selectable single luminaire or circuit monitoring, mixed operation mode
- Twin housing with battery compartment
- Programming software included



**EASY+IP
Low Power Supply (LPS)**

- Connected
- Secure
- Convenient

You will find the suitable system
for your project, whether Low
Power System (LPS) or Central Power
System (CPS).

Contact us and we would be
happy to support you.

Contact details in page 864



DALI INTERFACE

Monitoring system for up to 2 x 64 self-contained luminaires

- DALI monitoring units with touchscreen and logical menu guidance
- 2 circuits, with 64 luminaires each
- Automatic generation of detailed test record
- Execution of all mandatory controls at minimum costs
- Formation of groups
- System set up using software via USB
- Easy to install, setup and maintain
- Bus structure: star-shaped, linear and tree-shaped
- Control cable DC-isolated and polarity protected
- No specific bus line required
- Password protection
- Emergency lighting function disabled outside of normal operating hours
- No need to respect bus line polarity

DALI interface

Type of Protection: IP 20

Voltage: Power supply voltage: 230 V / 50-60 Hz

Power supply voltage (bus line): max. 250 mA, 22,5 V

Max. bus length: 300 m (between control unit and last luminaire)

Transfer rate: 1 200 Bit/s at a voltage level of 16 V

This system is based on the DALI Standard (IEC 62034 and IEC 62386) and allows for central monitoring of up to 2 x 64 self-contained emergency luminaires.

It is operated and monitored via touchscreen (DALI control unit) with logical menu guidance for easy use.

The DALI control unit is housed in a high-quality plastic housing for either surface wall installation or recessed wall installation.

The DALI control unit communicates permanently with the connected self-contained emergency luminaires and is thus able to immediately display any error.

The logical menu guidance provides the operator within a few steps detailed information concerning type and location of the respective error as well as further indications for error elimination, if applicable.

Automatic self-test function of the luminaires as well as generation of a detailed test log contribute notably to a reduction of time and costs for mandatory emergency lighting systems tests.

Monitoring system for RZB self-contained luminaires with .07 coding

Available colour: 2 = white

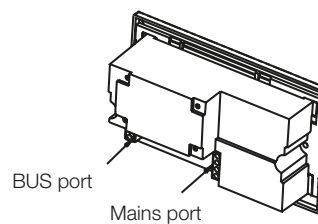
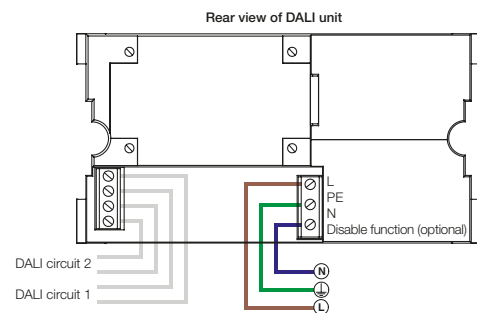
Reference
number

Control system DALI

Price Category 30

Wall surface mounting / Wall recessed mounting

985405.1 L 149, B 92, H 60



Max. line length	Min. cross-section of bus line
150 m	0,75 mm ²
200 m	1,0 mm ²
300 m	1,5 mm ²

Attention!

All modules and luminaires for DALI must have order suffix .07



MULTIDIGIT®PLUS

Monitoring system for up to 7875 self-contained luminaires

- Automatic system configuration
- Plain-text reports of all malfunctions, with indication of failure location
- Coordination of self-test activation of all self-contained emergency luminaires
- Error message logs
- Detailed information and control options for each single emergency luminaire
- Max. communication line length: 2 x 1,000 metres
- Communication line structure can be T-shaped, star-shaped, linear or even mixed. Polarity needs not to be considered.
- Ongoing system error logs
- Automatic generation of detailed system test log
- Max. 7875 luminaires
- Execution of all mandatory emergency lighting system controls at minimum costs
- Password protection for system data changes
- The MultiDigit®plus module can be queried by any intranet/internet compatible PC that is connected to the network via web navigator. To do this, no special software is required. In this process the data stored in MultiDigit®plus are sent to the navigator via network, using the TCP-IP protocol. Any system failure will be immediately displayed in the navigation window. The integrated email function allows for sending a detailed error report to the system administrator. The network can be configured in such a way that the system can be addressed via internet.

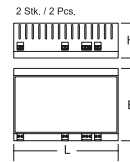
MultiDigit[®]plus

Type of protection: IP 20
Protection class: I

The MultiDigit[®]plus system allows for permanent central monitoring of self-contained emergency luminaires. The emergency luminaires which report their momentary states via LAN network to a web browser based PC, which evaluates and controls the entire system. 125 self-contained emergency luminaires can be installed according to the general circuit diagram indicated below. When used in conjunction with signal amplifiers, the MultiDigit[®]plus system can monitor up to 7,875 luminaires. Up to 63 signal amplifiers can be used. The communication line does not need to comply with any particular requirements; its structure can be T-shaped, star-shaped, linear or even mixed. Bus line polarity needs not to be considered.

Monitoring system for RZB self-contained luminaires with .04 coding

Available colour: grey



Reference number Dimensions

Starter set MultiDigit[®]plus

981935.000 L 155, B 75, H 120

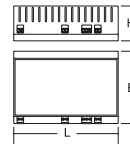
Price Category 30

Signal amplifier

Type of protection: IP 20
Protection class: I

For connecting a further 125 RZB luminaires with incorporated feedback (.04)

Type of installation: DIN profile track



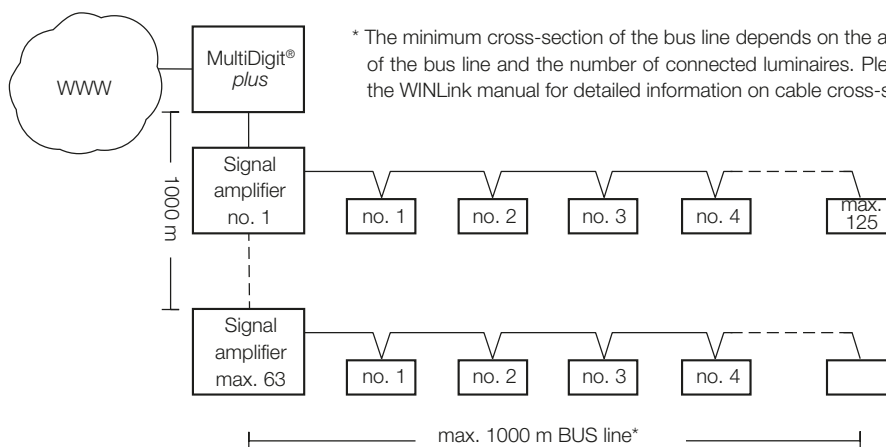
Reference number Dimensions

Signal amplifier

671148.000 L 155, B 75, H 120

Price Category 30

General circuit diagram for the MultiDigit[®]plus monitoring system



No. of luminaires per line	Max. line length	Min. cross-section of bus line
40	1000 m	0,5 mm ²
80	1000 m	1,0 mm ²
125	1000 m	1,5 mm ²

Attention!

All modules and luminaires for MultiDigit[®]plus must have order suffix .04



MWEBPLUS

Monitoring system for up to 125 self-contained luminaires

- Automatic system configuration
- Plain-text reports of all malfunctions, with indication of failure location
- Coordination of self-test activation of all self-contained emergency luminaires
- Error message logs
- Detailed information and control options for each single emergency luminaire
- Maximum length of the communication line 1000 metres
- Communication line structure can be T-shaped, star-shaped, linear or even mixed. Polarity needs not to be considered.
- Ongoing system error logs
- Automatic generation of detailed system test log
- Max. 125 luminaires
- Execution of all mandatory emergency lighting system controls at minimum costs
- Password protection for system data changes
- The MWEBplus module can be queried by any intranet/internet compatible PC that is connected to the network via web navigator. To do this, no special software is required. In this process the data stored in MWEBplus are sent to the navigator via network, using the TCP-IP protocol. Any system failure will be immediately displayed in the navigation window. The integrated email function allows for sending a detailed error report to the system administrator. The network can be configured in such a way that the system can be addressed via internet.

Monitoring system MWEBplus

Type of protection: IP 20
Protection class: I

The MWEBplus system allows for permanent central control of self-contained safety luminaires, which report their momentary states to a PC, which evaluates and controls the entire system. An immediate and clear overview of the entire system can thus be provided and be used for determining the operational readiness of the emergency lighting system. The system is very easy to set up. 125 self-contained safety luminaires can be installed according to the general circuit diagram indicated on the following page.

The communication line does not need to comply with any particular requirements; its structure can be T-shaped, star-shaped, linear or even mixed.

MWEBplus constitutes the interface between the system's OS and an on-site Ethernet network. Since MWEBplus performs the entire control and error management of the emergency lighting system, a separate PC for the monitoring system is not required.

The MWEBplus module can be accessed via web navigator from any PC in the network that is connected to intranet/internet, without the need for any special software.

The data stored in MWEBplus are transmitted to the navigator via TCP/IP protocol.

Any malfunction within the system will be immediately displayed; the incorporated e-mail function allows detailed information on the malfunction to be sent to the system administrator. The system can also be accessed via internet if the network is configured accordingly.

Monitoring system for RZB self-contained luminaires with .04 coding

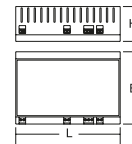
Available colour: grey

Reference number Dimensions

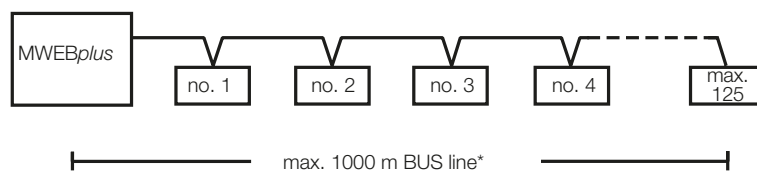
Monitoring system MWEBplus

Price Category 30

671823.000 L 160, B 110, H 63



General circuit diagram for the MWEBplus monitoring system



No. of luminaires per line	Max. line length	Min. cross-section of bus line
40	1000 m	0,5 mm ²
80	1000 m	1,0 mm ²
125	1000 m	1,5 mm ²

* The minimum cross-section of the bus line depends on the actual length of the bus line and the number of connected luminaires.

Attention!

All modules and luminaires for MWEBplus must have order suffix .04



MULTIDIGIT® S63

Monitoring system for up to 63 self-contained luminaires

- Continuous central local monitoring of all emergency luminaires
- Simple and clear system structure
- Automatic function tests
- Easy log book keeping
- Easy to install
- Execution of all mandatory controls at minimum costs
- Collective error display on the monitoring unit
- Detailed error readout via USB
- Up to 63 luminaires can be monitored
- Max. bus cable length: 1,000 m

MultiDigit® S63

Type of protection: IP 20

Protection class: I

Supply voltage: 230 V / 50/60 Hz

Alarm delay: 10 seconds

Type of installation: DIN profile track

Max. BUS cable length: 1,000 m

Max. number of luminaires that can be monitored: 63

Potential-free contact: 230 V AC / 5 A, 24 V DC / 5 A

The MultiDigit® S63 is a component of the MultiDigit® emergency lighting system, which is employed for emergency luminaires monitoring. Each system can monitor up to 63 emergency luminaires. The MultiDigit® S63 can be linked to a module for collective alarm transmission to a building control system.

The MultiDigit® S63 is supplied with a universal adaptor for DIN track systems, which allows for easy attachment of the MultiDigit® S63 to the mounting track. Plug terminals, which allow for connection of wires and cables ranging from 0.6 mm² to 1 mm², for connecting the MultiDigit® S63 to the communication line are included. We recommend to use T+T cables for the communication line.

The MultiDigit® S63 is connected to a PC via a USB interface. A PC software allows for entering the connected emergency elements in the configuration. Later on this link is necessary for individual luminaire status control; it is, however, not required for collective error messages.

Monitoring system for RZB self-contained luminaires with .04 coding

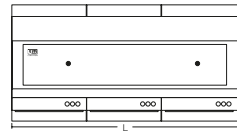
Available colour: grey

Reference number Dimensions

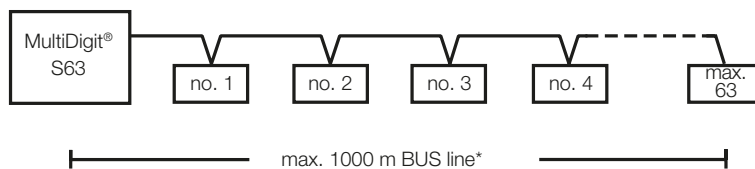
Monitoring system with MultiDigit® S63

981796.000 L 158, H 90, T 58

Price Category 30



General circuit diagram for the MultiDigit® S63 monitoring system



No. of luminaires per line	Max. line length	Min. cross-section of bus line
40	1000 m	0,5 mm ²
80	1000 m	1,0 mm ²
125	1000 m	1,5 mm ²

* The minimum cross-section of the bus line depends on the actual length of the bus line and the number of connected luminaires.

Attention!

All modules and luminaires for MultiDigit® S63 must have order suffix .04



Emergency conversion kits

Type of Protection: IP 20
Protection Class: I

General Information

The emergency lighting elements of the RZB LEH series are suitable for use in emergency lighting systems complying with VDE 0108 or EN50172. They are produced in accordance with EN60598-2-22 and IEC 61347-2-13. The LEH emergency lighting module must be used in a combination of LED driver for mains operation and an LED. That is, the LED driver must always be separate from the LED! In mains operation, the connected LED is supplied by the LED driver, while in emergency mode, the LED is supplied by the LEH emergency lighting module.

Conditions

To be able to use the LEH emergency lighting element in an LED luminaire, the following conditions must be met:

- 1. The LED must be supplied with ± through two connecting cables.
- 2. Different or additional control cables in the LED (for voltage / signals) are not permitted.
- 3. The two connecting cables (±) of the LED must be freely accessible.
- 4. With electronic current limitation, the rated output of the LED in mains operation must be higher than the output that the emergency lighting module can supply in emergency mode.
- 5. The maximum current in mains operation must not be higher than 2.5A.

Compatibility

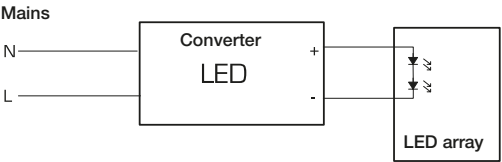
Before an LEH emergency lighting element is used in an LED luminaire, its compatibility with the LED configuration must be tested.

Module and battery

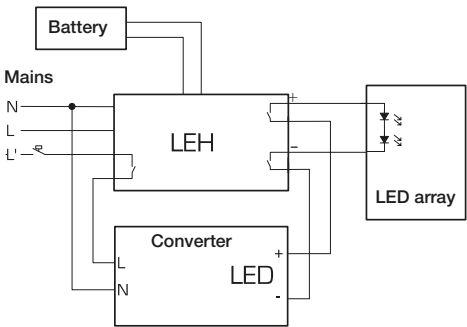
Protection class: I
Supply voltage: 230 V / 50/60 Hz
Controlled output in emergency mode: 3 W
Rated Operating Time: 3 h
Battery: NiMh 4,8 V / 4,5 Ah
Battery dimensions: D 19, L 2 x 180

Reference number	Dimensions	Output Voltage	No Load Voltage	Emergency Lighting System
Emergency conversion kits incl. accu				Price Category 23
09-6555.040	L 210, B 32, H 22	12-50 V	60 V	for autotest
09-6555.050	L 210, B 32, H 22	12-50 V	60 V	for MultiDigit
09-6555.060	L 210, B 32, H 22	12-50 V	60 V	for DALI
09-6556.040	L 210, B 32, H 22	20-130 V	150 V	for autotest
09-6556.050	L 210, B 32, H 22	20-130 V	150 V	for MultiDigit
09-6556.060	L 210, B 32, H 22	20-130 V	150 V	for DALI
09-6557.040	L 210, B 32, H 22	30-220 V	250 V	for autotest
09-6557.050	L 210, B 32, H 22	30-220 V	250 V	for MultiDigit
09-6557.060	L 210, B 32, H 22	30-220 V	250 V	for DALI

Standard LED luminaire

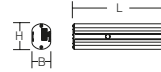


Wiring LED luminaire with emergency module



Self-contained power supply units

Type of Protection: IP 20
Protection Class: I



Ideally suitable for converting general purpose lighting luminaires into self-contained emergency luminaires

Housing die cast aluminium, powder coated, battery included.

For use with LED luminaires with converter

Operating mode: optionally in maintained or non-maintained power mode.

Converters, power supply units:

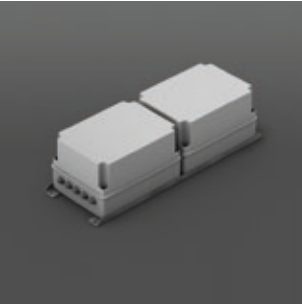
Charging function control (LED) standard. Maintenance-free NiMH batteries. Rated duration 3 or 8 hours, max. cable length between emergency light supply unit and LED max. 2m.

Permissible ambient temperature: 0 - 35° C

Automatic self test in all standard versions.

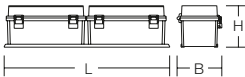
Available colour: 2 = white

Reference number	Dimensions	Output Voltage	Rated operating time	Emergency Lighting System
Self-contained power supply units				Price Category 23
982244.002	L 273, B 55, H 75	12-50 V	3 h	for autotest
982244.002.04	L 273, B 55, H 75	12-50 V	3 h	for MultiDigit
982244.002.07	L 273, B 55, H 75	12-50 V	3 h	for DALI
982245.002	L 273, B 55, H 75	20-130 V	3 h	for autotest
982245.002.04	L 273, B 55, H 75	20-130 V	3 h	for MultiDigit
982245.002.07	L 273, B 55, H 75	20-130 V	3 h	for DALI
982246.002	L 273, B 55, H 75	100-220 V	3 h	for autotest
982246.002.04	L 273, B 55, H 75	100-220 V	3 h	for MultiDigit
982246.002.07	L 273, B 55, H 75	100-220 V	3 h	for DALI
982248.002	L 273, B 55, H 75	12-50 V	8 h	for autotest
982248.002.04	L 273, B 55, H 75	12-50 V	8 h	for MultiDigit
982248.002.07	L 273, B 55, H 75	12-50 V	8 h	for DALI
982249.002	L 273, B 55, H 75	20-130 V	8 h	for autotest
982249.002.04	L 273, B 55, H 75	20-130 V	8 h	for MultiDigit
982249.002.07	L 273, B 55, H 75	20-130 V	8 h	for DALI
982250.002	L 273, B 55, H 75	100-220 V	8 h	for autotest
982250.002.04	L 273, B 55, H 75	100-220 V	8 h	for MultiDigit
982250.002.07	L 273, B 55, H 75	100-220 V	8 h	for DALI



Emergency power supply unit PGVG200

Type of protection: IP 33
Protection class: I
Supply voltage: 230 V / 50/60 Hz
Output voltage: 230 V / 50 Hz (mains operation) | 170 - 225 V (battery operation)
Permissible ambient temperature: +5 to +25°
Max. distance between PGVG and luminaires: 500 m
Device contains a protective conductor terminal



The PGVG 200 is an emergency power supply unit with a single battery for use in emergency lighting systems in accordance with DIN V VDE V 0108/DIN EN 50172 and luminaires in accordance with DIN EN 60598-2-22 for operating 1 or 2 luminaires for a duration of 1 or 3 hrs.

Electronics

Electronic module with charging device, 2 mains monitors, 2 changeover facilities, DC-DC converter, 2 lighting circuits, deep discharge protection disconnection and automatic self-monitoring. Non-maintained or maintained power mode of the luminaires. Separate luminaire inputs and outputs as well as control inputs for switching the luminaires by lighting circuit in mains mode.

The battery is charged via input 1. In the event of a power failure on input 1 and/or input 2, the charging process will be interrupted and output 1 and/or 2 will be powered by the battery. Upon return of the mains power supply, the device switches back from battery to mains operation mode with a delay of 10 seconds. In mains mode, the luminaires can be individually switched from non-maintained to maintained mode via control input 1 and control input 2.

The device switches off automatically in case of overheat, overload or short circuit during battery mode. The standard self-monitoring function provides for automatic weekly function tests (charging device, changeover facility and lighting circuits) as well as yearly service life tests (battery capacity). The luminaires will be controlled by a self-adjusting rating monitor. A display and foil button indicate operating states and malfunctions and allow for manual activation of function tests. Collective errors can be forwarded to an external alarm system via an alarm output. Battery device with maintenance-free, sealed Pb battery (service life: 6 – 9 years according to EUROBAT). The battery installation must comply with the manufacturer's instructions. The battery must always be positioned with the pole pointing vertically upwards.

Luminaire 4 can be connected to terminals 5/6.

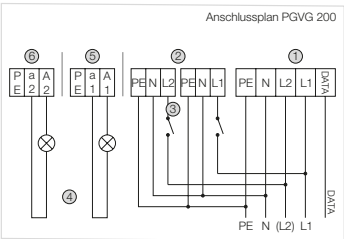
Mechanics

Battery and electronics are incorporated in separate housings according to DIN EN 50272-2. Battery device with ventilation opening. Screwed housing can be folded open laterally. Wiring through cable ducts.

Type list

Emergency power supply units for operating 1 or 2 luminaires with LED incandescent lamps and fluorescent lamps with electronic ballast. Single battery system design in accordance with DIN EN 61347-2-7. The rating provided is the overall rating for the device, which is divided into 2 outputs. For the lamp monitoring, the minimum connected load is 13 W for each output.

Reference number	Dimensions	Wattage 1 h	Wattage 3 h	Emergency Lighting System
Emergency conversion kit for fluorescent lamps in recessed or surface mounted housing				
Price Category 30				
NVG200-7-DC-G				
981502.000	L 690, B 204, H 190	34 W/1h	15 W/3h	for autotest
981502.000.04	L 690, B 204, H 190	34 W/1h	15 W/3h	for MultiDigit
NVG200-12-DC-G				
981504.000	L 690, B 204, H 190	60 W/1h	25 W/3h	for autotest
981504.000.04	L 690, B 204, H 190	60 W/1h	25 W/3h	for MultiDigit
NVG200-18-DC-G				
981506.000	L 690, B 204, H 190	90 W/1h	40 W/3h	for autotest
981506.000.04	L 690, B 204, H 190	90 W/1h	40 W/3h	for MultiDigit
NVG200-26-DC-G				
981508.000	L 690, B 204, H 190	115 W/1h	50 W/3h	for autotest
981508.000.04	L 690, B 204, H 190	115 W/1h	50 W/3h	for MultiDigit
NVG200-45-DC-G				
981510.000	L 760, B 332, H 234	183 W/1h	95 W/3h	for autotest
981510.000.04	L 760, B 332, H 234	183 W/1h	95 W/3h	for MultiDigit
NVG200-90-DC-G				
981512.000	L 760, B 332, H 234	200 W/1h	190 W/3h	for autotest
981512.000.04	L 760, B 332, H 234	200 W/1h	190 W/3h	for MultiDigit







POWERBOX 15

Self-contained power supply units

- Up to 500 metres cable length between the Powerbox 15 and the luminaire
- Two luminaires can be connected per device
- Self test as standard
- Ideally suited for supplying power to emergency luminaires in areas with high or low ambient temperatures
- Battery included

Self-contained power supply units | Powerbox 15

Type of Protection: IP 56
Protection Class: II

The Powerbox 15 is an emergency power supply unit, which uses the single battery principle in accordance with DIN EN 60598.

In the event of a mains failure, the Power Box 15 is in a position to supply a maximum of 2 luminaires with a voltage of 210V DC and a total wattage of up to 15W for up to 3 hrs. Luminaires with higher wattage may be supplied with power if their total wattage is reduced to 15 W by means of suitable dimmable ballasts (digital or analogue with 1-10V control input) with a connected voltage of 210V DC (emergency operation). The connected luminaires can be operated optionally in maintained or non-maintained power mode.

The high output voltage makes it possible to supply the luminaires from a distance of up to 500 metres. The Power Box 15 emergency power supply unit can thus be installed in a location that allows easy, trouble-free maintenance.

With bus connection for MultiDigit monitoring systems for passing on a group malfunction for the Powerbox 15

Technical data:

Mains power: 230 V; 50 Hz

Output voltage: 230 V AC (mains operation), 210 V DC (battery operation)

Permissible ambient temperature: + 5 to + 35 °C

Available colour: 9 = grey

Reference number	Dimensions
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Self-contained power supply units			Price Category 30
672232.009	L 100, B 200, H 250	autotest	
672232.009.04	L 100, B 200, H 250	MultiDigit	



POWERBOX FLOOD

Safety stand spotlight

- IP 54 type of protection - dustproof and protected against water spray
- Robust model
- Suitable for rooms with high ceilings
- Ideal for free-standing emergency lighting systems
- Standard automatic self-test
- Long-lasting, low-maintenance LED technology
- Maintenance-free lead battery

Safety stand spotlight | Series: Powerbox Flood

Type of Protection: IP 54

Protection Class: I

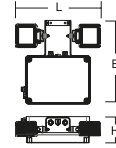
Impact Protection: IK03

Luminaire housing: plastic, grey. Luminaire tops can be swivelled in all directions. With 2.5 m power supply cable, including safety plug.

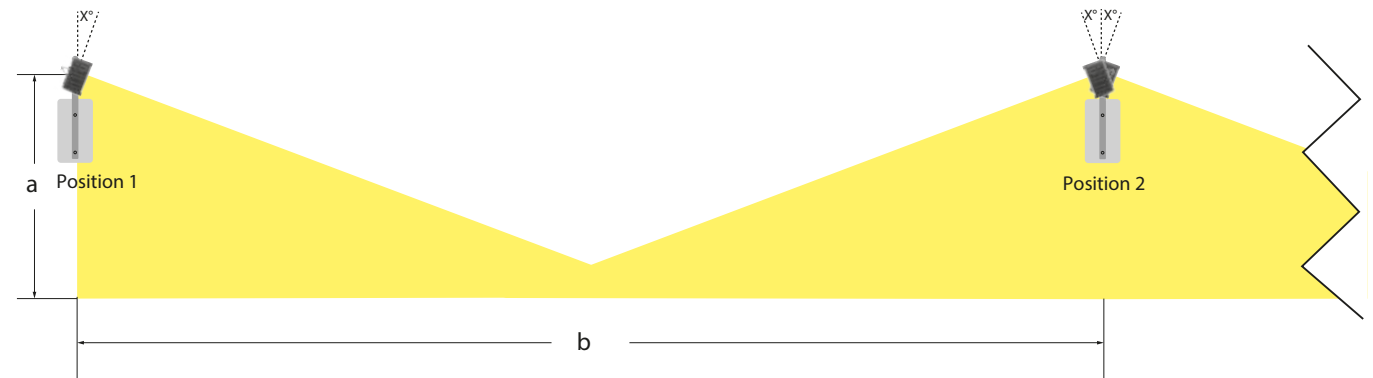
LED and maintenance-free lead battery included in scope of delivery.

Operating mode: non-maintained power mode (BS)

Available colour: 9 = grey



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System	Price Category 23
672196.009	L 395, B 128, H 470	2 x LED 18 W	6500 K	2350 / 1200 lm	1 h	autotest	
672197.009	L 395, B 128, H 470	2 x LED 18 W	6500 K	2350 / 1200 lm	3 h	autotest	



To determine the light point intervals, tops projecting the light parallel were arranged as follows:		
	Number of projector tops in Position 1	Number of projector tops in Position 2
1.	b1 ←	→ b1
2.		→ b1 → b2
3.	b1 ←	→ b3 ← → b1
4.		→ b4 ← → b1
5.		→ b5 ← → b1

On the basis of this arrangement, the following intervals were calculated for illuminating the escape route with 1 lx										
a/m	Layout 1		Layout 2		Layout 3		Layout 4		Layout 5	
	b 1/m	X	b 2/m	X	b 3/m	X	b 4/m	X	b 5/m	X
4,0	18,0	10	22,5	5	49,0	10	54,0	10	66,0	10
5,0	19,5	15	24,5	5	53,0	10	60,0	10	67,0	10
6,0	21,0	15	25,7	10	53,0	10	63,0	10	72,0	10
8,0	22,6	20	30,0	15	58,0	10	64,0	10	75,0	10
10,0	23,0	25	30,5	20	62,0	20	70,0	20	81,0	15
12,0	24,0	30	32,0	25	64,0	25	73,0	20	83,0	20

a = mounting height in m - Position of the projector tops
b = range at 1 lx (distance from the next projector top in m)
X° = inclination of the projector tops in the direction of the escape route (floor)



TENUO®

Wall luminaires, Recessed wall luminaires, Extensions, Ceiling luminaires, Recessed ceiling luminaires, Pendant luminaires

- The ultra-flat exit sign luminaire with highly efficient LED technology
- One-piece aluminium frame made of quality brushed anodised aluminium
- Specially calculated thermal management
- LED rated life 50,000 h
- Exceptionally high luminance of over 900 cd/m²
- Uniformly lit legend panel thanks to use of patented MicroLens technology

Legends for escape route identification -
ISO 7010 | DIN 4844
Background colour: green



3003



3004



3006



3005



3113



3114



3116



3115

Special legends on request



1026



1074

Wall luminaires | Series: Tenuo®

Type of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

Distance of recognition: 30 m

For escape route identification

Housing: anodised aluminium, silver. Display panel: patented MicroLens technology and legend on one side.

LED included.

Please indicate legend number when placing your order!

Available colour: 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

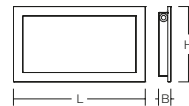
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
671944.004	L 350, B 33, H 200	1 x LED 2,5 W	3 h	autotest
671944.004.04	L 350, B 33, H 200	1 x LED 2,5 W	3 h	MultiDigit
671944.004.07	L 350, B 33, H 200	1 x LED 2,5 W	3 h	DALI-Sibe
672005.004	L 350, B 33, H 200	1 x LED 2,5 W	8 h	autotest
672005.004.04	L 350, B 33, H 200	1 x LED 2,5 W	8 h	MultiDigit
672005.004.07	L 350, B 33, H 200	1 x LED 2,5 W	8 h	DALI-Sibe

Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
671923.004	L 350, B 33, H 200	1 x LED 2,5 W	
671923.004.89	L 350, B 33, H 200	1 x LED 2,5 W	AC-Control





Recessed wall luminaires | Series: Tenuo®

Type of Protection: IP 40
Protection Class: I
Impact Protection: IK03
Distance of recognition: 30 m

For escape route identification

Housing: anodised aluminium, silver. Display panel: patented MicroLens technology and legend on one side.
LED included.

Please indicate legend number when placing your order!

Available colour: 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

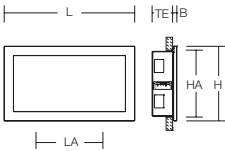
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number Dimensions Lamp Rated operating time Emergency Lighting System

Self-contained safety luminaires Price Category 23

Wall cutout LA 175 x BA 175 mm, TE 70 mm

671943.004	L 350, B 11, H 200	1 x LED 2,5 W	3 h	autotest
671943.004.04	L 350, B 11, H 200	1 x LED 2,5 W	3 h	MultiDigit
671943.004.07	L 350, B 11, H 200	1 x LED 2,5 W	3 h	DALI-Sibe
672004.004	L 350, B 11, H 200	1 x LED 2,5 W	8 h	autotest
672004.004.04	L 350, B 11, H 200	1 x LED 2,5 W	8 h	MultiDigit
672004.004.07	L 350, B 11, H 200	1 x LED 2,5 W	8 h	DALI-Sibe



Reference number Dimensions Lamp Monitoring module

Luminaires for central battery system Price Category 24

Wall cutout LA 175 mm x BA 175 mm

671922.004	L 350, B 11, H 200	1 x LED 2,5 W	
671922.004.89	L 350, B 11, H 200	1 x LED 2,5 W	AC-Control

Extensions | Series: Tenuo®

Type of Protection: IP 40

Protection Class: I

Impact Protection: IK03

Distance of recognition: 30 m

For escape route identification

Housing: anodised aluminium, silver. Display panel: patented MicroLens technology and legends on one side/both sides.

LED included.

Please indicate legend number when placing your order!

Available colour: 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
single-sided				
672040.004	L 400, B 100, H 200	1 x LED 5 W	3 h	autotest
672040.004.04	L 400, B 100, H 200	1 x LED 5 W	3 h	MultiDigit
672040.004.07	L 400, B 100, H 200	1 x LED 5 W	3 h	DALI-Sibe
672041.004	L 400, B 100, H 200	1 x LED 5 W	8 h	autotest
672041.004.04	L 400, B 100, H 200	1 x LED 5 W	8 h	MultiDigit
672041.004.07	L 400, B 100, H 200	1 x LED 5 W	8 h	DALI-Sibe
double-sided				
671945.004	L 400, B 100, H 200	1 x LED 5 W	3 h	autotest
671945.004.04	L 400, B 100, H 200	1 x LED 5 W	3 h	MultiDigit
671945.004.07	L 400, B 100, H 200	1 x LED 5 W	3 h	DALI-Sibe
672006.004	L 400, B 100, H 200	1 x LED 5 W	8 h	autotest
672006.004.04	L 400, B 100, H 200	1 x LED 5 W	8 h	MultiDigit
672006.004.07	L 400, B 100, H 200	1 x LED 5 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
single-sided			
672039.004	L 400, B 100, H 200	1 x LED 5 W	AC-Control
672039.004.89	L 400, B 100, H 200	1 x LED 5 W	
double-sided			
671938.004	L 400, B 100, H 200	1 x LED 5 W	AC-Control
671938.004.89	L 400, B 100, H 200	1 x LED 5 W	



**Ceiling luminaires | Series: Tenuo®**

Type of Protection: IP 40

Protection Class: I

Impact Protection: IK03

Distance of recognition: 30 m

For escape route identification

Housing: anodised aluminium, silver. Display panel: patented MicroLens technology and legends on one side/both sides.

LED included.

Please indicate legend number when placing your order!

Available colour: 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

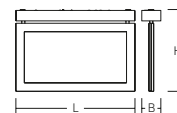
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
single-sided				
672033.004	L 350, B 56, H 240	1 x LED 2,5 W	3 h	autotest
672033.004.04	L 350, B 56, H 240	1 x LED 2,5 W	3 h	MultiDigit
672033.004.07	L 350, B 56, H 240	1 x LED 2,5 W	3 h	DALI-Sibe
672042.004	L 350, B 56, H 240	1 x LED 2,5 W	8 h	autotest
672042.004.04	L 350, B 56, H 240	1 x LED 2,5 W	8 h	MultiDigit
672042.004.07	L 350, B 56, H 240	1 x LED 2,5 W	8 h	DALI-Sibe
double-sided				
671946.004	L 350, B 56, H 240	1 x LED 5 W	3 h	autotest
671946.004.04	L 350, B 56, H 240	1 x LED 5 W	3 h	MultiDigit
671946.004.07	L 350, B 56, H 240	1 x LED 5 W	3 h	DALI-Sibe
672007.004	L 350, B 56, H 240	1 x LED 5 W	8 h	autotest
672007.004.04	L 350, B 56, H 240	1 x LED 5 W	8 h	MultiDigit
672007.004.07	L 350, B 56, H 240	1 x LED 5 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
single-sided			
672029.004	L 350, B 56, H 240	1 x LED 2,5 W	AC-Control
672029.004.89	L 350, B 56, H 240	1 x LED 2,5 W	
double-sided			
671939.004	L 350, B 56, H 240	1 x LED 5 W	AC-Control
671939.004.89	L 350, B 56, H 240	1 x LED 5 W	

Recessed ceiling luminaires | Series: Tenuo®

Type of Protection: **IP 40**, IP 20 (above the ceiling)
 Protection Class: I
 Ceiling Thickness: 5-35 mm
 Impact Protection: IK03
 Distance of recognition: 30 m

For escape route identification

Housing: anodised aluminium, silver. Display panel: patented MicroLens technology and legends on one side/both sides.

LED included.

Please indicate legend number when placing your order!

Available colour: 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

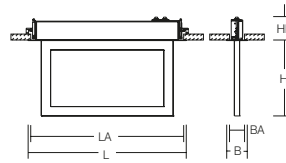
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				
Ceiling cut out LA 400 x BA 40 mm, HE 60 mm				
single-sided				
672034.004	L 420, B 55, H 202	1 x LED 2,5 W	3 h	autotest
672034.004.04	L 420, B 55, H 202	1 x LED 2,5 W	3 h	MultiDigit
672034.004.07	L 420, B 55, H 202	1 x LED 2,5 W	3 h	DALI-Sibe
672043.004	L 420, B 55, H 202	1 x LED 2,5 W	8 h	autotest
672043.004.04	L 420, B 55, H 202	1 x LED 2,5 W	8 h	MultiDigit
672043.004.07	L 420, B 55, H 202	1 x LED 2,5 W	8 h	DALI-Sibe
double-sided				
671947.004	L 420, B 55, H 202	1 x LED 5 W	3 h	autotest
671947.004.04	L 420, B 55, H 202	1 x LED 5 W	3 h	MultiDigit
671947.004.07	L 420, B 55, H 202	1 x LED 5 W	3 h	DALI-Sibe
672008.004	L 420, B 55, H 202	1 x LED 5 W	8 h	autotest
672008.004.04	L 420, B 55, H 202	1 x LED 5 W	8 h	MultiDigit
672008.004.07	L 420, B 55, H 202	1 x LED 5 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			
Ceiling cut out LA 400 x BA 40 mm, HE 90 mm			
single-sided			
672030.004	L 420, B 55, H 202	1 x LED 2,5 W	
672030.004.89	L 420, B 55, H 202	1 x LED 2,5 W	AC-Control
double-sided			
671940.004	L 420, B 55, H 202	1 x LED 5 W	
671940.004.89	L 420, B 55, H 202	1 x LED 5 W	AC-Control



**Pendant luminaires | Series: Tenuo®**

Type of Protection: **IP 40**
 Protection Class: I
 Impact Protection: IK03
 Suspension Length: 500 mm
 Distance of recognition: 30 m

For escape route identification

Housing: anodised aluminium, silver. Display panel: patented MicroLens technology and legends on one side/both sides.

LED included.

Please indicate legend number when placing your order!

Available colour: 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

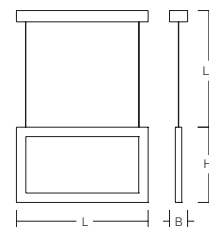
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
single-sided				
Pendant tube				
672035.004	L 350, B 56, H 200	1 x LED 2,5 W	3 h	autotest
672035.004.04	L 350, B 56, H 200	1 x LED 2,5 W	3 h	MultiDigit
672035.004.07	L 350, B 56, H 200	1 x LED 2,5 W	3 h	DALI-Sibe
672044.004	L 350, B 56, H 200	1 x LED 2,5 W	8 h	autotest
672044.004.04	L 350, B 56, H 200	1 x LED 2,5 W	8 h	MultiDigit
672044.004.07	L 350, B 56, H 200	1 x LED 2,5 W	8 h	DALI-Sibe
Suspension cable				
672036.004	L 350, B 56, H 200	1 x LED 2,5 W	3 h	autotest
672036.004.04	L 350, B 56, H 200	1 x LED 2,5 W	3 h	MultiDigit
672036.004.07	L 350, B 56, H 200	1 x LED 2,5 W	3 h	DALI-Sibe
672045.004	L 350, B 56, H 200	1 x LED 2,5 W	8 h	autotest
672045.004.04	L 350, B 56, H 200	1 x LED 2,5 W	8 h	MultiDigit
672045.004.07	L 350, B 56, H 200	1 x LED 2,5 W	8 h	DALI-Sibe
double-sided				
Pendant tube				
671948.004	L 350, B 56, H 200	1 x LED 5 W	3 h	autotest
671948.004.04	L 350, B 56, H 200	1 x LED 5 W	3 h	MultiDigit
671948.004.07	L 350, B 56, H 200	1 x LED 5 W	3 h	DALI-Sibe
672009.004	L 350, B 56, H 200	1 x LED 5 W	8 h	autotest
672009.004.04	L 350, B 56, H 200	1 x LED 5 W	8 h	MultiDigit
672009.004.07	L 350, B 56, H 200	1 x LED 5 W	8 h	DALI-Sibe
Suspension cable				
671949.004	L 350, B 56, H 200	1 x LED 5 W	3 h	autotest
671949.004.04	L 350, B 56, H 200	1 x LED 5 W	3 h	MultiDigit
671949.004.07	L 350, B 56, H 200	1 x LED 5 W	3 h	DALI-Sibe
672010.004	L 350, B 56, H 200	1 x LED 5 W	8 h	autotest
672010.004.04	L 350, B 56, H 200	1 x LED 5 W	8 h	MultiDigit
672010.004.07	L 350, B 56, H 200	1 x LED 5 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
single-sided			
Pendant tube			
672031.004	L 350, B 56, H 200	1 x LED 2,5 W	AC-Control
672031.004.89	L 350, B 56, H 200	1 x LED 2,5 W	
Suspension cable			
672032.004	L 350, B 56, H 200	1 x LED 2,5 W	AC-Control
672032.004.89	L 350, B 56, H 200	1 x LED 2,5 W	
double-sided			
Pendant tube			
671941.004	L 350, B 56, H 200	1 x LED 5 W	AC-Control
671941.004.89	L 350, B 56, H 200	1 x LED 5 W	
Suspension cable			
671942.004	L 350, B 56, H 200	1 x LED 5 W	AC-Control
671942.004.89	L 350, B 56, H 200	1 x LED 5 W	



The application image shows:
Tenuo®



SCL



CBS

HALYXX®

Wall luminaires, Ceiling luminaires, Recessed ceiling luminaires

- Escape sign luminaire with highly efficient LED technology
- Housing made of top quality aluminium
- High quality and elegant design
- Specially calculated thermal management
- LED rated life 50,000 h
- Wide range of applications thanks to various types of installation
- Easy to install

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005



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Special legends on request



1026



1074

Wall luminaires | Series: Halyxx®

Type of Protection: IP 40

Protection Class: I

Impact Protection: IK03

Distance of recognition: 14 m, 19 m, 30 m

For escape route identification

Housing extruded aluminium profile anodised or powder-coated.

Display panel: highly transparent plastic, with motifs on one side.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

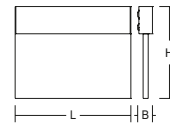
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB

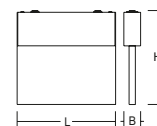


Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				
Viewing distance: 14 m, display panel 170 x 100 mm				
671501.00X	L 233, B 40, H 180	2 x LED 1 W	3 h	autotest
671501.00X.04	L 233, B 40, H 180	2 x LED 1 W	3 h	MultiDigit
671501.00X.07	L 233, B 40, H 180	2 x LED 1 W	3 h	DALI-Sibe
Viewing distance: 19 m, display panel 235 x 140 mm				
671746.00X	L 235, B 40, H 220	2 x LED 1 W	3 h	autotest
671746.00X.04	L 235, B 40, H 220	2 x LED 1 W	3 h	MultiDigit
671746.00X.07	L 235, B 40, H 220	2 x LED 1 W	3 h	DALI-Sibe
671895.00X	L 235, B 40, H 220	2 x LED 1 W	8 h	autotest
671895.00X.04	L 235, B 40, H 220	2 x LED 1 W	8 h	MultiDigit
Viewing distance: 30 m, display panel 340 x 190 mm				
671748.00X	L 340, B 40, H 270	4 x LED 1 W	3 h	autotest
671748.00X.04	L 340, B 40, H 270	4 x LED 1 W	3 h	MultiDigit
671748.00X.07	L 340, B 40, H 270	4 x LED 1 W	3 h	DALI-Sibe
671912.00X	L 340, B 40, H 270	4 x LED 1 W	8 h	autotest
671912.00X.04	L 340, B 40, H 270	4 x LED 1 W	8 h	MultiDigit
671912.00X.07	L 340, B 40, H 270	4 x LED 1 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
Viewing distance: 14 m, display panel 170 x 100 mm			
671503.00X	L 233, B 40, H 180	2 x LED 1,1 W	AC-Control
671503.00X.89	L 233, B 40, H 180	2 x LED 1,1 W	
Viewing distance: 19 m, display panel 235 x 140 mm			
671738.00X	L 235, B 40, H 220	2 x LED 1,1 W	AC-Control
671738.00X.89	L 235, B 40, H 220	2 x LED 1,1 W	
Viewing distance: 30 m, display panel 340 x 190 mm			
671722.00X	L 340, B 40, H 270	3 x LED 1,1 W	AC-Control
671722.00X.89	L 340, B 40, H 270	3 x LED 1,1 W	



**Ceiling luminaires | Series: Halyxx®**Type of Protection: **IP 40**Protection Class: **I**Impact Protection: **IK03**Distance of recognition: **14 m, 19 m, 30 m****For escape route identification**

Housing extruded aluminium profile anodised or powder-coated. Display panel: highly transparent panel, plastic, with legend on one side/both sides.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminairesVoltage type: **AC**

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: **EB****Luminaires for central battery system**Voltage type: **AC/DC**Ballast: **EB**

Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
Viewing distance: 14 m, display panel 170 x 100 mm				
671502.00X	L 233, B 40, H 180	2 x LED 1 W	3 h	autotest
671502.00X.04	L 233, B 40, H 180	2 x LED 1 W	3 h	MultiDigit
671502.00X.07	L 233, B 40, H 180	2 x LED 1 W	3 h	DALI-Sibe
Viewing distance: 19 m, display panel 235 x 140 mm				
671742.00X	L 235, B 40, H 220	2 x LED 1 W	3 h	autotest
671742.00X.04	L 235, B 40, H 220	2 x LED 1 W	3 h	MultiDigit
671742.00X.07	L 235, B 40, H 220	2 x LED 1 W	3 h	DALI-Sibe
671896.00X	L 235, B 40, H 220	2 x LED 1 W	8 h	autotest
671896.00X.04	L 235, B 40, H 220	2 x LED 1 W	8 h	MultiDigit
Viewing distance: 30 m, display panel 340 x 190 mm				
671744.00X	L 340, B 40, H 270	4 x LED 1 W	3 h	autotest
671744.00X.04	L 340, B 40, H 270	4 x LED 1 W	3 h	MultiDigit
671744.00X.07	L 340, B 40, H 270	4 x LED 1 W	3 h	DALI-Sibe
671913.00X	L 340, B 40, H 270	4 x LED 1 W	8 h	autotest
671913.00X.04	L 340, B 40, H 270	4 x LED 1 W	8 h	MultiDigit
671913.00X.07	L 340, B 40, H 270	4 x LED 1 W	8 h	DALI-Sibe



Mounting kit for chains/cable suspensions				Price Category 23
Viewing distance: 14 m + 19 m				
981701.004	Pendant length LP			
Viewing distance: 30 m				
981702.004	Pendant length LP			



Pendant sets				Price Category 23
Viewing distance 14 m + 19 m				
981639.010	Pendant length LP 500	for standard versions		
981639.040	Pendant length LP 500	for MultiDigit (.04) / DALI (.07)		
Viewing distance: 30 m				
981647.010	Pendant length LP 500	for standard versions		
981647.040	Pendant length LP 500	for MultiDigit (.04) / DALI (.07)		



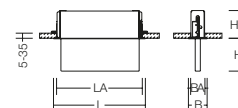
Wall extension				Price Category 24
Viewing distance: 14 m + 19 m				
981581.004	L 258, B 38, H 104			
Viewing distance: 30 m				
981640.004	L 363, B 38, H 104			

Reference number	Dimensions	Lamp	Monitoring module	
Luminaires for central battery system				Price Category 24
Viewing distance: 14 m, display panel 170 x 100 mm				
671504.00X	L 233, B 40, H 184	2 x LED 1,1 W	AC-Control	
671504.00X.89	L 233, B 40, H 184	2 x LED 1,1 W		
Viewing distance: 19 m, display panel 235 x 140 mm				
671736.00X	L 235, B 40, H 220	2 x LED 1,1 W	AC-Control	
671736.00X.89	L 235, B 40, H 220	2 x LED 1,1 W		
Viewing distance: 30 m, display panel 340 x 190 mm				
671737.00X	L 340, B 40, H 270	3 x LED 1,1 W	AC-Control	
671737.00X.89	L 340, B 40, H 270	3 x LED 1,1 W		
Mounting kit for chains/cable suspensions				Price Category 23
Viewing distance: 14 m + 19 m				
981701.004	Pendant length LP			
Viewing distance: 30 m				
981702.004	Pendant length LP			
Pendant sets				Price Category 23
Viewing distance: 14 m + 19 m				
981639.060	Pendant length LP 500	for standard variants		
981639.020	Pendant length LP 500	for .88/.89		
Wall extension				Price Category 24
Viewing distance: 14 m + 19 m				
981581.004	L 258, B 38, H 104			
Viewing distance: 30 m				
981640.004	L 363, B 38, H 104			



**Recessed ceiling luminaires | Series: Halyxx®**

Type of Protection: **IP 40**
 Protection Class: **I**
 Ceiling Thickness: **5-35 mm**
 Impact Protection: **IK03**
 Distance of recognition: **14 m, 19 m, 30 m**

**For escape route identification**

Installation housing sheet steel. Ceiling plate stainless steel high polish. Display panel: highly transparent panel, plastic, with legend on one side/both sides.

LED included.

Please specify legend number when ordering!

Available colours (X): 0 = stainless steel, 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				
Viewing distance: 14 m, display panel 170 x 100 mm				
Ceiling cutout LA 255 x BA 42 mm, HE 90 mm				
671518.00X	L 270, B 55, H 100	2 x LED 1 W	3 h	autotest
671518.00X.04	L 270, B 55, H 100	2 x LED 1 W	3 h	MultiDigit
671518.00X.07	L 270, B 55, H 100	2 x LED 1 W	3 h	DALI-Sibe
Viewing distance: 19 m, display panel 235 x 140 mm				
Ceiling cutout LA 305 x BA 42 mm, HE 90 mm				
671750.00X	L 320, B 55, H 140	2 x LED 1 W	3 h	autotest
671750.00X.04	L 320, B 55, H 140	2 x LED 1 W	3 h	MultiDigit
671750.00X.07	L 320, B 55, H 140	2 x LED 1 W	3 h	DALI-Sibe
671897.00X	L 320, B 55, H 140	2 x LED 1 W	8 h	autotest
671897.00X.04	L 320, B 55, H 140	2 x LED 1 W	8 h	MultiDigit
Viewing distance: 30 m, display panel 340 x 190 mm				
Ceiling cutout LA 410 x BA 42 mm, HE 90 mm				
671752.00X	L 424, B 55, H 190	4 x LED 1 W	3 h	autotest
671752.00X.04	L 424, B 55, H 190	4 x LED 1 W	3 h	MultiDigit
671752.00X.07	L 424, B 55, H 190	4 x LED 1 W	3 h	DALI-Sibe
671914.00X	L 424, B 55, H 190	4 x LED 1 W	8 h	autotest
671914.00X.04	L 424, B 55, H 190	4 x LED 1 W	8 h	MultiDigit
671914.00X.07	L 424, B 55, H 190	4 x LED 1 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
 255 x 42	Viewing distance: 14 m, display panel 170 x 100 mm		
	Ceiling cutout LA 255 x BA 42 mm, HE 90 mm		
	671519.00X	L 270, B 55, H 100	2 x LED 1,1 W
	671519.00X.89	L 270, B 55, H 100	2 x LED 1,1 W
 305 x 42	Viewing distance: 19 m, display panel 235 x 140 mm		
	Ceiling cutout LA 305 x BA 42 mm, HE 90 mm		
	671739.00X	L 320, B 55, H 140	2 x LED 1,1 W
	671739.00X.89	L 320, B 55, H 140	2 x LED 1,1 W
 410 x 42	Viewing distance: 30 m, display panel 340 x 190 mm		
	Ceiling cutout LA 410 x BA 42 mm, HE 90 mm		
	671740.00X	L 424, B 55, H 190	3 x LED 1,1 W
	671740.00X.89	L 424, B 55, H 190	3 x LED 1,1 W

**Moulded housing**

Viewing distance: 14 m

981685.000 L 542, B 142, H 143

Viewing distance: 19 m

981686.000 L 542, B 142, H 143

Viewing distance: 30 m

981687.000 L 542, B 142, H 143





SCL



CBS

GSUN® S | UNIVERSAL S

Ceiling and wall luminaires

- NEW - now with adapter for rapid installation
- Escape sign luminaire with highly efficient LED technology
- Adjustable rated operating time 1/3/8 hrs (only for versions without BUS connection)
- Housing made of top quality aluminium
- The very latest LED technology keeps maintenance costs to a minimum
- LED rated life 50,000 h
- Standard automatic self-test (self contained luminaires)
- Set of 5 legends included for easy attachment
- Automatic self-test can be deactivated
- Suitable for mounting on either a ceiling or a wall by simply changing the end caps

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005



3113



3114



3116



3115

Special legends on request



1026



1074

Ceiling and wall luminaires | Series: GSUN® S, Universal S

Type of Protection: IP 30
Protection Class: I
Impact Protection: IK03
Distance of recognition: 24 m, 32 m

For escape route identification

Housing: aluminium extrusion profile, powder-coated. Universal mounting kit for ceiling and wall surface mounting. 4 legends and 1 white plug-in plastic sheet included.

LED included.

Available colours (X): 2 = white, 4 = silver coloured

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

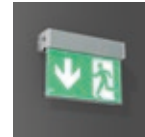
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
Viewing distance: 24 m				
672217.00X.Q	L 247, B 45, H 195	1 x LED 2,2 W	1/3/8 h	autotest
672217.00X.04	L 247, B 45, H 195	1 x LED 2,2 W	3 h	MultiDigit
672217.00X.07	L 247, B 45, H 195	1 x LED 2,2 W	3 h	DALI-Sibe
Viewing distance: 32 m				
672218.00X	L 327, B 45, H 237	1 x LED 3 W	1/3/8 h	autotest
672218.00X.04	L 327, B 45, H 237	1 x LED 3 W	3 h	MultiDigit
672218.00X.07	L 327, B 45, H 237	1 x LED 3 W	3 h	DALI-Sibe

Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
Viewing distance: 24 m			
671983.00X.1	L 247, B 45, H 195	1 x LED 2,2 W	AC-Control
671983.00X.1.89	L 247, B 45, H 195	1 x LED 2,2 W	
Viewing distance: 32 m			
671985.00X.1	L 327, B 45, H 237	1 x LED 3 W	AC-Control
671985.00X.1.89	L 327, B 45, H 237	1 x LED 3 W	

Mounting frame for recessed ceiling mounting			Price Category 23
981883.00X.1	L 330, B 68, H 1, LA 300, BA 52, HE 75	for variant 24 m	
981884.00X.1	L 406, B 68, H 1, LA 370, BA 52, HE 75	for variant 32 m	

Wall extension			Price Category 23
981779.00X.1	L 260, B 46, H 90	for variant 24 m	
981797.00X.1	L 338, B 46, H 90	for variant 32 m	

Pendant tube			Price Category 23
981777.01X.1	Pendant length LP 500	for variant 24 m / 32 m	
981777.03X.1	Pendant length LP 500	for variant 24 m / 32 m with MultiDigit (.04) / DALI (.07) and AC-Control (.89)	

Mounting kit for chains/cable suspensions			Price Category 23
981780.00X.1	L 238, B 40, H 32		

Replacement foils			Price Category 23
991126.04	4 motif foils (1 each of 3113, 3114, 3115, 3116)	for variant 24 m	
991129.03	4 motif foils (1 each of 3113, 3114, 3115, 3116)	for variant 32 m	





GSUN® RS | UNIVERSAL RS

Ceiling and wall luminaires

- High-quality design
- Standard automatic self-test
- The ultra-flat exit sign luminaire with highly efficient LED technology
- LED rated life 50,000 h
- Set of 5 legends included for easy attachment

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling and wall luminaires | Series: GSUN® RS, Universal RS

Type of Protection: IP 20

Protection Class: II

Distance of recognition: 24 m

For escape route identification

Housing: plastic (polycarbonate) with universal mounting kit for ceiling and wall mount. 4 legends and 1 white plug-in plastic sheet included.

LED included.

Available colour: 9 = grey

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

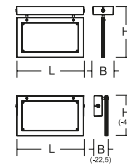
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

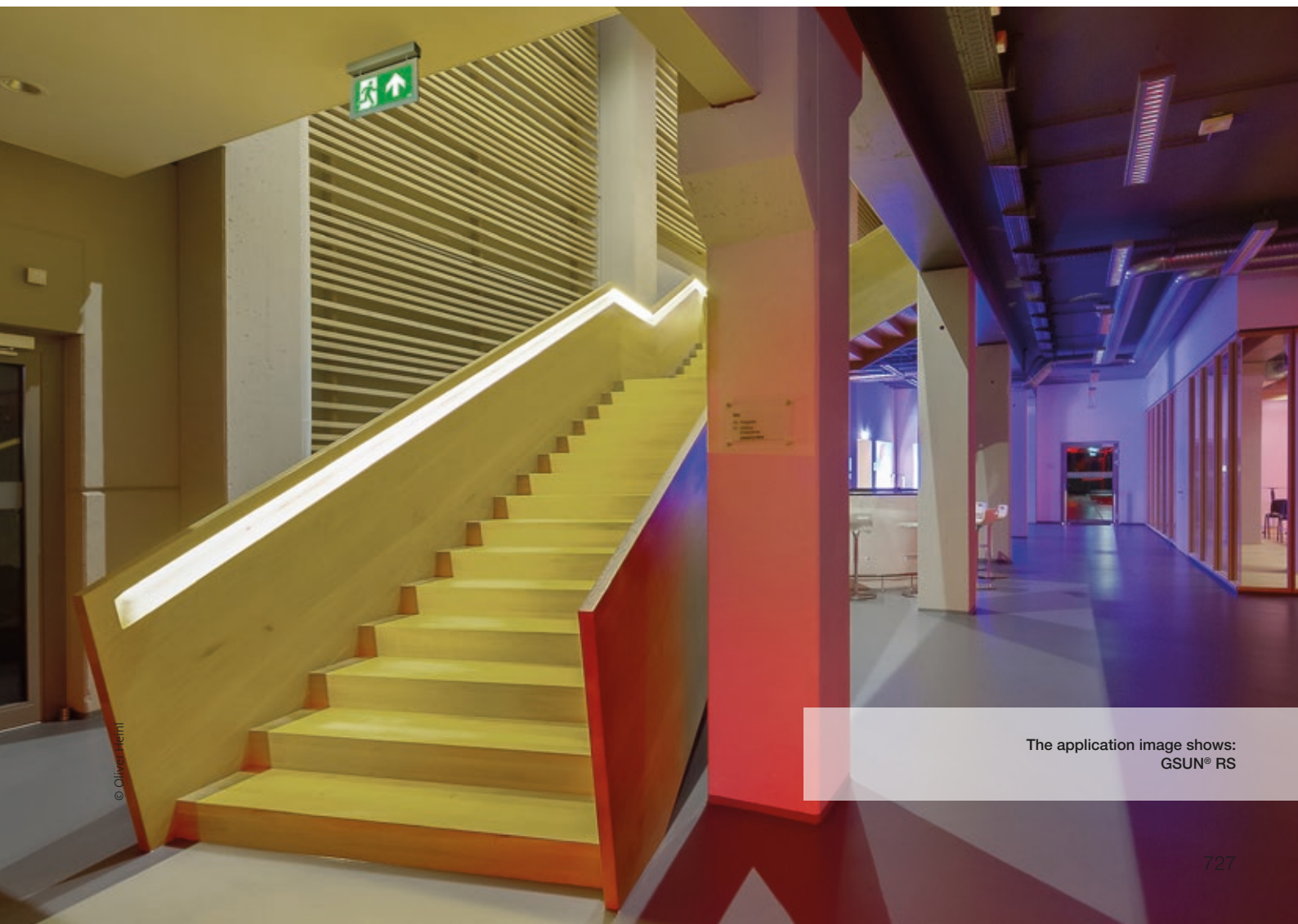
Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires					
672116.009..Q	L 276, B 83, H 211	1 x LED 2,2 W	3 h	autotest	
672116.009.04	L 276, B 83, H 211	1 x LED 2,2 W	3 h	MultiDigit	
672116.009.07	L 276, B 83, H 211	1 x LED 2,2 W	3 h	DALI-Sibe	

Reference number	Dimensions	Lamp	Monitoring module	Price Category 24
Luminaires for central battery system				
672117.009	L 276, B 83, H 211	1 x LED 2,2 W		
672117.009.89	L 276, B 83, H 211	1 x LED 2,2 W	AC-Control	



The application image shows:
GSUN® RS



GSUN® D | UNIVERSAL D

Ceiling and wall luminaires

- NEW - now with adapter for rapid installation
- Housing made of top quality aluminium
- Adjustable rated operating time 1/3/8 hrs (only for versions without BUS connection)
- The very latest LED technology keeps maintenance costs to a minimum
- LED rated life 50,000 h
- Standard automatic self-test
- Automatic self-test can be deactivated
- 5 easy to lay in legends included
- Suitable for mounting on either a ceiling or a wall by simply changing the end caps

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005



3113



3114



3116



3115

Special legends on request



1026



1074

Ceiling and wall luminaires | Series: GSUN® D, Universal D

Type of Protection: IP 30

Protection Class: I

Impact Protection: IK03

Distance of recognition: 24 m

For escape route identification

Housing: aluminium extrusion profile, powder-coated. Universal mounting kit for ceiling and wall surface mounting. 4 legends and 1 white lay in plastic sheet included.

LED included.

Available colours (X): 2 = white, 4 = silver coloured

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

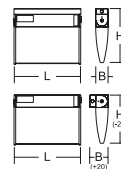
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
672219.00X.Q	L 247, B 45, H 200	1 x LED 2,2 W	1/3/8 h	autotest
672219.00X.04	L 247, B 45, H 200	1 x LED 2,2 W	3 h	MultiDigit
672219.00X.07	L 247, B 45, H 200	1 x LED 2,2 W	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
671996.00X.1	L 247, B 45, H 200	1 x LED 2,2 W	
671996.00X.1.89	L 247, B 45, H 200	1 x LED 2,2 W	AC-Control



Mounting frame for recessed ceiling mounting			Price Category 23
982224.00X.1	L 330, B 68, H 1, LA 300, BA 60, HE 75		



Wall extension			Price Category 23
981779.00X.1	L 260, B 46, H 90	for variant 24 m	



Pendant tube			Price Category 23
981777.01X.1	Pendant length LP 500	For 24 m / 32 m variant	
981777.03X.1	Pendant length LP 500	for MultiDigit (.04) / DALI (.07) and AC-Control (.89)	



Mounting kit for chains/cable suspensions			Price Category 23
981780.00X.1	L 238, B 40, H 32		



Replacement foils			Price Category 23
991130.04	4 motif foils (1 each of 3113, 3114, 3115, 3116)		



CENTRYXX®

Wall luminaires

- For signposting and illuminating of fire fighting equipment and call points and of first aid posts according DIN EN 1838
- IP 65 type of protection - dustproof and protected against water jets from all directions
- The legend is viewable from three sides
- Additional downward emitting LED to illuminate the equipment with min. 5 lx
- Impact resistant plastic diffuser is suitable for robust neighborhood requirements
- Individual legends are possible

Legend with green or red background color (others on request)



1059



1057



1060



1034



1052



1054



1055



1084

Wall luminaires | Series: Centryxx® D

Type of Protection: IP 65

Protection Class: I

Impact Protection: IK05

Distance of recognition: 24 m

For signposting and illuminating of fire fighting equipment and call points and of first aid posts

Base: pressure die-cast aluminium, powder-coated. Diffuser polycarbonate in prismatic shape. Legend both sides, in 90° angle arranged. Downward light emission with elliptical character.

Indicate required motif when placing your order!

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

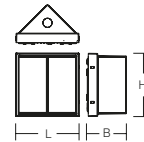
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires					
672165.002	L 199, B 125, H 199	2 x LED 2 W	3 h	autotest	
672165.002.04	L 199, B 125, H 199	2 x LED 2 W	3 h	MultiDigit	
672165.002.07	L 199, B 125, H 199	2 x LED 2 W	3 h	DALI-Sibe	

Reference number	Dimensions	Lamp	Monitoring module	Price Category 24
Luminaires for central battery system				
672164.002	L 199, B 125, H 199	2 x LED 2 W		
672164.002.89	L 199, B 125, H 199	2 x LED 2 W	AC-Control	

Mounting set for through wiring surface installation				Price Category 23
982274.002	L 110, B 104, H 14			





SCL



CBS

CENTRYXX®

Ceiling luminaires

- IP 65 type of protection - dustproof and protected against water jets from all directions
- 4 legends for escape route identification included
- Best thermal management thanks to die cast aluminium base
- Reliable and long life LED technology

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling luminaires | Series: Centryxx® D RZ IP65

Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK06

Distance of recognition: 17 m

For escape route identification

Base: pressure die-cast aluminium, powder-coated. Diffuser polycarbonate in prismatic shape. Double sided escape route signs. 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

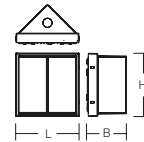
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
672250.002	L 199, B 199, H 125	1 x LED 2,2 W	3 h	autotest
672250.002.04	L 199, B 199, H 125	1 x LED 2,2 W	3 h	MultiDigit
672250.002.07	L 199, B 199, H 125	1 x LED 2,2 W	3 h	DALI-Sibe
Reference number	Dimensions	Lamp	Monitoring module	
Luminaires for central battery system				Price Category 24
672249.002	L 199, B 199, H 125	1 x LED 2,2 W		
672249.002.89	L 199, B 199, H 125	1 x LED 2,2 W	AC-Control	
Mounting kit for chains/cable suspensions				Price Category 23
982341.002	L 130, B 130, H 18			
Mounting set for through wiring surface installation				Price Category 23
982274.002	L 110, B 104, H 14			
Pendant kit for self-contained safety luminaires				Price Category 23
982425.002	Pendant length LP 500	for standard variants		
982425.002.04	Pendant length LP 500	for MultiDigit (.04)		
982425.002.07	Pendant length LP 500	for DALI (.07)		
Pendant kit for central battery system				Price Category 24
982423.002	Pendant length LP 500	for standard variants		
982424.002	Pendant length LP 500	for AC-Control (.89)		





MULTIVARIABEL

Ceiling and wall luminaires, Pendant luminaires

- IP 54 type of protection - dustproof and protected against water spray
- Suitable for ceiling and wall mounting
- LED rated life 50,000 h
- Easy to install
- 4 legends for escape route identification included

Legends for escape route identification -
ISO 7010 | DIN 4844
Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



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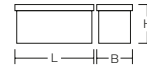


1019

Ceiling and wall luminaires | Series: Multivariabel

Type of Protection: **IP 54** for indoor use
Impact Protection: IK03

Protection Class: I
Distance of recognition: 21 m



For escape route identification

Base: aluminium, powder-coated. Diffuser: plastic, opal.
4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



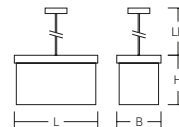
Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
672245.002	L 274, B 125, H 139	1 x LED 2,2 W	3 h	autotest
672245.002.04	L 274, B 125, H 139	1 x LED 2,2 W	3 h	MultiDigit
672245.002.07	L 274, B 125, H 139	1 x LED 2,2 W	3 h	DALI-Sibe
Reference number	Dimensions	Lamp	Monitoring module	
Luminaires for central battery system				Price Category 24
672247.002	L 274, B 125, H 139	1 x LED 2,2 W		
672247.002.89	L 274, B 125, H 139	1 x LED 2,2 W	AC-Control	
Replacement diffusers				Price Category 13
08-671373.002	L 267, B 118, H 120	Plastic (polycarbonate)		
Ball impact guard				Price Category 23
981167.002	L 380, B 295, H 185			



Pendant luminaires | Series: Multivariabel

Type of Protection: **IP 54** for indoor use
Impact Protection: IK03
Distance of recognition: 21 m

Protection Class: I
Suspension Length: 500 mm



For escape route identification

Base: aluminium, powder-coated. Canopy: plastic, white. Pendant tube: chrome.
Diffuser: plastic, opal. 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
672246.002	L 274, B 125, H 131	1 x LED 2,2 W	3 h	autotest
672246.002.04	L 274, B 125, H 131	1 x LED 2,2 W	3 h	MultiDigit
672246.002.07	L 274, B 125, H 131	1 x LED 2,2 W	3 h	DALI-Sibe
Reference number	Dimensions	Lamp	Monitoring module	
Luminaires for central battery system				Price Category 24
672248.002	L 274, B 125, H 131	1 x LED 2,2 W		
672248.002.89	L 274, B 125, H 131	1 x LED 2,2 W	AC-Control	
Replacement diffusers				Price Category 13
08-671373.002	L 267, B 118, H 120	Plastic (polycarbonate)		





MINISIGN

Ceiling and wall luminaires

- Extremely low profile
- Inconspicuous design
- Suitable for mounting on either a ceiling or a wall by simply changing the end caps
- Reliable and long life LED technology
- Easy to install
- Standard automatic self-test
- 4 legends for escape route identification included

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



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1019

Ceiling and wall luminaires | Series: MinisignType of Protection: **IP 40**

Protection Class: I

Impact Protection: IK03

Distance of recognition: 14 m

For escape route identification

Base: metal, powder-coated. Diffuser: plastic (polycarbonate), opal. 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires					
672188.002	L 230, B 103, H 76	2 x LED 1,1 W	3 h	autotest	
672188.002.04	L 230, B 103, H 76	2 x LED 1,1 W	3 h	MultiDigit	
672188.002.07	L 230, B 103, H 76	2 x LED 1,1 W	3 h	DALI-Sibe	
672189.002	L 230, B 103, H 76	2 x LED 1,1 W	8 h	autotest	
672189.002.04	L 230, B 103, H 76	2 x LED 1,1 W	8 h	MultiDigit	
672189.002.07	L 230, B 103, H 76	2 x LED 1,1 W	8 h	DALI-Sibe	

Reference number	Dimensions	Lamp	Monitoring module	Price Category 24
Luminaires for central battery system				
672190.002	L 230, B 106, H 76	2 x LED 1,1 W		
672190.002.89	L 230, B 106, H 76	2 x LED 1,1 W	AC-Control	

Replacement diffusers			Price Category 24
08-64100	L 230, B 75, H 75	Plastic (polycarbonate)	





VARIOPLAST I

Ceiling and wall luminaires, Wall luminaires

- IP 55 type of protection - dustproof and protected against water jets
- Ball impact protection in acc. with DIN 18032-03
- Suitable for use in the food and drink industry
- Installation-friendly construction with mounting plate
- Suitable for installation heights up to 8 metres
- ▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of non-conductive dust on the luminaire can be expected.

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling and wall luminaires | Series: Varioplast I

Type of Protection: **IP 55** for indoor use

Protection Class: I

Impact Protection: IK08

For escape route illumination

Base: plastic (polycarbonate). Diffuser: shockproof plastic (polycarbonate). Ball impact proof in accordance with DIN 18032-03.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of non-conductive dust on the luminaire can be expected.

LED included.

Available colours (X): 2 = white, 3 = black

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

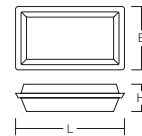
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					
672181.00X .Q	L 320, B 186, H 80	1 x LED 6,2 W	750 / 220 lm	3 h	autotest
672181.00X.04	L 320, B 186, H 80	1 x LED 6,2 W	750 / 220 lm	3 h	MultiDigit
672181.00X.07	L 320, B 186, H 80	1 x LED 6,2 W	750 / 220 lm	3 h	DALI-Sibe
672176.00X	L 320, B 186, H 80	1 x LED 6,2 W	750 / 190 lm	8 h	autotest
672176.00X.04	L 320, B 186, H 80	1 x LED 6,2 W	750 / 190 lm	8 h	MultiDigit
672176.00X.07	L 320, B 186, H 80	1 x LED 6,2 W	750 / 190 lm	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
672182.00X .Q	L 320, B 186, H 80	1 x LED 6,2 W		750 / 750 lm	
672182.00X.89	L 320, B 186, H 80	1 x LED 6,2 W		750 / 750 lm	AC-Control
672129.00X	L 320, B 186, H 80	3 x LED 1 W		350 / 350 lm	
672129.00X.89	L 320, B 186, H 80	3 x LED 1 W		350 / 350 lm	AC-Control



Replacement diffusers			Price Category 13
08-22070.002	L 296, B 162, H 44	Plastic (polycarbonate)	

Mounting kit for chains/cable suspensions			Price Category 24
982354.002	L 166, B 116, H 19		

Display cover			Price Category 23
982195.002		Viewing distance 15 m	



Wire guard, varnished			Price Category 11
22125.00X	L 314, B 180, H 49		

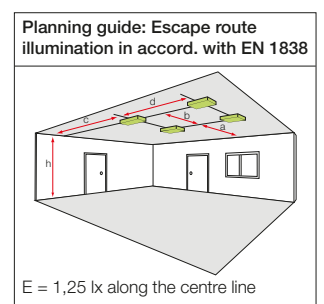
Set of screws with special anti-theft key			Price Category 11
90-4013.00X			



Spacing table 672176.00X					
Luminaire flux Emergency: 190 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,4	8,8	3,3	8,4	
3,0	3,5	9,3	3,4	8,9	
3,5	3,5	9,6	3,4	9,3	
4,0	3,5	9,8	3,4	9,6	

Spacing table 672129.00X					
Luminaire flux Emergency: 350 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,0	10,4	3,9	9,8	
3,0	4,2	11,0	4,1	10,5	
3,5	4,3	11,5	4,2	11,0	
4,0	4,4	11,9	4,3	11,4	

Spacing table 672182.00X					
Luminaire flux Emergency: 750 lm Following values are indicated in m					
h	a	b	c	d	
2,5	5,3	13,0	5,0	12,2	
3,0	5,6	14,1	5,3	13,2	
3,5	5,9	14,9	5,6	14,1	
4,0	6,1	15,6	5,8	14,8	



**Wall luminaires | Series: Varioplast I**

Type of Protection: **IP 55** for indoor use
 Protection Class: I
 Impact Protection: IK08
 Distance of recognition: 24 m

For escape route identification

Base: plastic (polycarbonate). Diffuser: shockproof plastic (polycarbonate). 4 legends for escape route identification included. Ball impact proof in accordance with DIN 18032-03.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of non-conductive dust on the luminaire can be expected.

LED included.

Available colours (X): 2 = white, 3 = black

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

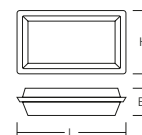
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				
672126.00X	L 320, B 80, H 186	3 x LED 1,1 W	3 h	autotest
672126.00X.04	L 320, B 80, H 186	3 x LED 1,1 W	3 h	MultiDigit
672126.00X.07	L 320, B 80, H 186	3 x LED 1,1 W	3 h	DALI-Sibe
672175.00X	L 320, B 80, H 186	3 x LED 1,1 W	8 h	autotest
672175.00X.04	L 320, B 80, H 186	3 x LED 1,1 W	8 h	MultiDigit
672175.00X.07	L 320, B 80, H 186	3 x LED 1,1 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			
672128.00X	L 320, B 80, H 186	3 x LED 1 W	
672128.00X.89	L 320, B 80, H 186	3 x LED 1 W	AC-Control

Replacement diffusers			Price Category 13
08-22070.002	L 296, B 162, H 44	Plastic (polycarbonate)	

Wire guard, varnished			Price Category 11
22125.00X	L 314, B 180, H 49		

Set of screws with special anti-theft key			Price Category 11
90-4013.00X			







GSUN® 2

Wall luminaires

- Universal luminaire for 3 hours of operating time in emergency mode
- Lamp replacement without tools
- 4 legends for escape route identification included
- Reliable and long life LED technology
- LED rated life 50,000 h
- Very low power consumption
- Wattage: just 0.2 W

Legends for escape route identification -
ISO 7010 | DIN 4844
Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Wall luminaires | Series: GSUN® 2

Type of Protection: IP 40

Protection Class: II

Impact Protection: IK03

Distance of recognition: 19 m

For escape route identification

Base: plastic, grey. Diffuser: plastic, opal. 4 legends for escape route identification included.

LED included.

Available colour: 9 = grey

Self-contained safety luminaires

Voltage type: AC

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

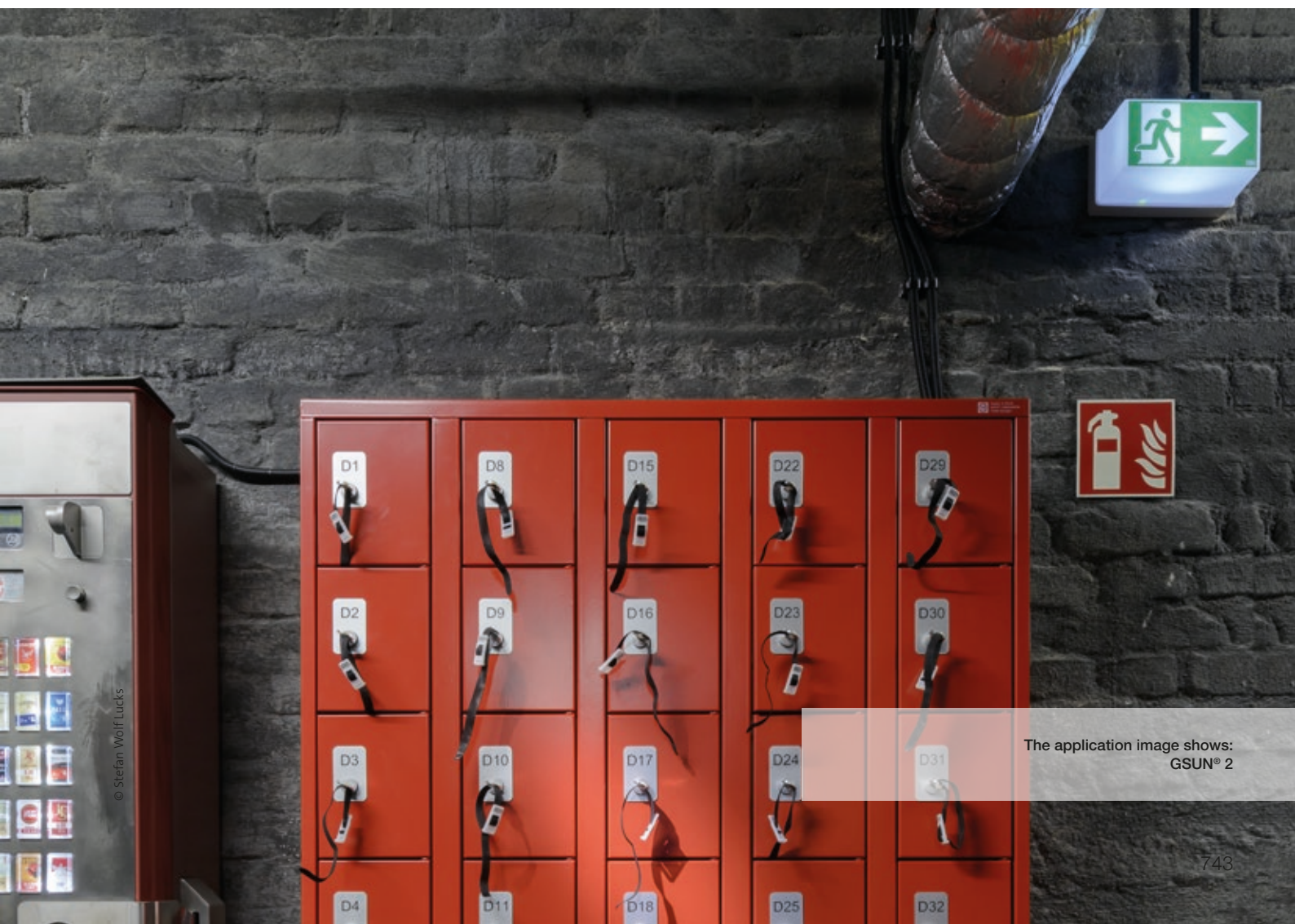


Reference number	Dimensions	Lamp	Rated operating time	
Self-contained safety luminaires				Price Category 23
671817.009	L 215, B 115, H 110	1 x LED 0,2 W	3 h	
671817.009.14 *	L 215, B 115, H 110	1 x LED 0,2 W	3 h	

* .14 = with integrated test button

Replacement diffusers				Price Category 13
08-22144	L 215, B 115, H 86			

Ball impact guard				Price Category 23
981167.002	L 380, B 295, H 185			



The application image shows:
GSUN® 2



GSUN® 3 | UNIVERSAL 3

Ceiling and wall luminaires, Wall luminaires

- IP 54 type of protection - dustproof and protected against water spray
- All-plastic luminaires, shockproof
- Wide range of applications thanks to either surface or recessed ceiling installation
- 4 legends for escape route identification included
- Low-cost installation
- LED rated life 50,000 h

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling and wall luminaires | Series: GSUN® 3, Universal 3

Type of Protection: **IP 54** for indoor use

Protection Class: II (I for .04)

Impact Protection: IK03

Distance of recognition: 21 m

For escape route identification

Base: plastic. Diffuser: plastic, opal. 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

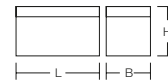
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires					
671780.002	L 240, B 126, H 145	1 x LED 2,1 W	3 h	autotest	
671780.002.04	L 240, B 126, H 145	1 x LED 2,1 W	3 h	MultiDigit	
671909.002	L 240, B 126, H 145	1 x LED 2,1 W	8 h	autotest	
671909.002.04	L 240, B 126, H 145	1 x LED 2,1 W	8 h	MultiDigit	

Reference number	Dimensions	Lamp	Monitoring module	Price Category 24
Luminaires for central battery system				
671782.002	L 242, B 126, H 150	1 x LED 2,1 W		
671782.002.89	L 242, B 126, H 150	1 x LED 2,1 W	AC-Control	

Replacement diffusers				Price Category 13
08-671320.002	L 241, B 125, H 124			

Replacement foils				Price Category 23
991153	4 motif foils (1 each of 3003, 3004, 3005, 3006)			

Ball impact guard				Price Category 23
981167.002	L 380, B 295, H 185			

Pendant tube				Price Category 23
90-4164.002	Pendant length LP 500			

Wall extension				Price Category 23
981144.002	L 251, B 131, H 60			



**Wall luminaires | Series: GSUN® 3, Universal 3**Type of Protection: **IP 54** for indoor use

Protection Class: II (I for .04)

Impact Protection: IK03

Distance of recognition: 21 m

**For escape route identification**

Base: plastic. Diffuser: plastic, opal. 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires					
671707.002	L 240, B 126, H 78	1 x LED 2,1 W	3 h	autotest	
671707.002.04	L 240, B 126, H 78	1 x LED 2,1 W	3 h	MultiDigit	
671908.002	L 240, B 126, H 78	1 x LED 2,1 W	8 h	autotest	
671908.002.04	L 240, B 126, H 78	1 x LED 2,1 W	8 h	MultiDigit	



Reference number	Dimensions	Lamp	Monitoring module	Price Category 24
Luminaires for central battery system				
671775.002	L 243, B 127, H 77	1 x LED 2,1 W		
671775.002.89	L 243, B 127, H 77	1 x LED 2,1 W	AC-Control	

Replacement diffusers				Price Category 13
08-671573.002	L 241, B 125, H 55			

Replacement foils for self-contained safety luminaires				Price Category 23
991153	4 motif foils (1 each of 3003, 3004, 3005, 3006)			

Replacement foils for central battery system				Price Category 23
991152	4 motif foils (1 each of 3003, 3004, 3005, 3006)			



Ball impact guard				Price Category 23
981167.002	L 380, B 295, H 185			





GSUN® 4 | UNIVERSAL 4

Ceiling and wall luminaires, Wall luminaires

- IP 54 type of protection - dustproof and protected against water spray
- All-plastic luminaires, shockproof
- Wide range of applications thanks to either surface or recessed ceiling installation
- 4 legends for escape route identification included
- Low-cost installation
- LED rated life 50,000 h

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling and wall luminaires | Series: GSUN® 4, Universal 4Type of Protection: **IP 54** for indoor use

Protection Class: II (I for .04)

Impact Protection: IK03

Distance of recognition: 21 m

For escape route identification

Base: plastic (polycarbonate). Diffuser: plastic (polycarbonate), opal. 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

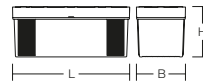
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System	Price Category 23
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Self-contained safety luminaires

671819.002	L 344, B 144, H 148	1 x LED 4,5 W	3 h	autotest	
671819.002.04	L 344, B 144, H 148	1 x LED 4,5 W	3 h	MultiDigit	
671907.002	L 344, B 144, H 148	1 x LED 4,5 W	8 h	autotest	
671907.002.04	L 344, B 144, H 148	1 x LED 4,5 W	8 h	MultiDigit	

Reference number	Dimensions	Lamp	Monitoring module	Price Category 24
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Luminaires for central battery system

671820.002	L 344, B 144, H 148	1 x LED 4,5 W		
671820.002.89	L 344, B 144, H 148	1 x LED 4,5 W	AC-Control	

Replacement diffusers	Price Category 13
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08-671516.002 L 343, B 143, H 124

Replacement foils	Price Category 23
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991153 4 motif foils (1 each of 3003, 3004, 3005, 3006)

Ball impact guard	Price Category 23
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981167.002 L 380, B 295, H 185

Mounting kit for chains/cable suspensions	Price Category 24
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981583.002 L 295, B 135, H 26

Pendant tube	Price Category 23
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90-4164.002 Pendant length LP 500

Wall extension	Price Category 23
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981485.002 L 374, B 147, H 75



**Wall luminaires | Series: GSUN® 4, Universal 4**

Type of Protection: **IP 54** for indoor use
 Protection Class: II (I for .04)
 Impact Protection: IK03
 Distance of recognition: 25 m

**For escape route identification or escape route illumination**

Base: plastic (polycarbonate). Refractor: plastic (polycarbonate), transparent, prismatic.
 4 legends for escape route identification included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



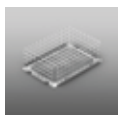
Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
671792.002	L 344, B 144, H 78	1 x LED 4,5 W	3 h	autotest
671792.002.04	L 344, B 144, H 78	1 x LED 4,5 W	3 h	MultiDigit
671906.002	L 344, B 144, H 78	1 x LED 4,5 W	8 h	autotest
671906.002.04	L 344, B 144, H 78	1 x LED 4,5 W	8 h	MultiDigit



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			
671793.002	L 344, B 144, H 78	1 x LED 4,5 W	
671793.002.89	L 344, B 144, H 78	1 x LED 4,5 W	AC-Control

Replacement refractor			Price Category 13
08-671514.000	L 343, B 143, H 54	Replacement refractor (polycarbonate)	

Replacement foils			Price Category 23
991152	4 motif foils (1 each of 3003, 3004, 3005, 3006)		



Ball impact guard			Price Category 23
981167.002	L 380, B 295, H 185		
981168.002	L 540, B 375, H 185		



Wall extension			Price Category 23
981485.002	L 374, B 147, H 75		



Pendant tube			Price Category 23
90-4164.002	Pendant length LP 500		

Mounting kit for chains/cable suspensions			Price Category 24
981583.002	L 295, B 135, H 26		





SCL



CBS

RECHTECK

Wall luminaires, Extensions, Ceiling luminaires, Pendant luminaires

- High quality aluminium profile housing
- Wide range of applications thanks to various types of installation

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Wall luminaires | Series: Rechteck 250, Rechteck 360, Rechteck 485

Type of Protection: IP 44

Protection Class: I

Impact Protection: IK03

Distance of recognition: 21 m, 32 m, 43 m

For escape route identification

Housing: aluminium, with plastic corner connectors. Display panel: plastic, opal, with legend on one side. Light emission: downwards.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

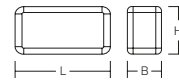
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
Rechteck 250 - Viewing distance: 21 m				
671045.00X	L 250, B 90, H 140	2 x LED 1 W	3 h	autotest
671045.00X.04	L 250, B 90, H 140	2 x LED 1 W	3 h	MultiDigit
Rechteck 360 - Viewing distance: 32 m				
671061.00X	L 362, B 90, H 192	3 x LED 1 W	3 h	autotest
671061.00X.04	L 362, B 90, H 192	3 x LED 1 W	3 h	MultiDigit
Rechteck 485 - Viewing distance: 43 m				
671077.00X	L 485, B 90, H 250	3 x LED 1 W	3 h	autotest
671077.00X.04	L 485, B 90, H 250	3 x LED 1 W	3 h	MultiDigit

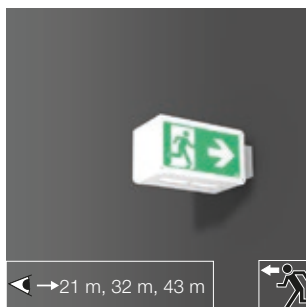


Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
Rechteck 250 - Viewing distance: 21 m			
671207.00X	L 250, B 90, H 140	2 x LED 1,1 W	AC-Control
671207.00X.89	L 250, B 90, H 140	2 x LED 1,1 W	
Rechteck 360 - Viewing distance: 32 m			
671215.00X	L 362, B 90, H 192	3 x LED 1,1 W	AC-Control
671215.00X.89	L 362, B 90, H 192	3 x LED 1,1 W	
Rechteck 485 - Viewing distance: 43 m			
671229.00X	L 485, B 90, H 250	3 x LED 1,1 W	AC-Control
671229.00X.89	L 485, B 90, H 250	3 x LED 1,1 W	



Ball impact guard			Price Category 23
981167.002	L 380, B 295, H 185	for Rechteck 250	
981168.002	L 540, B 375, H 185	for Rechteck 360 / 485	



**Extensions | Series: Rechteck 250, Rechteck 360, Rechteck 485**

Type of Protection: **IP 44**
 Protection Class: I
 Impact Protection: IK03
 Distance of recognition: 21 m, 32 m, 43 m

For escape route identification

Housing: aluminium, with plastic corner connectors. Display panels: plastic, opal, with motifs on both sides. Light emission: downwards.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

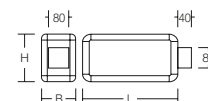
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
Rechteck 250 - Viewing distance: 21 m				
671049.00X	L 250, B 125, H 140	4 x LED 1 W	3 h	autotest
671049.00X.04	L 250, B 125, H 140	4 x LED 1 W	3 h	MultiDigit
Rechteck 360 - Viewing distance: 32 m				
671065.00X	L 362, B 125, H 192	6 x LED 1 W	3 h	autotest
671065.00X.04	L 362, B 125, H 192	6 x LED 1 W	3 h	MultiDigit
Rechteck 485 - Viewing distance: 43 m				
671081.00X	L 485, B 125, H 250	6 x LED 1,1 W	3 h	autotest
671081.00X.04	L 485, B 125, H 250	6 x LED 1,1 W	3 h	MultiDigit



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
Rechteck 250 - Viewing distance: 21 m			
671209.00X	L 250, B 125, H 140	4 x LED 1,1 W	AC-Control
671209.00X.89	L 250, B 125, H 140	4 x LED 1,1 W	
Rechteck 360 - Viewing distance: 32 m			
671217.00X	L 362, B 125, H 192	6 x LED 1,1 W	AC-Control
671217.00X.89	L 362, B 125, H 192	6 x LED 1,1 W	
Rechteck 485 - Viewing distance: 43 m			
671231.00X	L 485, B 125, H 250	6 x LED 1,1 W	AC-Control
671231.00X.89	L 485, B 125, H 250	6 x LED 1,1 W	

Ceiling luminaires | Series: Rechteck 250, Rechteck 360, Rechteck 485

Type of Protection: IP 44

Protection Class: I

Impact Protection: IK03

Distance of recognition: 21 m, 32 m, 43 m

For escape route identification

Housing: aluminium, with plastic corner connectors. Display panels: plastic, opal, with motifs on both sides. Light emission: downwards.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

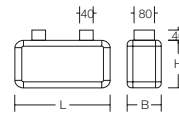
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
Rechteck 250 - Viewing distance: 21 m				
671053.00X	L 250, B 125, H 140	4 x LED 1 W	3 h	autotest
671053.00X.04	L 250, B 125, H 140	4 x LED 1 W	3 h	MultiDigit
Rechteck 360 - Viewing distance: 32 m				
671069.00X	L 362, B 125, H 192	6 x LED 1 W	3 h	autotest
671069.00X.04	L 362, B 125, H 192	6 x LED 1 W	3 h	MultiDigit
Rechteck 485 - Viewing distance: 43 m				
671085.00X	L 485, B 125, H 250	6 x LED 1,1 W	3 h	autotest
671085.00X.04	L 485, B 125, H 250	6 x LED 1,1 W	3 h	MultiDigit



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
Rechteck 250 - Viewing distance: 21 m			
671211.00X	L 250, B 125, H 140	4 x LED 1,1 W	AC-Control
671211.00X.89	L 250, B 125, H 140	4 x LED 1,1 W	
Rechteck 360 - Viewing distance: 32 m			
671223.00X	L 362, B 125, H 192	6 x LED 1,1 W	AC-Control
671223.00X.89	L 362, B 125, H 192	6 x LED 1,1 W	
Rechteck 485 - Viewing distance: 43 m			
671233.00X	L 485, B 125, H 250	6 x LED 1,1 W	AC-Control
671233.00X.89	L 485, B 125, H 250	6 x LED 1,1 W	



**Pendant luminaires | Series: Rechteck 250, Rechteck 360, Rechteck 485**Type of Protection: **IP 44**

Protection Class: I

Impact Protection: IK03

Distance of recognition: 21 m, 32 m, 43 m

For escape route identification

Housing: aluminium, with plastic corner connectors. Display panels: plastic, opal, with motifs on both sides.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

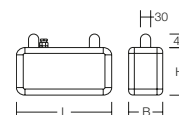
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires**Price Category 23****Rechteck 250 - Viewing distance: 21 m**

671343.00X L 250, B 125, H 140 4 x LED 1 W 3 h autotest

671343.00X.04 L 250, B 125, H 140 4 x LED 1 W 3 h MultiDigit

Rechteck 360 - Viewing distance: 32 m

671347.00X L 362, B 125, H 192 6 x LED 1 W 3 h autotest

671347.00X.04 L 362, B 125, H 192 6 x LED 1 W 3 h MultiDigit

Rechteck 485 - Viewing distance: 43 m

671351.00X L 485, B 125, H 250 6 x LED 1,1 W 3 h autotest

671351.00X.04 L 485, B 125, H 250 6 x LED 1,1 W 3 h MultiDigit



Reference number	Dimensions	Lamp	Monitoring module
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Luminaires for central battery system**Price Category 24****Rechteck 250 - Viewing distance: 21 m**

671359.00X L 250, B 125, H 140 4 x LED 1,1 W

671359.00X.89 L 250, B 125, H 140 4 x LED 1,1 W

AC-Control

Rechteck 360 - Viewing distance: 32 m

671363.00X.89 L 362, B 125, H 192 6 x LED 1,1 W

671363.00X L 362, B 125, H 192 6 x LED 1,1 W

AC-Control

Rechteck 485 - Viewing distance: 43 m

671367.00X L 485, B 125, H 250 6 x LED 1,1 W

671367.00X.89 L 485, B 125, H 250 6 x LED 1,1 W

AC-Control

Pendant luminaires | Series: Rechteck 250, Rechteck 360, Rechteck 485

Type of Protection: IP 44

Protection Class: I

Impact Protection: IK03

Suspension Length: 500 mm

Distance of recognition: 21 m, 32 m, 43 m

For escape route identification

Housing: aluminium, with plastic corner connectors. Display panels: plastic, opal, with motifs on both sides.

LED included.

Please specify legend number when ordering!

Available colours (X): 2 = white, 4 = aluminium, anodised

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

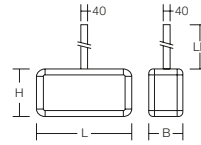
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
Rechteck 250 - Viewing distance: 21 m				
671057.00X	L 250, B 125, H 140	4 x LED 1 W	3 h	autotest
671057.00X.04	L 250, B 125, H 140	4 x LED 1 W	3 h	MultiDigit
Rechteck 360 - Viewing distance: 32 m				
671073.00X	L 362, B 125, H 192	6 x LED 1 W	3 h	autotest
671073.00X.04	L 362, B 125, H 192	6 x LED 1 W	3 h	MultiDigit
Rechteck 485 - Viewing distance: 43 m				
671089.00X	L 485, B 125, H 250	6 x LED 1,1 W	3 h	autotest
671089.00X.04	L 485, B 125, H 250	6 x LED 1,1 W	3 h	MultiDigit

Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			
Rechteck 250 - Viewing distance: 21 m			
671213.00X.89	L 250, B 125, H 140	4 x LED 1,1 W	AC-Control
671213.00X	L 250, B 125, H 140	4 x LED 1,1 W	
Rechteck 360 - Viewing distance: 32 m			
671227.00X	L 362, B 125, H 192	6 x LED 1,1 W	
671227.00X.89	L 362, B 125, H 192	6 x LED 1,1 W	AC-Control
Rechteck 485 - Viewing distance: 43 m			
671235.00X.89	L 485, B 125, H 250	6 x LED 1,1 W	AC-Control
671235.00X	L 485, B 125, H 250	6 x LED 1,1 W	





SCL



CBS

SIGNCUBE

Ceiling luminaires

- 4 legends for escape route identification included
- Standard automatic self-test
- Easy to install
- Top quality LED technology

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling luminaires | Series: Signcube Mini

Type of Protection: IP 20

Protection Class: I

Distance of recognition: 19 m

For escape route identification

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal. 4 legends for escape route identification included.

Can be converted into a suspended luminaire, via accessories. Please order mounting elements separately.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

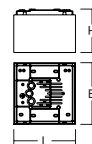
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
672292.002	L 199, B 199, H 140	1 x LED 1,9 W	3 h	autotest
672292.002.04	L 199, B 199, H 140	1 x LED 1,9 W	3 h	MultiDigit
672292.002.07	L 199, B 199, H 140	1 x LED 1,9 W	3 h	DALI-Sibe
672293.002	L 199, B 199, H 140	1 x LED 1,9 W	8 h	autotest
672293.002.04	L 199, B 199, H 140	1 x LED 1,9 W	8 h	MultiDigit
672293.002.07	L 199, B 199, H 140	1 x LED 1,9 W	8 h	DALI-Sibe

Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			
672291.002	L 199, B 199, H 140	1 x LED 2 W	
672291.002.89	L 199, B 199, H 140	1 x LED 2 W	AC-Control
Price Category 24			

Mounting kit for chains/cable suspensions			Price Category 23
982341.002	L 130, B 130, H 18		

Mounting set for through wiring surface installation			Price Category 23
982274.002	L 110, B 104, H 14		

Pendant kit			Price Category 23
982425.002	Pendant length LP 500	for standard variants	
982425.002.04	Pendant length LP 500	for MultiDigit (.04)	
982425.002.07	Pendant length LP 500	for DALI (.07)	

Pendant kit			Price Category 24
982423.002	Pendant length LP 500	for standard variants	
982424.002	Pendant length LP 500	for AC-Control (.89)	



**Ceiling luminaires | Series: Signcube Midi**Type of Protection: **IP 40**

Protection Class: I

Distance of recognition: 30 m

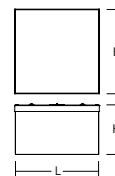
For escape route identification

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal. 4 legends for escape route identification included.

Can be converted into a suspended luminaire, via accessories. Please order mounting elements separately.

LED included.

Available colour: 2 = white

**Self-contained safety luminaires**

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
Self-contained safety luminaires				Price Category 23
672300.002	L 315, B 315, H 187	4 x LED 2 W	3 h	autotest
672300.002.04	L 315, B 315, H 187	4 x LED 2 W	3 h	MultiDigit
672300.002.07	L 315, B 315, H 187	4 x LED 2 W	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
Luminaires for central battery system			Price Category 24
672299.002	L 315, B 315, H 187	4 x LED 1,8 W	
672299.002.89	L 315, B 315, H 187	4 x LED 1,8 W	AC-Control

Mounting kit for chains/cable suspensions		Price Category 24
982413.002	L 210, B 210, H 17	

Pendant kit		Price Category 23
982416.002	Pendant length LP 500	for standard variants
982416.002.04	Pendant length LP 500	for MultiDigit (.04)
982416.002.07	Pendant length LP 500	for DALI (.07)

Pendant kit		Price Category 24
982414.002	Pendant length LP 500	for standard variants
982415.002	Pendant length LP 500	for AC-Control (.89)





CENTRYXX®

Ceiling luminaires, Wall luminaires

- IP 65 type of protection - dustproof and protected against water jets from all directions
- Exceedingly flat design to match modern architecture
- Ball impact protection in acc. with DIN 18032-03
- Wide luminaire spacing for escape routes thanks to special lenses
- Very low maintenance costs thanks to automatic self-test
- Best thermal management thanks to die cast aluminium base

Legends for escape route identification -
ISO 7010 | DIN 4844
Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Ceiling luminaires | Series: Centryxx® IP65

Type of Protection: IP 65

Protection Class: I

For escape route illumination

Base: pressure die-cast aluminium, powder-coated. Cover: polycarbonate. Lens, plastic, for ideal light distribution on escape route. Ball impact proof in accordance with DIN 18032-03.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

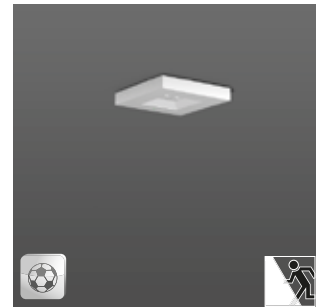
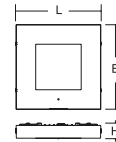
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					
with lens, for area lighting					
672170.002.1	L 198, B 198, H 38	1 x LED 4 W	390 / 350 lm	3 h	autotest
672170.002.1.04	L 198, B 198, H 38	1 x LED 4 W	390 / 350 lm	3 h	MultiDigit
672170.002.1.07	L 198, B 198, H 38	1 x LED 4 W	390 / 350 lm	3 h	DALI-Sibe
672282.002.1	L 198, B 198, H 38	1 x LED 4 W	410 / 130 lm	8 h	autotest
672282.002.1.04	L 198, B 198, H 38	1 x LED 4 W	410 / 130 lm	8 h	MultiDigit
672282.002.1.07	L 198, B 198, H 38	1 x LED 4 W	410 / 130 lm	8 h	DALI-Sibe
with lens, for escape route illumination					
672170.002	L 198, B 198, H 38	1 x LED 4 W	390 / 310 lm	3 h	autotest
672170.002.04	L 198, B 198, H 38	1 x LED 4 W	350 / 310 lm	3 h	MultiDigit
672170.002.07	L 198, B 198, H 38	1 x LED 4 W	350 / 310 lm	3 h	DALI-Sibe
672282.002	L 198, B 198, H 38	1 x LED 4 W	340 / 100 lm	8 h	autotest
672282.002.04	L 198, B 198, H 38	1 x LED 4 W	340 / 100 lm	8 h	MultiDigit
672282.002.07	L 198, B 198, H 38	1 x LED 4 W	340 / 100 lm	8 h	DALI-Sibe
With narrow beam lens					
672170.002.2	L 198, B 198, H 38	1 x LED 4 W	380 / 340 lm	3 h	autotest
672170.002.2.04	L 198, B 198, H 38	1 x LED 4 W	380 / 340 lm	3 h	MultiDigit
672170.002.2.07	L 198, B 198, H 38	1 x LED 4 W	380 / 340 lm	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
with lens, for area lighting				
672294.002.1	L 198, B 198, H 38	1 x LED 2 W	220 / 220 lm	AC-Control
672294.002.1.89	L 198, B 198, H 38	1 x LED 2 W	220 / 220 lm	
672171.002.1	L 198, B 198, H 38	1 x LED 4 W	430 / 430 lm	
672171.002.1.89	L 198, B 198, H 38	1 x LED 4 W	430 / 430 lm	AC-Control
with lens, for escape route illumination				
672294.002	L 198, B 198, H 38	1 x LED 2 W	190 / 190 lm	AC-Control
672294.002.89	L 198, B 198, H 38	1 x LED 2 W	190 / 190 lm	
672171.002	L 198, B 198, H 38	1 x LED 4 W	360 / 360 lm	AC-Control
672171.002.89	L 198, B 198, H 38	1 x LED 4 W	360 / 360 lm	
With narrow beam lens				
672171.002.2	L 198, B 198, H 38	1 x LED 4 W	410 / 410 lm	AC-Control
672171.002.2.89	L 198, B 198, H 38	1 x LED 4 W	410 / 410 lm	



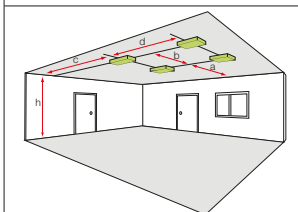
Mounting kit for chains/cable suspensions				Price Category 23
982341.002	L 130, B 130, H 18			

Mounting set for through wiring surface installation				Price Category 23
982274.002	L 110, B 104, H 14			

Pendant kit				Price Category 23
982425.002	Pendant length LP 500	for standard variants		
982425.002.04	Pendant length LP 500	for MultiDigit (.04)		
982425.002.07	Pendant length LP 500	for DALI (.07)		

Pendant kit				Price Category 24
982423.002	Pendant length LP 500	for standard variants		
982424.002	Pendant length LP 500	for AC-Control (.89)		

Frame attachment for wall installation for luminaires with lenses for area lighting				Price Category 23
982257.002	L 201, B 103, H 200			

Planning guide: Escape route illumination in accord. with EN 1838

E = 1,25 lx along the centre line

**Spacing table
672170.002.1**

Luminaire flux
Emergency: 310 lm
Following values are indicated in m

h	a	b	c	d
2,5	4,2	8,9	4,2	8,9
3,0	4,5	9,9	4,5	9,9
3,5	4,8	10,9	4,8	10,9
4,0	5,0	11,9	5,0	11,9

**Spacing table
672282.002.1**

Luminaire flux
Emergency: 130 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,2	6,9	3,2	6,9
3,0	3,3	7,9	3,3	7,9
3,5	3,3	9,1	3,3	9,1
4,0	3,1	9,4	3,1	9,4

**Spacing table
672170.002**

Luminaire flux
Emergency: 310 lm
Following values are indicated in m

h	a	b	c	d
2,5	8,1	14,9	3,1	8,0
3,0	9,0	16,9	3,2	8,5
3,5	9,7	17,9	3,1	8,7
4,0	10,2	19,9	3,2	8,9

**Spacing table
672282.002**

Luminaire flux
Emergency: 100 lm
Following values are indicated in m

h	a	b	c	d
2,5	6,2	9,9	2,9	6,1
3,0	5,6	11,9	2,9	6,1
3,5	5,1	12,9	2,9	6,1
4,0	3,4	14,9	2,9	6,1

**Spacing table
672170.002.2**

Luminaire flux
Emergency: 340 lm
Following values are indicated in m

h	a	b	c	d
2,5	2,9	6,1	2,9	6,1
3,0	3,0	6,4	3,0	6,4
3,5	3,0	6,8	3,0	6,8
4,0	3,0	7,2	3,0	7,2

**Spacing table
672294.002.1**

Luminaire flux
Emergency: 220 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,8	6,9	3,8	6,9
3,0	4,1	7,9	4,1	7,9
3,5	4,2	9,9	4,2	9,9
4,0	4,3	10,9	4,3	10,9

**Spacing table
672171.002.1**

Luminaire flux
Emergency: 430 lm
Following values are indicated in m

h	a	b	c	d
2,5	4,5	9,9	4,5	9,9
3,0	5,0	10,9	5,0	10,9
3,5	5,3	11,9	5,3	11,9
4,0	5,6	12,9	5,6	12,9

**Spacing table
672294.002**

Luminaire flux
Emergency: 190 lm
Following values are indicated in m

h	a	b	c	d
2,5	7,1	10,9	3,0	6,5
3,0	8,1	11,9	3,0	6,8
3,5	8,5	13,9	3,0	6,9
4,0	7,8	14,9	3,0	6,9

**Spacing table
672171.002**

Luminaire flux
Emergency: 360 lm
Following values are indicated in m

h	a	b	c	d
2,5	8,2	14,9	3,1	8,1
3,0	9,2	16,9	3,3	8,5
3,5	10,1	18,9	3,3	9,0
4,0	10,8	20,9	3,4	9,2

**Spacing table
672171.002.2**

Luminaire flux
Emergency: 410 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,3	3,0	6,3
3,0	3,0	6,8	3,0	6,8
3,5	3,0	7,2	3,0	7,2
4,0	3,1	7,6	3,1	7,6



**Ceiling luminaires | Series: Centryxx® RZ IP65**Type of Protection: **IP 65**

Protection Class: I

Distance of recognition: 18 m

For escape route identification

Base: pressure die-cast aluminium, powder-coated. Cover: polycarbonate. Display panel: highly transparent panel, plastic, with legend on one side/both sides. 4 legends and 1 white plug-in plastic sheet included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

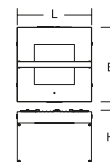
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires**Price Category 23**

672172.002	L 198, B 198, H 143	1 x LED 4 W	3 h	autotest
672172.002.04	L 198, B 198, H 143	1 x LED 4 W	3 h	MultiDigit
672172.002.07	L 198, B 198, H 143	1 x LED 4 W	3 h	DALI-Sibe
672283.002	L 198, B 198, H 143	1 x LED 4 W	8 h	autotest
672283.002.04	L 198, B 198, H 143	1 x LED 4 W	8 h	MultiDigit
672283.002.07	L 198, B 198, H 143	1 x LED 4 W	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
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Luminaires for central battery system**Price Category 24**

672173.002	L 198, B 198, H 143	1 x LED 4 W	
672173.002.89	L 198, B 198, H 143	1 x LED 4 W	AC-Control

Mounting kit for chains/cable suspensions**Price Category 23**

982341.002	L 130, B 130, H 18
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Mounting set for through wiring surface installation**Price Category 23**

982274.002	L 110, B 104, H 14
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Pendant kit**Price Category 23**

982425.002	Pendant length LP 500	for standard variants
982425.002.04	Pendant length LP 500	for MultiDigit (.04)
982425.002.07	Pendant length LP 500	for DALI (.07)

Pendant kit**Price Category 24**

982423.002	Pendant length LP 500	for standard variants
982424.002	Pendant length LP 500	for AC-Control (.89)

Ceiling luminaires | Series: Centryxx®

Type of Protection: IP 20
Protection Class: I

For escape route illumination

Housing: pressure die-cast aluminium, powder-coated. Lens, plastic, for ideal light distribution on escape route.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

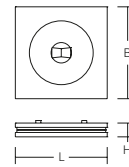
Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					
with lens, for area lighting					
671840.002.1.Q	L 180, B 180, H 32	1 x LED 3 W	170 / 140 lm	3 h	autotest
671840.002.1.04	L 180, B 180, H 32	1 x LED 3 W	170 / 140 lm	3 h	MultiDigit
671840.002.1.07	L 180, B 180, H 32	1 x LED 3 W	170 / 140 lm	3 h	DALI-Sibe
671997.002.1.07	L 180, B 180, H 32	1 x LED 3 W	100 / 100 lm	8 h	DALI-Sibe
with lens, for escape route illumination					
671840.002.Q	L 180, B 180, H 32	1 x LED 3 W	150 / 140 lm	3 h	autotest
671840.002.04.Q	L 180, B 180, H 32	1 x LED 3 W	150 / 140 lm	3 h	MultiDigit
671840.002.07	L 180, B 180, H 32	1 x LED 3 W	150 / 140 lm	3 h	DALI-Sibe
671997.002.07	L 180, B 180, H 32	1 x LED 3 W	100 / 100 lm	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
with lens, for area lighting				
671841.002.1	L 180, B 180, H 32	1 x LED 3 W	170 / 170 lm	AC-Control
671841.002.1.89	L 180, B 180, H 59	1 x LED 3 W	170 / 170 lm	
with lens, for escape route illumination				
671841.002	L 180, B 180, H 32	1 x LED 3 W	170 / 170 lm	AC-Control
671841.002.89	L 180, B 180, H 59	1 x LED 3 W	170 / 170 lm	



Mounting kit for chains/cable suspensions				Price Category 24
981963.002	L 122, B 120, H 13			

Accessories | Installation box for Centryxx LED luminaires

Flat installation box made of white coated sheet steel, with lateral cable inlets, for Centryxx emergency luminaires.

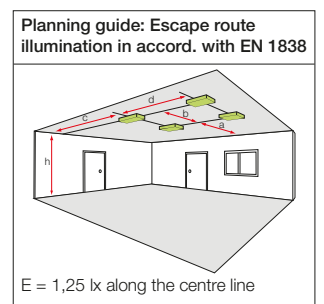
Rear-mounted box for through wiring surface installation

981921.002	L 123, B 123, H 33	Price Category 23
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Spacing table 671840.002.1					Spacing table 671997.002.1.07					Spacing table 671840.002				
Luminaire flux Emergency: 140 lm Following values are indicated in m					Luminaire flux Emergency: 70 lm Following values are indicated in m					Luminaire flux Emergency: 140 lm Following values are indicated in m				
h	a	b	c	d	h	a	b	c	d	h	a	b	c	d
2,5	3,5	7,9	3,5	7,9	2,5	3,4	8,0	3,4	8,0	2,5	7,1	8,9	3,0	6,6
3,0	3,8	7,9	3,8	7,9	3,0	3,8	8,9	3,8	8,9	3,0	7,9	10,9	2,9	6,1
3,5	3,8	8,9	3,8	8,9	3,5	4,1	9,7	4,1	9,7	3,5	8,6	11,9	2,9	6,1
4,0	3,3	9,9	3,3	9,9	4,0	0,0	8,2	0,0	8,2	4,0	9,2	13,9	2,9	6,1

Spacing table 671997.002.07					Spacing table 671841.002.1					Spacing table 671841.002				
Luminaire flux Emergency: 70 lm Following values are indicated in m					Luminaire flux Emergency: 170 lm Following values are indicated in m					Luminaire flux Emergency: 170 lm Following values are indicated in m				
h	a	b	c	d	h	a	b	c	d	h	a	b	c	d
2,5	6,3	14,8	2,9	6,1	2,5	3,5	7,9	3,5	7,9	2,5	7,1	8,9	2,9	6,1
3,0	6,7	16,4	2,9	6,1	3,0	3,9	8,9	3,9	8,9	3,0	8,0	10,9	2,9	6,1
3,5	7,2	17,6	2,9	6,1	3,5	4,2	9,9	4,2	9,9	3,5	8,5	12,9	2,9	6,1
4,0	7,7	18,4	2,9	6,1	4,0	4,3	10,9	4,3	10,9	4,0	8,9	13,9	2,9	6,1



**Ceiling luminaires | Series: Centryxx® 2-LED**

Type of Protection: IP 20 (surface ceiling installation), **IP 40** (recessed ceiling installation)
Protection Class: I

For escape route illumination

Housing: pressure die-cast aluminium, powder-coated. Lens, plastic, for ideal light distribution on escape route.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

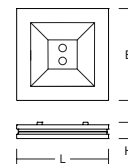
Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					Price Category 23
with lens, for area lighting					
672023.002 .Q	L 180, B 180, H 32	2 x LED 3 W	320 / 280 lm	3 h	autotest
672023.002.04	L 180, B 180, H 32	2 x LED 3 W	320 / 280 lm	3 h	MultiDigit
672023.002.07	L 180, B 180, H 32	2 x LED 3 W	320 / 280 lm	3 h	DALI-Sibe
with lens, for escape route illumination					
672022.002	L 180, B 180, H 32	2 x LED 3 W	280 / 310 lm	3 h	autotest
672022.002.04	L 180, B 180, H 32	2 x LED 3 W	280 / 310 lm	3 h	MultiDigit
672022.002.07	L 180, B 180, H 32	2 x LED 3 W	280 / 310 lm	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
with lens, for area lighting				
672011.002	L 180, B 180, H 32	2 x LED 3 W	340 / 340 lm	
672011.002.89	L 180, B 180, H 60	2 x LED 3 W	340 / 340 lm	AC-Control
with lens, for escape route illumination				
671999.002	L 180, B 180, H 32	2 x LED 3 W	340 / 340 lm	
671999.002.89	L 180, B 180, H 60	2 x LED 3 W	340 / 340 lm	AC-Control

Mounting kit for chains/cable suspensions				Price Category 24
981963.002	L 122, B 120, H 13			

Accessories | Installation box for Centryxx LED luminaires

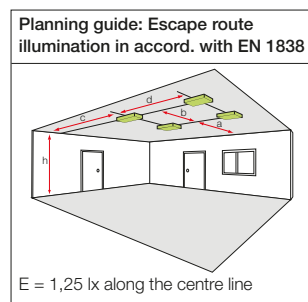
Flat installation box made of white coated sheet steel, with lateral cable inlets, for Centryxx emergency luminaires.

Rear-mounted box for through wiring surface installation				Price Category 23
981921.002	L 123, B 123, H 33			



Spacing table 672023.002					
Luminaire flux Emergency: 280 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,1	9,5	4,1	9,5	
3,0	4,5	10,5	4,5	10,5	
3,5	4,9	11,5	4,9	11,5	
4,0	5,3	12,4	5,3	12,4	

Spacing table 672022.002					
Luminaire flux Emergency: 280 lm Following values are indicated in m					
h	a	b	c	d	
2,5	7,9	11,9	3,0	7,4	
3,0	8,9	13,9	3,0	7,3	
3,5	9,8	15,9	2,9	6,1	
4,0	10,5	17,9	2,9	6,1	



Spacing table 672011.002					
Luminaire flux Emergency: 340 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	9,9	4,3	9,9	
3,0	4,8	10,9	4,8	10,9	
3,5	5,2	11,9	5,2	11,9	
4,0	5,6	12,9	5,6	12,9	

Spacing table 671999.002					
Luminaire flux Emergency: 340 lm Following values are indicated in m					
h	a	b	c	d	
2,5	8,2	12,9	3,0	7,5	
3,0	9,2	14,9	3,0	7,4	
3,5	10,1	16,9	2,9	6,1	
4,0	10,8	18,9	2,9	6,1	

Wall luminaires | Series: Centryxx® W

Type of Protection: IP 20

Protection Class: I

Impact Protection: IK03

For escape route illumination

Housing: pressure die-cast aluminium, powder-coated. Lens, plastic, for ideal light distribution on escape route.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

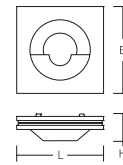
Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					Price Category 23
672020.002	L 180, B 180, H 58	1 x LED 3 W	190 / 140 lm	3 h	autotest
672020.002.04	L 180, B 180, H 58	1 x LED 3 W	190 / 140 lm	3 h	MultiDigit
672020.002.07	L 180, B 180, H 58	1 x LED 3 W	190 / 140 lm	3 h	DALI-Sibe
672021.002.07	L 180, B 180, H 58	1 x LED 1 W	190 / 70 lm	8 h	DALI-Sibe



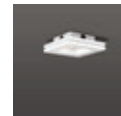
Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
672019.002	L 180, B 180, H 58	1 x LED 3 W	230 / 230 lm	
672019.002.89	L 180, B 180, H 85	1 x LED 3 W	230 / 230 lm	AC-Control



Accessories | Installation box for Centryxx LED luminaires

Flat installation box made of white coated sheet steel, with lateral cable inlets, for Centryxx emergency luminaires.

Rear-mounted box for through wiring surface installation					Price Category 23
981921.002	L 123, B 123, H 33				



**Ceiling luminaires | Series: Centryxx® RZ**

Type of Protection: IP 20
Protection Class: I
Distance of recognition: 17 m

For escape route identification

Base: pressure die-cast aluminium, powder-coated. Cover: polycarbonate. Display panel: highly transparent panel, plastic, with legend on one side/both sides. 4 legends and 1 white plug-in plastic sheet included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

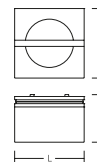
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires**Price Category 23**

672038.002	L 180, B 180, H 132	1 x LED 3 W	3 h	autotest
672038.002.04	L 180, B 180, H 132	1 x LED 3 W	3 h	MultiDigit
672038.002.07	L 180, B 180, H 132	1 x LED 3 W	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Monitoring module
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Luminaires for central battery system**Price Category 24**

672037.002	L 180, B 180, H 132	1 x LED 3 W	
672037.002.89	L 180, B 180, H 160	1 x LED 3 W	AC-Control

Mounting kit for chains/cable suspensions**Price Category 24**

981963.002	L 122, B 120, H 13
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Accessories | Installation box for Centryxx LED luminaires

Flat installation box made of white coated sheet steel, with lateral cable inlets, for Centryxx emergency luminaires.

Rear-mounted box for through wiring surface installation**Price Category 23**

981921.002	L 123, B 123, H 33
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Wall luminaires | Series: Centryxx® W IP65plus

Type of Protection: **IP 65** (also approved for use outdoors)
 Protection Class: I
 Impact Protection: IK03

For escape route illumination

Housing: pressure die-cast aluminium, powder-coated. Safety glass transparent.
 Lens, plastic, for ideal light distribution on escape route.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.
 LED included.

Available colours (X): 2 = white, 9 = graphite grey

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

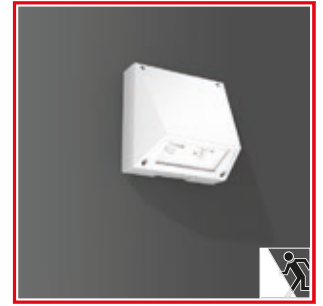
Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					Price Category 23
with lens, for area lighting					
672139.00X	L 117, B 190, H 190	2 x LED 3 W	310 / 310 lm	3 h	autotest
672139.00X.04	L 117, B 190, H 190	2 x LED 3 W	310 / 310 lm	3 h	MultiDigit
672139.00X.07	L 117, B 190, H 190	2 x LED 3 W	310 / 310 lm	3 h	DALI-Sibe
with lens, for escape route illumination					
672141.00X	L 117, B 190, H 190	2 x LED 3 W	250 / 250 lm	3 h	autotest
672141.00X.04	L 117, B 190, H 190	2 x LED 3 W	250 / 250 lm	3 h	MultiDigit
672141.00X.07	L 117, B 190, H 190	2 x LED 3 W	250 / 250 lm	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
with lens, for area lighting				
672140.00X	L 117, B 190, H 190	2 x LED 3 W	310 / 310 lm	
672140.00X.89	L 117, B 190, H 190	2 x LED 3 W	310 / 310 lm	AC-Control
with lens, for escape route illumination				
672142.00X	L 117, B 190, H 190	2 x LED 3 W	250 / 250 lm	
672142.00X.89	L 117, B 190, H 190	2 x LED 3 W	250 / 250 lm	AC-Control



**Ceiling luminaires | Series: Centryxx® IP65plus**Type of Protection: **IP 65** (also approved for use outdoors)

Protection Class: I

Impact Protection: IK03

For escape route illumination

Housing: pressure die-cast aluminium, powder-coated. Safety glass transparent. Lens, plastic, for ideal light distribution on escape route. Ball impact proof in accordance with DIN 18032-03.

Standard Gore™ Protective Vents diaphragm valve to prevent condensed water.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

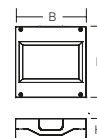
Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					
With narrow beam lens					
672118.002	L 190, B 190, H 56	2 x LED 3 W	320 / 320 lm	3 h	autotest
672118.002.04	L 190, B 190, H 56	2 x LED 3 W	320 / 320 lm	3 h	MultiDigit
672118.002.07	L 190, B 190, H 56	2 x LED 3 W	320 / 320 lm	3 h	DALI-Sibe
with lens, for area lighting					
672135.002	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	3 h	autotest
672135.002.04	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	3 h	MultiDigit
672135.002.07	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	3 h	DALI-Sibe
with lens, for escape route illumination					
672137.002	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	3 h	autotest
672137.002.04	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	3 h	MultiDigit
672137.002.07	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	3 h	DALI-Sibe

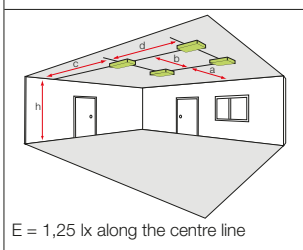


Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
With narrow beam lens				
672119.002	L 190, B 190, H 56	2 x LED 3 W	320 / 320 lm	AC-Control
672119.002.89	L 190, B 190, H 56	2 x LED 3 W	320 / 320 lm	
with lens, for area lighting				
672136.002	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	AC-Control
672136.002.89	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	
with lens, for escape route illumination				
672138.002	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	AC-Control
672138.002.89	L 190, B 190, H 56	2 x LED 3 W	290 / 290 lm	

Spacing table 672118.002					
Luminaire flux Emergency: 320 lm Following values are indicated in m					
h	a	b	c	d	
2,5	2,9	6,1	2,9	6,1	
3,0	2,9	6,1	2,9	6,1	
3,5	3,0	6,1	3,0	6,1	
4,0	3,0	6,4	3,0	6,4	

Spacing table 672135.002					
Luminaire flux Emergency: 290 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,2	9,6	4,2	9,6	
3,0	4,7	10,8	4,7	10,8	
3,5	5,0	11,8	5,0	11,8	
4,0	5,3	12,7	5,3	12,7	

Spacing table 672137.002					
Luminaire flux Emergency: 290 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,0	7,9	3,0	7,9	
3,0	6,9	8,9	3,0	8,0	
3,5	7,8	9,9	3,0	7,9	
4,0	8,6	11,9	3,0	7,1	

Planning guide: Escape route illumination in accord. with EN 1838

Spacing table 672119.002					
Luminaire flux Emergency: 320 lm Following values are indicated in m					
h	a	b	c	d	
2,5	2,9	6,1	2,9	6,1	
3,0	2,9	6,1	2,9	6,1	
3,5	3,0	6,1	3,0	6,1	
4,0	3,0	6,4	3,0	6,4	

Spacing table 672136.002					
Luminaire flux Emergency: 290 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,2	9,6	4,2	9,6	
3,0	4,7	10,8	4,7	10,8	
3,5	5,0	11,8	5,0	11,8	
4,0	5,3	12,7	5,3	12,7	

Spacing table 672138.002					
Luminaire flux Emergency: 290 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,0	7,9	3,0	7,9	
3,0	6,9	8,9	3,0	8,0	
3,5	7,8	9,9	3,0	7,9	
4,0	8,6	11,9	3,0	7,1	

Wall luminaires | Series: Centryxx® W IP65, Centryxx® W IPType of Protection: **IP 65**

Protection Class: I

For escape route illumination

Base: pressure die-cast aluminium, powder-coated. Cover: polycarbonate. LED lamp insert with clear plastic lenses for escape route illumination, can be swivelled vertically. Integral driver.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

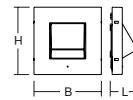
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

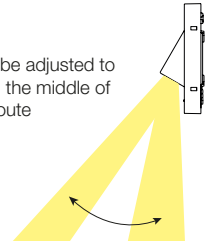
Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



LED can be adjusted to illuminate the middle of escape route



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires					Price Category 23
with lens, for area lighting					
672302.002.1	L 79, B 198, H 198	1 x LED 4 W	350 / 320 lm	3 h	autotest
672302.002.1.04	L 79, B 198, H 198	1 x LED 4 W	350 / 320 lm	3 h	MultiDigit
672302.002.1.07	L 79, B 198, H 198	1 x LED 4 W	350 / 320 lm	3 h	DALI-Sibe
672303.002.1	L 79, B 198, H 198	1 x LED 4 W	350 / 110 lm	8 h	autotest
672303.002.1.04	L 79, B 198, H 198	1 x LED 4 W	350 / 110 lm	8 h	MultiDigit
672303.002.1.07	L 79, B 198, H 198	1 x LED 4 W	350 / 110 lm	8 h	DALI-Sibe
with lens, for escape route illumination					
672302.002	L 79, B 198, H 198	1 x LED 4 W	300 / 270 lm	3 h	autotest
672302.002.04	L 79, B 198, H 198	1 x LED 4 W	300 / 270 lm	3 h	MultiDigit
672302.002.07	L 79, B 198, H 198	1 x LED 4 W	300 / 270 lm	3 h	DALI-Sibe
672303.002	L 79, B 198, H 198	1 x LED 4 W	300 / 100 lm	8 h	autotest
672303.002.04	L 79, B 198, H 198	1 x LED 4 W	300 / 100 lm	8 h	MultiDigit
672303.002.07	L 79, B 198, H 198	1 x LED 4 W	300 / 100 lm	8 h	DALI-Sibe

Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system				Price Category 24
with lens, for area lighting				
672305.002.1	L 79, B 198, H 198	1 x LED 2 W	190 / 190 lm	
672305.002.1.89	L 79, B 198, H 198	1 x LED 2 W	190 / 190 lm	AC-Control
672304.002.1	L 79, B 198, H 198	1 x LED 4 W	350 / 350 lm	
672304.002.1.89	L 79, B 198, H 198	1 x LED 4 W	350 / 350 lm	AC-Control
with lens, for escape route illumination				
672305.002	L 79, B 198, H 198	1 x LED 2 W	170 / 170 lm	
672305.002.89	L 79, B 198, H 198	1 x LED 2 W	170 / 170 lm	AC-Control
672304.002	L 79, B 198, H 198	1 x LED 4 W	300 / 300 lm	
672304.002.89	L 79, B 198, H 198	1 x LED 4 W	300 / 300 lm	AC-Control





LUCIO

Universal downlight for surface or recessed mounting

- Wide luminaire spacing for escape routes thanks to special lenses
- Top quality LED technology
- Very low maintenance costs
- Compact design
- Easy to install
- Can be mounted on or in a ceiling for universal use

Universal downlight for surface or recessed mounting | Series: Lucio

Type of Protection: IP 30
Protection Class: II
Ceiling Thickness: 5-25 mm
Impact Protection: IK03

For escape route illumination

Housing: plastic. Accessories for recessed and surface mounting on the ceiling are included.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

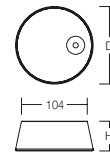
Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires

Price Category 23

Surface installation: D 120, H 45 mm
Mounting: D 120, H 3, DA 105, HE 42 mm
with lens

671918.002 .Q	D 120, H 3	1 x LED 3 W	80 / 80 lm	3 h	autotest
671918.002.07 .Q	D 120, H 3	1 x LED 3 W	80 / 80 lm	3 h	DALI-Sibe
without lens					
671917.002 .Q	D 120, H 3	1 x LED 3 W	130 / 130 lm	3 h	autotest
671917.002.07	D 120, H 3	1 x LED 3 W	130 / 130 lm	3 h	DALI-Sibe

Surface installation: D 120, H 45 mm
Mounting: D 120, H 3, DA 105, HE 46 mm
with lens (High Power)

672169.002	D 120, H 3	1 x LED 3 W	140 / 140 lm	3 h	autotest
672169.002.07	D 120, H 3	1 x LED 3 W	140 / 140 lm	3 h	DALI-Sibe

Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency
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Luminaires for central battery system

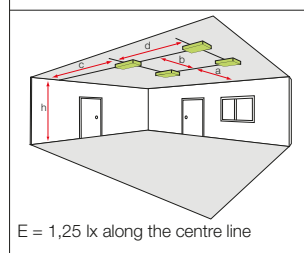
Price Category 24

Surface installation: D 120, H 45 mm
Recessed installation: D 120, H 3, DA 105, HE 42 mm

671916.002 .Q	D 120, H 3	1 x LED 2 W	130 / 130 lm
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Planning guide: Escape route illumination in accord. with EN 1838



Spacing table 671918.002

Luminaire flux
Emergency: 80 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,9	3,0	6,9
3,0	3,0	7,9	3,0	7,9
3,5	0,0	1,8	0,0	1,9
4,0	0,0	1,0	0,0	1,1

Spacing table 671917.002

Luminaire flux
Emergency: 130 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,1	3,0	6,1
3,0	3,0	6,8	3,0	6,8
3,5	3,3	7,6	3,3	7,6
4,0	3,4	8,3	3,4	8,3

Spacing table 672169.002

Luminaire flux
Emergency: 140 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,3	14,2	3,0	6,7
3,0	3,3	12,7	2,9	6,1
3,5	3,0	9,5	2,9	6,1
4,0	3,0	8,3	2,9	6,1

Spacing table 671916.002

Luminaire flux
Emergency: 130 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,1	3,0	6,1
3,0	3,0	6,8	3,0	6,8
3,5	3,3	7,6	3,3	7,6
4,0	3,4	8,3	3,4	8,3



TURIA®

Recessed ceiling luminaires

- Top quality LED technology
- Specially calculated thermal management
- Very low maintenance costs
- LED rated life 50,000 h
- Easy to install
- Extremely low profile
- Inconspicuous design
- The self-contained module and battery can be inserted and removed through the ceiling opening

Legends for escape route identification -

ISO 7010 | DIN 4844

Background colour: green



3003



3004



3006



3005

Special legends on request



1026



1074



1092



1019

Recessed ceiling luminaires | Series: Turia®

Type of Protection: IP 20, IP 30
Protection Class: II, I (for .88/.89)
Ceiling Thickness: 15-35 mm, 5-25 mm
Impact Protection: IK03

For escape route illumination

Housing: die-cast aluminium. Bezel ring: plastic. Emergency kit and battery in separate box with connecting cable.

LED included.

Available colours (X): 2 = white, 3 = black

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

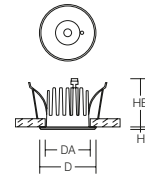
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires

Price Category 23

42

Ceiling cut out DA 42 mm, HE 160 mm

Operating mode BS

671920.002.Q	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	autotest
671920.002.07	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	DALI-Sibe
671920.003	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	autotest
671920.003.07	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	DALI-Sibe

Operating mode BS / DS

671921.002	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	autotest
671921.002.07	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	DALI-Sibe
671921.003	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	autotest
671921.003.07	D 50, H 2	1 x LED 2 W	150 / 150 lm	3 h	DALI-Sibe
671982.002.07	D 50, H 2	1 x LED 2 W	150 / 150 lm	8 h	DALI-Sibe

Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
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Luminaires for central battery system

Price Category 24

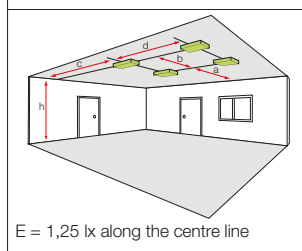
42

Ceiling cut out DA 42 mm, HE 160 mm

671919.002	D 50, H 2	1 x LED 2 W	150 / 150 lm	
671919.002.89	D 50, H 2	1 x LED 2 W	150 / 150 lm	AC-Control
671919.003	D 50, H 2	1 x LED 2 W	150 / 150 lm	
671919.003.89	D 50, H 2	1 x LED 2 W	150 / 150 lm	AC-Control



Planning guide: Escape route illumination in accord. with EN 1838



Spacing table 671920.002

Luminaire flux
Emergency: 150 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,9	3,0	6,9
3,0	3,2	7,9	3,2	7,9
3,5	3,4	8,5	3,4	8,5
4,0	3,5	9,0	3,5	9,0

Spacing table 671919.002

Luminaire flux
Emergency: 150 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,9	3,0	6,9
3,0	3,2	7,9	3,2	7,9
3,5	3,4	8,5	3,4	8,5
4,0	3,5	9,0	3,5	9,0

**Recessed ceiling luminaires | Series: Turia® L**

Type of Protection: IP 20, IP 30
Protection Class: II
Ceiling Thickness: 1-35 mm, 15-35 mm
Impact Protection: IK03

For escape route illumination

Housing: die-cast aluminium. Bezel ring: plastic, white. Emergency kit and battery in separate box with connecting cable.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

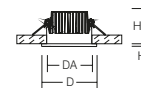
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires**Price Category 23****Ceiling cut out DA 54 mm, HE 185 mm with lens, for area lighting**

672016.002.Q	D 61, H 4	1 x LED 2,5 W	140 / 140 lm	3 h	autotest
672016.002.04	D 61, H 4	1 x LED 2,5 W	140 / 140 lm	3 h	MultiDigit
672016.002.07	D 61, H 4	1 x LED 2,5 W	140 / 140 lm	3 h	DALI-Sibe
672017.002.07	D 61, H 4	1 x LED 2,5 W	130 / 110 lm	8 h	DALI-Sibe

with lens, for escape route illumination

672002.002	D 61, H 4	1 x LED 2,5 W	110 / 110 lm	3 h	autotest
672002.002.04	D 61, H 4	1 x LED 2,5 W	110 / 110 lm	3 h	MultiDigit
672002.002.07	D 61, H 4	1 x LED 1,8 W	110 / 110 lm	3 h	DALI-Sibe
672003.002.07	D 61, H 4	1 x LED 2,5 W	110 / 110 lm	8 h	DALI-Sibe



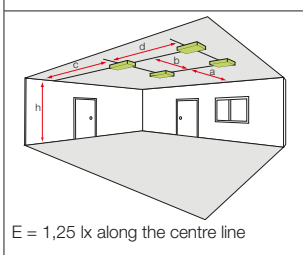
Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
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Luminaires for central battery system**Price Category 24****Ceiling cut out DA 54 mm, HE 185 mm with lens, for area lighting**

672014.002	D 61, H 5	1 x LED 2,5 W	170 / 170 lm	
672014.002.89	D 61, H 5	1 x LED 2,5 W	160 / 160 lm	AC-Control

with lens, for escape route illumination

672000.002	D 61, H 4	1 x LED 2,5 W	170 / 170 lm	
672000.002.89	D 61, H 4	1 x LED 2,5 W	130 / 130 lm	AC-Control

Planning guide: Escape route illumination in accord. with EN 1838**Spacing table
672016.002**

Luminaire flux
Emergency: 140 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,5	8,2	3,5	8,2
3,0	3,9	9,1	3,9	9,1
3,5	4,2	9,9	4,2	9,9
4,0	3,0	10,6	3,0	10,6

**Spacing table
672002.002**

Luminaire flux
Emergency: 110 lm
Following values are indicated in m

h	a	b	c	d
2,5	6,3	14,8	2,9	6,1
3,0	6,7	16,4	2,9	6,1
3,5	7,2	17,6	2,9	6,1
4,0	7,7	18,4	2,9	6,1

**Spacing table
672017.002.07**

Luminaire flux
Emergency: 105 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,4	8,0	3,4	8,0
3,0	3,8	8,9	3,8	8,9
3,5	4,1	9,7	4,1	9,7
4,0	0,0	8,2	0,0	8,2

**Spacing table
672014.002**

Luminaire flux
Emergency: 170 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,6	8,5	3,6	8,5
3,0	4,0	9,5	4,0	9,5
3,5	4,4	10,3	4,4	10,3
4,0	4,6	11,1	4,6	11,1

**Spacing table
672014.002.89**

Luminaire flux
Emergency: 160 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,6	8,4	3,6	8,4
3,0	4,0	9,4	4,0	9,4
3,5	4,4	10,2	4,4	10,2
4,0	4,5	11,0	4,5	11,0

**Spacing table
672000.002**

Luminaire flux
Emergency: 170 lm
Following values are indicated in m

h	a	b	c	d
2,5	7,0	15,9	2,9	6,1
3,0	7,7	18,1	2,9	6,1
3,5	8,1	19,7	2,9	6,1
4,0	8,6	21,2	2,9	6,1

**Spacing table
672000.002.89**

Luminaire flux
Emergency: 130 lm
Following values are indicated in m

h	a	b	c	d
2,5	6,5	15,3	2,9	6,1
3,0	7,0	17,1	2,9	6,1
3,5	7,5	18,5	2,9	6,1
4,0	8,1	19,5	2,9	6,1

Recessed ceiling luminaires | Series: Turia® RZ

Type of Protection: IP 20
Protection Class: II
Ceiling Thickness: 1-35 mm
Distance of recognition: 14 m

For escape route identification

Housing: die-cast aluminium. Display panel: highly transparent panel, plastic, with legend on one side/both sides. Bezel ring: plastic, white. Emergency kit and battery in separate box with connecting cable.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

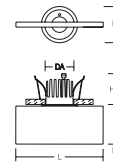
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires

Price Category 23

Ceiling cut out DA 54 mm, HE 185 mm

Viewing distance: 14 m

672053.002	L 145, B 61, H 83	1 x LED 2,5 W	3 h	autotest
672053.002.04	L 145, B 61, H 83	1 x LED 2,5 W	3 h	MultiDigit
672053.002.07	L 145, B 61, H 83	1 x LED 2,5 W	3 h	DALI-Sibe
672104.002.07	L 145, B 61, H 83	1 x LED 2,5 W	8 h	DALI-Sibe

Reference number	Dimensions	Lamp	Monitoring module
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Luminaires for central battery system

Price Category 24

Ceiling cut out DA 54 mm, HE 185 mm

Viewing distance: 14 m

672055.002	L 145, B 61, H 83	1 x LED 2,5 W	
672055.002.89	L 145, B 61, H 83	1 x LED 2,5 W	AC-Control





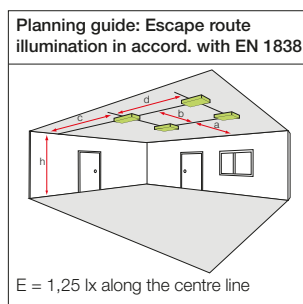
EDO

Retrofit set, Lay-in luminaires, Recessed ceiling luminaires

- Top quality LED technology
- Wide luminaire spacing for escape route illumination
- Very low maintenance costs
- LED rated life 50,000 h
- Easy to install
- Compact design
- Inconspicuous design

Spacing table 672161.002.04					
Luminaire flux Emergency: 90 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,9	3,0	6,9	
3,0	3,0	7,3	3,0	7,3	
3,5	3,0	7,4	3,0	7,4	
4,0	3,0	7,4	3,0	7,4	

Spacing table 672208.002					
Luminaire flux Emergency: 80 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,5	3,0	6,5	
3,0	3,0	6,9	3,0	6,9	
3,5	3,0	7,1	3,0	7,1	
4,0	3,0	7,1	3,0	7,1	



Spacing table 671927.002					
Luminaire flux Emergency: 110 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	5,9	3,0	5,9	
3,0	3,0	6,9	3,0	6,9	
3,5	3,0	7,9	3,0	7,9	
4,0	3,0	8,2	3,0	8,2	

Spacing table 671936.002					
Luminaire flux Emergency: 110 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	5,9	3,0	5,9	
3,0	3,0	6,9	3,0	6,9	
3,5	3,0	7,9	3,0	7,9	
4,0	3,0	8,2	3,0	8,2	

Retrofit set | Series: Edo 3

Type of Protection: IP 20
 Protection Class: II
 Ceiling Thickness: 1-10 mm, 1-13 mm
 Impact Protection: IK03

For escape route illumination

Housing: plastic, white. PCB and battery in separate gearbox, 400 mm cable.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires

Price Category 23

cut out DA 10 mm

672161.002.04	D 12, H 2	1 x LED 0,9 W	90 / 90 lm	3 h	MultiDigit
672161.002.07	D 12, H 2	1 x LED 0,9 W	90 / 90 lm	3 h	DALI-Sibe

Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
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Luminaires for central battery system

Price Category 24

cut out DA 10 mm

672208.002	D 12, L 650, H 2	1 x LED 0,8 W	80 / 80 lm	
672208.002.89	D 12, L 865, H 2	1 x LED 0,8 W	80 / 80 lm	AC-Control


Recessed ceiling luminaires | Series: Edo 4

Type of Protection: IP 20, IP 30
 Protection Class: II
 Ceiling Thickness: 15-35 mm
 Impact Protection: IK03

For escape route illumination

Housing: die-cast aluminium. Bezel ring: plastic. Control gear in separate box with connecting cable.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

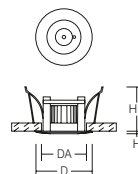
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires

Price Category 23

Ceiling cut out DA 38 mm, HE 160 mm
Operating mode BS

671927.002	D 50, H 3	1 x LED 2 W	110 / 110 lm	3 h	autotest
671927.002.07	D 50, H 3	1 x LED 2 W	110 / 110 lm	3 h	DALI-Sibe

Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Monitoring module
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Luminaires for central battery system

Price Category 24

Ceiling cut out DA 38 mm, HE 160 mm

671936.002	D 50, H 3	1 x LED 2 W	110 / 110 lm	
671936.002.89	D 50, H 3	1 x LED 2 W	110 / 110 lm	AC-Control





TOLEDO FLAT

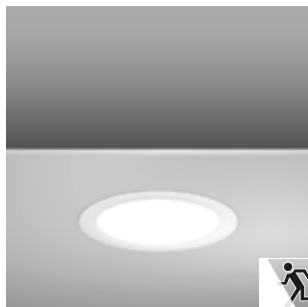
Recessed downlights

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems. As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Wide luminaire spacing for escape route illumination
- Very low maintenance costs thanks to automatic self-test
- Ultra thin recessed LED downlight
- Lightguide and diffuser made of non-yellowing PMMA
- LED rated life 50,000 h (L70, B10)
- Colour temperature 3,000 K and 4,000 K
- Easy to install thanks to tool-free spring fastening system
- Can be directly covered with thermal insulation material (does not apply for D 495 mm diameter)
- Separate gearbox with connecting cable



Further luminaires of this series, see:
Indoor lighting | Surface mounted downlights
Indoor lighting | Recessed downlights



**Recessed downlights | Series: Toledo Flat Round**

Type of Protection: **IP 40**
 Protection Class: I
 Ceiling Thickness: 1-20 mm

For escape route illumination

Housing: die-cast aluminium. Light guide and plastic cover made of non-yellowing PMMA, opal matt. Emergency kit and battery in separate box with connecting cable.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

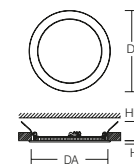
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB

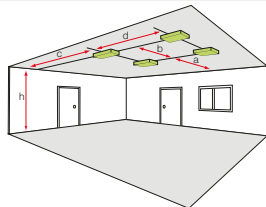


Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires							
Ceiling cut out DA 128 mm, HE 150							
672220.002	D 148, H 2	1 x LED 5 W	830	390 / 310 lm	3 h	autotest	
672220.002.04	D 148, H 2	1 x LED 5 W	830	390 / 310 lm	3 h	MultiDigit	
672220.002.07	D 148, H 2	1 x LED 5 W	830	390 / 310 lm	3 h	DALI-Sibe	
672221.002	D 148, H 2	1 x LED 5 W	830	390 / 140 lm	8 h	autotest	
672221.002.04	D 148, H 2	1 x LED 5 W	830	390 / 140 lm	8 h	MultiDigit	
672221.002.07	D 148, H 2	1 x LED 5 W	830	390 / 140 lm	8 h	DALI-Sibe	
672220.002.1	D 148, H 2	1 x LED 5 W	840	410 / 330 lm	3 h	autotest	
672220.002.1.04	D 148, H 2	1 x LED 5 W	840	410 / 330 lm	3 h	MultiDigit	
672220.002.1.07	D 148, H 2	1 x LED 5 W	840	410 / 330 lm	3 h	DALI-Sibe	
672221.002.1	D 148, H 2	1 x LED 5 W	840	410 / 150 lm	8 h	autotest	
672221.002.1.04	D 148, H 2	1 x LED 5 W	840	410 / 150 lm	8 h	MultiDigit	
672221.002.1.07	D 148, H 2	1 x LED 5 W	840	410 / 150 lm	8 h	DALI-Sibe	
Ceiling cut out DA 170 mm, HE 120							
672222.002	D 190, H 3	1 x LED 9 W	830	740 / 370 lm	3 h	autotest	
672222.002.04	D 190, H 3	1 x LED 9 W	830	740 / 370 lm	3 h	MultiDigit	
672222.002.07	D 190, H 3	1 x LED 9 W	830	740 / 370 lm	3 h	DALI-Sibe	
672223.002	D 190, H 3	1 x LED 9 W	830	740 / 170 lm	8 h	autotest	
672223.002.04	D 190, H 3	1 x LED 9 W	830	740 / 170 lm	8 h	MultiDigit	
672223.002.07	D 190, H 3	1 x LED 9 W	830	740 / 170 lm	8 h	DALI-Sibe	
672222.002.1	D 190, H 3	1 x LED 9 W	840	840 / 350 lm	3 h	autotest	
672222.002.1.04	D 190, H 3	1 x LED 9 W	840	840 / 350 lm	3 h	MultiDigit	
672222.002.1.07	D 190, H 3	1 x LED 9 W	840	840 / 350 lm	3 h	DALI-Sibe	
672223.002.1	D 190, H 3	1 x LED 9 W	840	840 / 160 lm	8 h	autotest	
672223.002.1.04	D 190, H 3	1 x LED 9 W	840	840 / 160 lm	8 h	MultiDigit	
672223.002.1.07	D 190, H 3	1 x LED 9 W	840	840 / 160 lm	8 h	DALI-Sibe	
Ceiling cut out DA 234 mm, HE 100							
672224.002	D 255, H 3	1 x LED 18 W	830	1650 / 450 lm	3 h	autotest	
672224.002.04	D 255, H 3	1 x LED 18 W	830	1650 / 450 lm	3 h	MultiDigit	
672224.002.07	D 255, H 3	1 x LED 18 W	830	1650 / 450 lm	3 h	DALI-Sibe	
672225.002	D 255, H 3	1 x LED 18 W	830	1650 / 180 lm	8 h	autotest	
672225.002.04	D 255, H 3	1 x LED 18 W	830	1650 / 180 lm	8 h	MultiDigit	
672225.002.07	D 255, H 3	1 x LED 18 W	830	1650 / 180 lm	8 h	DALI-Sibe	
672224.002.1	D 255, H 3	1 x LED 18 W	840	1700 / 460 lm	3 h	autotest	
672224.002.1.04	D 255, H 3	1 x LED 18 W	840	1700 / 460 lm	3 h	MultiDigit	
672224.002.1.07	D 255, H 3	1 x LED 18 W	840	1700 / 460 lm	3 h	DALI-Sibe	
672225.002.1	D 255, H 3	1 x LED 18 W	840	1700 / 180 lm	8 h	autotest	
672225.002.1.04	D 255, H 3	1 x LED 18 W	840	1700 / 180 lm	8 h	MultiDigit	
672225.002.1.07	D 255, H 3	1 x LED 18 W	840	1700 / 180 lm	8 h	DALI-Sibe	
Ceiling cut out DA 288 mm, HE 90							
672226.002	D 317, H 3	1 x LED 24 W	830	2200 / 430 lm	3 h	autotest	
672226.002.04	D 317, H 3	1 x LED 24 W	830	2200 / 430 lm	3 h	MultiDigit	
672226.002.07	D 317, H 3	1 x LED 24 W	830	2200 / 430 lm	3 h	DALI-Sibe	
672227.002	D 317, H 3	1 x LED 24 W	830	2200 / 180 lm	8 h	autotest	
672227.002.04	D 317, H 3	1 x LED 24 W	830	2200 / 180 lm	8 h	MultiDigit	
672227.002.07	D 317, H 3	1 x LED 24 W	830	2200 / 180 lm	8 h	DALI-Sibe	
672226.002.1	D 317, H 3	1 x LED 24 W	840	2300 / 440 lm	3 h	autotest	
672226.002.1.04	D 317, H 3	1 x LED 24 W	840	2300 / 440 lm	3 h	MultiDigit	
672226.002.1.07	D 317, H 3	1 x LED 24 W	840	2300 / 440 lm	3 h	DALI-Sibe	
672227.002.1	D 317, H 3	1 x LED 24 W	840	2300 / 180 lm	8 h	autotest	
672227.002.1.04	D 317, H 3	1 x LED 24 W	840	2300 / 180 lm	8 h	MultiDigit	
672227.002.1.07	D 317, H 3	1 x LED 24 W	840	2300 / 180 lm	8 h	DALI-Sibe	

Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module	Price Category 24
Luminaires for central battery system						
128 Ceiling cut out DA 128 mm						
672228.002	D 148, H 2, HE 35	1 x LED 5 W	830	390 / 390 lm		
672228.002.89	D 148, H 2, HE 100	1 x LED 5 W	830	390 / 390 lm	AC-Control	
672228.002.1	D 148, H 2, HE 35	1 x LED 5 W	840	410 / 410 lm		
672228.002.1.89	D 148, H 2, HE 100	1 x LED 5 W	840	410 / 410 lm	AC-Control	
170 Ceiling cut out DA 170 mm						
672229.002	D 190, H 3, HE 35	1 x LED 9 W	830	740 / 740 lm		
672229.002.89	D 190, H 3, HE 60	1 x LED 9 W	830	740 / 740 lm	AC-Control	
672229.002.1	D 190, H 3, HE 35	1 x LED 9 W	840	840 / 840 lm		
672229.002.1.89	D 190, H 3, HE 60	1 x LED 9 W	840	840 / 840 lm	AC-Control	
234 Ceiling cut out DA 234 mm						
672230.002	D 255, H 3, HE 35	1 x LED 18 W	830	1650 / 1650 lm		
672230.002.89	D 255, H 3, HE 40	1 x LED 18 W	830	1650 / 1650 lm	AC-Control	
672230.002.1	D 255, H 3, HE 35	1 x LED 18 W	840	1700 / 1700 lm		
672230.002.1.89	D 255, H 3, HE 40	1 x LED 18 W	840	1700 / 1700 lm	AC-Control	
288 Ceiling cut out DA 288 mm						
672231.002	D 317, H 3, HE 35	1 x LED 24 W	830	2200 / 2200 lm		
672231.002.89	D 317, H 3, HE 40	1 x LED 24 W	830	2200 / 2200 lm	AC-Control	
672231.002.1	D 317, H 3, HE 35	1 x LED 24 W	840	2300 / 2300 lm		
672231.002.1.89	D 317, H 3, HE 40	1 x LED 24 W	840	2300 / 2300 lm	AC-Control	



Planning guide: Escape route illumination in accord. with EN 1838



E = 1,25 lx along the centre line

Spacing table 672220.002					
Luminaire flux Emergency: 310 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,9	9,7	3,9	9,7	
3,0	4,1	10,4	4,1	10,4	
3,5	4,3	11,1	4,3	11,1	
4,0	4,4	11,6	4,4	11,6	

Spacing table 672221.002					
Luminaire flux Emergency: 140 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	7,6	3,0	7,6	
3,0	3,0	8,0	3,0	8,0	
3,5	3,0	8,3	3,0	8,3	
4,0	3,0	8,5	3,0	8,5	

Spacing table 672222.002					
Luminaire flux Emergency: 370 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,2	10,3	4,2	10,3	
3,0	4,4	11,1	4,4	11,1	
3,5	4,6	11,8	4,6	11,8	
4,0	4,8	12,4	4,8	12,4	

Spacing table 672223.002					
Luminaire flux Emergency: 160 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,1	8,0	3,1	8,0	
3,0	3,2	8,5	3,2	8,5	
3,5	3,2	8,8	3,2	8,8	
4,0	3,2	9,0	3,2	9,0	

Spacing table 672224.002					
Luminaire flux Emergency: 450 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,4	10,8	4,4	10,8	
3,0	4,7	11,7	4,7	11,7	
3,5	4,9	12,5	4,9	12,5	
4,0	5,1	13,1	5,1	13,1	

Spacing table 672225.002					
Luminaire flux Emergency: 180 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,2	8,2	3,2	8,2	
3,0	3,3	8,7	3,3	8,7	
3,5	3,4	9,1	3,4	9,1	
4,0	3,4	9,4	3,4	9,4	

Spacing table 672226.002					
Luminaire flux Emergency: 430 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	10,6	4,3	10,6	
3,0	4,6	11,5	4,6	11,5	
3,5	4,8	12,2	4,8	12,2	
4,0	5,0	12,9	5,0	12,9	

Spacing table 672227.002					
Luminaire flux Emergency: 180 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,2	8,2	3,2	8,2	
3,0	3,3	8,7	3,3	8,7	
3,5	3,4	9,1	3,4	9,1	
4,0	3,4	9,4	3,4	9,4	

Spacing table 672230.002.1					
Luminaire flux Emergency: 1700 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,4	15,5	6,4	15,5	
3,0	7,0	17,0	7,0	17,0	
3,5	7,5	18,2	7,5	18,2	
4,0	7,9	19,4	7,9	19,4	

Spacing table 672229.002					
Luminaire flux Emergency: 740 lm Following values are indicated in m					
h	a	b	c	d	
2,5	5,1	12,5	5,1	12,5	
3,0	5,5	13,6	5,5	13,6	
3,5	5,9	14,5	5,9	14,5	
4,0	6,1	15,3	6,1	15,3	

Spacing table 672230.002					
Luminaire flux Emergency: 1650 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,4	15,4	6,4	15,4	
3,0	7,0	16,8	7,0	16,8	
3,5	7,4	18,1	7,4	18,1	
4,0	7,9	19,2	7,9	19,2	

Spacing table 672231.002					
Luminaire flux Emergency: 2200 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,8	16,5	6,8	16,5	
3,0	7,5	18,0	7,5	18,0	
3,5	8,0	19,4	8,0	19,4	
4,0	8,5	20,6	8,5	20,6	

**Recessed downlights | Series: Toledo Flat Square**

Type of Protection: **IP 40**
 Protection Class: I
 Ceiling Thickness: 1-20 mm

For escape route illumination

Housing: die-cast aluminium. Light guide and plastic cover made of non-yellowing PMMA, opal matt. Emergency kit and battery in separate box with connecting cable.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

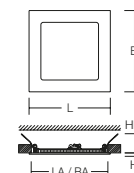
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB

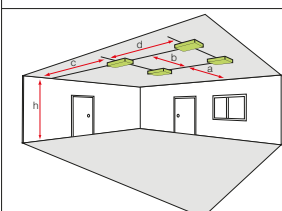


Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires							
Ceiling cut out LA 96 x BA 96 mm, HE 170							
672233.002	L 110, B 110, H 3	1 x LED 5 W	830	370 / 280 lm	3 h	autotest	
672233.002.04	L 110, B 110, H 3	1 x LED 5 W	830	370 / 280 lm	3 h	MultiDigit	
672233.002.07	L 110, B 110, H 3	1 x LED 5 W	830	370 / 280 lm	3 h	DALI-Sibe	
672234.002	L 110, B 110, H 3	1 x LED 5 W	830	370 / 120 lm	8 h	autotest	
672234.002.04	L 110, B 110, H 3	1 x LED 5 W	830	370 / 120 lm	8 h	MultiDigit	
672234.002.07	L 110, B 110, H 3	1 x LED 5 W	830	370 / 120 lm	8 h	DALI-Sibe	
672233.002.1	L 110, B 110, H 3	1 x LED 5 W	840	390 / 330 lm	3 h	autotest	
672233.002.1.04	L 110, B 110, H 3	1 x LED 5 W	840	390 / 330 lm	3 h	MultiDigit	
672233.002.1.07	L 110, B 110, H 3	1 x LED 5 W	840	390 / 330 lm	3 h	DALI-Sibe	
672234.002.1	L 110, B 110, H 3	1 x LED 5 W	840	390 / 130 lm	8 h	autotest	
672234.002.1.04	L 110, B 110, H 3	1 x LED 5 W	840	390 / 130 lm	8 h	MultiDigit	
672234.002.1.07	L 110, B 110, H 3	1 x LED 5 W	840	390 / 130 lm	8 h	DALI-Sibe	
Ceiling cut out LA 156 x BA 156 mm, HE 110							
672235.002	L 172, B 172, H 3	1 x LED 9 W	830	730 / 350 lm	3 h	autotest	
672235.002.04	L 172, B 172, H 3	1 x LED 9 W	830	730 / 350 lm	3 h	MultiDigit	
672235.002.07	L 172, B 172, H 3	1 x LED 9 W	830	730 / 350 lm	3 h	DALI-Sibe	
672236.002	L 172, B 172, H 3	1 x LED 9 W	830	730 / 160 lm	8 h	autotest	
672236.002.04	L 172, B 172, H 3	1 x LED 9 W	830	730 / 160 lm	8 h	MultiDigit	
672236.002.07	L 172, B 172, H 3	1 x LED 9 W	830	730 / 160 lm	8 h	DALI-Sibe	
672235.002.1	L 172, B 172, H 3	1 x LED 9 W	840	750 / 340 lm	3 h	autotest	
672235.002.1.04	L 172, B 172, H 3	1 x LED 9 W	840	750 / 340 lm	3 h	MultiDigit	
672235.002.1.07	L 172, B 172, H 3	1 x LED 9 W	840	750 / 340 lm	3 h	DALI-Sibe	
672236.002.1	L 172, B 172, H 3	1 x LED 9 W	840	730 / 150 lm	8 h	autotest	
672236.002.1.04	L 172, B 172, H 3	1 x LED 9 W	840	730 / 150 lm	8 h	MultiDigit	
672236.002.1.07	L 172, B 172, H 3	1 x LED 9 W	840	730 / 150 lm	8 h	DALI-Sibe	
Ceiling cut out LA 208 x BA 208 mm, HE 100							
672237.002	L 225, B 225, H 3	1 x LED 18 W	830	1600 / 440 lm	3 h	autotest	
672237.002.04	L 225, B 225, H 3	1 x LED 18 W	830	1600 / 440 lm	3 h	MultiDigit	
672237.002.07	L 225, B 225, H 3	1 x LED 18 W	830	1600 / 440 lm	3 h	DALI-Sibe	
672238.002	L 225, B 225, H 3	1 x LED 18 W	830	1600 / 170 lm	8 h	autotest	
672238.002.04	L 225, B 225, H 3	1 x LED 18 W	830	1600 / 170 lm	8 h	MultiDigit	
672238.002.07	L 225, B 225, H 3	1 x LED 18 W	830	1600 / 170 lm	8 h	DALI-Sibe	
672237.002.1	L 225, B 225, H 3	1 x LED 18 W	840	1650 / 450 lm	3 h	autotest	
672237.002.1.04	L 225, B 225, H 3	1 x LED 18 W	840	1650 / 450 lm	3 h	MultiDigit	
672237.002.1.07	L 225, B 225, H 3	1 x LED 18 W	840	1650 / 450 lm	3 h	DALI-Sibe	
672238.002.1	L 225, B 225, H 3	1 x LED 18 W	840	1650 / 180 lm	8 h	autotest	
672238.002.1.04	L 225, B 225, H 3	1 x LED 18 W	840	1650 / 180 lm	8 h	MultiDigit	
672238.002.1.07	L 225, B 225, H 3	1 x LED 18 W	840	1650 / 180 lm	8 h	DALI-Sibe	
Ceiling cut out LA 280 x BA 280 mm, HE 90							
672239.002	L 300, B 300, H 3	1 x LED 24 W	830	2100 / 420 lm	3 h	autotest	
672239.002.04	L 300, B 300, H 3	1 x LED 24 W	830	2100 / 420 lm	3 h	MultiDigit	
672239.002.07	L 300, B 300, H 3	1 x LED 24 W	830	2100 / 420 lm	3 h	DALI-Sibe	
672240.002	L 300, B 300, H 3	1 x LED 24 W	830	2050 / 170 lm	8 h	autotest	
672240.002.04	L 300, B 300, H 3	1 x LED 24 W	830	2050 / 170 lm	8 h	MultiDigit	
672240.002.07	L 300, B 300, H 3	1 x LED 24 W	830	2050 / 170 lm	8 h	DALI-Sibe	
672239.002.1	L 300, B 300, H 3	1 x LED 24 W	840	2200 / 430 lm	3 h	autotest	
672239.002.1.04	L 300, B 300, H 3	1 x LED 24 W	840	2200 / 430 lm	3 h	MultiDigit	
672239.002.1.07	L 300, B 300, H 3	1 x LED 24 W	840	2200 / 430 lm	3 h	DALI-Sibe	
672240.002.1	L 300, B 300, H 3	1 x LED 24 W	840	2200 / 180 lm	8 h	autotest	
672240.002.1.04	L 300, B 300, H 3	1 x LED 24 W	840	2200 / 180 lm	8 h	MultiDigit	
672240.002.1.07	L 300, B 300, H 3	1 x LED 24 W	840	2200 / 180 lm	8 h	DALI-Sibe	

Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Price Category 24					
96 x 96	Ceiling cut out LA 96 x BA 96 mm				
672241.002	L 110, B 110, H 3, HE 40	1 x LED 5 W	830	370 / 280 lm	
672241.002.89	L 110, B 110, H 3, HE 100	1 x LED 5 W	830	370 / 280 lm	AC-Control
672241.002.1	L 110, B 110, H 3, HE 40	1 x LED 5 W	840	390 / 330 lm	
672241.002.1.89	L 110, B 110, H 3, HE 100	1 x LED 5 W	840	390 / 330 lm	AC-Control
156 x 156	Ceiling cut out LA 156 x BA 156 mm				
672242.002	L 172, B 172, H 3, HE 35	1 x LED 9 W	830	730 / 730 lm	
672242.002.89	L 172, B 172, H 3, HE 60	1 x LED 9 W	830	730 / 730 lm	AC-Control
672242.002.1	L 172, B 172, H 3, HE 35	1 x LED 9 W	840	750 / 750 lm	
672242.002.1.89	L 172, B 172, H 3, HE 60	1 x LED 9 W	840	750 / 750 lm	AC-Control
208 x 208	Ceiling cut out LA 208 x BA 208 mm				
672243.002	L 225, B 225, H 3, HE 35	1 x LED 18 W	830	1600 / 1600 lm	
672243.002.89	L 225, B 225, H 3, HE 40	1 x LED 18 W	830	1600 / 1600 lm	AC-Control
672243.002.1	L 225, B 225, H 3, HE 35	1 x LED 18 W	840	1650 / 1650 lm	
672243.002.1.89	L 225, B 225, H 3, HE 40	1 x LED 18 W	840	1650 / 1650 lm	AC-Control
280 x 280	Ceiling cut out LA 280 x BA 280 mm				
672244.002	L 300, B 300, H 3, HE 35	1 x LED 24 W	830	2100 / 2100 lm	
672244.002.89	L 300, B 300, H 3, HE 40	1 x LED 24 W	830	2100 / 2100 lm	AC-Control
672244.002.1	L 300, B 300, H 3, HE 35	1 x LED 24 W	840	2200 / 2200 lm	
672244.002.1.89	L 300, B 300, H 3, HE 40	1 x LED 24 W	840	2200 / 2200 lm	AC-Control



Planning guide: Escape route illumination in accord. with EN 1838



E = 1,25 lx along the centre line

Spacing table 672233.002					
Luminaire flux Emergency: 280 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,8	9,5	3,8	9,5	
3,0	4,0	10,2	4,0	10,2	
3,5	4,1	10,7	4,1	10,7	
4,0	4,2	11,2	4,2	11,2	

Spacing table 672234.002					
Luminaire flux Emergency: 120 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	7,2	3,0	7,2	
3,0	3,0	7,6	3,0	7,6	
3,5	3,0	7,8	3,0	7,8	
4,0	3,0	7,9	3,0	7,9	

Spacing table 672235.002					
Luminaire flux Emergency: 350 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,1	10,2	4,1	10,2	
3,0	4,3	10,9	4,3	10,9	
3,5	4,5	11,6	4,5	11,6	
4,0	4,7	12,1	4,7	12,1	

Spacing table 672236.002					
Luminaire flux Emergency: 160 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,1	8,0	3,1	8,0	
3,0	3,2	8,5	3,2	8,5	
3,5	3,2	8,8	3,2	8,8	
4,0	3,2	9,0	3,2	9,0	

Spacing table 672237.002					
Luminaire flux Emergency: 440 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,4	10,8	4,4	10,8	
3,0	4,7	11,6	4,7	11,6	
3,5	4,9	12,4	4,9	12,4	
4,0	5,1	13,0	5,1	13,0	

Spacing table 672238.002					
Luminaire flux Emergency: 170 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,1	8,1	3,1	8,1	
3,0	3,3	8,6	3,3	8,6	
3,5	3,3	8,9	3,3	8,9	
4,0	3,3	9,2	3,3	9,2	

Spacing table 672239.002					
Luminaire flux Emergency: 420 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	10,6	4,3	10,6	
3,0	4,6	11,5	4,6	11,5	
3,5	4,8	12,2	4,8	12,2	
4,0	5,0	12,8	5,0	12,8	

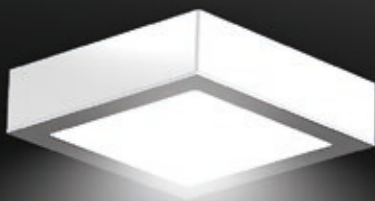
Spacing table 672240.002					
Luminaire flux Emergency: 170 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,1	8,1	3,1	8,1	
3,0	3,3	8,6	3,3	8,6	
3,5	3,3	9,0	3,3	9,0	
4,0	3,3	9,2	3,3	9,2	

Spacing table 672241.002					
Luminaire flux Emergency: 280 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,8	9,5	3,8	9,5	
3,0	4,0	10,2	4,0	10,2	
3,5	4,1	10,7	4,1	10,7	
4,0	4,2	11,2	4,2	11,2	

Spacing table 672242.002					
Luminaire flux Emergency: 730 lm Following values are indicated in m					
h	a	b	c	d	
2,5	5,0	12,3	5,0	12,3	
3,0	5,4	13,4	5,4	13,4	
3,5	5,8	14,3	5,8	14,3	
4,0	6,1	15,1	6,1	15,1	

Spacing table 672243.002					
Luminaire flux Emergency: 1600 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,3	15,2	6,3	15,2	
3,0	6,8	16,6	6,8	16,6	
3,5	7,3	17,8	7,3	17,8	
4,0	7,8	18,9	7,8	18,9	

Spacing table 672244.002					
Luminaire flux Emergency: 2100 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	10,6	4,3	10,6	
3,0	4,6	11,5	4,6	11,5	
3,5	4,8	12,2	4,8	12,2	
4,0	5,0	12,8	5,0	12,8	



TOLEDO FLAT

Surface mounted downlights

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems. As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- LED rated life 50,000 h (L70, B10)
- Lightguide and diffuser made of non-yellowing PMMA
- Also suitable for large ceiling heights
- Easy to install
- Wide luminaire spacing for escape route illumination
- Inconspicuous design



Further luminaires of this series, see:
Indoor lighting | Surface mounted downlights
Indoor lighting | Recessed downlights

Surface mounted downlights | Series: Toledo Flat RoundType of Protection: **IP 40**

Protection Class: I

For escape route illumination

Cylinder housing: sheet steel, powder coated. Bezel ring: die-cast aluminium, powder-coated. Light guide and plastic cover made of non-yellowing PMMA, opal matt.

LED and LED converter included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

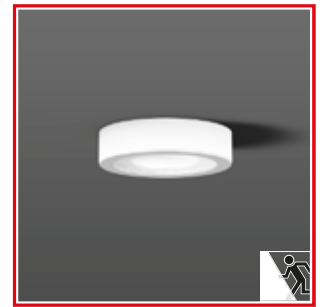
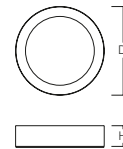
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Diameter D 257 mm						
672271.002	D 257, H 63	1 x LED 18 W	830	1650 / 450 lm	3 h	autotest
672271.002.04	D 257, H 63	1 x LED 18 W	830	1650 / 450 lm	3 h	MultiDigit
672271.002.07	D 257, H 63	1 x LED 18 W	830	1650 / 450 lm	3 h	DALI-Sibe
672272.002	D 257, H 63	1 x LED 18 W	830	1650 / 180 lm	8 h	autotest
672272.002.04	D 257, H 63	1 x LED 18 W	830	1650 / 180 lm	8 h	MultiDigit
672272.002.07	D 257, H 63	1 x LED 18 W	830	1650 / 180 lm	8 h	DALI-Sibe
672271.002.1	D 257, H 63	1 x LED 18 W	840	1700 / 460 lm	3 h	autotest
672271.002.1.04	D 257, H 63	1 x LED 18 W	840	1700 / 460 lm	3 h	MultiDigit
672271.002.1.07	D 257, H 63	1 x LED 18 W	840	1700 / 460 lm	3 h	DALI-Sibe
672272.002.1	D 257, H 63	1 x LED 18 W	840	1700 / 180 lm	8 h	autotest
672272.002.1.04	D 257, H 63	1 x LED 18 W	840	1700 / 180 lm	8 h	MultiDigit
672272.002.1.07	D 257, H 63	1 x LED 18 W	840	1700 / 180 lm	8 h	DALI-Sibe
Diameter D 319 mm						
672273.002	D 319, H 63	1 x LED 24 W	830	2200 / 430 lm	3 h	autotest
672273.002.04	D 319, H 63	1 x LED 24 W	830	2200 / 430 lm	3 h	MultiDigit
672273.002.07	D 319, H 63	1 x LED 24 W	830	2200 / 430 lm	3 h	DALI-Sibe
672274.002	D 319, H 63	1 x LED 24 W	830	2200 / 180 lm	8 h	autotest
672274.002.04	D 319, H 63	1 x LED 24 W	830	2200 / 180 lm	8 h	MultiDigit
672274.002.07	D 319, H 63	1 x LED 24 W	830	2200 / 180 lm	8 h	DALI-Sibe
672273.002.1	D 319, H 63	1 x LED 24 W	840	2300 / 440 lm	3 h	autotest
672273.002.1.04	D 319, H 63	1 x LED 24 W	840	2300 / 440 lm	3 h	MultiDigit
672273.002.1.07	D 319, H 63	1 x LED 24 W	840	2300 / 440 lm	3 h	DALI-Sibe
672274.002.1	D 319, H 63	1 x LED 24 W	840	2300 / 180 lm	8 h	autotest
672274.002.1.04	D 319, H 63	1 x LED 24 W	840	2300 / 180 lm	8 h	MultiDigit
672274.002.1.07	D 319, H 63	1 x LED 24 W	840	2300 / 180 lm	8 h	DALI-Sibe



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Diameter D 150 mm					
672290.002	D 150, H 57	1 x LED 5 W	830	390 / 450 lm	
672290.002.89	D 150, H 57	1 x LED 5 W	830	390 / 450 lm	AC-Control
672290.002.1	D 150, H 57	1 x LED 5 W	840	410 / 450 lm	
672290.002.1.89	D 150, H 57	1 x LED 5 W	840	410 / 450 lm	AC-Control
Diameter D 192 mm					
672279.002	D 192, H 58	1 x LED 9 W	830	770 / 770 lm	
672279.002.89	D 192, H 58	1 x LED 9 W	830	770 / 770 lm	AC-Control
672279.002.1	D 192, H 58	1 x LED 9 W	840	840 / 840 lm	
672279.002.1.89	D 192, H 58	1 x LED 9 W	840	840 / 840 lm	AC-Control
Diameter D 257 mm					
672280.002	D 257, H 63	1 x LED 18 W	830	1650 / 1650 lm	
672280.002.89	D 257, H 63	1 x LED 18 W	830	1650 / 1650 lm	AC-Control
672280.002.1	D 257, H 63	1 x LED 18 W	840	1700 / 1700 lm	
672280.002.1.89	D 257, H 63	1 x LED 18 W	840	1700 / 1700 lm	AC-Control
Diameter D 319 mm					
672281.002	D 319, H 63	1 x LED 24 W	830	2200 / 2200 lm	
672281.002.89	D 319, H 63	1 x LED 24 W	830	2200 / 2200 lm	AC-Control
672281.002.1	D 319, H 63	1 x LED 24 W	840	2300 / 2300 lm	
672281.002.1.89	D 319, H 63	1 x LED 24 W	840	2300 / 2300 lm	AC-Control



**Surface mounted downlights | Series: Toledo Flat Square**Type of Protection: **IP 40**Protection Class: **I****For escape route illumination**

Cylinder housing: sheet steel, powder coated. Square cover plate: die cast aluminium, powder coated. Light guide and plastic cover made of non-yellowing PMMA, opal matt.

LED and LED converter included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

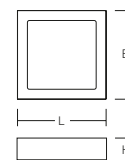
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System	Price Category 23
Self-contained safety luminaires							
Length L 225 mm x Width B 225 mm							
672275.002	L 225, B 225, H 58	1 x LED 18 W	830	1600 / 440 lm	3 h	autotest	
672275.002.04	L 225, B 225, H 58	1 x LED 18 W	830	1600 / 440 lm	3 h	MultiDigit	
672275.002.07	L 225, B 225, H 58	1 x LED 18 W	830	1600 / 440 lm	3 h	DALI-Sibe	
672276.002	L 225, B 225, H 58	1 x LED 18 W	830	1600 / 170 lm	8 h	autotest	
672276.002.04	L 225, B 225, H 58	1 x LED 18 W	830	1600 / 170 lm	8 h	MultiDigit	
672276.002.07	L 225, B 225, H 58	1 x LED 18 W	830	1600 / 170 lm	8 h	DALI-Sibe	
672275.002.1	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 450 lm	3 h	autotest	
672275.002.1.04	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 450 lm	3 h	MultiDigit	
672275.002.1.07	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 450 lm	3 h	DALI-Sibe	
672276.002.1	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 180 lm	8 h	autotest	
672276.002.1.04	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 180 lm	8 h	MultiDigit	
672276.002.1.07	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 180 lm	8 h	DALI-Sibe	
Length L 300 mm x Width B 300 mm							
672277.002	L 300, B 300, H 58	1 x LED 24 W	830	2100 / 420 lm	3 h	autotest	
672277.002.04	L 300, B 300, H 58	1 x LED 24 W	830	2100 / 420 lm	3 h	MultiDigit	
672277.002.07	L 300, B 300, H 58	1 x LED 24 W	830	2100 / 420 lm	3 h	DALI-Sibe	
672278.002	L 300, B 300, H 58	1 x LED 24 W	830	2050 / 170 lm	8 h	autotest	
672278.002.04	L 300, B 300, H 58	1 x LED 24 W	830	2050 / 170 lm	8 h	MultiDigit	
672278.002.07	L 300, B 300, H 58	1 x LED 24 W	830	2050 / 170 lm	8 h	DALI-Sibe	
672277.002.1	L 300, B 300, H 58	1 x LED 24 W	840	2200 / 430 lm	3 h	autotest	
672277.002.1.04	L 300, B 300, H 58	1 x LED 24 W	840	2200 / 430 lm	3 h	MultiDigit	
672277.002.1.07	L 300, B 300, H 58	1 x LED 24 W	840	2200 / 430 lm	3 h	DALI-Sibe	
672278.002.1	L 300, B 300, H 58	1 x LED 24 W	840	2200 / 180 lm	8 h	autotest	
672278.002.1.04	L 300, B 300, H 58	1 x LED 24 W	840	2200 / 180 lm	8 h	MultiDigit	
672278.002.1.07	L 300, B 300, H 58	1 x LED 24 W	840	2200 / 180 lm	8 h	DALI-Sibe	



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module	Price Category 24
Luminaires for central battery system						
Length L 110 mm x Width B 110 mm						
672259.002	L 110, B 110, H 58	1 x LED 5 W	830	410 / 410 lm		
672259.002.89	L 110, B 110, H 58	1 x LED 5 W	830	410 / 410 lm	AC-Control	
672259.002.1	L 110, B 110, H 58	1 x LED 5 W	840	430 / 430 lm		
672259.002.1.89	L 110, B 110, H 58	1 x LED 5 W	840	430 / 430 lm	AC-Control	
Length L 172 mm x Width B 172 mm						
672267.002	L 172, B 172, H 58	1 x LED 9 W	830	730 / 790 lm		
672267.002.89	L 172, B 172, H 58	1 x LED 9 W	830	730 / 790 lm	AC-Control	
672267.002.1	L 172, B 172, H 58	1 x LED 9 W	840	750 / 750 lm		
672267.002.1.89	L 172, B 172, H 58	1 x LED 9 W	840	750 / 750 lm	AC-Control	
Length L 225 mm x Width B 225 mm						
672268.002	L 225, B 225, H 58	1 x LED 18 W	830	1650 / 1650 lm		
672268.002.89	L 225, B 225, H 58	1 x LED 18 W	830	1650 / 1650 lm	AC-Control	
672268.002.1	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 1650 lm		
672268.002.1.89	L 225, B 225, H 58	1 x LED 18 W	840	1650 / 1650 lm	AC-Control	
Length L 300 mm x Width B 300 mm						
672269.002	L 300, B 300, H 58	1 x LED 24 W	830	2100 / 2100 lm		
672269.002.89	L 300, B 300, H 58	1 x LED 24 W	830	2100 / 2100 lm	AC-Control	
672269.002.1	L 300, B 300, H 58	1 x LED 24 W	840	2300 / 2300 lm		
672269.002.1.89	L 300, B 300, H 58	1 x LED 24 W	840	2250 / 2250 lm	AC-Control	

Spacing table 672271.002					
Luminaire flux Emergency: 450 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,4	10,8	4,4	10,8	
3,0	4,7	11,7	4,7	11,7	
3,5	4,9	12,5	4,9	12,5	
4,0	5,1	13,1	5,1	13,1	

Spacing table 672272.002					
Luminaire flux Emergency: 180 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,2	8,2	3,2	8,2	
3,0	3,3	8,7	3,3	8,7	
3,5	3,4	9,1	3,4	9,1	
4,0	3,4	9,4	3,4	9,4	

Spacing table 672273.002					
Luminaire flux Emergency: 430 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	10,6	4,3	10,6	
3,0	4,6	11,5	4,6	11,5	
3,5	4,8	12,2	4,8	12,2	
4,0	5,0	12,9	5,0	12,9	

Spacing table 672274.002					
Luminaire flux Emergency: 180 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,2	8,2	3,2	8,2	
3,0	3,3	8,7	3,3	8,7	
3,5	3,4	9,1	3,4	9,1	
4,0	3,4	9,4	3,4	9,4	

Spacing table 672290.002					
Luminaire flux Emergency: 450 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,4	10,9	4,4	10,9	
3,0	4,7	11,7	4,7	11,7	
3,5	4,9	12,5	4,9	12,5	
4,0	5,1	13,1	5,1	13,1	

Spacing table 672279.002					
Luminaire flux Emergency: 770 lm Following values are indicated in m					
h	a	b	c	d	
2,5	5,2	12,6	5,2	12,6	
3,0	5,6	13,6	5,6	13,6	
3,5	5,9	14,6	5,9	14,6	
4,0	6,2	15,4	6,2	15,4	

Spacing table 672280.002					
Luminaire flux Emergency: 1650 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,4	15,4	6,4	15,4	
3,0	7,0	16,8	7,0	16,8	
3,5	7,4	18,1	7,4	18,1	
4,0	7,9	19,2	7,9	19,2	

Spacing table 672281.002					
Luminaire flux Emergency: 2200 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,8	16,5	6,8	16,5	
3,0	7,5	18,0	7,5	18,0	
3,5	8,0	19,4	8,0	19,4	
4,0	8,5	20,6	8,5	20,6	

Spacing table 672275.002					
Luminaire flux Emergency: 440 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,4	10,8	4,4	10,8	
3,0	4,7	11,6	4,7	11,6	
3,5	4,9	12,4	4,9	12,4	
4,0	5,1	13,0	5,1	13,0	

Spacing table 672276.002					
Luminaire flux Emergency: 170 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,1	8,1	3,1	8,1	
3,0	3,3	8,6	3,3	8,6	
3,5	3,3	8,9	3,3	8,9	
4,0	3,3	9,2	3,3	9,2	

Spacing table 672277.002					
Luminaire flux Emergency: 420 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	10,6	4,3	10,6	
3,0	4,6	11,5	4,6	11,5	
3,5	4,8	12,2	4,8	12,2	
4,0	5,0	12,8	5,0	12,8	

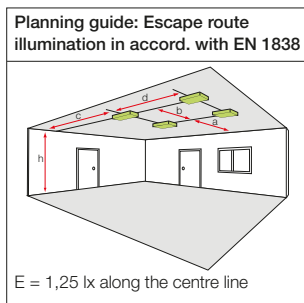
Spacing table 672278.002					
Luminaire flux Emergency: 170 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,1	8,1	3,1	8,1	
3,0	3,3	8,6	3,3	8,6	
3,5	3,3	9,0	3,3	9,0	
4,0	3,3	9,2	3,3	9,2	

Spacing table 672259.002					
Luminaire flux Emergency: 410 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,3	10,5	4,3	10,5	
3,0	4,6	11,4	4,6	11,4	
3,5	4,8	12,1	4,8	12,1	
4,0	4,9	12,7	4,9	12,7	

Spacing table 672267.002					
Luminaire flux Emergency: 730 lm Following values are indicated in m					
h	a	b	c	d	
2,5	5,2	12,7	5,2	12,7	
3,0	5,6	13,8	5,6	13,8	
3,5	6,0	14,8	6,0	14,8	
4,0	6,3	15,7	6,3	15,7	

Spacing table 672268.002					
Luminaire flux Emergency: 1650 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,3	15,3	6,3	15,3	
3,0	6,9	16,7	6,9	16,7	
3,5	7,4	17,9	7,4	17,9	
4,0	7,8	19,1	7,8	19,1	

Spacing table 672269.002					
Luminaire flux Emergency: 2100 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,8	16,3	6,8	16,3	
3,0	7,4	17,8	7,4	17,8	
3,5	7,9	19,1	7,9	19,1	
4,0	8,4	20,4	8,4	20,4	





SIDELITE® ECO

Recessed ceiling luminaires, Lay-in luminaires

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems. As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Self-contained emergency luminaire (3hrs)
- Ideal for office areas ($UGR \leq 19$) and computer workstations in accordance with DIN EN 12464-1
- Lightguide and diffuser made of non-yellowing PMMA
- LED rated life 50,000 h (L70, B10)
- Up to 109 lm per watt
- Standard automatic self-test
- Low maintenance costs
- Wide luminaire spacing for escape route illumination

Spacing table 672168.002					
Luminaire flux Emergency: 90 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,9	3,0	6,9	
3,0	3,0	7,3	3,0	7,3	
3,5	3,0	7,4	3,0	7,4	
4,0	3,0	7,4	3,0	7,4	

Spacing table 672168.002.04					
Luminaire flux Emergency: 50 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,7	3,0	6,7	
3,0	3,0	7,2	3,0	7,2	
3,5	3,0	7,5	3,0	7,5	
4,0	3,0	7,6	3,0	7,6	

Spacing table 672191.002					
Luminaire flux Emergency: 60 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,7	3,0	6,7	
3,0	3,0	7,2	3,0	7,2	
3,5	3,0	7,5	3,0	7,5	
4,0	3,0	7,6	3,0	7,6	

Spacing table 672192.002					
Luminaire flux Emergency: 80 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,9	3,0	6,9	
3,0	3,0	7,3	3,0	7,3	
3,5	3,0	7,4	3,0	7,4	
4,0	3,0	7,4	3,0	7,4	

Recessed ceiling luminaires, Lay-in luminaires | Series: Sidelite® ECO

Type of Protection: IP 20
 Protection Class: I, II
 Ceiling Thickness: 10-25 mm

For escape route illumination

Frame: aluminium, powder-coated. Diffuser: plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing PMMA. Lateral light emission thanks to LED. External driver (Height 32 mm). With integrated Edo 3 for emergency lighting.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

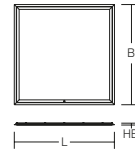
Operating mode Edo 3: Non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Operating mode Edo 3: Non-maintained power mode (BS)

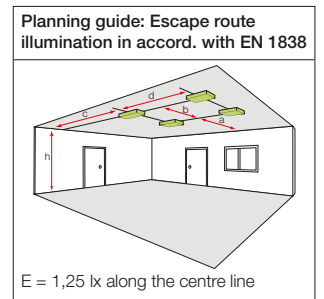
Ballast mains/emergency: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Module 625, cut out 610 x 610 mm						
Diffuser: plastic, opal						
672168.002	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 90 lm	3 h	autotest
672168.002.04	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 50 lm	3 h	MultiDigit
672168.002.07	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 90 lm	3 h	DALI-Sibe
672191.002	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 80 lm	8 h	autotest
672191.002.04	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 80 lm	8 h	MultiDigit
672191.002.07	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 80 lm	8 h	DALI-Sibe
672168.002.1	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 90 lm	3 h	autotest
672168.002.1.04	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 50 lm	3 h	MultiDigit
672168.002.1.07	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 90 lm	3 h	DALI-Sibe
672191.002.1	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 80 lm	8 h	autotest
672191.002.1.04	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 80 lm	8 h	MultiDigit
672191.002.1.07	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 80 lm	8 h	DALI-Sibe
Diffuser: transparent plastic, microprismatic						
672193.002	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 90 lm	3 h	autotest
672193.002.04	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 50 lm	3 h	MultiDigit
672193.002.07	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 90 lm	3 h	DALI-Sibe
672194.002	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 80 lm	8 h	autotest
672194.002.04	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 80 lm	8 h	MultiDigit
672194.002.07	L 622, B 622, H 44	1 x LED 34 W	830	3500 / 80 lm	8 h	DALI-Sibe
672193.002.1	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 90 lm	3 h	autotest
672193.002.1.04	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 50 lm	3 h	MultiDigit
672193.002.1.07	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 90 lm	3 h	DALI-Sibe
672194.002.1	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 80 lm	8 h	autotest
672194.002.1.04	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 80 lm	8 h	MultiDigit
672194.002.1.07	L 622, B 622, H 44	1 x LED 34 W	840	3700 / 80 lm	8 h	DALI-Sibe

Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Module 625, cut out 610 x 610 mm					
Diffuser: plastic, opal					
672192.002	L 622, B 622, H 59	1 x LED 34 W	830	3500 / 80 lm	
672192.002.89	L 622, B 622, H 59	1 x LED 34 W	830	3500 / 80 lm	AC-Control
672192.002.1	L 622, B 622, H 59	1 x LED 34 W	840	3700 / 80 lm	
672192.002.1.89	L 622, B 622, H 59	1 x LED 34 W	840	3700 / 80 lm	AC-Control
Diffuser: transparent plastic, microprismatic					
672195.002	L 622, B 622, H 59	1 x LED 34 W	830	3500 / 80 lm	
672195.002.89	L 622, B 622, H 59	1 x LED 34 W	830	3500 / 80 lm	AC-Control
672195.002.1	L 622, B 622, H 59	1 x LED 34 W	840	3700 / 80 lm	
672195.002.1.89	L 622, B 622, H 59	1 x LED 34 W	840	3700 / 80 lm	AC-Control

Surface mounting frame		Price Category 21
982221.012	L 627, B 627, H 47	





SONIS EVO

Lay-in luminaires

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems. As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Suitable for laying in grid ceiling module 600/625
- Standard automatic self-test
- Narrow beam, brilliant luminous effect
- Very high efficiency with optimum glare limitation
- LED rated life 50,000 h (L80, B10)

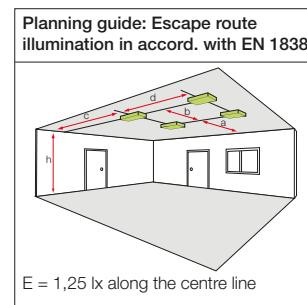


Further luminaires of this series, see:
Indoor lighting | Recessed modular and linear luminaires
Indoor lighting | Modular luminaires: surface mounted or pendant mounted

Spacing table 672251.002					
Luminaire flux Emergency: 90 lm Following values are indicated in m					
h	a	b	c	d	
2,5	2,9	6,1	2,9	6,1	
3,0	2,9	6,1	2,9	6,1	
3,5	2,9	6,1	2,9	6,1	
4,0	2,9	6,1	2,9	6,1	

Spacing table 672251.002.04					
Luminaire flux Emergency: 50 lm Following values are indicated in m					
h	a	b	c	d	
2,5	2,9	6,1	2,9	6,1	
3,0	2,9	6,1	2,9	6,1	
3,5	2,9	6,1	2,9	6,1	
4,0	2,9	6,1	2,9	6,1	

Spacing table 672252.002					
Luminaire flux Emergency: 80 lm Following values are indicated in m					
h	a	b	c	d	
2,5	2,9	6,1	2,9	6,1	
3,0	2,9	6,1	2,9	6,1	
3,5	2,9	6,1	2,9	6,1	
4,0	2,9	6,1	2,9	6,1	



Lay-in luminaires | Series: Sonis EVO

Type of Protection: IP 20

Protection Class: I

For escape route illumination

Housing: powder-coated metal white. **Alea optical system:** Reflector structure (ABS, Aluminium-coated, highly polished) with diffuser made of non-yellowing plastic (PMMA) opal for glare-free light at the workstation (screen-compliant according to EN 12464-1). With integrated Edo 3 for emergency lighting.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

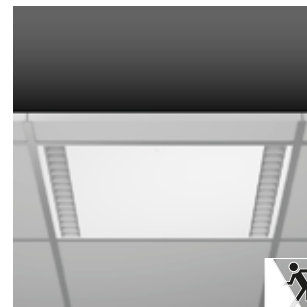
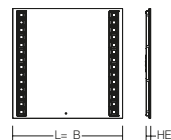
Operating mode Edo 3: Non-maintained power mode (BS)

Ballast mains/emergency: EB

Luminaires for central battery system

Operating mode Edo 3: Non-maintained power mode (BS)

Ballast mains/emergency: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Module 600, HE 37 mm						
672251.002	L 597, B 597, H 1	1 x LED 30 W	830	3400 / 90 lm	3 h	autotest
672251.002.04	L 597, B 597, H 1	1 x LED 30 W	830	3400 / 50 lm	3 h	MultiDigit
672251.002.07	L 597, B 597, H 1	1 x LED 30 W	830	3400 / 90 lm	3 h	DALI-Sibe
672251.002.1	L 597, B 597, H 1	1 x LED 30 W	840	3500 / 90 lm	3 h	autotest
672251.002.1.04	L 597, B 597, H 1	1 x LED 30 W	840	3500 / 50 lm	3 h	MultiDigit
672251.002.1.07	L 597, B 597, H 1	1 x LED 30 W	840	3500 / 90 lm	3 h	DALI-Sibe
Module 625, HE 37 mm						
672253.002	L 622, B 622, H 1	1 x LED 30 W	830	3400 / 90 lm	3 h	autotest
672253.002.04	L 622, B 622, H 1	1 x LED 30 W	830	3400 / 50 lm	3 h	MultiDigit
672253.002.07	L 622, B 622, H 1	1 x LED 30 W	830	3400 / 90 lm	3 h	DALI-Sibe
672253.002.1	L 622, B 622, H 1	1 x LED 30 W	840	3500 / 90 lm	3 h	autotest
672253.002.1.04	L 622, B 622, H 1	1 x LED 30 W	840	3500 / 50 lm	3 h	MultiDigit
672253.002.1.07	L 622, B 622, H 1	1 x LED 30 W	840	3500 / 90 lm	3 h	DALI-Sibe



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Module 600, HE 37 mm					
672252.002	L 597, B 597, H 1	1 x LED 30 W	830	3400 / 80 lm	
672252.002.89	L 597, B 597, H 1	1 x LED 30 W	830	3400 / 80 lm	AC-Control
672252.002.1	L 597, B 597, H 1	1 x LED 30 W	840	3500 / 80 lm	
672252.002.1.89	L 597, B 597, H 1	1 x LED 30 W	840	3500 / 80 lm	AC-Control
Module 625, HE 37 mm					
672254.002	L 622, B 622, H 1	1 x LED 30 W	830	3400 / 80 lm	
672254.002.89	L 622, B 622, H 1	1 x LED 30 W	830	3400 / 80 lm	AC-Control
672254.002.1	L 622, B 622, H 1	1 x LED 30 W	840	3500 / 80 lm	
672254.002.1.89	L 622, B 622, H 1	1 x LED 30 W	840	3500 / 80 lm	AC-Control

**Accessories | Recessed mounting frame**

Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.

Recessed mounting frame**cut out LA 610 x BA 610 mm**

981941.002 L 624, B 624, H 2, HE 94

cut out LA 635 x BA 635 mm

981942.002 L 649, B 649, H 2, HE 94

Price Category 21**Surface mounting frame**

982187.012 L 602, B 602, H 47 for module 600

982292.002 L 627, B 627, H 47 for module 625

Price Category 21**Pendant frame**

982290.012 L 602, B 602, H 33, LP 1500

982291.002 L 627, B 627, H 33, LP 1500

Price Category 21**ALEA OPTICAL SYSTEM**

A brilliant example of the power of innovation:

The Alea optical system in the Sonis EVO combines square reflector elements with a linear structure.

The integrated opal diffuser reduces direct glare, ensures excellent light quality and protects the highly efficient LEDs.



PLANOS LED CONTINUOUS LINE LUMINAIRE

LED strip

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems.
As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Self-contained system
- Standard automatic self-test



Further luminaires of this series, see:
Indoor lighting | LED Strips

LED strip | Series: Planos LED continuous line luminaire insert

Type of Protection: IP 20
Protection Class: I

For escape route illumination

LED insert for mounting tracks with three-row lens system. LED cover provided by plastic (PMMA) panel with integrated three-row lens system. LED output in emergency mode 3 watts.

LED included.

Execution .04 (MultiDigit) = minimum 7-pole mounting track.

Execution .07 (DALI) = minimum 7-pole mounting track.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
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Self-contained safety luminaires

Price Category 23

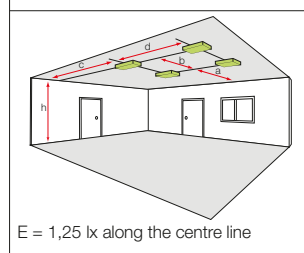
Wide beam light distribution

672213.002	L 1500, B 70, H 51	5 x LED 6,2 W	840	3950 / 620 lm	3 h	autotest
672213.002.04	L 1500, B 70, H 51	5 x LED 6,2 W	840	3950 / 620 lm	3 h	MultiDigit
672213.002.07	L 1500, B 70, H 51	5 x LED 6,2 W	840	3950 / 620 lm	3 h	DALI-Sibe
672214.002	L 1500, B 70, H 51	5 x LED 7,1 W	840	5000 / 620 lm	3 h	autotest
672214.002.04	L 1500, B 70, H 51	5 x LED 7,1 W	840	5000 / 620 lm	3 h	MultiDigit
672214.002.07	L 1500, B 70, H 51	5 x LED 7,1 W	840	5000 / 620 lm	3 h	DALI-Sibe
672215.002	L 1500, B 70, H 51	5 x LED 9,6 W	840	7050 / 620 lm	3 h	autotest
672215.002.04	L 1500, B 70, H 51	5 x LED 9,6 W	840	7050 / 620 lm	3 h	MultiDigit
672215.002.07	L 1500, B 70, H 51	5 x LED 9,6 W	840	7050 / 620 lm	3 h	DALI-Sibe
672256.002	L 1500, B 70, H 51	5 x LED 12,4 W	840	7850 / 620 lm	3 h	autotest
672256.002.04	L 1500, B 70, H 51	5 x LED 12,4 W	840	7850 / 620 lm	3 h	MultiDigit
672256.002.07	L 1500, B 70, H 51	5 x LED 12,4 W	840	7850 / 620 lm	3 h	DALI-Sibe
672216.002	L 1500, B 70, H 51	5 x LED 14,5 W	840	9500 / 620 lm	3 h	autotest
672216.002.04	L 1500, B 70, H 51	5 x LED 14,5 W	840	9500 / 620 lm	3 h	MultiDigit
672216.002.07	L 1500, B 70, H 51	5 x LED 14,5 W	840	9500 / 620 lm	3 h	DALI-Sibe

Narrow beam light distribution

672209.002	L 1500, B 70, H 51	5 x LED 6,2 W	840	4000 / 560 lm	3 h	autotest
672209.002.04	L 1500, B 70, H 51	5 x LED 6,2 W	840	4000 / 560 lm	3 h	MultiDigit
672209.002.07	L 1500, B 70, H 51	5 x LED 6,2 W	840	4000 / 560 lm	3 h	DALI-Sibe
672210.002	L 1500, B 70, H 51	5 x LED 7,1 W	840	5050 / 560 lm	3 h	autotest
672210.002.04	L 1500, B 70, H 51	5 x LED 7,1 W	840	5050 / 560 lm	3 h	MultiDigit
672210.002.07	L 1500, B 70, H 51	5 x LED 7,1 W	840	5050 / 560 lm	3 h	DALI-Sibe
672211.002	L 1500, B 70, H 51	5 x LED 9,6 W	840	7250 / 560 lm	3 h	autotest
672211.002.04	L 1500, B 70, H 51	5 x LED 9,6 W	840	7250 / 560 lm	3 h	MultiDigit
672211.002.07	L 1500, B 70, H 51	5 x LED 9,6 W	840	7250 / 560 lm	3 h	DALI-Sibe
672255.002	L 1500, B 70, H 51	5 x LED 12,4 W	840	7700 / 560 lm	3 h	autotest
672255.002.04	L 1500, B 70, H 51	5 x LED 12,4 W	840	7700 / 560 lm	3 h	MultiDigit
672255.002.07	L 1500, B 70, H 51	5 x LED 12,4 W	840	7700 / 560 lm	3 h	DALI-Sibe
672212.002	L 1500, B 70, H 51	5 x LED 14,5 W	840	9500 / 560 lm	3 h	autotest
672212.002.04	L 1500, B 70, H 51	5 x LED 14,5 W	840	9500 / 560 lm	3 h	MultiDigit
672212.002.07	L 1500, B 70, H 51	5 x LED 14,5 W	840	9500 / 560 lm	3 h	DALI-Sibe

Planning guide: Escape route illumination in accord. with EN 1838



Spacing table Planos (wide beam)

Luminaire flux
Emergency: 620 lm
Following values are indicated in m

h	a	b	c	d
2,5	9,6	4,3	9,5	4,2
3,0	10,8	4,8	10,7	4,7
3,5	12,0	5,3	11,8	5,2
4,0	13,0	5,7	12,9	5,6
4,5	14,0	6,2	13,9	6,0
5,0	15,0	6,5	14,8	6,4
5,5	15,9	6,8	15,7	6,7
6,0	16,7	7,1	16,5	6,9

Spacing table Planos (narrow beam)

Luminaire flux
Emergency: 560 lm
Following values are indicated in m

h	a	b	c	d
6,0	7,8	3,0	7,7	2,9
7,0	8,9	3,4	8,9	3,4
8,0	9,6	3,6	9,8	3,7
9,0	10,0	3,8	10,2	3,9
10,0	10,2	3,9	10,4	4,0
11,0	10,5	4,1	10,5	4,1
12,0	10,6	4,2	10,7	4,3



Accessories | Series: Planos LED continuous line luminaire

Type of Protection: IP 20
Protection Class: I

Track insert 300 mm for self contained standard. RZB carrier, sheet steel, painted white, multi pole connector for RZB GSUN® S or GSUN® D, 24 m viewing distance.

Available colour: 2 = white



Reference number Dimensions

Track insert for external self contained emergency luminaires type GSUN® S or GSUN® D			Price Category 23
925237.002	L 299, B 66, H 46	for automatic self-test	
925237.002.04	L 299, B 66, H 46	for MultiDigit	
925237.002.07	L 299, B 66, H 46	for DALI	

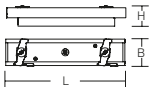


Accessories | Series: Planos LED continuous line luminaire

Type of Protection: IP 20
Protection Class: I

Track insert 300 mm for central battery emergency supply. RZB carrier, sheet steel, painted white, multi pole connector for RZB UNIVERSAL S or UNIVERSAL D, 24 m viewing distance.

Available colour: 2 = white



Reference number Dimensions

Track insert for external central battery emergency supply type UNIVERSAL S or UNIVERSAL D			Price Category 23
925238.002	L 299, B 66, H 46	Standard	
925238.002.89	L 299, B 66, H 46	for AC Control	



Stepless adjustable to 90 degree



0 degree

GSUN®S shown





PLANOX

Ceiling and wall luminaires

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems.
As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Standard automatic self-test
- Wide luminaire spacing for escape route illumination
- Easy to install
- High degree of protection IP 66
- ▼ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.
- Suitable for use in the food and drink industry



Further luminaires of this series, see:
Indoor lighting | Luminaires for moist/humid environments

Ceiling and wall luminaires | Series: Planox

Type of Protection: **IP 66**

Protection Class: I

Impact Protection: IK03 (PMMA)

For escape route illumination

Base: plastic (polycarbonate). White painted interior fastening element made of steel plate. Refractor: plastic (PMMA or PC), transparent, prismatic inside. Refractor fastening: stainless steel clips.

▽ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

LED included.

Available colour: 9 = grey

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

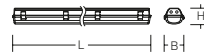
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

Luminaires for central battery system

Voltage type: AC/DC

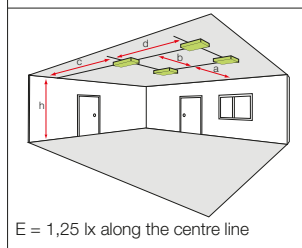
Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Refractor: plastic (PMMA)						
672202.009	L 1278, B 96, H 100	1 x LED 28 W	840	3350 / 600 lm	3 h	autotest
672202.009.04	L 1278, B 96, H 100	1 x LED 28 W	840	3350 / 600 lm	3 h	MultiDigit
672202.009.07	L 1278, B 96, H 100	1 x LED 28 W	840	3350 / 600 lm	3 h	DALI-Sibe
672202.009.2	L 1278, B 96, H 100	1 x LED 28 W	850	3350 / 610 lm	3 h	autotest
672202.009.2.04	L 1278, B 96, H 100	1 x LED 28 W	850	3350 / 610 lm	3 h	MultiDigit
672202.009.2.07	L 1278, B 96, H 100	1 x LED 28 W	850	3350 / 610 lm	3 h	DALI-Sibe
672203.009	L 1278, B 96, H 100	1 x LED 45 W	840	5050 / 600 lm	3 h	autotest
672203.009.04	L 1278, B 96, H 100	1 x LED 45 W	840	5050 / 600 lm	3 h	MultiDigit
672203.009.07	L 1278, B 96, H 100	1 x LED 45 W	840	5050 / 600 lm	3 h	DALI-Sibe
672203.009.2	L 1278, B 96, H 100	1 x LED 45 W	850	5050 / 580 lm	3 h	autotest
672203.009.2.04	L 1278, B 96, H 100	1 x LED 45 W	850	5050 / 580 lm	3 h	MultiDigit
672203.009.2.07	L 1278, B 96, H 100	1 x LED 45 W	850	5050 / 580 lm	3 h	DALI-Sibe
672204.009	L 1278, B 96, H 100	1 x LED 52 W	840	5650 / 590 lm	3 h	autotest
672204.009.04	L 1278, B 96, H 100	1 x LED 52 W	840	5650 / 590 lm	3 h	MultiDigit
672204.009.07	L 1278, B 96, H 100	1 x LED 52 W	840	5650 / 590 lm	3 h	DALI-Sibe
672204.009.2	L 1278, B 96, H 100	1 x LED 52 W	850	5750 / 580 lm	3 h	autotest
672204.009.2.04	L 1278, B 96, H 100	1 x LED 52 W	850	5750 / 580 lm	3 h	MultiDigit
672204.009.2.07	L 1278, B 96, H 100	1 x LED 52 W	850	5750 / 580 lm	3 h	DALI-Sibe
672205.009	L 1573, B 96, H 100	1 x LED 34 W	840	4100 / 550 lm	3 h	autotest
672205.009.04	L 1573, B 96, H 100	1 x LED 34 W	840	4100 / 550 lm	3 h	MultiDigit
672205.009.07	L 1573, B 96, H 100	1 x LED 34 W	840	4100 / 550 lm	3 h	DALI-Sibe
672205.009.2	L 1573, B 96, H 100	1 x LED 34 W	850	4300 / 600 lm	3 h	autotest
672205.009.2.04	L 1573, B 96, H 100	1 x LED 34 W	850	4300 / 600 lm	3 h	MultiDigit
672205.009.2.07	L 1573, B 96, H 100	1 x LED 34 W	850	4300 / 600 lm	3 h	DALI-Sibe
672206.009	L 1573, B 96, H 100	1 x LED 58 W	840	6450 / 540 lm	3 h	autotest
672206.009.04	L 1573, B 96, H 100	1 x LED 58 W	840	6450 / 540 lm	3 h	MultiDigit
672206.009.07	L 1573, B 96, H 100	1 x LED 58 W	840	6450 / 540 lm	3 h	DALI-Sibe
672206.009.2	L 1573, B 96, H 100	1 x LED 58 W	850	6500 / 590 lm	3 h	autotest
672206.009.2.04	L 1573, B 96, H 100	1 x LED 58 W	850	6500 / 590 lm	3 h	MultiDigit
672206.009.2.07	L 1573, B 96, H 100	1 x LED 58 W	850	6500 / 590 lm	3 h	DALI-Sibe



Planning guide: Escape route illumination in accord. with EN 1838



Spacing table 672202.009

Luminaire flux Emergency: 600 lm Following values are indicated in m					
h	a	b	c	d	
2,5	5,1	12,7	4,0	9,6	
3,0	5,2	13,6	4,2	10,5	
3,5	5,3	14,4	4,5	11,3	
4,0	5,6	14,5	4,7	11,8	

Spacing table 672205.009

Luminaire flux Emergency: 550 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,9	12,3	4,1	10,2	
3,0	5,2	13,2	4,4	11,0	
3,5	5,4	13,9	4,7	11,8	
4,0	5,6	14,5	4,9	12,4	



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Refractor: plastic (polycarbonate)						
672202.009.1	L 1278, B 96, H 100	1 x LED 28 W	840	3150 / 600 lm	3 h	autotest
672202.009.1.04	L 1278, B 96, H 100	1 x LED 28 W	840	3150 / 600 lm	3 h	MultiDigit
672202.009.1.07	L 1278, B 96, H 100	1 x LED 28 W	840	3150 / 600 lm	3 h	DALI-Sibe
672202.009.3	L 1278, B 96, H 100	1 x LED 28 W	850	3150 / 600 lm	3 h	autotest
672202.009.3.04	L 1278, B 96, H 100	1 x LED 28 W	850	3150 / 600 lm	3 h	MultiDigit
672202.009.3.07	L 1278, B 96, H 100	1 x LED 28 W	850	3150 / 600 lm	3 h	DALI-Sibe
672203.009.1	L 1278, B 96, H 100	1 x LED 45 W	840	4750 / 550 lm	3 h	autotest
672203.009.1.04	L 1278, B 96, H 100	1 x LED 45 W	840	4750 / 550 lm	3 h	MultiDigit
672203.009.1.07	L 1278, B 96, H 100	1 x LED 45 W	840	4750 / 550 lm	3 h	DALI-Sibe
672203.009.3	L 1278, B 96, H 100	1 x LED 45 W	850	4750 / 550 lm	3 h	autotest
672203.009.3.04	L 1278, B 96, H 100	1 x LED 45 W	850	4750 / 550 lm	3 h	MultiDigit
672203.009.3.07	L 1278, B 96, H 100	1 x LED 45 W	850	4750 / 550 lm	3 h	DALI-Sibe
672204.009.1	L 1278, B 96, H 100	1 x LED 52 W	840	5300 / 550 lm	3 h	autotest
672204.009.1.04	L 1278, B 96, H 100	1 x LED 52 W	840	5300 / 550 lm	3 h	MultiDigit
672204.009.1.07	L 1278, B 96, H 100	1 x LED 52 W	840	5300 / 550 lm	3 h	DALI-Sibe
672204.009.3	L 1278, B 96, H 100	1 x LED 52 W	850	5400 / 550 lm	3 h	autotest
672204.009.3.04	L 1278, B 96, H 100	1 x LED 52 W	850	5400 / 550 lm	3 h	MultiDigit
672204.009.3.07	L 1278, B 96, H 100	1 x LED 52 W	850	5400 / 550 lm	3 h	DALI-Sibe
672205.009.1	L 1573, B 96, H 100	1 x LED 34 W	840	4000 / 530 lm	3 h	autotest
672205.009.1.04	L 1573, B 96, H 100	1 x LED 34 W	840	4000 / 530 lm	3 h	MultiDigit
672205.009.1.07	L 1573, B 96, H 100	1 x LED 34 W	840	4000 / 530 lm	3 h	DALI-Sibe
672205.009.3	L 1573, B 96, H 100	1 x LED 34 W	850	4150 / 580 lm	3 h	autotest
672205.009.3.04	L 1573, B 96, H 100	1 x LED 34 W	850	4150 / 580 lm	3 h	MultiDigit
672205.009.3.07	L 1573, B 96, H 100	1 x LED 34 W	850	4150 / 580 lm	3 h	DALI-Sibe
672206.009.1	L 1573, B 96, H 100	1 x LED 58 W	840	6200 / 520 lm	3 h	autotest
672206.009.1.04	L 1573, B 96, H 100	1 x LED 58 W	840	6200 / 520 lm	3 h	MultiDigit
672206.009.1.07	L 1573, B 96, H 100	1 x LED 58 W	840	6200 / 520 lm	3 h	DALI-Sibe
672206.009.3	L 1573, B 96, H 100	1 x LED 58 W	850	6250 / 570 lm	3 h	autotest
672206.009.3.04	L 1573, B 96, H 100	1 x LED 58 W	850	6250 / 570 lm	3 h	MultiDigit
672206.009.3.07	L 1573, B 96, H 100	1 x LED 58 W	850	6250 / 570 lm	3 h	DALI-Sibe

Price Category 23



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Refractor: plastic (PMMA)					
672143.009	L 658, B 96, H 100	1 x LED 26 W	840	2700 / 2700 lm	
672143.009.89	L 658, B 96, H 100	1 x LED 26 W	840	2700 / 2700 lm	AC-Control
672143.009.2	L 658, B 96, H 100	1 x LED 26 W	850	2850 / 2850 lm	
672143.009.2.89	L 658, B 96, H 100	1 x LED 26 W	850	2850 / 2850 lm	AC-Control
672144.009	L 1278, B 96, H 100	1 x LED 28 W	840	2950 / 2950 lm	
672144.009.89	L 1278, B 96, H 100	1 x LED 28 W	840	2950 / 2950 lm	AC-Control
672144.009.2	L 1278, B 96, H 100	1 x LED 28 W	850	3150 / 3150 lm	
672144.009.2.89	L 1278, B 96, H 100	1 x LED 28 W	850	3150 / 3150 lm	AC-Control
672199.009	L 1278, B 96, H 100	1 x LED 45 W	840	4750 / 4750 lm	
672199.009.89	L 1278, B 96, H 100	1 x LED 45 W	840	4750 / 4750 lm	AC-Control
672199.009.2	L 1278, B 96, H 100	1 x LED 45 W	850	5050 / 5050 lm	
672199.009.2.89	L 1278, B 96, H 100	1 x LED 45 W	850	5050 / 5050 lm	AC-Control
672200.009	L 1278, B 96, H 100	1 x LED 52 W	840	5300 / 5300 lm	
672200.009.89	L 1278, B 96, H 100	1 x LED 52 W	840	5300 / 5300 lm	AC-Control
672200.009.2	L 1278, B 96, H 100	1 x LED 52 W	850	5750 / 5750 lm	
672200.009.2.89	L 1278, B 96, H 100	1 x LED 52 W	850	5750 / 5750 lm	AC-Control
672145.009	L 1573, B 96, H 100	1 x LED 34 W	840	3900 / 3900 lm	
672145.009.89	L 1573, B 96, H 100	1 x LED 34 W	840	3900 / 3900 lm	AC-Control
672145.009.2	L 1573, B 96, H 100	1 x LED 34 W	850	4200 / 4200 lm	
672145.009.2.89	L 1573, B 96, H 100	1 x LED 34 W	850	4200 / 4200 lm	AC-Control
672201.009	L 1573, B 96, H 100	1 x LED 58 W	840	6150 / 6150 lm	
672201.009.89	L 1573, B 96, H 100	1 x LED 58 W	840	6150 / 6150 lm	AC-Control
672201.009.2	L 1573, B 96, H 100	1 x LED 58 W	850	6600 / 6600 lm	
672201.009.2.89	L 1573, B 96, H 100	1 x LED 58 W	850	6600 / 6600 lm	AC-Control

Price Category 24

Spacing table 672202.009.1

Luminaire flux
Emergency: 600 lm
Following values are indicated in m

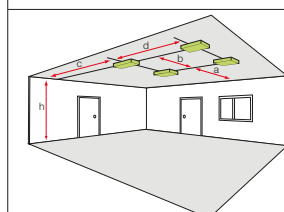
h	a	b	c	d
2,5	5,1	12,6	3,9	9,5
3,0	5,2	13,6	4,2	10,4
3,5	5,3	14,4	4,4	11,2
4,0	5,6	14,9	4,6	11,7

Spacing table 672203.009.1

Luminaire flux
Emergency: 550 lm
Following values are indicated in m

h	a	b	c	d
2,5	5,0	12,6	3,8	9,5
3,0	5,3	13,5	4,1	10,2
3,5	5,5	14,2	4,3	10,9
4,0	5,7	14,9	4,5	11,5

Planning guide: Escape route illumination in accord. with EN 1838



E = 1,25 lx along the centre line

Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Refractor: plastic (polycarbonate)					
672143.009.1	L 658, B 96, H 100	1 x LED 26 W	840	2600 / 2600 lm	AC-Control
672143.009.1.89	L 658, B 96, H 100	1 x LED 26 W	840	2600 / 2600 lm	
672143.009.3	L 658, B 96, H 100	1 x LED 26 W	850	2800 / 2800 lm	
672143.009.3.89	L 658, B 96, H 100	1 x LED 26 W	850	2800 / 2800 lm	AC-Control
672144.009.1	L 1278, B 96, H 100	1 x LED 28 W	840	2850 / 2850 lm	AC-Control
672144.009.1.89	L 1278, B 96, H 100	1 x LED 28 W	840	2850 / 2850 lm	
672144.009.3	L 1278, B 96, H 100	1 x LED 28 W	850	3050 / 3050 lm	
672144.009.3.89	L 1278, B 96, H 100	1 x LED 28 W	850	3050 / 3050 lm	AC-Control
672199.009.1	L 1278, B 96, H 100	1 x LED 45 W	840	4550 / 4550 lm	AC-Control
672199.009.1.89	L 1278, B 96, H 100	1 x LED 45 W	840	4550 / 4550 lm	
672199.009.3	L 1278, B 96, H 100	1 x LED 45 W	850	4850 / 4850 lm	
672199.009.3.89	L 1278, B 96, H 100	1 x LED 45 W	850	4850 / 4850 lm	AC-Control
672200.009.1	L 1278, B 96, H 100	1 x LED 52 W	840	5100 / 5100 lm	AC-Control
672200.009.1.89	L 1278, B 96, H 100	1 x LED 52 W	840	5100 / 5100 lm	
672200.009.3	L 1278, B 96, H 100	1 x LED 52 W	850	5500 / 5500 lm	
672200.009.3.89	L 1278, B 96, H 100	1 x LED 52 W	850	5500 / 5500 lm	AC-Control
672145.009.1	L 1573, B 96, H 100	1 x LED 34 W	840	3750 / 3750 lm	AC-Control
672145.009.1.89	L 1573, B 96, H 100	1 x LED 34 W	840	3750 / 3750 lm	
672145.009.3	L 1573, B 96, H 100	1 x LED 34 W	850	4050 / 4050 lm	
672145.009.3.89	L 1573, B 96, H 100	1 x LED 34 W	850	4050 / 4050 lm	AC-Control
672201.009.1	L 1573, B 96, H 100	1 x LED 58 W	840	5950 / 5950 lm	AC-Control
672201.009.1.89	L 1573, B 96, H 100	1 x LED 58 W	840	5950 / 5950 lm	
672201.009.3	L 1573, B 96, H 100	1 x LED 58 W	850	6400 / 6400 lm	
672201.009.3.89	L 1573, B 96, H 100	1 x LED 58 W	850	6400 / 6400 lm	AC-Control



Spacing table 672205.009.1					
Luminaire flux Emergency: 530 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,9	12,3	3,9	9,7	
3,0	5,2	13,2	4,2	10,5	
3,5	5,4	13,8	4,5	11,2	
4,0	5,5	14,4	4,6	11,8	

Spacing table 672143.009					
Luminaire flux Emergency: 2700 lm Following values are indicated in m					
h	a	b	c	d	
2,5	8,1	20,1	6,4	15,4	
3,0	8,7	21,6	6,9	16,8	
3,5	9,3	23,0	7,4	18,0	
4,0	9,7	24,2	7,9	19,2	

Spacing table 672144.009					
Luminaire flux Emergency: 2950 lm Following values are indicated in m					
h	a	b	c	d	
2,5	8,4	20,6	6,4	15,3	
3,0	9,0	22,2	7,0	16,8	
3,5	9,6	23,7	7,5	18,1	
4,0	10,1	25,0	8,0	19,3	

Spacing table 672199.009					
Luminaire flux Emergency: 4750 lm Following values are indicated in m					
h	a	b	c	d	
2,5	9,6	23,8	7,2	17,3	
3,0	10,4	25,6	7,9	19,0	
3,5	11,1	27,3	8,5	20,5	
4,0	11,7	28,8	9,1	21,9	

Spacing table 672200.009					
Luminaire flux Emergency: 5300 lm Following values are indicated in m					
h	a	b	c	d	
2,5	10,0	24,5	7,4	17,7	
3,0	10,7	26,4	8,1	19,4	
3,5	11,4	28,2	8,8	21,0	
4,0	12,1	29,8	9,3	22,4	

Spacing table 672145.009					
Luminaire flux Emergency: 3900 lm Following values are indicated in m					
h	a	b	c	d	
2,5	9,1	22,5	6,9	16,5	
3,0	9,8	24,2	7,5	18,0	
3,5	10,4	25,8	8,1	19,5	
4,0	11,0	27,2	8,7	20,8	

Spacing table 672201.009					
Luminaire flux Emergency: 6150 lm Following values are indicated in m					
h	a	b	c	d	
2,5	10,5	25,8	7,7	18,4	
3,0	11,3	27,8	8,5	20,2	
3,5	12,0	29,6	9,1	21,8	
4,0	12,6	31,2	9,8	23,3	

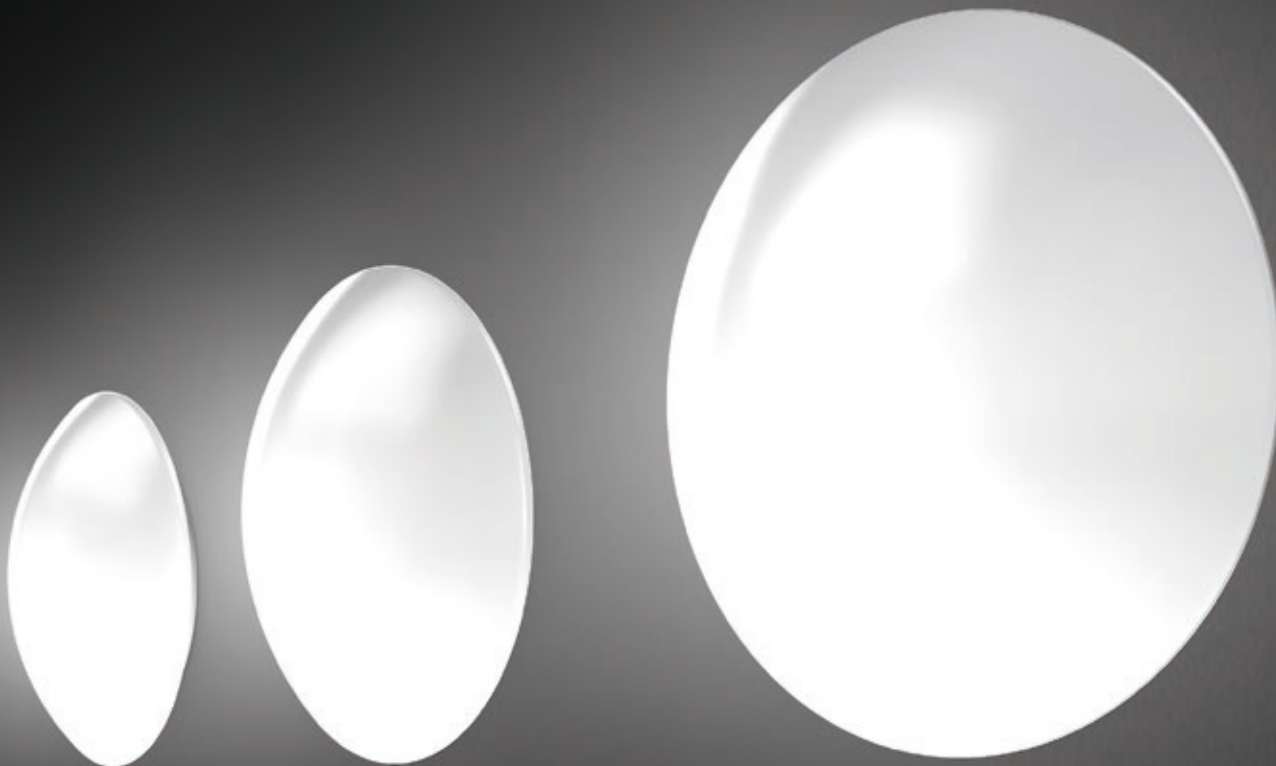
Spacing table 672143.009.1					
Luminaire flux Emergency: 2600 lm Following values are indicated in m					
h	a	b	c	d	
2,5	8,1	20,1	6,1	14,7	
3,0	8,7	21,6	6,6	16,0	
3,5	9,2	23,0	7,1	17,3	
4,0	9,7	24,2	7,5	18,3	

Spacing table 672199.009.1					
Luminaire flux Emergency: 4550 lm Following values are indicated in m					
h	a	b	c	d	
2,5	9,7	23,9	6,9	16,6	
3,0	10,5	25,7	7,6	18,2	
3,5	11,1	27,4	8,2	19,6	
4,0	11,7	29,0	8,7	20,9	

Spacing table 672200.009.1					
Luminaire flux Emergency: 5100 lm Following values are indicated in m					
h	a	b	c	d	
2,5	10,0	24,7	7,1	17,1	
3,0	10,8	26,6	7,8	18,7	
3,5	11,5	28,4	8,4	20,2	
4,0	12,1	30,0	9,0	21,6	

Spacing table 672145.009.1					
Luminaire flux Emergency: 3750 lm Following values are indicated in m					
h	a	b	c	d	
2,5	10,7	26,3	7,5	17,9	
3,0	11,5	28,3	8,2	19,7	
3,5	12,3	30,2	8,9	21,3	
4,0	12,9	31,9	9,5	22,7	

Spacing table 672201.009.1					
Luminaire flux Emergency: 5950 lm Following values are indicated in m					
h	a	b	c	d	
2,5	10,7	26,3	7,5	17,9	
3,0	11,5	28,3	8,2	19,7	
3,5	12,3	30,2	8,9	21,3	
4,0	12,9	31,9	9,5	22,7	



FLAT POLYMERO®

Ceiling and wall luminaires

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems.
As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Design matches modern architectural styles
- Compact design
- Easy to install
- Low maintenance costs



Further luminaires of this series, see:
Indoor lighting | Ceiling and wall luminaires
Indoor lighting | Pendant luminaires

Ceiling and wall luminaires | Series: Flat Polymero®Type of Protection: **IP 40**Protection Class: **I**Impact Protection: **IK03****For escape route illumination**

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal.

Diffuser fastening: patented push system.

LED included.

Available colour: 2 = white

Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

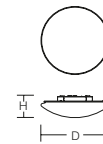
Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

Ballast mains/emergency: EB

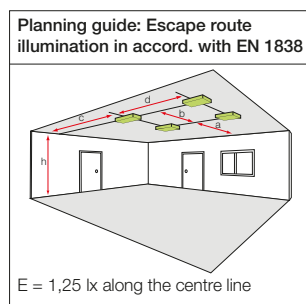
Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Diffuser: plastic (PMMA)						
Diameter D 360 mm						
672058.002.7 .Q	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	830	1450 / 130 lm	3 h	autotest
672058.002.7.04	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	830	1450 / 130 lm	3 h	MultiDigit
672058.002.7.07	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	830	1450 / 130 lm	3 h	DALI-Sibe
672134.002.7.19 .Q*	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	830	1450 / 120 lm	3 h	autotest with movement sensor
672058.002.5 .Q	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	840	1450 / 130 lm	3 h	autotest
672058.002.5.04	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	840	1450 / 130 lm	3 h	MultiDigit
672058.002.5.07	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	840	1450 / 130 lm	3 h	DALI-Sibe
672134.002.5.19 *	D 360, H 116	6 x LED 2,2 W + 1 x LED 2 W	840	1450 / 120 lm	3 h	autotest with movement sensor
Diameter D 460 mm						
672059.002.7 .Q	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2100 / 100 lm	3 h	autotest
672059.002.7.04	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2100 / 100 lm	3 h	MultiDigit
672059.002.7.07	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2100 / 100 lm	3 h	DALI-Sibe
672059.002.7.19 *	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2100 / 100 lm	3 h	autotest with movement sensor
672133.002.7	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2050 / 100 lm	8 h	autotest
672133.002.7.07	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2050 / 100 lm	8 h	DALI-Sibe
672133.002.7.19 *	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	830	2100 / 100 lm	8 h	autotest with movement sensor
672059.002.5 .Q	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2100 / 100 lm	3 h	autotest
672059.002.5.04	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2100 / 100 lm	3 h	MultiDigit
672059.002.5.07	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2100 / 100 lm	3 h	DALI-Sibe
672059.002.5.19 *	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2100 / 100 lm	3 h	autotest with movement sensor
672133.002.5 .Q	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2050 / 100 lm	8 h	autotest
672133.002.5.07	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2050 / 100 lm	8 h	DALI-Sibe
672133.002.5.19 *	D 460, H 120	8 x LED 2,2 W + 1 x LED 2 W	840	2100 / 100 lm	8 h	autotest with movement sensor



Spacing table 672058.002.7

Luminaire flux
Emergency: 130 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	7,2	3,0	7,2
3,0	3,0	7,6	3,0	7,6
3,5	3,0	7,8	3,0	7,8
4,0	3,0	7,9	3,0	7,9

Spacing table 672059.002.7

Luminaire flux
Emergency: 100 lm
Following values are indicated in m

h	a	b	c	d
2,5	3,0	6,8	3,0	6,8
3,0	3,0	7,1	3,0	7,1
3,5	3,0	7,2	3,0	7,2
4,0	3,0	7,2	3,0	7,2



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Diffuser: plastic (PMMA)						
Diameter D 620 mm						
672260.002	D 620, H 155	16 x LED 2,2 W + 830 2 x LED 1 W		4050 / 390 lm	3 h	autotest
672260.002.04	D 620, H 155	16 x LED 2,2 W + 830 2 x LED 1 W		4050 / 390 lm	3 h	MultiDigit
672260.002.07	D 620, H 155	16 x LED 2,2 W + 830 2 x LED 1 W		4050 / 390 lm	3 h	DALI-Sibe
672261.002	D 620, H 155	16 x LED 2,2 W + 830 2 x LED 1 W		4050 / 100 lm	8 h	autotest
672261.002.04	D 620, H 155	16 x LED 2,2 W + 830 2 x LED 1 W		4050 / 100 lm	8 h	MultiDigit
672261.002.07	D 620, H 155	16 x LED 2,2 W + 830 2 x LED 1 W		4050 / 100 lm	8 h	DALI-Sibe
672260.002.1	D 620, H 155	16 x LED 2,2 W + 840 2 x LED 1 W		4050 / 390 lm	3 h	autotest
672260.002.1.04	D 620, H 155	16 x LED 2,2 W + 840 2 x LED 1 W		4050 / 390 lm	3 h	MultiDigit
672260.002.1.07	D 620, H 155	16 x LED 2,2 W + 840 2 x LED 1 W		4050 / 390 lm	3 h	DALI-Sibe
672261.002.1	D 620, H 155	16 x LED 2,2 W + 840 2 x LED 1 W		4050 / 100 lm	8 h	autotest
672261.002.1.04	D 620, H 155	16 x LED 2,2 W + 840 2 x LED 1 W		4050 / 100 lm	8 h	MultiDigit
672261.002.1.07	D 620, H 155	16 x LED 2,2 W + 840 2 x LED 1 W		4050 / 100 lm	8 h	DALI-Sibe

Price Category 23



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					
Diffuser: plastic (PMMA)					
Diameter D 360 mm					
672056.002.7	D 360, H 100	6 x LED 2,2 W	830	1450 / 1450 lm	AC-Control
672056.002.7.89	D 360, H 100	6 x LED 2,2 W	830	1450 / 1450 lm	
672056.002.5	D 360, H 100	6 x LED 2,2 W	840	1450 / 1450 lm	
672056.002.5.89	D 360, H 100	6 x LED 2,2 W	840	1450 / 1450 lm	AC-Control
Diameter D 460 mm					
672057.002.7	D 460, H 120	8 x LED 2,2 W	830	2050 / 2050 lm	AC-Control
672057.002.7.89	D 460, H 120	8 x LED 2,2 W	830	2050 / 2050 lm	
672057.002.5	D 460, H 120	8 x LED 2,2 W	840	2050 / 2050 lm	
672057.002.5.89	D 460, H 120	8 x LED 2,2 W	840	2050 / 2050 lm	AC-Control

Price Category 24

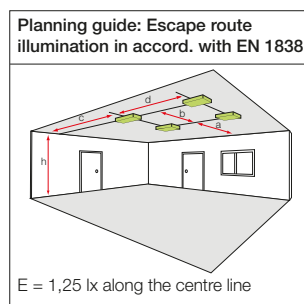
Replacement diffusers			Price Category 13		
08-311161.012	D 360, H 88	Plastic (PMMA)			
08-311165.012	D 460, H 113	Plastic (PMMA)			
08-311173.012	D 620, H 150	Plastic (PMMA)			

Spacing table 672260.002					
Luminaire flux Emergency: 390 lm Following values are indicated in m					
h	a	b	c	d	
2,5	4,1	10,2	4,1	10,2	
3,0	4,3	10,9	4,3	10,9	
3,5	4,5	11,5	4,5	11,5	
4,0	4,6	12,0	4,6	12,0	

Spacing table 672261.002					
Luminaire flux Emergency: 100 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,4	3,0	6,4	
3,0	3,0	6,6	3,0	6,6	
3,5	3,0	6,7	3,0	6,7	
4,0	3,0	6,6	3,0	6,6	

Spacing table 672056.002.7					
Luminaire flux Emergency: 1450 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,1	15,1	6,1	15,1	
3,0	6,5	16,2	6,5	16,2	
3,5	6,9	17,2	6,9	17,2	
4,0	7,3	18,2	7,3	18,2	

Spacing table 672057.002.7					
Luminaire flux Emergency: 2050 lm Following values are indicated in m					
h	a	b	c	d	
2,5	6,8	16,8	6,8	16,8	
3,0	7,3	18,1	7,3	18,1	
3,5	7,8	19,3	7,8	19,3	
4,0	8,2	20,3	8,2	20,3	







FLAT POLYMERO® KREIS

Ceiling and wall luminaires

- Design continuity to the general lighting product range.
We offer an extensive range of emergency lighting and general lighting systems.
As such, we can provide our customers with integrated solutions for all areas of application, depending on their construction projects.
- Design matches modern architectural styles
- Compact design
- Easy to install
- Low maintenance costs



Further luminaires of this series, see:
Indoor lighting | Pendant luminaires
Indoor lighting | Ceiling and wall luminaires

Ceiling and wall luminaires | Series: Flat Polymero® Kreis

Type of Protection: IP 40

Protection Class: I

Impact Protection: IK03

For escape route illumination

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal.

Diffuser fastening: patented push system.

LED included.

Available colour: 2 = white

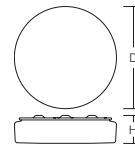
Self-contained safety luminaires

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode (BS) or in maintained power mode (DS).

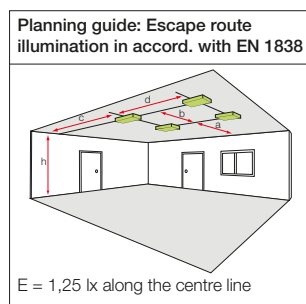
Ballast mains/emergency: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System
Self-contained safety luminaires						
Diffuser: plastic (PMMA)						
Diameter D 360 mm						
672092.002.7	D 360, H 109	6 x LED 2,2 W + 830 1 x LED 2 W		1550 / 120 lm	3 h	autotest
672092.002.7.04	D 360, H 109	6 x LED 2,2 W + 830 1 x LED 2 W		1550 / 120 lm	3 h	MultiDigit
672092.002.7.07	D 360, H 109	6 x LED 2,2 W + 830 1 x LED 2 W		1550 / 120 lm	3 h	DALI-Sibe
672092.002.5	D 360, H 109	6 x LED 2,2 W + 840 1 x LED 2 W		1550 / 120 lm	3 h	autotest
672092.002.5.04	D 360, H 109	6 x LED 2,2 W + 840 1 x LED 2 W		1550 / 120 lm	3 h	MultiDigit
672092.002.5.07	D 360, H 109	6 x LED 2,2 W + 840 1 x LED 2 W		1550 / 120 lm	3 h	DALI-Sibe
Diameter D 460 mm						
672093.002.7	D 460, H 95	8 x LED 2,2 W + 830 1 x LED 1 W		2050 / 80 lm	3 h	autotest
672093.002.7.04	D 460, H 95	8 x LED 2,2 W + 830 1 x LED 1 W		2050 / 80 lm	3 h	MultiDigit
672093.002.7.07	D 460, H 95	8 x LED 2,2 W + 830 1 x LED 1 W		2050 / 80 lm	3 h	DALI-Sibe
672093.002.7.19 *	D 460, H 95	8 x LED 2,2 W + 830 1 x LED 1 W		2050 / 80 lm	3 h	autotest with movement sensor
672093.002.5	D 460, H 95	8 x LED 2,2 W + 840 1 x LED 1 W		2050 / 80 lm	3 h	autotest
672093.002.5.04	D 460, H 95	8 x LED 2,2 W + 840 1 x LED 1 W		2050 / 80 lm	3 h	MultiDigit
672093.002.5.07	D 460, H 95	8 x LED 2,2 W + 840 1 x LED 1 W		2050 / 80 lm	3 h	DALI-Sibe

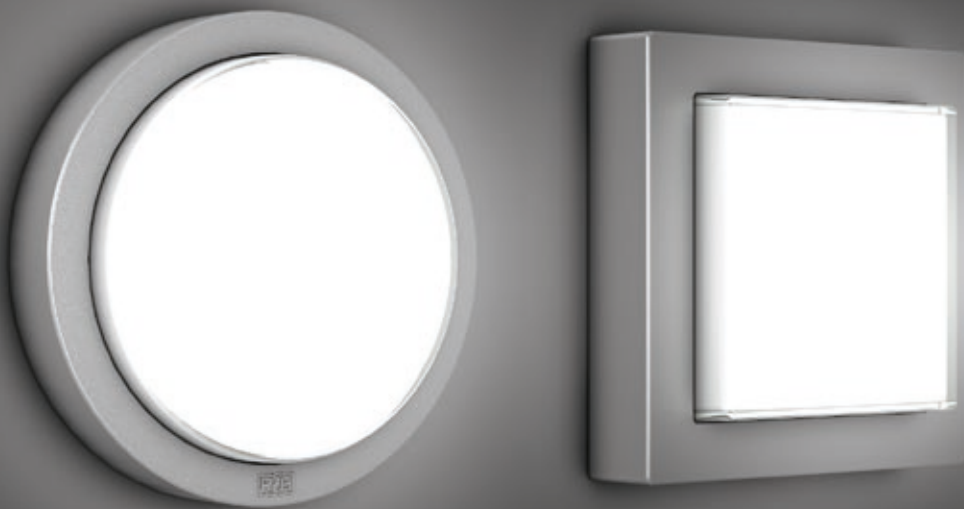
* with integrated movement sensor

Replacement diffusers			Price Category 13
08-311595.002	D 360, H 81	Plastic (PMMA)	
08-311600.002	D 460, H 88	Plastic (PMMA)	



Spacing table 672092.002.7					
Luminaire flux Emergency: 120 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,7	3,0	6,7	
3,0	3,0	6,9	3,0	6,9	
3,5	3,0	6,9	3,0	6,9	
4,0	3,0	6,8	3,0	6,8	

Spacing table 672093.002.7					
Luminaire flux Emergency: 80 lm Following values are indicated in m					
h	a	b	c	d	
2,5	3,0	6,2	3,0	6,2	
3,0	3,0	6,4	3,0	6,4	
3,5	3,0	6,5	3,0	6,5	
4,0	3,0	6,4	3,0	6,4	



CADERO®

Ceiling and wall luminaires

- The flat design provides universal applicability with circular or square glass cover option
- The inside matte crystal glass diffuser appears brilliant also in the daytime.
- Smart, cost-effective LED modules for mains voltage with high total LED luminous efficiency for energy-saving operation
- Durability by using high-quality materials like aluminium, crystal glass and stainless steel as well as long-lasting powder-coating
- Selection of two light colours 830 or 840 enables harmonising direct surrounding with remote ambient lighting
- The high type of protection IP 65 enables maintenance-free, plain LED operation

Ceiling and wall luminaires | Series: Cadero® Disca

Type of Protection: IP 66

Protection Class: I

Impact Protection: IK05

For escape route illumination

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Clear crystal glass diffuser, inside matte finish, retained in cover. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. Screwless cover fixing via bayonet lock with safety catch. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

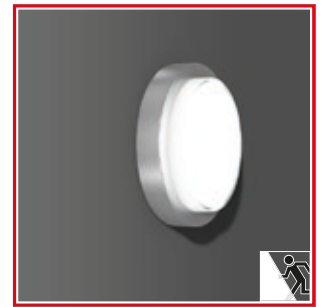
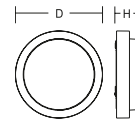
LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	
Luminaires for central battery system				Price Category 24
672289.00X	D 276, H 66	1 x LED 12,9 W	830	
672289.00X.1	D 276, H 66	1 x LED 12,9 W	840	
Replacement glasses				Price Category 13
981211.002	D 245, H 33			

**Ceiling and wall luminaires | Series: Cadero® Quadra**

Type of Protection: IP 65

Protection Class: I

Impact Protection: IK05

For escape route illumination

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Clear crystal glass diffuser, inside matte finish, retained in cover. Simple mounting spring system for installation without tools. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

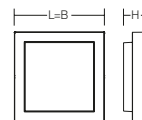
LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	
Luminaires for central battery system					Price Category 24
672295.00X	L 257, B 257, H 81	1 x LED 13,5 W	830	670 / 170 lm	
672295.00X.1	L 257, B 257, H 81	1 x LED 13,5 W	840	670 / 170 lm	
Replacement glasses					Price Category 13
981210.002	D 245, H 33				





ALU-DESIGN

Ceiling and wall luminaires

- Elegant appearance without visible hardware featuring bayonet lock and safety catch.
- Sturdy housing made of corrosion resistant pressure die cast Aluminium, powder coated, with stainless steel screws.
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables, wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Marine grade coating available as an option

Ceiling and wall luminaires | Series: Alu-DesignType of Protection: **IP 65**

Protection Class: I

For escape route illumination

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: opal glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. Mains connection 2 x 3 x 1.5 mm².

LED included.

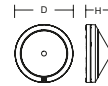
Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB

Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module	
Luminaires for central battery system						Price Category 24
672287.00X	D 268, H 115	1 x LED 6,2 W	830			
672287.00X.89	D 268, H 115	1 x LED 6,2 W	830		AC-Control	
672287.00X.1	D 268, H 115	1 x LED 6,2 W	840	200 / 200 lm		
672287.00X.1.89	D 268, H 115	1 x LED 6,2 W	840	200 / 200 lm	AC-Control	
Theft protection						Price Category 12
982410.003	L 13, B 11, H 16					
Replacement glasses						Price Category 13
05-3143.002	D 226, H 83					

**Wall luminaires | Series: Alu-Design**Type of Protection: **IP 65**

Protection Class: I

For escape route illumination

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Opal glass cone diffuser retained in cover ring, screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. Mains connection 2 x 3 x 1.5 mm².

LED included.

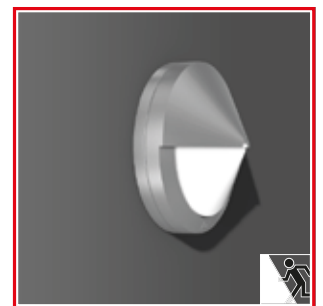
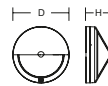
Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

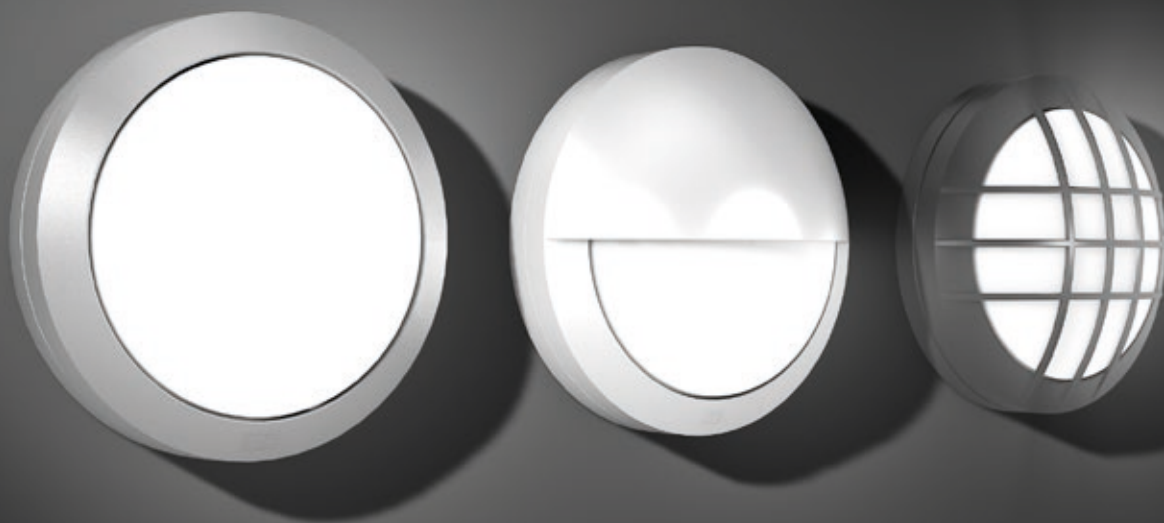
Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB

Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module	
Luminaires for central battery system						Price Category 24
672288.00X	D 268, H 120	1 x LED 6,2 W	830			
672288.00X.89	D 268, H 120	1 x LED 6,2 W	830		AC-Control	
672288.00X.1	D 268, H 120	1 x LED 6,2 W	840	320 / 320 lm		
672288.00X.1.89	D 268, H 120	1 x LED 6,2 W	840	320 / 320 lm	AC-Control	
Theft protection						Price Category 12
982410.003	L 13, B 11, H 16					
Replacement glasses						Price Category 13
05-3143.002	D 226, H 83					





ROUNDED® MIDI

Ceiling and wall luminaires, Wall luminaires

- Elegant appearance without visible hardware featuring bayonet lock and safety catch.
- Sturdy housing made of corrosion resistant pressure die cast Aluminium, powder coated, with stainless steel screws.
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables, wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes
- Marine grade coating available as an option

Ceiling and wall luminaires | Series: Rounded® Midi

Type of Protection: IP 65

Protection Class: I

For escape route illumination

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. Mains connection 2 x 3 x 1.5 mm².

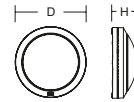
LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module	
Luminaires for central battery system						Price Category 24
Glass						
672313.00X	D 268, H 91	1 x LED 6,2 W	840	310 / 310 lm		
672313.00X.89	D 268, H 91	1 x LED 6,2 W	840	310 / 310 lm	AC-Control	
Plastic (polycarbonate)						
672284.00X	D 268, H 91	1 x LED 6,2 W	840	530 / 530 lm		
672284.00X.89	D 268, H 91	1 x LED 6,2 W	840	530 / 530 lm	AC-Control	



Ceiling and wall luminaires | Series: Rounded® Midi

Type of Protection: IP 65

Protection Class: I

Impact Protection: IK02 (Glass)

For escape route illumination

Base, housing and guard made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) or opal plastic (polycarbonate); with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. Mains connection 2 x 3 x 1.5 mm².

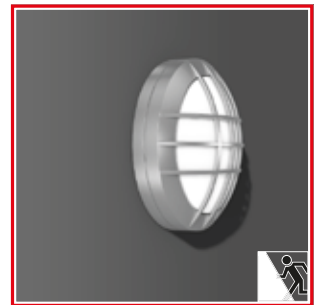
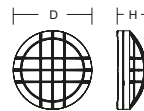
LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



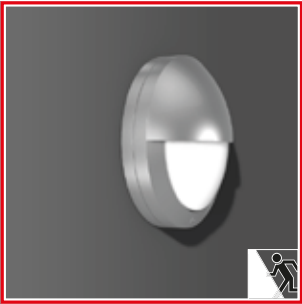
Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module	
Luminaires for central battery system						Price Category 24
Glass						
672314.00X	D 268, H 100	1 x LED 6,2 W	840	290 / 290 lm		
672314.00X.89	D 268, H 100	1 x LED 6,2 W	840	290 / 290 lm	AC-Control	
Plastic (polycarbonate)						
672285.00X	D 268, H 100	1 x LED 6,2 W	840	480 / 480 lm		
672285.00X.89	D 268, H 100	1 x LED 6,2 W	840	480 / 480 lm	AC-Control	



Replacement glasses					Price Category 13
05-581023.002	D 226, H 60				

Replacement diffusers					Price Category 13
08-581019.012	D 226, H 60	Plastic (polycarbonate)			

Theft protection					Price Category 12
982410.003	L 13, B 11, H 16				



Wall luminaires | Series: Rounded® Midi

Type of Protection: IP 65
Protection Class: I

For escape route illumination

Housing made of corrosion-resistant pressure die-cast Aluminium for outdoor use, powder coated. Visor with opal glass or plastic (polycarbonate) spherical cap diffuser retained in cover ring, screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. LED with integral driver. With membrane valve as a standard to prevent condensed water.

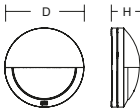
LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

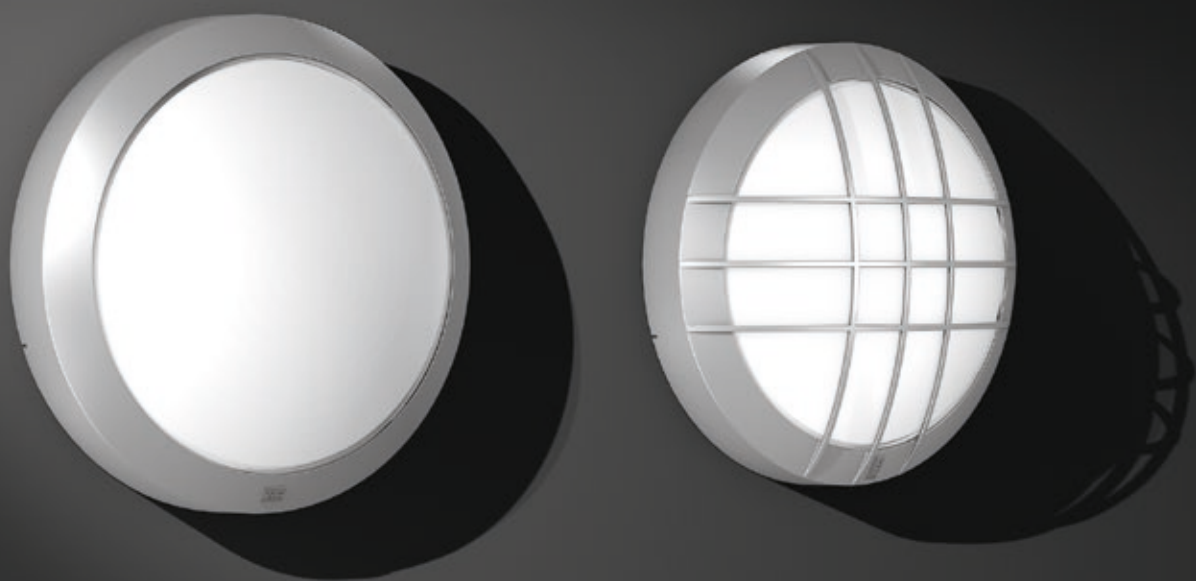
Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Monitoring module
Luminaires for central battery system					Price Category 24
Glass					
672315.00X	D 268, H 100	1 x LED 6,2 W	840	190 / 190 lm	AC-Control
672315.00X.89	D 268, H 100	1 x LED 6,2 W	840	190 / 190 lm	
Plastic (polycarbonate)					
672301.00X	D 268, H 96	1 x LED 6,2 W	840	330 / 330 lm	AC-Control
672301.00X.89	D 268, H 96	1 x LED 6,2 W	840	330 / 330 lm	
Replacement glasses					Price Category 13
05-581023.002	D 226, H 60				
Replacement diffusers					Price Category 13
08-581019.012	D 226, H 60	Plastic (polycarbonate)			
Theft protection					Price Category 12
982410.003	L 13, B 11, H 16				





ROUNDED® MAXI

Ceiling and wall luminaires

- Elegant appearance without visible hardware featuring bayonet lock and safety catch.
- The adequate size also allows them to be used in generously dimensioned outdoor areas without them appearing lost
- Quick installation:
 - Drill hole deviations can be compensated
 - Generous space for displacing cables, wall outlet even in the luminaire centre possible
 - Electrical connection via piano key terminal
- Fixing points outside the gasketed space guarantee a steady mounting quality by consequently preventing mistakes

Ceiling and wall luminaires | Series: Rounded® Maxi

Type of Protection: IP 65

Protection Class: I

Impact Protection: IK04

For escape route illumination

Base and housing made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) with diffuser fixing. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

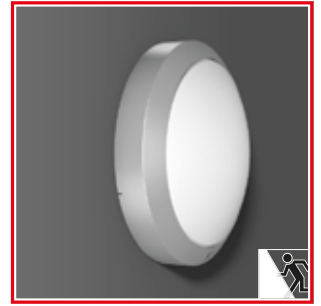
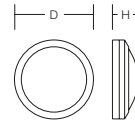
LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Monitoring module
Luminaires for central battery system				Price Category 24
672297.00X	D 400, H 121	1 x LED 21 W	830	
672297.00X.89	D 400, H 121	1 x LED 21 W	830	AC-Control
672297.00X.1	D 400, H 121	1 x LED 21 W	840	
672297.00X.1.89	D 400, H 121	1 x LED 21 W	840	AC-Control

**Ceiling and wall luminaires | Series: Rounded® Maxi**

Type of Protection: IP 65

Protection Class: I

Impact Protection: IK04

For escape route illumination

Base, housing and guard made of corrosion resistant pressure die-cast aluminium (powder-coated). Diffuser: pressed glass (satin finish) with diffuser fixing. Screwless cover fixing via bayonet lock with safety catch. Base fixing slots outside of gasketed volume, drill hole deviations can be compensated. With membrane valve as a standard to prevent condensed water. With mains voltage LED module. Mains connection 2 x 3 x 1.5 mm².

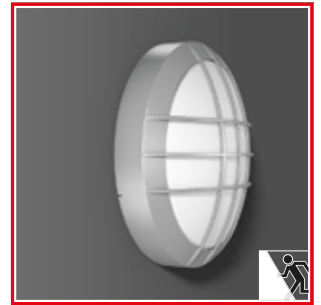
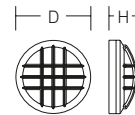
LED included.

Available colours (X): 2 = white, 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Monitoring module
Luminaires for central battery system				Price Category 24
672298.00X	D 400, H 127	1 x LED 21 W	830	
672298.00X.89	D 400, H 127	1 x LED 21 W	830	AC-Control
672298.00X.1	D 400, H 127	1 x LED 21 W	840	
672298.00X.1.89	D 400, H 127	1 x LED 21 W	840	AC-Control



Replacement glasses		Price Category 13
05-58130	D 352, H 105	



LIGHTSTREAM® LED

Spotlights

- Made in Germany
- Marine grade coating available as an option
- Second cable inlet for loop through
- Reduced power consumption maintaining the same luminaire flux for energy savings at switchable version
- COB-LEDs with socket for change on site, selection of two light colours 830 or 840
- LED rated life 50,000 h (L80, B10)
- Mounting accessories available for pole and wall mounting
- Suitable for use in the food and drink industry

Spotlights | Series: Lightstream® LED Mini

 Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK07

For escape route illumination

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Ceramic coated toughened glass. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodised. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal 2.5 mm², for cable max. Ø 13 mm. Second cable gland for loop through available as accessory.

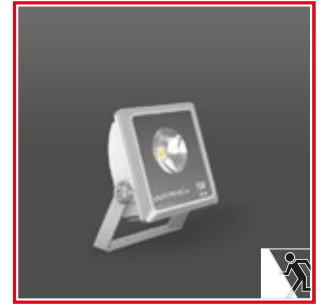
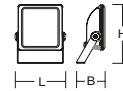
LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Price Category 24
Luminaires for central battery system					
Flood, Rotationally symmetric wide beam light distribution					
672316.11X	L 194, B 109, H 226	1 x LED 10 W	830	2200 / 990 lm	
672316.11X.1	L 194, B 109, H 226	1 x LED 10 W	840	2300 / 1050 lm	
672088.11X	L 194, B 109, H 226	1 x LED 23 W	830	2200 / 2200 lm	
672088.11X.1	L 194, B 109, H 226	1 x LED 23 W	840	2300 / 2300 lm	


Spotlights | Series: Lightstream® LED Midi

 Type of Protection: **IP 65**

Protection Class: I

Impact Protection: IK07

For escape route illumination

Housing made of corrosion-resistant pressure die-cast aluminium, for outdoor application, bracket: aluminium, powder-coated. Ceramic coated toughened glass. COB LED with socket for easy replacement. Reflector made of high purity aluminium, glossy brightened and anodised. Standard Gore™ Protective Vents diaphragm valve to prevent condensed water. Piano-key terminal 2.5 mm², for cable max. Ø 13 mm. Second cable gland for loop through available as accessory.

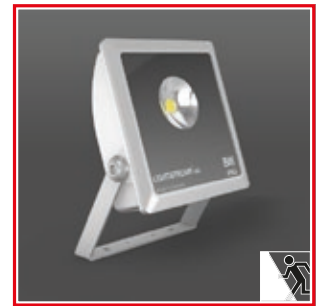
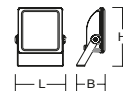
LED included.

Available colours (X): 31 = anthracite metallic, 4 = silver metallic

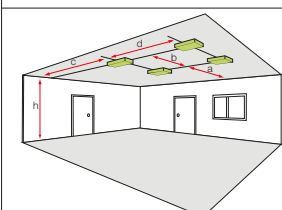
Luminaires for central battery system

Voltage type: AC/DC

Ballast: EB



Reference number	Dimensions	Lamp	Light colour	Luminaire luminous flux Mains/Emergency	Price Category 24
Luminaires for central battery system					
Flood, Rotationally symmetric wide beam light distribution					
672089.11X	L 267, B 142, H 336	1 x LED 37 W	830	4200 / 4200 lm	
672089.11X.1	L 267, B 142, H 336	1 x LED 37 W	840	4300 / 4300 lm	


Planning guide: Escape route illumination in accord. with EN 1838


E = 1,25 lx along the centre line

Spacing table 672088.11X

Luminaire flux
Emergency: 2200 lm
Following values are indicated in m

h	a	b	c	d
2,5	4,5	6,9	4,5	6,9
3,0	5,3	7,9	5,3	7,9
3,5	6,0	8,9	6,0	8,9
4,0	6,8	9,9	6,8	9,9

Spacing table 672089.11X

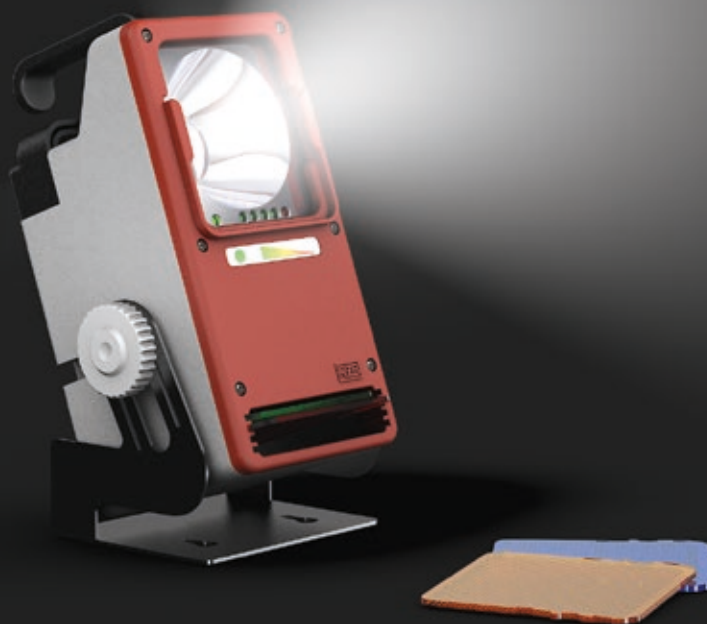
Luminaire flux
Emergency: 4200 lm
Following values are indicated in m

h	a	b	c	d
2,5	5,3	7,9	5,3	7,9
3,0	6,2	8,9	6,2	8,9
3,5	7,1	9,9	7,1	9,9
4,0	7,9	11,9	7,9	11,9



The application image shows:
Lightstream®
Pascala®

© Linus Lintner



Safety spotlights | Series: Portable safety spotlight

Type of Protection: **IP 54**

Protection Class: Protection class: II in charging mode, Protection class: III in battery mode

Impact Protection: IK03

Luminaire housing: plastic, grey. Ergonomically designed one-hand handle, black. Front frame: plastic, red. Cover: polycarbonate, transparent. With four-coloured light scatter disk attachment. Universal mounting adaptor: metal, painted. Integrated charger: 230 V at 50/60 Hz. Automatic changeover from quick to trickle charging.

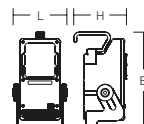
Preselection between static and flashing light mode possible. Operation of the LED lamp at 100% or 10% performance. Maintenance-free NiCd rechargeable battery 6 V / 4,0 Ah. Charging status indicator.

Charge in dry rooms only!

Operating time in static mode:

LED lamp 100% > 4 h, LED lamp 10% > 13.5 h

Available colour: 9 = grey



Reference number	Dimensions	Lamp	Luminaire luminous flux Mains/Emergency	Rated operating time	Emergency Lighting System	Price Category 23
671824.009	L 160, B 155, H 285	1 x LED 5 W	120 / 120 lm	3 h	autotest	



The application image shows:
Less is more® 27

Service	
Abbreviations	826
Types of protection, protection classes	826
IK code: Impact protection	826
Electrotechnical variants and additions	827
Ballasts	827
Binning	827
General information	827
Service life criteria	827
Quality	828
Catalogues, internet, GAEB texts	828
Luminaire showroom, light laboratory, conference and training centre	828
Light planning	828
Safety	828
Safety marks, symbols	828
Quick service	828
Explanation of graphics	829
Explanation of declared values and energy efficiency classes	830
Conditions of sale and delivery	832
Explanation of icons	834
Reference number index	835
Alphabetical index	858
Customer Contact	864

Abbreviations

L	Lengh
B	Width
H	Height
D	Diameter
T	Depth
LP	Pendant length
AL	Extension
BA, LA, DA	Cut out (width, length or Ø)
HE	Required recess depth
TE	Luminaire recessing dimensions
HEL	Recessed height of the luminaire
Le	Recessed length
①	Luminaire with Edison lampholder
EEC	Energy efficiency class
Tg	Operating temperature in °C at the centre of the luminaire surface
ta	Luminaires marked “ta 15°C” are designed for ambient temperatures of 15°C and are also suitable for use outdoors.
K-Trafo	Conventional transformer
E-Trafo	Electronic transformer
EB	Electronic ballast
LM	Lamp
LVK	Light distribution curve
DKN system®	(push-tilt all-glass luminaire) for fastening glass without the need for tools: Slight pressure exerted at the rim of the glass diffuser on the retaining springs releases the tilt and holding mechanism for secure mounting of glass diffusers. Retaining springs compensate the tolerances of the glass rim and protect the glass diffuser when it is repeatedly attached and removed. The base is not visible after mounting the glass diffuser.
RGB	stands for additive colour mixture, based on the three primary colours red - green – blue, using suitable lamps, e.g. coloured fluorescent lamps and coloured LED lamps. By optimising the arrangement of the lamps in the luminaire and choosing colour-saturated lamps, RZB produces a high level of colour saturation and a broad spectrum of composite colours.
LED	stands for light emitting diode, an electronic semi-conductor component offering excellent energy efficiency and a long service life.
LED (1)	Mains voltage LED - no driver required
①	Our Edison socket luminaires are mainly compatible with halogen and compact fluorescent lamps, as well as LEDs, as an alternative to conventional general service lamps. All such luminaires are marked in the catalogue with ①, whereby the socket size and maximum conventional lamp wattage is indicated. When using non-conventional lamps, follow the vendor's instructions concerning conversion of the relevant lamp output. For a list of selected light sources that can be used in the desired luminaires, see our product database at www.rzb-lighting.com. In determining which light source is suitable, you will need to consider the size of the light source and the number of times it can be switched on and off. Please note that the “Comparison of LED and conventional lamps” is based on hypothetical averages and not on exact figures.

Types of protection according to EN 60598/VDE 0711

1st digit: Protection against solid objects		
	IP 2X	Protection against penetration of solid objects ≥ 12.5 mm
	IP 3X	Protection against penetration of solid objects ≥ 2.5 mm
	IP 4X	Protection against penetration of solid objects ≥ 1 mm
☒	IP 5X	Protection against dust penetration
☒	IP 6X	Dust-proof
2nd digit: Protection against water		
💧	IP X1	Protected against water drops (vertically falling drops of water)
	IP X2	Protected against water drops (up to 15° from the vertical)
💧	IP X3	Splashproof luminaires
⚠️	IP X4	Luminaires are protected against water sprays
⚠️	IP X5	Luminaires are protected against water jets
	IP X6	Protected against rough sea or heavy jets of water
💧💧	IP X7	Protection against temporary immersion
💧💧_m	IP X8	Protection against continuous immersion
The type of protection indicated for surface mounted, recessed, pole or pendant luminaires only applies for the defined and/or permitted type of luminaire installation.		

Protection classes

Protection class I	
⚡	Protection against electric shock is not derived solely from the basic insulation. Accessible conductive parts are also connected to the protective conductors on the on-site installation to prevent them going live if the basic insulation fails.
Protection class II	
☐	Protection against electric shock is not derived solely from the basic insulation, but also assured by double- or triple-reinforced insulation. Neither has provision been made to connect a protective conductor nor is the protection derived from the construction conditions.
Protection class III	
⚡	Protection against electric shock is derived from using the safety extra-low voltage (SELV). No voltages above SELV (max. 50 V AC or 120 V DC) are generated. Appropriate converters reliably separate SELV circuits in luminaires from other electric circuits.

IK code: Impact protection

The IK degree of impact protection is a classification for the resistance of an enclosure for electrical equipment to mechanical impacts. It is standardised in accordance with IEC EN 50102 and describes how much impact energy in joules the enclosure can stand without breaking. The higher the IK code, the more robust and resistant is the luminaire.

IK class (DIN EN 50102)	Impact energy (joules)
IK00	No impact resistance
IK01	up to 0,15 J
IK02	up to 0,20 J
IK03	up to 0,35 J
IK04	up to 0,50 J
IK05	up to 0,70 J
IK06	up to 1,00 J
IK07	up to 2,00 J
IK08	up to 5,00 J
IK09	up to 10,0 J
IK10	up to 20,0 J

Electrotechnical variants and additions

Codes are marked by a two-digit suffix separated by a point at the end of the catalogue number.

Code .04	autom. self-test function and feedback to MultiDigit
	Version with automatic self-test function and feedback to MultiDigit
Code .07	autom. self-test function and feedback to DALI
	Version with automatic self-test function and feedback to DALI unit
Code .14	Test button
	Integrated test button
Code .19	Movement sensor
	With movement sensor
Code .25	Light-sensitive switch
	Integrated light-sensitive switch
Code .73	Radio controlled system
	Remote control included
Code .76	EB, digitally dimmable (DALI)
	Version with digitally dimmable EB, DALI compatible
Code .79	EB
	Versions with electronic ballast
Code .191	Movement sensor (Slave)
	With movement sensor
Code .730	smart+free
	Light management for wireless controlling of lighting by bluetooth

Ballasts

Our luminaires are mainly fitted with low-loss ballasts. They are designed for 230 V/50 Hz (ballasts with other specifications available on request).

Luminaires with electronic ballasts are indicated by the code at the end of the reference number, e.g. .76 or .79 or have their own separate reference number with explanatory text.

Parallel-compensated luminaires are indicated either by the code .28 or by a separate reference number with text explanation (compensation for other luminaires available on request).

Binning

The term „binning“ describes the classification of LEDs in the ongoing production process, in particular with respect to their colour quality. Light colour (the most similar colour temperature), colour rendering index (Ra) and colour coordinate tolerance (MacAdam's ellipses) are the common terms generally used to describe the binning of an LED.

General information

Indoor lighting In the case of recessed luminaires, the indicated type of protection only applies to luminaires installed in closed, dry ceilings.

The requirements to be met in the installation of the luminaire in terms of clearance and recessed height are specified in the relevant installation instructions for open and closed ceilings. These installation instructions are also available at www.rzb-lighting.com.

Outdoor lighting Possible occurrence of condensation
Condensation can occur in outdoor luminaires with a high type of protection.
A vacuum is created while the luminaires are cooling down and/or after they were switched off or when temperatures fluctuate strongly. This can result in moisture being sucked into the inside of the luminaire, where it condenses.
As such, the accumulation of condensation in an outdoor luminaire is by no means an indication that the luminaire is not leak-tight.

Care of stainless steel luminaires Stainless steel is corrosion resistant and therefore does not require any organic or metallic coating to improve its corrosion resistance or appearance.

To keep the luminaires looking good, they should occasionally be treated with a suitable cleaning agent.

Service life criteria

The luminous flux of LEDs and LED luminaires declines slowly as the operating time increases. The parameters L_x,B_y describe the condition after a rated time of operation.

In the expression L_x,B_y, x stands for the remaining proportion of initial luminous flux in %, and y stands for the proportion of LEDs or luminaires that still supply luminous power flux but at a level lower than x%.

These parameters are used, for example, for drawing up maintenance plans for lighting systems. Correctly dimensioned LED luminaires continue to provide light for a long time even after the rated time of operation.

You can find more detailed explanations about the operating behaviour of LEDs in: Guideline for long-term planning in LED lighting, published by ZVEI, Revised 2nd edition dated 09/03/2016

Quality

Our quality management system is DIN EN ISO 9001:2008 compliant.

Product Selection Guide

The Product Selection Guide is an important working tool for our users, electricians, electrical wholesalers, architects, planners, investors and the public sector. It provides an overview of our range of products and explains the practical application of our luminaires. The Product Selection Guide is published once a year and contains any new products that have been introduced in the meantime. Both documents are available for download at www.rzb-lighting.com.

Internet - www.rzb-lighting.com

Detailed information about our luminaires (incl. photometric data), our latest publications and an overview of projects we have realised are available to download from our home page.

GAEB texts

GAEB texts are standardised texts issued by the German Common Committee for Electronics in the Construction Industry. They are used for tenders relating to new construction, repair and renovation works. Appropriate texts for our products are available for download at www.rzb-lighting.com.

Luminaire showroom

Light laboratory

Conference and training centre

This is where we offer our partners a closer look at our range of products. For example, we can demonstrate state-of-the-art LED technology compared with conventional lamps in our laboratory and in realistic surrounding conditions.

Light planning with 3D simulation

- Planning interior lighting using artificial and natural light, either separate or in combination with each other
- Economic efficiency analyses for daylight-dependent lighting control systems
- Planning outdoor lighting systems
- Economic efficiency calculations
- Realistic 3D simulation for data input and output
- Simple and logical operation

Please address any queries relating to the use and configuration of the programme to our technical customer service, Tel. +49 9 51 / 79 09 - 374

Electrotechnical safety

We guarantee that we have manufactured and tested all of the luminaires in this catalogue carefully in accordance with international standard EN 60598 (VDE 0711).

Special luminaires are manufactured in accordance with this standard.

Safety marks



The ENEC mark is a European test and certification mark for luminaires and electrical luminaire components.



Luminaires marked with the "ball impact protection" symbol are suitable for use in sports facilities. They are manufactured in accordance with the test conditions defined in DIN 18032.



The CE mark is not a safety mark. It indicates that the product complies with European Union directives.

Symbol explanations



Luminaires made of impact resistant polycarbonate are marked with this symbol.

Quick service – Immediate delivery programme



All luminaires marked with a ".Q" are available from stock.

Orders received before 10.00 a.m. will be despatched from the factory on the same day.

System power LED $\approx$ Conventional lamp fitting (system power)

This comparison is for improved orientation with respect to the light output of LED luminaires on the basis of the comparison of luminous flux. The specified system power of the illustrated LED luminaires are compared with the appropriate luminaires with conventional lamps. To make the power consumption clear, the system power of the conventional lamps is given in brackets.

Comparison LED vs. conventional lamps

LED 28 W $\approx$

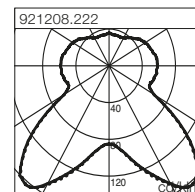
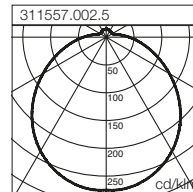
2 x 26 W TC-D (68 W CB)
1 x 40 W T16-R (43 W EB)

LED 35 W $\approx$

4 x 18 W TC-D (104 W CB)
1 x 55 W T16-R (60 W EB)

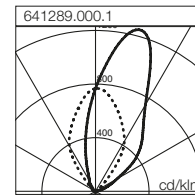
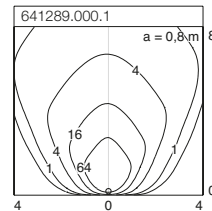
LDC (Light distribution curve)

This curve shows the light distribution of a luminaire. The specified light distribution values are standardised at 1000 lm luminous flux of the lamp and have to be adapted to the actual luminous flux.



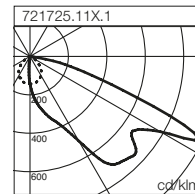
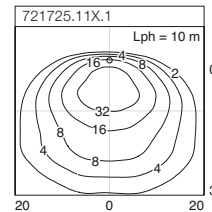
Wall lighting (contour line diagram)

This diagram shows the light distribution on a wall created by a luminaire at a certain distance from the wall.



Floor lighting (contour line diagram)

This diagram shows the light distribution on a floor created by a luminaire at a certain height.



Quick calculation

The table serves as an aid in the planning of rooms and hallways (the value in brackets is the level of the working plane). The average illuminance achieved may vary upwards or downwards depending on the number of luminaires.

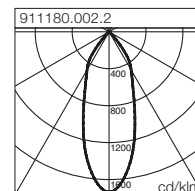
311557.002.5		
Floor 12 x 2,5 x 3 m (0,2 m)		
100 lx	150 lx	200 lx
2	3	5
Room 6 x 4 x 3 m (0,75 m)		
200 lx	300 lx	500 lx
2	3	-

921208.222			
Hall 50 x 30 m (0 m)			
Lph	100 lx	300 lx	500 lx
6 m	24	70	-
9 m	30	77	-
12 m	30	88	-
15 m	30	88	-

Cone diagram

The diagram shows the diameter of the light cone and the maximum illuminance in the centre, depending on the distance of the luminaire from the illuminated object.

911180.002.2		
h (m)	Ø (m)	E (lx)
1.0	0.67	6417.1
2.0	1.35	1604.3
3.0	0.02	713.0
4.0	2.69	401.1
5.0	3.36	256.7



Explanation of declared values in this catalogue

„Lamp/Wattage“

Number and type of lamp (e. g. 1 x HIT-CE) as well as its maximum wattage [W] (e.g. 70 W), when used in the selected luminaire.

„Light colour“

To indicate the „light colour“ and the colour rendering quality of a light source, the lighting industry uses a three-digit light colour code, where the first digit defines the colour rendering index (CRI) while the second and third denote the correlated colour temperature (CCT) of the light emitted by the light source in Kelvin [K].

Examples:

8	27	9	40
colour temperature 2700 K		colour temperature 4000 K	
colour rendering index Ra = 80-89		colour rendering index Ra = 90-100	

„Luminaire flux“

Luminaire flux is defined as the total quantity of light emitted by a luminaire and is measured in lumens [lm].

„System power“

Indicates the luminaire's total power requirements, i.e. the total watts [W] required to power the light source and any ballast or driver needed to operate it.

„“ - beam angle

The beam angle, or half-peak angle of a luminaire is defined as that part of the beam where the light level varies between its peak intensity and half the peak level. This angle indicates whether the light distribution of a luminaire is narrow, medium or wide beam.

„UGR“

The UGR (Unified Glare Rating) allows for the rating of direct glare resulting from indoor lighting installations. The higher the UGR, the more intense the glare. Standardized limit values are defined for specific types of activities and spaces, and are not to be exceeded (see e.g. DIN EN 12464-1).

„Dimmable“

Depends on whether the luminaire is dimmable and which system is used.

„SCL“

Luminaire also available as a self-contained emergency luminaire in accordance with EN 60598 2-22

„CBS“

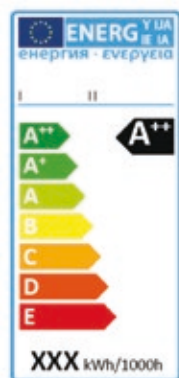
Luminaire also available as a central power supply emergency luminaire in accordance with EN 60598 2-22

„EEC“

Light source energy efficiency class in accordance with regulation (EU) no 874/2012.

These classes are determined in accordance with the system that is currently in use for other electrical devices:

A++ (highest energy efficiency) to **E** (lowest energy efficiency)



Regulation (EU) no. 874/2012 stipulates that the energy efficiency class needs to be indicated for the following applications:

EEC X: The energy efficiency class for **usable conventional light sources** (incandescent lamps, fluorescent lamps and high pressure lamps). A number of values can come into play here.

EEC Y: The energy efficiency class for **usable LED lamps**, for which a number of values can come into play.

EEC Z: The energy efficiency class for built-in light sources that are pre-installed in lighting fixtures.

Hence the following designations are used in this catalogue:

EEC X | EEC Y | EEC Z

For reasons of simplicity, these designations are reduced here to their relevant values.

Examples:

1. EEC X | - | -

A lighting fixture with an E27 lampholder can accommodate general-use incandescent bulbs (EEC E), halogen bulbs (EEC C) or energy saving bulbs with E27 sockets (EEC A). In view of the fact that the energy efficiency of these lighting fixtures varies according to the bulbs used, the following energy efficiency classes are indicated for this particular instance:

(A,C,E | - | -) => **A,C,E**

2. EEC X | EEC Y | -

Lighting fixtures with GU10 lampholder can accommodate conventional QPAR16 bulbs (EEC D), or can be outfitted with an LED retrofit bulb (EEC A or A+).

(D | A,A+ | -) => **D | A,A+**

3. - | EEC Y | EEC Z

These lighting fixtures are designed for class A and A+ LED bulbs and integrate a class A+ LED circuit board.

(- | A,A+ | A+) => **A,A+ | A+**



INDOOR LIGHTING

Recessed downlights | Series: Toledo

Type of Protection: IP 44

Protection Class: II

Ceiling Thickness: 1-25 mm

Impact Protection: IK05

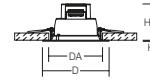
Bezel ring: die-cast aluminium, powder-coated. Housing plastic (polycarbonate UV-resistant).

Diffusor plastic (polycarbonate UV-resistant) opal, impact resistant. Spring fastening system.

Passive cooling. Suitable for through-wiring. Electronic ballast included.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	UGR	dim-able	EEC
Recessed downlights								
Ceiling cut out DA 105 mm, HE 100 mm								
901573.002	D 130, H 2	LED	827	770 lm	8 W	102°	26,5 on/off	A+ A+
901573.002.1 .Q	D 130, H 2	LED	840	850 lm	8 W	102°	26,9 on/off	A+ A+
Ceiling cut out DA 105 mm, HE 140 mm								
901573.002.76	D 130, H 2	LED	827	770 lm	9 W	102°	27,5 DALI	A+ A+
901573.002.1.76	D 130, H 2	LED	840	850 lm	9 W	102°	27,8 DALI	A+ A+
Ceiling cut out DA 150 mm, HE 140 mm								
901574.002	D 172, H 2	LED	827	1750 lm	17 W	102°	27,1 on/off	A+ A+
901574.002.1 .Q	D 172, H 2	LED	840	1900 lm	17 W	102°	27,4 on/off	A+ A+
901574.002.76	D 172, H 2	LED	827	1750 lm	18 W	102°	28,2 DALI	A+ A+
901574.002.1.76	D 172, H 2	LED	840	1900 lm	18 W	102°	28,5 DALI	A+ A+
Ceiling cut out DA 200 mm, HE 140 mm								
901575.002	D 225, H 4	LED	827	2600 lm	26 W	104°	26,9 on/off	A+ A+
901575.002.1 .Q	D 225, H 4	LED	840	3050 lm	26 W	104°	27,4 on/off	A+ A+
901575.002.76	D 225, H 4	LED	827	2600 lm	27 W	104°	28,0 DALI	A+ A+
901575.002.1.76	D 225, H 4	LED	840	3050 lm	27 W	104°	28,5 DALI	A+ A+

Price Category 21

Comparison LED vs. conventional lamps

LED 8 / 9 W ≈

1 x 18 W TC-D (26 W CB)

LED 17 / 18 W ≈

1 x 42 W TC-TEL (47 W EB)

LED 26 / 27 W ≈

2 x 32 W TC-TEL (69 W EB)

Ceiling and wall luminaires | Series: Flat Polymero®

Type of Protection: IP 40

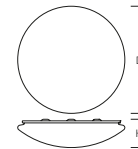
Protection Class: I

Impact Protection: IK03 (PMMA), IK10 (polycarbonate)

Base: metal, powder-coated. Diffuser: plastic (PMMA), opal, or plastic (polycarbonate), opal and shockproof. Diffuser fastening: patented push system. Integrated EB/driver.

LED included.

Available colour: 2 = white



Reference number	Dimensions	Lamp	Light colour	Luminaire flux	System power	dim-able	SCL	CBS	EEC
Ceiling and wall luminaires									
Diffuser: plastic (PMMA)									
Diameter D 460 mm									
311518.002.7 .Q	D 460, H 120	LED	830	2100 lm	19 W	on/off	✓	✓	A++ A++
311518.002.7.76	D 460, H 120	LED	830	2100 lm	19 W	DALI	✓	✓	A++ A++
311518.002.5 .Q	D 460, H 120	LED	840	2100 lm	19 W	on/off	✓	✓	A++ A++
311518.002.5.76	D 460, H 120	LED	840	2100 lm	19 W	DALI	✓	✓	A++ A++
311947.002.1	D 460, H 120	LED ⁽¹⁾	830	1950 lm	21 W	Phase-cut			A+ A+
311947.002.1.76	D 460, H 120	LED ⁽¹⁾	830	1950 lm	21 W	DALI			A+ A+
311947.002.3	D 460, H 120	LED ⁽¹⁾	840	2050 lm	21 W	Phase-cut			A+ A+
311947.002.3.76	D 460, H 120	LED ⁽¹⁾	840	2050 lm	21 W	DALI			A+ A+
312244.002.1	D 460, H 120	LED ⁽¹⁾	830	2800 lm	27 W	Phase-cut			A+ A+
312244.002.3	D 460, H 120	LED ⁽¹⁾	840	2900 lm	27 W	Phase-cut			A+ A+

Price Category 11

Comparison LED vs. conventional lamps

LED 19 / 21 W ≈

2 x 26 W TC-D (68 W CB)

LED 27 W ≈

3 x 18 W TC-D (78 W CB)

Specifications subject to alteration | Further information and additional versions can be found on our website at www.rzb-lighting.com.

Q = Quick service (stock articles) | LED (1) = With mains voltage LED

Further information on technical specifications can be found in the appendix

Article I: General provisions

1. All legal relationships between Supplier and Purchaser with regard to deliveries and/or performance by Supplier ("Deliveries") are governed solely by these terms and conditions. Purchaser's general terms and conditions of business only apply if Supplier has expressly acknowledged them in writing. The scope of Deliveries is governed by the mutually agreed written declarations.
2. Supplier reserves the unrestricted rights of use to any quotations, drawings and other literature ("Documents") under possession and copyright law. Documents may only be made accessible to third parties with Supplier's prior consent. If Supplier is not awarded the contract, said Documents are to be returned immediately on request. Sentences 1 and 2 apply accordingly for Purchaser's Documents, although these may be made accessible to those third parties to whom Supplier has permissibly transferred Deliveries.
3. Purchaser is granted the non-exclusive right to utilise the standard software and firmware with the performance characteristics agreed, without modifying the same, on the devices specified. Purchaser may make a back-up copy of the standard software without obtaining express agreement.
4. Partial shipments are permissible.
5. The term „claims for damages“ in these Terms and Conditions of Delivery also encompasses claims for reimbursement of futile expenses.

Article II: Prices, terms of payment and offsetting

1. Prices are quoted ex works excluding packaging plus any applicable statutory sales tax and other taxes and duties that may be levied.
2. If Supplier is responsible for setup or assembly, and unless otherwise agreed, Purchaser is responsible for all necessary ancillary costs, such as travel and shipping costs and accommodation allowances, in addition to the agreed payment.
3. Payments are due to Supplier's designated paying agent free of charges.
4. Purchaser may only offset against undisputed or legally established receivables.

Article III: Retention of title and payment protection

1. Items representing Deliveries (retained goods) remain the property of Supplier until Purchaser has satisfied each and every claim of Supplier under the business relationship.
2. For the duration of retention of title, Purchaser may not pledge the retained goods or use them as security, and they may only be resold by resellers in the ordinary course of their business and only on condition that the reseller receives payment from its customer or makes the transfer of ownership to the customer dependent upon the customer fulfilling its payment obligations.
3. Purchaser agrees to inform Supplier immediately and in writing of any seizures, confiscations or other disposals or acts of intervention by third parties.
4. If Purchaser fails to fulfil its duties, especially in rendering due payments, Supplier is entitled to take back the goods and cancel the contract if Purchaser fails to provide remedy within a reasonable period set by Supplier. Purchaser is obliged to relinquish the goods. Supplier's demand for return of the goods, exercise of retention of title, or seizure of the retained goods does not constitute termination of the contract unless Supplier expressly declares the same.

Article IV: Delivery periods; delays

1. Adherence to stipulated delivery periods is conditional upon timely receipt of all documents, necessary permits and releases, especially of plans to be provided by Purchaser, and upon the latter's fulfilment of the agreed terms of payment and other obligations. Failure to meet these conditions on time will extend the delivery periods; this is not applicable if Supplier is responsible for the delay.
2. If failure to adhere to the delivery periods is due to
 - a) force majeure, e.g. mobilisation, war, terrorist attacks, rebellion or similar events (e.g. strike, lockout),
 - b) virus and other third-party attacks on Supplier's IT systems despite Supplier exercising due caution in implementing safeguards,
 - c) hindrances under German, Swiss, US and other applicable national, EU or international laws governing external trade, or other circumstances beyond Supplier's control,
 - d) late or incorrect delivery to Supplier,
 the deadlines will be extended by a reasonable period.

3. If Supplier delays delivery, Purchaser may – subject to provision of evidence of any loss suffered – demand compensation for each complete week of delay of 0.5% (up to a maximum of 5%) of the price for the part of the Deliveries that could not be put to intended use as a result of the delay.
4. Purchaser's claims for damages on grounds of late Deliveries as well as claims for damages in lieu of performance [Note: this issue must be checked under Swiss law] that exceed the limits specified in 3. above are excluded in all cases of delayed Deliveries, even after Supplier has failed to meet a deadline set for delivery. The aforementioned does not apply in cases of unlawful intent or gross negligence on Supplier's part, nor if it contravenes mandatory law. Purchaser may only withdraw from the contract if Supplier is at fault with regard to the late Deliveries and if Supplier has failed to meet a previously specified, reasonable deadline.
5. At Supplier's request, Purchaser must – within a reasonable period – state whether it wishes to withdraw from the contract due to the delay in Deliveries, or insists on the Deliveries.
6. If despatch or delivery is delayed at Purchaser's request by more than one month after giving notice of readiness for dispatch, Purchaser may be charged storage costs of 0.5% of the price of the Deliveries for every additional month or part thereof. The parties to the contract are at liberty to prove the incurrence of higher or lower storage costs.

Article V: Transfer of risk

1. Even if carriage paid has been agreed, the risk is transferred to Purchaser as follows:
 - a) if setup or assembly is not included: when the Deliveries are declared ready for shipping. At Purchaser's request and expense, Supplier will insure the Deliveries against the usual risks to goods in transit;
 - b) if setup or assembly is included: on the day of acceptance at Purchaser's facility, or, if agreed, after a successful trial run.
2. The risk passes to Purchaser if the despatch, delivery, commencement or execution of setup or assembly, adoption into Purchaser's own operation or trial run is delayed for reasons for which Purchaser is responsible, or if the latter otherwise delays acceptance of the goods.

Article VI: Acceptance

Purchaser may not refuse to accept Deliveries on grounds of minor defects.

Article VII: Material defects

1. The warranty period is 12 months. It commences when the Deliveries leave the factory or, if appropriate, following agreed acceptance of the Deliveries or, if Supplier is responsible for assembly, upon completion of the same. If despatch, acceptance or assembly are delayed for reasons beyond Supplier's control, the warranty lapses at the latest 18 months after notification of readiness for despatch. The warranty lapses prematurely in case of unauthorised modifications or repairs by Purchaser or third parties, or failure by Purchaser to immediately take all suitable steps to mitigate the damage in the event of a defect and to give Supplier the opportunity to remedy the defect.
2. During the warranty period and at Purchaser's request, Supplier undertakes to either remedy or replace – at Supplier's discretion – as quickly as possible any and all parts of Supplier's Deliveries that are demonstrably damaged or unusable at the time of risk transfer due to material defects, design flaws or poor workmanship. Purchaser's warranty claims are excluded after the warranty period has lapsed. Replaced parts become Supplier's property unless Supplier expressly waives its right of title. Supplier must bear all the rectification costs incurred at its facility. If rectification is not possible at Supplier's facility, Purchaser must bear the associated costs to the extent that they exceed the normal transport and staff costs, travel and accommodation expenses, and the cost of installation and disassembly of the defective parts.
3. Damages that are not demonstrably due to material defects, design flaws or poor workmanship, e.g. normal wear, poor maintenance, failure to follow operating instructions, excessive stress, unsuitable operating equipment, chemical or electrolytic influences, construction or assembly work not performed by Supplier, and any other reasons beyond Supplier's control, are excluded from Supplier's warranty and liability.
4. Supplier only accepts liability for supplies from subcontractors designated by Purchaser within the framework of the warranty obligations of the relevant subcontractors.

5. Purchaser can claim no rights or entitlements for material, design or workmanship defects above and beyond those listed in 1. to 4. above.
6. Guaranteed properties must be expressly designated accordingly. The provisions governing material defects in Article VII 1. - 5. above apply accordingly.

Article VIII: Industrial property rights and copyrights; defects of title

1. Unless otherwise agreed, Supplier's obligation to execute the Deliveries free of third party industrial property rights and copyrights ("Property Rights") only applies in the country of the delivery location. If a third party raises justified claims against Purchaser on the grounds of infringement of Property Rights by Deliveries executed by Supplier and used in accordance with the contract, Supplier's liability to Purchaser within the period set out in Art. VII 1. above is as follows:
 - a) At its own discretion and expense, Supplier can acquire the right of use for the relevant Deliveries, modify the Deliveries so that they no longer infringe the Property Rights, or replace them. If it is not possible for Supplier to reasonably do so, Purchaser is entitled to exercise its statutory rights of cancellation or price reduction.
 - b) Supplier's obligation to pay damages is governed by Art. XII.
 - c) The aforementioned obligations of Supplier are only applicable if Purchaser promptly notifies Supplier in writing of any claims filed by a third party, does not concede an infringement, and all defence measures and settlement negotiations remain reserved for Supplier. If Purchaser discontinues the use of the Deliveries on grounds of loss mitigation or for other good reason, it must notify the third party that the discontinuation of use does not constitute acknowledgement of an infringement of Property Rights.
2. Purchaser is not entitled to assert claims for any infringement of Property Rights for which Purchaser is responsible.
3. Nor is Purchaser entitled to assert claims if the infringement of Property Rights results from specifications made by the Purchaser, usage that Supplier could not have foreseen, or is caused by the Deliveries being modified by Purchaser or used in conjunction with products not provided by Supplier.
4. If Property Rights are infringed, the provisions of Art. VIII apply accordingly for Purchaser claims governed by 1 a) above.
5. In the event of other defects in title, the provisions of Art. VIII apply accordingly.
6. Any other claims or claims not provided for in this Art. IX asserted by Purchaser against Supplier and the latter's agents on grounds of defect of title are excluded.

Article IX: Conditional performance

1. Contract performance is conditional upon the absence of any hindrances under German, Swiss, US or any other applicable national, EU or international laws governing external trade, embargoes or any other sanctions.
2. Purchaser undertakes to provide all information and documentation necessary to enable export, shipment and import.

Article X: Impossibility of performance; contract amendments

1. If Deliveries prove to be impossible, Purchaser is entitled to claim damages unless Supplier is not responsible for the impossibility. However, Purchaser's entitlement to damages is limited to 10% of the value of the part of the Deliveries that cannot be put to its intended use due to the impossibility. This limitation does not apply in cases of unlawful intent or gross negligence on Supplier's part, but does apply to unlawful intent or gross negligence on the part of Supplier's agents.
2. The parties agree to amend the contract appropriately and in good faith if events as defined in Art. IV, 2 a) - c) above substantially alter the economic significance or content of the Deliveries, or considerably impact Supplier's business. If this is not economically viable, Supplier is entitled to withdraw from the contract. The same applies if the requisite export permits are not granted or cannot be used. If Supplier wishes to exercise its right of rescission, it must inform Purchaser immediately on learning the implications of the event concerned, even if an extension of the delivery period had initially been agreed with Purchaser.

Article XI: Other instances of liability

These terms and conditions conclusively govern all instances of contract violations and their legal consequences, as well as all claims asserted by Purchaser, irre-

spective of the legal grounds. In particular, any and all claims for damages, price reductions, contract cancellation or rescission that are not expressly cited are excluded. Under no circumstances can Purchaser claim compensation for damages occurring other than on the Deliveries themselves, such as lost production, use, orders, profit, or any other direct or consequential damages.

This limitation of liability does not apply in cases of unlawful intent or gross negligence on Supplier's part, but does apply to unlawful intent or gross negligence on the part of Supplier's agents. Moreover, this limitation of liability does not apply if it contravenes mandatory law.

Article XII: Place of jurisdiction and applicable law

1. All disputes, differences in opinion or claims arising from or in connection with this contract, including the validity, invalidity, infringement or cancellation of the same, are subject to final settlement under the Rules of Arbitration of the International Chamber of Commerce (ICC). The Court of Arbitration must be composed of one or three arbitrators. If the Court is composed of three arbitrators, each party appoints one arbitrator, who must be confirmed by the ICC. These two arbitrators nominate the third arbitrator within thirty (30) days of their own appointment. If the two arbitrators are unable to agree on a third arbitrator within this period, the ICC will appoint the third arbitrator. The responsible Court of Arbitration is [Zurich] unless the parties agree on a different venue. Arbitration proceedings must be conducted in German.
2. This contract and its interpretation are subject to pertinent Swiss laws to the exclusion of the United Nations Convention on Contracts for the International Sale of Goods (CISG).

Article XIII: Contract validity

If individual provisions of this contract prove to be invalid, the remaining parts are nevertheless binding unless continuation of the contract would constitute undue hardship for one of the parties.

Explanations of the icons used in the catalogue

They are used as a quick record of product features within a range of luminaires.

	The colour temperature can be adjusted between 2700 K and 6500 K in a variable and continuous way.		Luminaires with movement sensor.
	During dimming, the colour temperature changes dynamically from about 3000 K to about 1800 K and thus provides a comfortable, cosy lighting atmosphere.		Luminaires with integrated light-sensitive switch.
	Additive colour mixing, based on three basic colours – red, green and blue as well as white – allows various light colours and colour temperatures to be set.		Luminaires with presence and light sensor.
	Additive colour mixing, based on three basic colours – red, green and blue – allows various light colours to be set. Particularly suitable for decorative lighting with dynamic colours.		Luminaires made of impact resistant polycarbonate.
	Simple control of brightness via leading edge or trailing edge dimmers.		Luminaires marked with the "ball impact protection" symbol are suitable for use in sports facilities. They are manufactured in accordance with the test conditions defined in DIN 18032.
	DALI is the classic light bus and is designed exclusively for light control. This makes DALI ideal for the simple and central control of light management.		Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24
	Light management for wireless controlling of lighting by bluetooth.		HACCP Luminaires with this symbol are suitable for use in the food and drink industry. For precise instructions on the use of our products in this context, please see the declaration of conformity, which you can find in the download area for the corresponding product under www.rzb-lighting.com .
	Ideal for office areas ($UGR \leq 19$) and computer workstations in accordance with DIN EN 12464-1.		Fast and easy installation.
	The Corridor function allows the luminaires to be configured to have a residual brightness of 10%. If no further movement is detected. This is recommended for applications without any ambient light, especially in corridors or stairwells without any daylight.		This symbol denotes that individual luminaires are available from a series and have been tested as emergency luminaires.
	TouchDim Sensor offers simple, cost-effective and efficient light control without any additional control device. TouchDim means the device can be operated via standard buttons, whilst control is taken over by the DALI board. Brightness and/or presence sensors can also be included in the control system.		Self-contained safety luminaires.
	TouchDim offers simple, cost-effective and efficient light control without any additional control device. TouchDim means the device can be operated via standard buttons, whilst control is taken over by the DALI board.		Luminaires for central power supply.

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
01-8524.132	424	05-251007.003	538	08-311173.012	96	10-3216.4	288	211060.002	103
01-8524.133	424	05-251007.004	538	08-311173.022	97	10-3221.1	288	211071.002	103
01-8524.134	424	05-311009.002	170	08-311183.022	94	10-3221.2	288	21116.002	112
01-8524.152	416	05-311012.002	169	08-311183.032	94	10-3221.3	288	2116.003	112
01-8524.153	416	05-311015.002	169	08-311270.002	93	10-3221.4	288	21117.002	112
01-8524.154	416	05-311044.002	169	08-311292.002	85	10-3222.1	288	21117.003	112
01-8613.002	489	05-311469.002	169	08-311292.012	85	10-3222.2	288	211207.002	109
05-10120	115	05-311488.012	106	08-311378.012	169	10-3222.3	288	211207.002.1	109
05-10130	115	05-311489.012	106	08-311595.002	86	10-3222.4	288	211209.002	109
05-10131	115	05-311491.012	107	08-311595.012	87	10-3223.1	288	211209.002.1	109
05-10320	114	05-311492.012	107	08-311600.002	86	10-3223.2	288	211209.002.1.76	109
05-10330	114	05-311985.012	194	08-311600.012	87	10-3223.3	288	211209.002.76	109
05-10340	114	05-311986.012	194	08-311604.002	86	10-3223.4	288	21127.002	118
05-10420	115	05-311987.012	194	08-311604.012	87	10-3224	288	21127.003	118
05-10430	115	05-311988.012	194	08-311616.002	86	10-3225	288	21128.002	118
05-10442	115	05-312174.002	72	08-311616.012	87	10-3311	657	21128.003	118
05-1929.002	43	05-3143.002	517	08-311623.002	96	10-3312	657	211289.002	46
05-1929.012	43	05-40120	127	08-311623.012	97	10-3313	659	21129.002	118
05-1934.012	17	05-40130	127	08-312084.002	81	10-3314	659	21129.003	118
05-1936.002	27	05-50031	585	08-312084.012	81	10120.002	115	211324.002	46
05-1936.022	41	05-50200	137	08-312085.002	81	10122.002	115	211344.002.3.19	104
05-1937.000	34	05-50200.020	137	08-312085.012	81	10122.002.1	115	211355.002.3.19	104
05-1939.022	174	05-50200.042	137	08-312086.002	81	10130.002	115	21136.002	539
05-1939.033	34	05-50450	140	08-312086.012	81	10131.002	115	21136.003	539
05-1940.002	34	05-51060.000	579	08-312087.002	81	10138.002	115	211394.002	103
05-1940.022	34	05-55863	143	08-312087.012	81	10138.002.1	115	211394.002.1	103
05-1941.002	27	05-56150	143	08-312175.002	74	10320.002	114	211395.002	103
05-1941.022	41	05-58010	537	08-312175.012	74	10322.002	114	211395.002.1	103
05-1952.002	33	05-58033	536	08-5145.002	100	10322.002.1	114	211396.002	103
05-1952.032	33	05-58090	536	08-5145.012	100	10330.002	114	211396.002.1	103
05-1952.062	33	05-581023.002	515	08-5146.002	100	10337.002	114	211397.002	103
05-1953.002	33	05-581208.002	543	08-5146.012	100	10337.002.1	114	211397.002.1	103
05-1954.002	33	05-58130	819	08-5229.002	100	10340.002	114	211398.002	109
05-1955.002	34	05-59160	143	08-5229.012	100	10345.002	114	211398.002.1	109
05-1956.002	57	05-59162	143	08-581019.012	515	10345.002.1	114	211398.002.1.76	109
05-1957.002	57	05-59250	143	08-581150.012	543	10420.002	115	211398.002.76	109
05-1965.002	19	05-59252	143	08-581628.002	519	10422.002	115	211399.002	103
05-1966.002	19	05-59256	143	08-581629.002	519	10422.002.1	115	211399.002.1	103
05-1969.002	72	05-61034	551	08-6093.002	489	10430.002	115	211399.002.1.19	104
05-1970.002	72	05-61818	552	08-64100	737	10434.002	115	211399.002.1.191	104
05-1971.002	72	05-721044	661	08-671320.002	745	10434.002.1	115	211399.002.1.76	103
05-2002.002	109	05-931174.012	31	08-671373.002	735	10445.002	115	211399.002.19	104
05-2003.002	109	05-931176.012	31	08-671514.000	750	10445.002.1	115	211399.002.191	104
05-2005.002	109	05-931177.012	31	08-671516.002	749	201010.003	538	211399.002.76	103
05-2007.002	109	05-931179.012	31	08-671573.002	746	201010.004	538	211400.002	103
05-2008.002	21	06566	491	09-6415.002	487	201012.003	538	211400.002.1	103
05-2009.002	23	08-1824.002	740	09-6422.002	493	201012.004	538	211400.002.1.19	104
05-2010.002	23	08-1837.002	535	09-6426.002	487	201024.003.1.25	550	211400.002.1.191	104
05-20101	550	08-2036.002	21	09-6429.000	494	201025.003.1.25	550	211400.002.1.76	103
05-20102	550	08-2037.002	21	09-6448.000	479	201026.003.1.25	547	211400.002.19	104
05-20124	549	08-2038.002	21	09-6459.000	491	201027.003.1.25	547	211400.002.191	104
05-20128	119	08-2118.002	74	09-6486.019	489	201028.003.1	549	211400.002.76	103
05-20129	119	08-2118.012	74	09-6555.040	702	201028.003.1.25	549	211401.002	103
05-20136	539	08-2119.002	74	09-6555.050	702	201029.003.1	549	211401.002.1	103
05-2018.032	17	08-2119.012	74	09-6555.060	702	201030.003	538	211401.002.1.76	103
05-2022.000	45	08-2120.002	74	09-6556.040	702	201030.003.1	538	211401.002.76	103
05-2023.002	45	08-2120.012	74	09-6556.050	702	201030.004	538	211403.002	103
05-2037.012	63	08-22070.002	739	09-6556.060	702	201030.004.1	538	211403.002.1	103
05-211004.002	103	08-221040/0001	545	09-6557.040	702	20124.003	549	211403.002.1.76	103
05-211005.002	103	08-221040/0002	545	09-6557.050	702	20128.002	119	211403.002.76	103
05-211006.002	103	08-221057.002	111	09-6557.060	702	20128.003	119	211404.002	109
05-21101	112	08-221061.002	111	09-6598.009	489	20129.002	119	211404.002.1	109
05-211011.002	103	08-221066.002	545	09-6599.009	493	20129.003	119	211404.002.1.76	109
05-21102	112	08-221069.002	117	10-2331	135	20136.002	539	211404.002.76	109
05-211059.002	103	08-221073.002	117	10-2332	135	20136.003	539	211407.002	117
05-211071.002	103	08-221080.002	117	10-2333	135	201410.002	119	211407.002.1	117
05-21116	112	08-221083.002	111	10-2334	135	201410.002.1	119	211408.002	117
05-21117	112	08-22141	113	10-2335	135	201412.002	119	211408.002.1	117
05-211223.002	117	08-22142	113	10-3213.1	288	201412.002.1	119	211410.002	118
05-211227.002	117	08-22144	121	10-3213.2	288	20172.002	119	211410.002.1	118
05-211250.012	103	08-22146	119	10-3213.3	288	20172.003	119	211412.002	118
05-21127	118	08-22148	119	10-3213.4	288	20224.003	549	211412.002.1	118
05-21128	118	08-22243	121	10-3214.1	288	2080273012	285	211414.002	112
05-211289.002	46	08-311047.012	170	10-3214.2	288	2080273022	285	211414.002.1	112
05-21129	118	08-311050.012	169	10-3214.3	288	2080403012	285	211415.002	112
05-211324.002	46	08-311053.012	169	10-3214.4	288	2080403022	285	211415.002.1	112
05-21136	120	08-311056.012	169	10-3215.1	288	211004.002	103	211416.002	112
05-21157	120	08-311161.012	96	10-3215.2	288	211005.002	103	211416.002.1	112
05-231008.002	47	08-311161.022	97	10-3215.3	288	211006.002	103	211417.002	112
05-231011.002	47	08-311165.012	96	10-3215.4	288	21101.002	112	211417.002.1	112
05-23643.002	47	08-311165.022	97	10-3216.1	288	21101.003	112	211421.002	120
05-251005.003	538	08-311170.012	96	10-3216.2	288	211011.002	103	211421.002.1	120
05-251005.004	538	08-311170.022	97	10-3216.3	288	211059.002	103	211422.002	120

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
211422.002.1	120	221162.002.1.76	117	311492.0044	107	311611.002.8	87	311669.004.730	163
211423.002	46	221162.002.76	117	311492.005	107	311611.002.8.19	88	311669.004.76	163
211423.002.1	46	221164.002	119	311518.002.5	96	311611.002.8.76	87	311670.004	27
211424.002	46	221164.002.1	119	311518.002.5.19	98	311612.002.5.19	88	311670.004.1	27
211424.002.1	46	221165.002	119	311518.002.5.76	96	311612.002.6.19	88	311670.004.1.76	27
211425.002	103	221165.002.1	119	311518.002.6	97	311612.002.7.19	88	311670.004.76	27
211425.002.1	103	221166.002	117	311518.002.6.19	98	311612.002.8.19	88	311671.004	27
211426.002	109	221166.002.1	117	311518.002.6.76	97	311613.002.5	86	311671.004.1	27
211426.002.1	109	221167.002	545	311518.002.7	96	311613.002.5.76	86	311671.004.1.76	27
21146.002	120	221167.002.25	545	311518.002.7.19	98	311613.002.6	87	311671.004.76	27
21146.003	120	221167.003	545	311518.002.7.76	96	311613.002.6.76	87	311672.004	41
21171.002	112	221167.003.1	545	311518.002.8	97	311613.002.7	86	311672.004.1	41
21171.003	112	221167.003.25	545	311518.002.8.19	98	311613.002.7.76	86	311673.004	41
221022.002	100	221167.004	545	311518.002.8.76	97	311613.002.8	87	311673.004.1	41
221023.002	100	221167.004.2	545	311523.002.5	96	311613.002.8.76	87	311673.004.1.76	41
221023.002.1	100	221167.004.25	545	311523.002.5.19	98	311619.002.5	86	311673.004.76	41
221026.002	100	221168.002	113	311523.002.5.76	96	311619.002.5.76	86	311674.004	164
221105.002	100	221168.002.1	113	311523.002.6	97	311619.002.6	87	311674.004.1	164
221106.002	100	221169.002	113	311523.002.6.19	98	311619.002.6.76	87	311674.004.1.76	164
221114.002	100	221169.002.1	113	311523.002.6.76	97	311619.002.7	86	311674.004.76	164
221114.002.1	100	221170.002	121	311523.002.7	96	311619.002.7.76	86	311675.004	164
221126.002.3.19	101	221170.002.1	121	311523.002.7.19	98	311619.002.8	87	311675.004.1	164
221126.002.4.19	101	221171.002	121	311523.002.7.76	96	311619.002.8.76	87	311675.004.1.76	164
221153.002	100	221171.002.1	121	311523.002.8	97	311620.002.5	86	311675.004.76	164
221153.002.1	100	221172.002	100	311523.002.8.19	98	311620.002.5.19	88	311676.004	164
221153.002.1.19	101	221172.002.1	100	311523.002.8.76	97	311620.002.5.76	86	311676.004.1	164
221153.002.1.191	101	221172.002.2	100	311525.002.5.19	98	311620.002.6	87	311676.004.1.76	164
221153.002.1.76	100	221172.002.3	100	311525.002.6.19	98	311620.002.6.19	88	311676.004.76	164
221153.002.19	101	221173.002	111	311525.002.7.19	98	311620.002.6.76	87	311677.000	150
221153.002.191	101	221173.002.1	111	311525.002.8.19	98	311620.002.7	86	311677.000.1	150
221153.002.2	100	221190.003.25	546	311555.002.5	96	311620.002.7.19	88	311677.000.1.76	150
221153.002.2.19	101	221191.003.25	546	311555.002.5.76	96	311620.002.7.76	86	311677.000.76	150
221153.002.2.191	101	22125.002	739	311555.002.6	97	311620.002.8	87	311678.000	150
221153.002.2.76	100	22125.003	739	311555.002.6.76	97	311620.002.8.19	88	311678.000.1	150
221153.002.3	100	22130.002	119	311555.002.7	96	311620.002.8.76	87	311678.000.1.76	150
221153.002.3.19	101	22130.003	119	311555.002.7.76	96	311626.002.5	96	311678.000.76	150
221153.002.3.191	101	22141.002	113	311555.002.8	97	311626.002.5.76	96	311679.000	150
221153.002.3.76	100	22141.003	113	311555.002.8.76	97	311626.002.6	97	311679.000.1	150
221153.002.76	100	22142.002	113	311557.002.5	96	311626.002.6.76	97	311679.000.1.76	150
221154.002	100	22142.003	113	311557.002.5.76	96	311626.002.7	96	311679.000.76	150
221154.002.1	100	22143.002	121	311557.002.6	97	311626.002.7.76	96	311681.000	149
221154.002.1.19	101	22143.003	121	311557.002.6.76	97	311626.002.8	97	311681.000.1	149
221154.002.1.191	101	22144.002	121	311557.002.7	96	311626.002.8.76	97	311681.000.1.730	149
221154.002.1.76	100	22144.003	121	311557.002.7.76	96	311627.002.5	96	311681.000.1.76	149
221154.002.19	101	22146.002	119	311557.002.8	97	311627.002.5.19	98	311681.000.2.730	149
221154.002.191	101	22146.003	119	311557.002.8.76	97	311627.002.5.76	96	311681.000.730	149
221154.002.2	100	22148.002	119	311570.004	163	311627.002.6	97	311681.000.76	149
221154.002.2.19	101	22148.003	119	311570.004.1	163	311627.002.6.19	98	311682.004	164
221154.002.2.191	101	22150.002	113	311570.004.1.730	163	311627.002.6.76	97	311682.004.1	164
221154.002.2.76	100	22150.003	113	311570.004.1.76	163	311627.002.7	96	311682.004.1.76	164
221154.002.3	100	231008.002	47	311570.004.2.730	163	311627.002.7.19	98	311682.004.76	164
221154.002.3.19	101	231011.002	47	311570.004.730	163	311627.002.7.76	96	311683.004	28
221154.002.3.191	101	231016.002	47	311570.004.76	163	311627.002.8	97	311683.004.1	28
221154.002.3.76	100	231016.002.1	47	311570.005	163	311627.002.8.19	98	311683.004.1.76	28
221154.002.76	100	231017.002	47	311570.005.76	163	311627.002.8.76	97	311683.004.76	28
221155.002	111	231017.002.1	47	311577.000	153	311662.000	153	311684.004	28
221155.002.1	111	231018.002	47	311577.000.1	153	311662.000.1	153	311684.004.1	28
221155.002.1.76	111	231018.002.1	47	311577.000.1.730	153	311662.000.1.730	153	311684.004.1.76	28
221155.002.76	111	23643.002	47	311577.000.1.76	153	311662.000.1.76	153	311684.004.76	28
221156.002	111	251050.003.1.25	548	311577.000.2.730	153	311662.000.2.730	153	311685.004	28
221156.002.1	111	251051.003.1.25	548	311577.000.730	153	311662.000.730	153	311685.004.1	28
221156.002.1.76	111	311009.002	170	311577.000.76	153	311662.000.76	153	311685.004.1.76	28
221156.002.76	111	311012.002	170	311610.002.5	86	311665.002.3	199	311685.004.76	28
221157.002	100	311015.002	170	311610.002.5.19	88	311665.002.3.76	199	311686.004	27
221157.002.1	100	311047.002	170	311610.002.5.76	86	311665.002.4	199	311686.004.1	27
221157.002.1.76	100	311050.002	170	311610.002.6	87	311665.002.4.76	199	311686.004.1.76	27
221157.002.2	100	311053.002	170	311610.002.6.19	88	311666.002.3	199	311686.004.76	27
221157.002.2.76	100	311344.002	171	311610.002.6.76	87	311666.002.3.76	199	311691.004	164
221157.002.3	100	311347.002	171	311610.002.7	86	311666.002.4	199	311691.004.1	164
221157.002.3.76	100	311350.002	171	311610.002.7.19	88	311666.002.4.76	199	311691.004.1.76	164
221157.002.76	100	311363.002	171	311610.002.7.76	86	311667.002	200	311691.004.76	164
221158.002	111	311366.002	171	311610.002.8	87	311667.002.1	200	311692.004	28
221158.002.1	111	311369.002	171	311610.002.8.19	88	311667.002.1.76	200	311692.004.1	28
221158.002.1.76	111	311488.0042	106	311610.002.8.76	87	311667.002.76	200	311692.004.1.76	28
221158.002.76	111	311488.0044	106	311611.002.5	86	311668.002	200	311692.004.76	28
221160.002	117	311488.005	106	311611.002.5.19	88	311668.002.1	200	311693.000	150
221160.002.1	117	311489.0042	106	311611.002.5.76	86	311668.002.1.76	200	311693.000.1	150
221161.002	117	311489.0044	106	311611.002.6	87	311668.002.76	200	311693.000.1.76	150
221161.002.1	117	311489.005	106	311611.002.6.19	88	311669.004	163	311693.000.76	150
221161.002.1.76	117	311491.0042	107	311611.002.6.76	87	311669.004.1	163	311694.002	94
221161.002.76	117	311491.0044	107	311611.002.7	86	311669.004.1.730	163	311694.002.1	94
221162.002	117	311491.005	107	311611.002.7.19	88	311669.004.1.76	163	311694.002.1.76	94
221162.002.1	117	311492.0042	107	311611.002.7.76	86	311669.004.2.730	163	311694.002.2	94

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
311694.002.2.76	94	311773.002.76	225	311882.004.1	107	311943.002.1.191	99	311951.002.4.19	89
311694.002.3	94	311835.002	175	311882.005	107	311943.002.1.76	96	311951.002.4.191	89
311694.002.3.76	94	311835.002.1	175	311882.005.1	107	311943.002.2	97	311951.002.4.76	87
311694.002.76	94	311836.002	175	311907.004	150	311943.002.2.19	99	311952.002.1	86
311695.002	85	311836.002.1	175	311907.004.1	150	311943.002.2.191	99	311952.002.1.76	86
311695.002.1	85	311841.000	175	311907.004.1.76	150	311943.002.2.76	97	311952.002.2	87
311695.002.1.76	85	311841.000.1	175	311907.004.76	150	311943.002.3	96	311952.002.2.76	87
311695.002.2	85	311842.002	175	311908.004	150	311943.002.3.19	99	311952.002.3	86
311695.002.2.76	85	311842.002.1	175	311908.004.1	150	311943.002.3.191	99	311952.002.3.76	86
311695.002.3	85	311843.002	175	311908.004.1.76	150	311943.002.3.76	96	311952.002.4	87
311695.002.3.76	85	311843.002.1	175	311908.004.76	150	311943.002.4	97	311952.002.4.76	87
311695.002.76	85	311844.003	175	311909.004	150	311943.002.4.19	99	311954.002.1.76	93
311696.002	187	311844.003.1	175	311909.004.1	150	311943.002.4.191	99	311954.002.76	93
311696.002.1	187	311845.000	54	311909.004.1.76	150	311943.002.4.76	97	311955.002.1.76	187
311696.002.1.76	187	311845.000.1	54	311909.004.76	150	311945.002.1	96	311955.002.76	187
311696.002.2	187	311845.000.1.76	54	311910.004	150	311945.002.1.76	96	311956.000	277
311696.002.2.76	187	311845.000.76	54	311910.004.1	150	311945.002.2	97	311956.000.1	277
311696.002.3	187	311846.000	54	311910.004.1.76	150	311945.002.2.76	97	311956.000.1.76	277
311696.002.3.76	187	311846.000.1	54	311910.004.76	150	311945.002.3	96	311956.000.76	277
311696.002.76	187	311846.000.1.76	54	311911.004	149	311945.002.3.76	96	311957.000	277
311697.002	183	311846.000.76	54	311911.004.1	149	311945.002.4	97	311957.000.1	277
311697.002.1	183	311847.000	54	311911.004.1.730	149	311945.002.4.76	97	311957.000.1.76	277
311697.002.1.76	183	311847.000.1	54	311911.004.1.76	149	311946.002.1	96	311957.000.76	277
311697.002.2	183	311847.000.1.76	54	311911.004.2.730	149	311946.002.1.19	99	311963.002	33
311697.002.2.76	183	311847.000.76	54	311911.004.730	149	311946.002.1.191	99	311963.002.1	33
311697.002.3	183	311848.000	54	311911.004.76	149	311946.002.1.76	96	311964.002	173
311697.002.3.76	183	311848.000.1	54	311912.004	54	311946.002.2	97	311964.002.1	173
311697.002.76	183	311848.000.1.76	54	311912.004.1	54	311946.002.2.19	99	311965.002	33
311698.002	94	311848.000.76	54	311912.004.1.76	54	311946.002.2.191	99	311965.002.1	33
311698.002.1	94	311849.000	53	311912.004.76	54	311946.002.2.76	97	311966.002	173
311698.002.1.76	94	311849.000.1	53	311913.004	54	311946.002.3	96	311966.002.1	173
311698.002.2	94	311849.000.1.730	53	311913.004.1	54	311946.002.3.19	99	311969.002	34
311698.002.2.76	94	311849.000.1.76	53	311913.004.1.76	54	311946.002.3.191	99	311969.002.1	34
311698.002.3	94	311849.000.2.730	53	311913.004.76	54	311946.002.3.76	96	311970.002	174
311698.002.3.76	94	311849.000.730	53	311914.004	54	311946.002.4	97	311970.002.1	174
311698.002.76	94	311849.000.76	53	311914.004.1	54	311946.002.4.19	99	311974.002.1	188
311699.002	85	311850.002	33	311914.004.1.76	54	311946.002.4.191	99	311974.002.1.76	188
311699.002.1	85	311850.002.1	33	311914.004.76	54	311946.002.4.76	97	311974.002.2	188
311699.002.1.76	85	311851.002	173	311915.004	54	311947.002.1	96	311974.002.2.76	188
311699.002.2	85	311851.002.1	173	311915.004.1	54	311947.002.1.76	96	311974.002.3	188
311699.002.2.76	85	311852.002	175	311915.004.1.76	54	311947.002.2	97	311974.002.3.76	188
311699.002.3	85	311852.002.1	175	311915.004.76	54	311947.002.2.76	97	311974.002.4	188
311699.002.3.76	85	311853.002	34	311916.004	53	311947.002.3	96	311974.002.4.76	188
311699.002.76	85	311853.002.1	34	311916.004.1	53	311947.002.3.76	96	311975.002.1	188
311700.000	34	311854.002	174	311916.004.1.730	53	311947.002.4	97	311975.002.1.76	188
311700.000.1	34	311854.002.1	174	311916.004.1.76	53	311947.002.4.76	97	311975.002.2	188
311701.002	34	311855.002	175	311916.004.2.730	53	311949.002.1	86	311975.002.2.76	188
311701.002.1	34	311855.002.1	175	311916.004.730	53	311949.002.1.19	89	311975.002.3	188
311702.002	34	311862.002	33	311916.004.76	53	311949.002.1.191	89	311975.002.3.76	188
311702.002.1	34	311863.002	33	311924.002.1	188	311949.002.1.76	86	311975.002.4	188
311703.003	34	311865.002	33	311924.002.1.76	188	311949.002.2	87	311975.002.4.76	188
311703.003.1	34	311866.002	34	311924.002.2	188	311949.002.2.19	89	311976.002.1	188
311704.000	174	311867.002	34	311924.002.2.76	188	311949.002.2.191	89	311976.002.1.76	188
311704.000.1	174	311868.003	34	311924.002.3	188	311949.002.2.76	87	311976.002.2	188
311705.002	174	311869.002	34	311924.002.3.76	188	311949.002.3	86	311976.002.2.76	188
311705.002.1	174	311870.002	173	311924.002.4	188	311949.002.3.19	89	311976.002.3	188
311706.002	174	311871.002	173	311924.002.4.76	188	311949.002.3.191	89	311976.002.3.76	188
311706.002.1	174	311873.002	173	311930.002	298	311949.002.3.76	86	311976.002.4	188
311707.003	174	311874.002	174	311930.002.1	298	311949.002.4	87	311976.002.4.76	188
311707.003.1	174	311875.002	174	311930.002.1.76	298	311949.002.4.19	89	311978.002.1	184
311721.002	33	311876.003	174	311930.002.76	298	311949.002.4.191	89	311978.002.1.76	184
311721.002.1	33	311877.002	174	311931.002	298	311949.002.4.76	87	311978.002.2	184
311722.002	33	311879.0042	106	311931.002.1	298	311950.002.1	86	311978.002.2.76	184
311722.002.1	33	311879.0042.1	106	311931.002.1.76	298	311950.002.1.76	86	311978.002.3	184
311725.002	173	311879.0044	106	311931.002.76	298	311950.002.2	87	311978.002.3.76	184
311725.002.1	173	311879.0044.1	106	311932.002	298	311950.002.2.76	87	311978.002.4	184
311726.002	173	311879.005	106	311932.002.1	298	311950.002.3	86	311978.002.4.76	184
311726.002.1	173	311879.005.1	106	311932.002.1.76	298	311950.002.3.76	86	311979.002.1	184
311770.002	201	311880.0042	106	311932.002.76	298	311950.002.4	87	311979.002.1.76	184
311770.002.1	201	311880.0042.1	106	311933.002	297	311950.002.4.76	87	311979.002.2	184
311770.002.1.76	201	311880.0044	106	311933.002.1	297	311951.002.1	86	311979.002.2.76	184
311770.002.76	201	311880.0044.1	106	311933.002.1.76	297	311951.002.1.19	89	311979.002.3	184
311771.002	201	311880.005	106	311933.002.76	297	311951.002.1.191	89	311979.002.3.76	184
311771.002.1	201	311880.005.1	106	311934.002	297	311951.002.1.76	86	311979.002.4	184
311771.002.1.76	201	311881.0042	107	311934.002.1	297	311951.002.2	87	311979.002.4.76	184
311771.002.76	201	311881.0042.1	107	311934.002.1.76	297	311951.002.2.19	89	311981.002	201
311772.002	225	311881.0044	107	311934.002.76	297	311951.002.2.191	89	311981.002.1	201
311772.002.1	225	311881.0044.1	107	311935.002	297	311951.002.2.76	87	311981.002.1.76	201
311772.002.1.76	225	311881.005	107	311935.002.1	297	311951.002.3	86	311981.002.76	201
311772.002.76	225	311881.005.1	107	311935.002.1.76	297	311951.002.3.19	89	311982.002	201
311773.002	225	311882.0042	107	311935.002.76	297	311951.002.3.191	89	311982.002.1	201
311773.002.1	225	311882.0042.1	107	311943.002.1	96	311951.002.3.76	86	311982.002.1.76	201
311773.002.1.76	225	311882.0044	107	311943.002.1.19	99	311951.002.4	87	311982.002.76	201

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
311983.000	277	312086.002.3.76	81	312108.002.1.76	169	312131.002.76	126	312135.0031.191	75
311983.000.1	277	312086.002.4	81	312108.002.76	169	312132.002	72	312135.0031.2	74
311983.000.1.76	277	312086.002.4.76	81	312109.002	169	312132.002.1	72	312135.0031.2.19	75
311983.000.76	277	312087.002.1	81	312109.002.1	169	312132.002.1.19	73	312135.0031.2.191	75
311984.000	277	312087.002.2	81	312109.002.1.76	169	312132.002.1.191	73	312135.0031.2.76	74
311984.000.1	277	312087.002.3	81	312109.002.76	169	312132.002.1.76	72	312135.0031.3	74
311984.000.1.76	277	312087.002.4	81	312110.002	169	312132.002.19	73	312135.0031.3.19	75
311984.000.76	277	312088.002.1	86	312110.002.1	169	312132.002.191	73	312135.0031.3.191	75
311985.002	194	312088.002.2	87	312110.002.1.76	169	312132.002.76	72	312135.0031.3.76	74
311986.002	194	312088.002.3	86	312110.002.76	169	312132.0031	72	312135.0031.76	74
311987.002	194	312088.002.4	87	312111.002	169	312132.0031.1	72	312135.004	74
311988.002	194	312089.002.1	181	312111.002.1	169	312132.0031.1.19	73	312135.004.1	74
311989.004	57	312089.002.1.76	181	312112.002	169	312132.0031.1.191	73	312135.004.1.19	75
311989.004.1	57	312089.002.2	181	312112.002.1	169	312132.0031.1.76	72	312135.004.1.191	75
311990.004	155	312089.002.2.76	181	312112.002.1.76	169	312132.0031.19	73	312135.004.1.76	74
311990.004.1	155	312089.002.3	181	312112.002.76	169	312132.0031.191	73	312135.004.19	75
311991.004	57	312089.002.3.76	181	312113.002	169	312132.0031.76	72	312135.004.191	75
311991.004.1	57	312089.002.4	181	312113.002.1	169	312132.004	72	312135.004.2	74
311991.004.1.730	57	312089.002.4.76	181	312113.002.1.76	169	312132.004.1	72	312135.004.2.19	75
311991.004.1.76	57	312090.002.1	181	312113.002.76	169	312132.004.1.19	73	312135.004.2.191	75
311991.004.730	57	312090.002.1.76	181	312114.002	169	312132.004.1.191	73	312135.004.2.76	74
311991.004.76	57	312090.002.2	181	312114.002.1	169	312132.004.1.76	72	312135.004.3	74
311992.004	155	312090.002.2.76	181	312114.002.1.76	169	312132.004.19	73	312135.004.3.19	75
311992.004.1	155	312090.002.3	181	312114.002.76	169	312132.004.191	73	312135.004.3.191	75
311992.004.1.730	155	312090.002.3.76	181	312115.002	167	312132.004.76	72	312135.004.3.76	74
311992.004.1.76	155	312090.002.4	181	312115.002.1	167	312133.002	72	312135.004.76	74
311992.004.730	155	312090.002.4.76	181	312115.002.1.76	167	312133.002.1	72	312136.002	74
311992.004.76	155	312091.002.1	181	312115.002.76	167	312133.002.1.19	73	312136.002.1	74
311997.000	53	312091.002.2	181	312116.002	167	312133.002.1.191	73	312136.002.1.19	75
311997.000.1	53	312091.002.3	181	312116.002.1	167	312133.002.1.730	72	312136.002.1.191	75
311997.000.1.730	53	312091.002.4	181	312116.002.1.76	167	312133.002.1.76	72	312136.002.1.730	74
311997.000.1.76	53	312092.002.1	96	312116.002.76	167	312133.002.19	73	312136.002.1.76	74
311997.000.2.730	53	312092.002.2	97	312118.002	167	312133.002.191	73	312136.002.19	75
311997.000.730	53	312092.002.3	96	312118.002.1	167	312133.002.730	72	312136.002.191	75
311997.000.76	53	312092.002.4	97	312119.002	167	312133.002.76	72	312136.002.2	74
311998.000	149	312093.002.1	188	312119.002.1	167	312133.0031	72	312136.002.2.19	75
311998.000.1	149	312093.002.2	188	312119.002.1.76	167	312133.0031.1	72	312136.002.2.191	75
311998.000.1.730	149	312093.002.3	188	312119.002.76	167	312133.0031.1.19	73	312136.002.2.730	74
311998.000.1.76	149	312093.002.4	188	312120.002	167	312133.0031.1.191	73	312136.002.2.76	74
311998.000.2.730	149	312094.002	169	312120.002.1	167	312133.0031.1.730	72	312136.002.3	74
311998.000.730	149	312094.002.1	169	312120.002.1.76	167	312133.0031.1.76	72	312136.002.3.19	75
311998.000.76	149	312094.002.1.76	169	312120.002.76	167	312133.0031.19	73	312136.002.3.191	75
311999.002.1	184	312094.002.76	169	312121.002	167	312133.0031.191	73	312136.002.3.730	74
311999.002.2	184	312095.002	169	312121.002.1	167	312133.0031.730	72	312136.002.3.76	74
311999.002.3	184	312095.002.1	169	312121.002.1.76	167	312133.0031.76	72	312136.002.730	74
311999.002.4	184	312095.002.1.76	169	312121.002.76	167	312133.004	72	312136.002.76	74
312084.002.1	81	312095.002.76	169	312122.002	167	312133.004.1	72	312136.0031	74
312084.002.1.19	82	312096.002.1	96	312122.002.1	167	312133.004.1.19	73	312136.0031.1	74
312084.002.1.191	82	312096.002.2	97	312122.002.1.76	167	312133.004.1.191	73	312136.0031.1.19	75
312084.002.1.76	81	312096.002.3	96	312122.002.76	167	312133.004.1.730	72	312136.0031.1.191	75
312084.002.2	81	312096.002.4	97	312123.002	167	312133.004.1.76	72	312136.0031.1.730	74
312084.002.2.19	82	312097.002.1	188	312123.002.1	167	312133.004.19	73	312136.0031.1.76	74
312084.002.2.191	82	312097.002.2	188	312123.002.1.76	167	312133.004.191	73	312136.0031.19	75
312084.002.2.76	81	312097.002.3	188	312123.002.76	167	312133.004.730	72	312136.0031.191	75
312084.002.3	81	312097.002.4	188	312124.002	167	312134.004.76	72	312136.0031.2	74
312084.002.3.19	82	312099.002.3	203	312124.002.1	167	312134.002	72	312136.0031.2.19	75
312084.002.3.191	82	312099.002.3.76	203	312125.002	167	312134.002.1	72	312136.0031.2.191	75
312084.002.3.76	81	312099.002.4	203	312125.002.1	167	312134.0031	72	312136.0031.2.730	74
312084.002.4	81	312099.002.4.76	203	312125.002.1.76	167	312134.0031.1	72	312136.0031.2.76	74
312084.002.4.19	82	312100.002.3	203	312125.002.76	167	312134.004	72	312136.0031.3	74
312084.002.4.191	82	312100.002.3.76	203	312126.002	167	312134.004.1	72	312136.0031.3.19	75
312084.002.4.76	81	312100.002.4	203	312126.002.1	167	312135.002	74	312136.0031.3.191	75
312085.002.1	81	312100.002.4.76	203	312126.002.1.76	167	312135.002.1	74	312136.0031.3.730	74
312085.002.1.19	82	312101.002	203	312126.002.76	167	312135.002.1.19	75	312136.0031.3.76	74
312085.002.1.191	82	312101.002.1	203	312127.002	167	312135.002.1.191	75	312136.0031.730	74
312085.002.1.76	81	312101.002.1.76	203	312127.002.1	167	312135.002.1.76	74	312136.0031.76	74
312085.002.2	81	312101.002.76	203	312127.002.1.76	167	312135.002.19	75	312136.004	74
312085.002.2.19	82	312102.002	203	312127.002.76	167	312135.002.191	75	312136.004.1	74
312085.002.2.191	82	312102.002.1	203	312128.002	126	312135.002.2	74	312136.004.1.19	75
312085.002.2.76	81	312102.002.1.76	203	312128.002.1	126	312135.002.2.19	75	312136.004.1.191	75
312085.002.3	81	312102.002.76	203	312128.002.1.76	126	312135.002.2.191	75	312136.004.1.730	74
312085.002.3.19	82	312105.002	169	312128.002.76	126	312135.002.2.76	74	312136.004.1.76	74
312085.002.3.191	82	312105.002.1	169	312129.002	126	312135.002.3	74	312136.004.19	75
312085.002.3.76	81	312105.002.1.76	169	312129.002.1	126	312135.002.3.19	75	312136.004.191	75
312085.002.4	81	312105.002.76	169	312129.002.1.76	126	312135.002.3.191	75	312136.004.2	74
312085.002.4.19	82	312106.002	169	312129.002.76	126	312135.002.3.76	74	312136.004.2.19	75
312085.002.4.191	82	312106.002.1	169	312130.002	126	312135.002.76	74	312136.004.2.191	75
312085.002.4.76	81	312107.002	169	312130.002.1	126	312135.0031	74	312136.004.2.730	74
312086.002.1	81	312107.002.1	169	312130.002.1.76	126	312135.0031.1	74	312136.004.2.76	74
312086.002.1.76	81	312107.002.1.76	169	312130.002.76	126	312135.0031.1.19	75	312136.004.3	74
312086.002.2	81	312107.002.76	169	312131.002	126	312135.0031.1.191	75	312136.004.3.19	75
312086.002.2.76	81	312108.002	169	312131.002.1	126	312135.0031.1.76	74	312136.004.3.191	75
312086.002.3	81	312108.002.1	169	312131.002.1.76	126	312135.0031.19	75	312136.004.3.730	74

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
312136.004.3.76	74	312153.002	222	312175.002.2	74	312190.002.1.76	260	312197.002.1	261
312136.004.730	74	312153.002.1	222	312175.002.2.730	74	312190.002.76	260	312197.002.1.76	261
312136.004.76	74	312153.002.1.76	222	312175.002.3	74	312190.003	260	312197.002.76	261
312137.002	74	312153.002.76	222	312175.002.3.730	74	312190.003.1	260	312197.003	261
312137.002.1	74	312154.002	222	312175.002.730	74	312190.003.1.76	260	312197.003.1	261
312137.002.2	74	312154.002.1	222	312175.0031	74	312190.003.76	260	312197.003.1.76	261
312137.002.3	74	312154.002.1.76	222	312175.0031.1	74	312190.0045	260	312197.003.76	261
312137.0031	74	312154.002.76	222	312175.0031.1.730	74	312190.0045.1	260	312197.0045	261
312137.0031.1	74	312155.002	225	312175.0031.2	74	312190.0045.1.76	260	312197.0045.1	261
312137.0031.2	74	312155.002.1	225	312175.0031.2.730	74	312190.0045.76	260	312197.0045.1.76	261
312137.0031.3	74	312155.002.1.76	225	312175.0031.3	74	312191.002	260	312197.0045.76	261
312137.004	74	312155.002.76	225	312175.0031.3.730	74	312191.002.1	260	312198.002	261
312137.004.1	74	312156.002	227	312175.0031.730	74	312191.002.1.76	260	312198.002.1	261
312137.004.2	74	312156.002.1	227	312175.004	74	312191.002.76	260	312198.002.1.76	261
312137.004.3	74	312156.002.1.76	227	312175.004.1	74	312191.003	260	312198.002.76	261
312138.002	248	312156.002.76	227	312175.004.1.730	74	312191.003.1	260	312198.003	261
312138.002.1	248	312157.002	227	312175.004.2	74	312191.003.1.76	260	312198.003.1	261
312138.002.1.19	248	312157.002.1	227	312175.004.2.730	74	312191.003.76	260	312198.003.1.76	261
312138.002.19	248	312157.002.1.76	227	312175.004.3	74	312191.0045	260	312198.003.76	261
312138.003	248	312157.002.76	227	312175.004.3.730	74	312191.0045.1	260	312198.0045	261
312138.003.1	248	312158.002	227	312175.004.730	74	312191.0045.1.76	260	312198.0045.1	261
312138.003.1.19	248	312158.002.1	227	312176.002	259	312191.0045.76	260	312198.0045.1.76	261
312138.003.19	248	312158.002.1.76	227	312176.002.1	259	312192.002	260	312198.0045.76	261
312138.0045	248	312158.002.76	227	312176.002.1.76	259	312192.002.1	260	312199.002	261
312138.0045.1	248	312159.002	227	312176.002.76	259	312192.002.1.76	260	312199.002.1	261
312138.0045.1.19	248	312159.002.1	227	312176.003	259	312192.002.76	260	312199.002.1.76	261
312138.0045.19	248	312159.002.1.76	227	312176.003.1	259	312192.003	260	312199.002.76	261
312139.002	248	312159.002.76	227	312176.003.1.76	259	312192.003.1	260	312199.003	261
312139.002.1	248	312160.002	229	312176.003.76	259	312192.003.1.76	260	312199.003.1	261
312139.002.1.19	248	312160.002.1	229	312176.0045	259	312192.003.76	260	312199.003.1.76	261
312139.002.19	248	312160.002.1.76	229	312176.0045.1	259	312192.0045	260	312199.003.76	261
312139.003	248	312160.002.76	229	312176.0045.1.76	259	312192.0045.1	260	312199.0045	261
312139.003.1	248	312161.002	229	312176.0045.76	259	312192.0045.1.76	260	312199.0045.1	261
312139.003.1.19	248	312161.002.1	229	312177.002	259	312192.0045.76	260	312199.0045.1.76	261
312139.003.19	248	312161.002.1.76	229	312177.002.1	259	312193.002	260	312199.0045.76	261
312139.0045	248	312161.002.76	229	312177.002.1.76	259	312193.002.1	260	312200.002	261
312139.0045.1	248	312162.002	229	312177.002.76	259	312193.002.1.76	260	312200.002.1	261
312139.0045.1.19	248	312162.002.1	229	312177.003	259	312193.002.76	260	312200.002.1.76	261
312139.0045.19	248	312162.002.1.76	229	312177.003.1	259	312193.003	260	312200.002.76	261
312142.002	221	312162.002.76	229	312177.003.1.76	259	312193.003.1	260	312200.003	261
312142.002.1	221	312163.002	229	312177.003.76	259	312193.003.1.76	260	312200.003.1	261
312142.002.1.76	221	312163.002.1	229	312177.0045	259	312193.003.76	260	312200.003.1.76	261
312142.002.76	221	312163.002.1.76	229	312177.0045.1	259	312193.0045	260	312200.003.76	261
312143.002	199	312163.002.76	229	312177.0045.1.76	259	312193.0045.1	260	312200.0045	261
312143.002.1	199	312164.002	229	312177.0045.76	259	312193.0045.1.76	260	312200.0045.1	261
312143.002.1.76	199	312164.002.1	229	312178.002	259	312193.0045.76	260	312200.0045.1.76	261
312143.002.76	199	312164.002.1.76	229	312178.002.1	259	312194.002	260	312200.0045.76	261
312144.002	221	312164.002.76	229	312178.002.1.76	259	312194.002.1	260	312201.002	261
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312144.002.1.76	221	312165.002.1	229	312178.003	259	312194.002.76	260	312201.002.1.76	261
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312145.002	221	312165.002.76	229	312178.003.1.76	259	312194.003.1	260	312201.003	261
312145.002.1	221	312166.000	277	312178.003.76	259	312194.003.1.76	260	312201.003.1	261
312145.002.1.76	221	312166.000.1	277	312178.0045	259	312194.003.76	260	312201.003.1.76	261
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312146.002	225	312166.000.76	277	312178.0045.1.76	259	312194.0045.1	260	312201.0045	261
312146.002.1	225	312167.000	277	312178.0045.76	259	312194.0045.1.76	260	312201.0045.1	261
312146.002.1.76	225	312167.000.1	277	312179.002	259	312194.0045.76	260	312201.0045.1.76	261
312146.002.76	225	312167.000.1.76	277	312179.002.1	259	312195.002	260	312201.0045.76	261
312147.002	221	312167.000.76	277	312179.002.1.76	259	312195.002.1	260	312202.002	262
312147.002.1	221	312168.000	277	312179.002.76	259	312195.002.1.76	260	312202.002.1	262
312147.002.1.76	221	312168.000.1	277	312179.003	259	312195.002.76	260	312202.002.1.76	262
312147.002.76	221	312168.000.1.76	277	312179.003.1	259	312195.003	260	312202.002.76	262
312148.002	221	312168.000.76	277	312179.003.1.76	259	312195.003.1	260	312202.003	262
312148.002.1	221	312169.000	277	312179.003.76	259	312195.003.1.76	260	312202.003.1	262
312148.002.1.76	221	312169.000.1	277	312179.0045	259	312195.003.76	260	312202.003.1.76	262
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312149.002.1.76	225	312174.002.1	72	312184.002	37	312195.0045.76	260	312202.0045.1.76	262
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312150.002.1.76	222	312174.0031.1	72	312186.002	37	312196.002.76	261	312203.002.1.76	262
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312151.002	222	312174.0031.730	72	312187.002	37	312196.003.1	261	312203.003	262
312151.002.1	222	312174.004	72	312187.002.1	37	312196.003.1.76	261	312203.003.1	262
312151.002.1.76	222	312174.004.1	72	312188.002	37	312196.003.76	261	312203.003.1.76	262
312151.002.76	222	312174.004.1.730	72	312188.002.1	37	312196.0045	261	312203.003.76	262
312152.002	225	312174.004.730	72	312189.002	37	312196.0045.1	261	312203.0045	262
312152.002.1	225	312175.002	74	312189.002.1	37	312196.0045.1.76	261	312203.0045.1	262
312152.002.1.76	225	312175.002.1	74	312190.002	260	312196.0045.76	261	312203.0045.1.76	262
312152.002.76	225	312175.002.1.730	74	312190.002.1	260	312197.002	261	312203.0045.76	262

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
312204.002	262	312210.0045.76	263	312217.0045.1.76	264	312224.0045.1	265	312234.002	255
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312208.003.1	263	312215.003	264	312222.002.76	265	312230.002.1.76	256	312242.002.3	86
312208.003.1.76	263	312215.003.1	264	312222.003	265	312230.002.76	256	312242.002.4	87
312208.003.76	263	312215.003.1.76	264	312222.003.1	265	312231.000	256	312243.002.1	184
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312208.0045.1	263	312215.0045	264	312222.003.76	265	312231.000.1.76	256	312243.002.3	184
312208.0045.1.76	263	312215.0045.1	264	312222.0045	265	312231.000.76	256	312243.002.4	184
312208.0045.76	263	312215.0045.1.76	264	312222.0045.1	265	312231.002	256	312244.002.1	96
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312209.003.1.76	263	312216.003.1	264	312223.003	265	312232.000.76	255	312245.002.4	188
312209.003.76	263	312216.003.1.76	264	312223.003.1	265	312232.002	255	312246.0045	191
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312210.002	263	312216.0045.76	264	312223.0045.1.76	265	312233.000.1	255	312247.0045.1	191
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312210.003.1.76	263	312217.003.1	264	312224.003	265	312233.002.76	255	312248.002.19	244
312210.003.76	263	312217.003.1.76	264	312224.003.1	265	312234.000	255	312248.003	244
312210.0045	263	312217.003.76	264	312224.003.1.76	265	312234.000.1	255	312248.003.1	244
312210.0045.1	263	312217.0045	264	312224.003.76	265	312234.000.1.76	255	312248.003.1.19	244
312210.0045.1.76	263	312217.0045.1	264	312224.0045	265	312234.000.76	255	312248.003.19	244

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
312248.0045	244	312270.004	217	312279.0045.19	244	451054.7545.19	129	451173.002	129
312248.0045.1	244	312270.004.1	217	312279.0045.2	244	451055.752	129	451173.002.1	129
312248.0045.1.19	244	312270.004.1.76	217	312279.0045.2.19	244	451055.7545	129	451174.002	129
312248.0045.19	244	312270.004.2.730	217	312280.002	302	451056.752	129	451174.002.1	129
312249.002	244	312270.004.76	217	312280.002.1	302	451056.7545	129	451175.002	129
312249.002.1	244	312271.004	218	312280.002.1.76	302	451057.752	129	451175.002.1	129
312249.002.1.19	244	312271.004.1	218	312280.002.76	302	451057.7545	129	451181.002	133
312249.002.19	244	312271.004.1.76	218	312281.002	302	451058.752	129	451181.002.1	133
312249.003	244	312271.004.2.730	218	312281.002.1	302	451058.7545	129	451182.009.19	454
312249.003.1	244	312271.004.76	218	312281.002.1.76	302	451059.752	129	451183.009.19	454
312249.003.1.19	244	312272.002.2.730	199	312281.002.76	302	451059.7545	129	451184.009.19	454
312249.003.19	244	312273.002.2.730	199	312282.002	304	451060.752	129	451185.009.19	454
312249.0045	244	312274.002.2.730	200	312282.002.1	304	451060.7545	129	451186.009.19	454
312249.0045.1	244	312275.002.2.730	200	312282.002.1.76	304	451061.752	129	451189.000.0	123
312249.0045.1.19	244	312276.002	244	312282.002.76	304	451061.7545	129	451189.000.0.76	123
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312251.000	17	312276.002.1.19	244	312283.002.1	303	451156.002.1	133	451189.000.1.76	123
312251.000.1	17	312276.002.19	244	312284.002	305	451157.002	133	451190.000.0	123
312251.000.1.19	59	312276.002.2	244	312284.002.1	305	451157.002.1	133	451190.000.0.76	123
312251.000.1.191	59	312276.002.2.19	244	312285.002	303	451158.002	133	451190.000.1	123
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312251.000.19	59	312276.003.1	244	312286.002	305	451159.002	133	451191.000.1	123
312251.000.191	59	312276.003.1.19	244	312286.002.1	305	451159.002.1	133	451191.000.1.76	123
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312252.000.1.76	19	312276.0045.1.19	244	312289.002.1	304	451161.009.2	446	451194.000.1.76	123
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312253.000	63	312276.0045.2.19	244	331153.000.1	43	451161.009.3.76	446	451195.000.1	123
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312253.000.19	63	312277.002.2	244	40125.002.1	127	451162.009.2	446	451197.000.1.76	193
312253.000.191	63	312277.002.2.19	244	40130.002.1	127	451162.009.2.76	446	451198.000	124
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312254.000.1.76	157	312277.003.19	244	4037283011	284	451163.009	446	451200.000	193
312254.000.76	157	312277.003.2	244	4037283021	284	451163.009.1	446	451200.000.76	193
312255.000	159	312277.003.2.19	244	4037653021	284	451163.009.1.76	446	451201.002	131
312255.000.1	159	312277.0045	244	4037653011	284	451163.009.2	446	451201.002.1	131
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312255.000.76	159	312277.0045.1.19	244	4039303022	283	451163.009.3	446	451202.002.1	131
312256.000	161	312277.0045.19	244	4039303032	283	451163.009.3.76	446	451203.002	131
312256.000.1	161	312277.0045.2	244	4039653012	283	451163.009.76	446	451203.002.1	131
312256.000.1.76	161	312277.0045.2.19	244	4039653022	283	451164.009	446	451204.002	450
312256.000.76	161	312278.002	244	4039653032	283	451164.009.1	446	451204.002.76	450
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No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
50500.009.1	139	551100.002.1.12	21	581641.004.1	570	582016.004	517	582041.0031	531
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No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
611870.004	593	611904.004	609	611945.0031	665	611970.004	615	612118.004.1	669
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611899.004	655	611941.004	665	611962.0031.1	667	612114.0031.1	601	621091.0031	524
611900.000	655	611941.004.1	665	611962.004	667	612114.004	601	621091.0031.1	524
611900.0031	655	611942.0031	665	611962.004.1	667	612114.004.1	601	621091.0031.1.19	524
611900.004	655	611942.0031.1	665	611963.0031	667	612115.0031	603	621091.0031.19	524
611901.000	655	611942.004	665	611963.0031.1	667	612115.004	603	621091.004	524
611901.0031	655	611942.004.1	665	611963.004	667	612116.0031	603	621091.004.1	524
611901.004	655	611943.0031	665	611963.004.1	667	612116.004	603	621091.004.1.19	524
611902.000	655	611943.0031.1	665	611966.0031	613	612117.0031	603	621091.004.19	524
611902.0031	655	611943.004	665	611967.0031	613	612117.0031.1	603	621092.0031	523
611902.004	655	611943.004.1	665	611968.0031	613	612117.004	603	621092.0031.19	523
611903.000	655	611944.0031	665	611968.0031.1	613	612117.004.1	603	621092.004	523
611903.0031	655	611944.0031.1	665	611969.0031	613	612118.0031	669	621092.004.19	523
611903.004	655	611944.004	665	611969.0031.1	613	612118.0031.1	669	621093.0031	523
611904.0031	609	611944.004.1	665	611970.0031	615	612118.004	669	621093.0031.19	523

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
621093.004	523	641304.0031	508	671089.004	757	671502.002.07	720	671775.002	746
621093.004.19	523	641304.0031.1	508	671089.004.04	757	671502.004	720	671775.002.89	746
621094.0031	524	641304.0031.1.76	508	671148.000	697	671502.004.04	720	671780.002	745
621094.0031.19	524	641304.0031.76	508	671207.002	753	671502.004.07	720	671780.002.04	745
621094.004	524	641305.000	507	671207.002.89	753	671503.002	719	671782.002	745
621094.004.19	524	641305.000.1	507	671207.004	753	671503.002.89	719	671782.002.89	745
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621095.0031.1.19	523	641306.002	508	671209.002.89	754	671504.002	721	671793.002	750
621095.0031.19	523	641306.002.1	508	671209.004	754	671504.002.89	721	671793.002.89	750
621095.004	523	641306.002.1.76	508	671209.004.89	754	671504.004	721	671817.009	743
621095.004.1	523	641306.002.76	508	671211.002	755	671504.004.89	721	671817.009.14	743
621095.004.1.19	523	641306.0031	508	671211.002.89	755	671518.002	722	671819.002	749
621095.004.19	523	641306.0031.1	508	671211.004	755	671518.002.04	722	671819.002.04	749
621096.0031	523	641306.0031.1.76	508	671211.004.89	755	671518.002.07	722	671820.002	749
621096.0031.19	523	641306.0031.76	508	671213.002	757	671518.004	722	671820.002.89	749
621096.004	523	641307.000	507	671213.002.89	757	671518.004.04	722	671823.000	699
621096.004.19	523	641307.000.1	507	671213.004	757	671518.004.07	722	671824.009	823
6401400805	283	641307.000.1.76	507	671213.004.89	757	671519.002	722	671840.002	767
6401401405	283	641307.000.76	507	671215.002	753	671519.004	722	671840.002.04	767
6401401505	283	641308.000	619	671215.002.89	753	671519.004.89	722	671840.002.07	767
6401401605	283	641308.000.1	619	671215.004	753	671707.002	746	671840.002.1	767
6401401705	283	641309.000	619	671215.004.89	753	671707.002.04	746	671840.002.1.04	767
6401401805	283	641309.000.1	619	671217.002	754	671722.002	719	671840.002.1.07	767
6401401905	283	641310.000	619	671217.002.89	754	671722.002.89	719	671841.002	767
6401402005	283	641310.000.1	619	671217.004	754	671722.004	719	671841.002.1	767
6401402305	283	641311.000	619	671217.004.89	754	671722.004.89	719	671841.002.1.89	767
6401402405	283	641311.000.1	619	671223.002	755	671736.002	721	671841.002.89	767
6401402505	283	641312.000	619	671223.002.89	755	671736.002.89	721	671895.002	719
6401403905	283	641312.000.1	619	671223.004	755	671736.004	721	671895.002.04	719
6401405305	283	641313.000	619	671223.004.89	755	671736.004.89	721	671895.004	719
6401500105	283	641313.000.1	619	671227.002	757	671737.002	721	671895.004.04	719
6401500205	283	641314.000	619	671227.002.89	757	671737.002.89	721	671896.002	720
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6401700605	283	641316.000	507	671227.004.89	757	671737.004.89	721	671896.004	720
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641289.000	625	671053.002	755	671233.004	755	671740.004	722	671908.002.04	746
641289.000.1	625	671053.002.04	755	671233.004.89	755	671740.004.89	722	671909.002	745
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641292.002	508	671061.002	753	671343.004	756	671744.002	720	671912.004.07	719
641292.002.1	508	671061.002.04	753	671343.004.04	756	671744.002.04	720	671913.002	720
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641296.000	623	671069.004	755	671359.002	756	671746.004.04	719	671914.004	722
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641297.000	623	671073.002	757	671359.004	756	671748.002	719	671914.004.07	722
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641298.000	623	671073.004	757	671363.002	756	671748.002.07	719	671917.002	775
641298.000.1	623	671073.004.04	757	671363.002.89	756	671748.004	719	671917.002.07	775
641299.000	623	671077.002	753	671363.004	756	671748.004.04	719	671918.002	775
641299.000.1	623	671077.002.04	753	671363.004.89	756	671748.004.07	719	671918.002.07	775
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641301.000	626	671081.002	754	671367.004	756	671750.002.07	722	671919.003	777
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641303.000	626	671085.002	755	671501.002.07	719	671752.002	722	671920.003	777
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641304.002.1.76	508	671089.002	757	671502.002	720	671752.004.04	722	671921.003	777
641304.002.76	508	671089.002.04	757	671502.002.04	720	671752.004.07	722	671921.003.07	777

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
671922.004	712	672011.002	768	672058.002.7.07	805	672141.002	771	672181.002.07	739
671922.004.89	712	672011.002.89	768	672059.002.5	805	672141.002.04	771	672181.003	739
671923.004	711	672014.002	778	672059.002.5.04	805	672141.002.07	771	672181.003.04	739
671923.004.89	711	672014.002.89	778	672059.002.5.07	805	672141.009	771	672181.003.07	739
671927.002	781	672016.002	778	672059.002.5.19	805	672141.009.04	771	672182.002	739
671927.002.07	781	672016.002.04	778	672059.002.7	805	672141.009.07	771	672182.002.89	739
671936.002	781	672016.002.07	778	672059.002.7.04	805	672142.002	771	672182.003	739
671936.002.89	781	672017.002.07	778	672059.002.7.07	805	672142.002.89	771	672182.003.89	739
671938.004	713	672019.002	769	672059.002.7.19	805	672142.009	771	672188.002	737
671938.004.89	713	672019.002.89	769	672088.1131	821	672142.009.89	771	672188.002.04	737
671939.004	714	672020.002	769	672088.1131.1	821	672143.009	802	672188.002.07	737
671939.004.89	714	672020.002.04	769	672088.114	821	672143.009.1	803	672189.002	737
671940.004	715	672020.002.07	769	672088.114.1	821	672143.009.1.89	803	672189.002.04	737
671940.004.89	715	672021.002.07	769	672089.1131	821	672143.009.2	802	672189.002.07	737
671941.004	716	672022.002	768	672089.1131.1	821	672143.009.2.89	802	672190.002	737
671941.004.89	716	672022.002.04	768	672089.114	821	672143.009.3	803	672190.002.89	737
671942.004	716	672022.002.07	768	672089.114.1	821	672143.009.3.89	803	672191.002	793
671942.004.89	716	672023.002	768	672092.002.5	809	672143.009.89	802	672191.002.04	793
671943.004	712	672023.002.04	768	672092.002.5.04	809	672144.009	802	672191.002.07	793
671943.004.04	712	672023.002.07	768	672092.002.5.07	809	672144.009.1	803	672191.002.1	793
671943.004.07	712	672029.004	714	672092.002.7	809	672144.009.1.89	803	672191.002.1.04	793
671944.004	711	672029.004.89	714	672092.002.7.04	809	672144.009.2	802	672191.002.1.07	793
671944.004.04	711	672030.004	715	672092.002.7.07	809	672144.009.2.89	802	672192.002	793
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671945.004	713	672031.004	716	672093.002.5.04	809	672144.009.3.89	803	672192.002.1.89	793
671945.004.04	713	672031.004.89	716	672093.002.5.07	809	672144.009.89	802	672192.002.89	793
671945.004.07	713	672032.004	716	672093.002.7	809	672145.009	802	672193.002	793
671946.004	714	672032.004.89	716	672093.002.7.04	809	672145.009.1	803	672193.002.04	793
671946.004.04	714	672033.004	714	672093.002.7.07	809	672145.009.1.89	803	672193.002.07	793
671946.004.07	714	672033.004.04	714	672093.002.7.19	809	672145.009.2	802	672193.002.1	793
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671947.004.04	715	672034.004	715	672116.009	727	672145.009.3	803	672193.002.1.07	793
671947.004.07	715	672034.004.04	715	672116.009.04	727	672145.009.3.89	803	672194.002	793
671948.004	716	672034.004.07	715	672116.009.07	727	672145.009.89	802	672194.002.04	793
671948.004.04	716	672035.004	716	672117.009	727	672161.002.04	781	672194.002.07	793
671948.004.07	716	672035.004.04	716	672117.009.89	727	672161.002.07	781	672194.002.1	793
671949.004	716	672035.004.07	716	672118.002	772	672164.002	731	672194.002.1.04	793
671949.004.04	716	672036.004	716	672118.002.04	772	672164.002.89	731	672194.002.1.07	793
671949.004.07	716	672036.004.04	716	672118.002.07	772	672165.002	731	672195.002	793
671982.002.07	777	672036.004.07	716	672119.002	772	672165.002.04	731	672195.002.1	793
671983.002.1	725	672037.002	770	672119.002.89	772	672165.002.07	731	672195.002.1.89	793
671983.002.1.89	725	672037.002.89	770	672126.002	740	672168.002	793	672195.002.89	793
671983.004.1	725	672038.002	770	672126.002.04	740	672168.002.04	793	672196.009	709
671983.004.1.89	725	672038.002.04	770	672126.002.07	740	672168.002.07	793	672197.009	709
671985.002.1	725	672038.002.07	770	672126.003	740	672168.002.1	793	672199.009	802
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671985.004.1	725	672039.004.89	713	672126.003.07	740	672168.002.1.07	793	672199.009.1.89	803
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671996.004.1.89	729	672041.004.04	713	672129.002	739	672170.002.07	763	672199.009.89	802
671997.002.07	767	672041.004.07	713	672129.002.89	739	672170.002.1	763	672200.009	802
671997.002.1.07	767	672042.004	714	672129.003	739	672170.002.1.04	763	672200.009.1	803
671999.002	768	672042.004.04	714	672129.003.89	739	672170.002.1.07	763	672200.009.1.89	803
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672002.002	778	672043.004.07	715	672133.002.7	805	672171.002	763	672200.009.3.89	803
672002.002.04	778	672044.004	716	672133.002.7.07	805	672171.002.1	763	672200.009.89	802
672002.002.07	778	672044.004.04	716	672133.002.7.19	805	672171.002.1.89	763	672201.009	802
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672004.004.07	712	672045.004.07	716	672135.002.04	772	672172.002	766	672201.009.2.89	802
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672005.004.07	711	672053.002.07	779	672136.002.89	772	672173.002	766	672201.009.89	802
672006.004	713	672055.002	779	672137.002	772	672173.002.89	766	672202.009	801
672006.004.04	713	672055.002.89	779	672137.002.04	772	672175.002	740	672202.009.04	801
672006.004.07	713	672056.002.5	806	672137.002.07	772	672175.002.04	740	672202.009.07	801
672007.004	714	672056.002.5.89	806	672138.002	772	672175.002.07	740	672202.009.1	802
672007.004.04	714	672056.002.7	806	672138.002.89	772	672175.003	740	672202.009.1.04	802
672007.004.07	714	672056.002.7.89	806	672139.002	771	672175.003.04	740	672202.009.1.07	802
672008.004	715	672057.002.5	806	672139.002.04	771	672175.003.07	739	672202.009.2	801
672008.004.04	715	672057.002.5.89	806	672139.002.07	771	672176.002	739	672202.009.2.04	801
672008.004.07	715	672057.002.7	806	672139.009	771	672176.002.04	739	672202.009.2.07	801
672009.004	716	672057.002.7.89	806	672139.009.04	771	672176.002.07	739	672202.009.3	802
672009.004.04	716	672058.002.5	805	672139.009.07	771	672176.003	739	672202.009.3.04	802
672009.004.07	716	672058.002.5.04	805	672140.002	771	672176.003.04	739	672202.009.3.07	802
672010.004	716	672058.002.5.07	805	672140.002.89	771	672176.003.07	739	672203.009	801
672010.004.04	716	672058.002.7	805	672140.009	771	672181.002	739	672203.009.04	801
672010.004.07	716	672058.002.7.04	805	672140.009.89	771	672181.002.04	739	672203.009.07	801

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
672203.009.1	802	672219.002	729	672234.002.1.07	786	672253.002.1.07	795	672278.002.07	790
672203.009.1.04	802	672219.002.04	729	672235.002	786	672254.002	795	672278.002.1	790
672203.009.1.07	802	672219.002.07	729	672235.002.04	786	672254.002.1	795	672278.002.1.04	790
672203.009.2	801	672219.004	729	672235.002.07	786	672254.002.1.89	795	672278.002.1.07	790
672203.009.2.04	801	672219.004.04	729	672235.002.1	786	672254.002.89	795	672279.002	789
672203.009.2.07	801	672219.004.07	729	672235.002.1.04	786	672255.002	797	672279.002.1	789
672203.009.3	802	672220.002	784	672235.002.1.07	786	672255.002.04	797	672279.002.1.89	789
672203.009.3.04	802	672220.002.04	784	672236.002	786	672255.002.07	797	672279.002.89	789
672203.009.3.07	802	672220.002.07	784	672236.002.04	786	672256.002	797	672280.002	789
672204.009	801	672220.002.1	784	672236.002.07	786	672256.002.04	797	672280.002.1	789
672204.009.04	801	672220.002.1.04	784	672236.002.1	786	672256.002.07	797	672280.002.1.89	789
672204.009.07	801	672220.002.1.07	784	672236.002.1.04	786	672259.002	790	672280.002.89	789
672204.009.1	802	672221.002	784	672236.002.1.07	786	672259.002.1	790	672281.002	789
672204.009.1.04	802	672221.002.04	784	672237.002	786	672259.002.1.89	790	672281.002.1	789
672204.009.1.07	802	672221.002.07	784	672237.002.04	786	672259.002.89	790	672281.002.1.89	789
672204.009.2	801	672221.002.1	784	672237.002.07	786	672260.002	806	672281.002.89	789
672204.009.2.04	801	672221.002.1.04	784	672237.002.1	786	672260.002.04	806	672282.002	763
672204.009.2.07	801	672221.002.1.07	784	672237.002.1.04	786	672260.002.07	806	672282.002.04	763
672204.009.3	802	672222.002	784	672237.002.1.07	786	672260.002.1	806	672282.002.07	763
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672205.009.07	801	672222.002.1.07	784	672238.002.1.04	786	672261.002.07	806	672283.002.04	766
672205.009.1	802	672223.002	784	672238.002.1.07	786	672261.002.1	806	672283.002.07	766
672205.009.1.04	802	672223.002.04	784	672239.002	786	672261.002.1.04	806	672284.002	815
672205.009.1.07	802	672223.002.07	784	672239.002.04	786	672261.002.1.07	806	672284.002.89	815
672205.009.2	801	672223.002.1	784	672239.002.07	786	672267.002	790	672284.0031	815
672205.009.2.04	801	672223.002.1.04	784	672239.002.1	786	672267.002.1	790	672284.0031.89	815
672205.009.2.07	801	672223.002.1.07	784	672239.002.1.04	786	672267.002.1.89	790	672284.004	815
672205.009.3	802	672224.002	784	672239.002.1.07	786	672267.002.89	790	672284.004.89	815
672205.009.3.04	802	672224.002.04	784	672240.002	786	672268.002	790	672285.002	815
672205.009.3.07	802	672224.002.07	784	672240.002.04	786	672268.002.1	790	672285.002.89	815
672206.009	801	672224.002.1	784	672240.002.07	786	672268.002.1.89	790	672285.0031	815
672206.009.04	801	672224.002.1.04	784	672240.002.1	786	672268.002.89	790	672285.0031.89	815
672206.009.07	801	672224.002.1.07	784	672240.002.1.04	786	672269.002	790	672285.004	815
672206.009.1	802	672225.002	784	672240.002.1.07	786	672269.002.1	790	672285.004.89	815
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672206.009.1.07	802	672225.002.07	784	672241.002.1	787	672269.002.89	790	672287.002.1	813
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672206.009.2.04	801	672225.002.1.04	784	672241.002.89	787	672271.002.04	789	672287.002.89	813
672206.009.2.07	801	672225.002.1.07	784	672242.002	787	672271.002.07	789	672287.0031	813
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672206.009.3.04	802	672226.002.04	784	672242.002.1.89	787	672271.002.1.04	789	672287.0031.1.89	813
672206.009.3.07	802	672226.002.07	784	672242.002.89	787	672271.002.1.07	789	672287.0031.89	813
672208.002	781	672226.002.1	784	672243.002	787	672272.002	789	672287.004	813
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672210.002	797	672227.002.07	784	672244.002.1	787	672272.002.1.07	789	672288.002.1	813
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672211.002	797	672227.002.1.07	784	672245.002	735	672273.002.07	789	672288.0031	813
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672212.002	797	672228.002.1.89	785	672246.002	735	672273.002.1.07	789	672288.0031.89	813
672212.002.04	797	672228.002.89	785	672246.002.04	735	672274.002	789	672288.004	813
672212.002.07	797	672229.002	785	672246.002.07	735	672274.002.04	789	672288.004.1	813
672213.002	797	672229.002.1	785	672247.002	735	672274.002.07	789	672288.004.1.89	813
672213.002.04	797	672229.002.1.89	785	672247.002.89	735	672274.002.1	789	672288.004.89	813
672213.002.07	797	672229.002.89	785	672248.002	735	672274.002.1.04	789	672289.0031	811
672214.002	797	672230.002	785	672248.002.89	735	672274.002.1.07	789	672289.0031.1	811
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672214.002.07	797	672230.002.1.89	785	672249.002.89	733	672275.002.04	790	672289.004.1	811
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672215.002.07	797	672231.002.1	785	672250.002.07	733	672275.002.1.04	790	672290.002.1.89	789
672216.002	797	672231.002.1.89	785	672251.002	795	672275.002.1.07	790	672290.002.89	789
672216.002.04	797	672231.002.89	785	672251.002.04	795	672276.002	790	672291.002	759
672216.002.07	797	672232.009	707	672251.002.07	795	672276.002.04	790	672291.002.89	759
672217.002	725	672232.009.04	707	672251.002.1	795	672276.002.07	790	672292.002	759
672217.002.04	725	672233.002	786	672251.002.1.04	795	672276.002.1	790	672292.002.04	759
672217.002.07	725	672233.002.04	786	672251.002.1.07	795	672276.002.1.04	790	672292.002.07	759
672217.004	725	672233.002.07	786	672252.002	795	672276.002.1.07	790	672293.002	759
672217.004.04	725	672233.002.1	786	672252.002.1	795	672277.002	790	672293.002.04	759
672217.004.07	725	672233.002.1.04	786	672252.002.1.89	795	672277.002.04	790	672293.002.07	759
672218.002	725	672233.002.1.07	786	672252.002.89	795	672277.002.07	790	672294.002	763
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672218.002.07	725	672234.002.04	786	672253.002.04	795	672277.002.1.04	790	672294.002.1.89	763
672218.004	725	672234.002.07	786	672253.002.07	795	672277.002.1.07	790	672294.002.89	763
672218.004.04	725	672234.002.1	786	672253.002.1	795	672278.002	790	672295.0031	811
672218.004.07	725	672234.002.1.04	786	672253.002.1.04	795	672278.002.04	790	672295.0031.1	811

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
672295.004	811	701055.013	425	701092.004	415	70351.004	424	721718.0031	647
672295.004.1	811	701055.019	425	701093.002	418	70354.002	424	721718.0031.1	647
672297.002	819	701063.002	414	701093.003	418	70354.004	424	721718.0031.1.76	647
672297.002.1	819	701063.003	414	701093.004	418	70360.002	419	721718.0031.76	647
672297.002.1.89	819	701063.004	414	701094.000	417	70382.000	425	721718.004	647
672297.002.89	819	701064.002	414	701097.002	422	70594.002	424	721718.004.1	647
672297.0031	819	701064.003	414	701097.003	422	70594.003	424	721718.004.1.76	647
672297.0031.1	819	701064.004	414	701097.009	422	70594.004	424	721718.004.76	647
672297.0031.1.89	819	701065.002	414	701098.002	422	70873.002	659	721718.1131	647
672297.0031.89	819	701065.003	414	701098.003	422	70873.003	659	721718.1131.1	647
672297.004	819	701065.004	414	701098.009	422	70875.002	419	721718.1131.1.76	647
672297.004.1	819	701066.002	414	701099.002	422	70875.003	419	721718.1131.76	647
672297.004.1.89	819	701066.003	414	701099.003	422	721052.7631	661	721718.114	647
672297.004.89	819	701066.004	414	701099.009	422	721052.764	661	721718.114.1	647
672298.002	819	701067.002	413	701100.002	422	721096.7631	661	721718.114.1.76	647
672298.002.1	819	701067.003	413	701100.003	422	721096.764	661	721718.114.76	647
672298.002.1.89	819	701067.004	413	701100.009	422	721107.762	661	721719.1131	649
672298.002.89	819	701068.002	413	701101.002	421	721107.7631	661	721719.1131.1	649
672298.0031	819	701068.003	413	701101.003	421	721107.764	661	721719.1131.1.76	649
672298.0031.1	819	701068.004	413	701101.009	421	721114.7631	661	721719.1131.76	649
672298.0031.1.89	819	701069.002	413	701102.002	421	721114.764	661	721719.114	649
672298.0031.89	819	701069.003	413	701102.003	421	721156.092	657	721719.114.1	649
672298.004	819	701069.004	413	701102.009	421	721156.0931	657	721719.114.1.76	649
672298.004.1	819	701070.002	413	701103.002	421	721157.092	657	721719.114.76	649
672298.004.1.89	819	701070.003	413	701103.003	421	721157.0931	657	721720.1131	651
672298.004.89	819	701070.004	413	701103.009	421	721158.092	657	721720.1131.1	651
672299.002	760	701071.002	415	701104.002	421	721158.0931	657	721720.1131.1.76	651
672299.002.89	760	701071.003	415	701104.003	421	721680.092	658	721720.1131.76	651
672300.002	760	701071.004	415	701104.009	421	721680.0931	658	721720.114	651
672300.002.04	760	701072.004	417	701105.002	422	721681.092	658	721720.114.1	651
672300.002.07	760	701073.002	416	701105.003	422	721681.0931	658	721720.114.1.76	651
672301.002	816	701073.003	416	701105.009	422	721682.092	658	721720.114.76	651
672301.002.89	816	701074.000	417	701106.002	422	721682.0931	658	721721.0031	639
672301.0031	816	701075.002	418	701106.003	422	721683.002	659	721721.0031.1	639
672301.0031.89	816	701075.003	418	701106.009	422	721683.003	659	721721.004	639
672301.004	816	701076.002	417	701107.002	422	721690.002	659	721721.1131	639
672301.004.89	816	701076.003	417	701107.003	422	721690.003	659	721721.1131.1	639
672302.002	773	701076.004	417	701107.009	422	721691.002	659	721721.114	639
672302.002.04	773	701077.002	414	701108.002	423	721691.003	659	721721.114.1	639
672302.002.07	773	701077.003	414	701108.003	423	721714.0031	637	721722.0031	643
672302.002.1	773	701077.004	414	701108.009	423	721714.0031.1	637	721722.0031.1	643
672302.002.1.04	773	701078.002	414	701109.002	423	721714.0031.1.76	637	721722.004	643
672302.002.1.07	773	701078.003	414	701109.003	423	721714.0031.76	637	721722.004.1	643
672303.002	773	701078.004	414	701109.009	423	721714.004	637	721722.1131	643
672303.002.04	773	701079.002	414	701110.002	422	721714.004.1	637	721722.1131.1	643
672303.002.07	773	701079.003	414	701110.003	422	721714.004.1.76	637	721722.114	643
672303.002.1	773	701079.004	414	701110.009	422	721714.004.76	637	721722.114.1	643
672303.002.1.04	773	701080.002	416	701111.002	422	721714.1131	637	721723.0031	639
672303.002.1.07	773	701080.003	416	701111.003	422	721714.1131.1	637	721723.0031.1	639
672304.002	773	701080.004	416	701111.009	422	721714.1131.1.76	637	721723.004	639
672304.002.1	773	701081.002	414	701112.002	423	721714.114	637	721723.004.1	639
672304.002.1.89	773	701081.003	414	701112.003	423	721714.114.1	637	721724.0031	643
672304.002.89	773	701081.004	414	701112.009	423	721714.114.1.76	637	721724.0031.1	643
672305.002	773	701082.002	414	701113.002	423	721714.114.76	637	721724.004	643
672305.002.1	773	701082.003	414	701113.003	423	721715.0031	637	721725.1131	653
672305.002.1.89	773	701082.004	414	701113.009	423	721715.004	637	721725.1131.1	653
672305.002.89	773	701083.002	415	701114.002	423	721715.004.1	637	721725.1131.1.76	653
672313.002	815	701083.003	415	701114.003	423	721716.0031	641	721725.1131.76	653
672313.002.89	815	701083.004	415	701114.009	423	721716.0031.1	641	721725.114	653
672313.0031	815	701084.002	415	701115.002	423	721716.0031.1.76	641	721725.114.1.76	653
672313.0031.89	815	701084.003	415	701115.003	423	721716.004	641	721725.114.76	653
672313.004	815	701084.004	415	701115.009	423	721716.004.1	641	721733.0031	647
672313.004.89	815	701085.002	415	701116.002	423	721716.004.1.76	641	721733.0031.1	647
672314.002	815	701085.003	415	701116.003	423	721716.004.76	641	721733.0031.1.76	647
672314.002.89	815	701085.004	415	701116.009	423	721716.1131	641	721733.0031.76	647
672314.0031	815	701086.002	415	701117.002	421	721716.1131.1	641	721733.004.1	647
672314.0031.89	815	701086.003	415	701117.003	421	721716.1131.1.76	641	721733.004.1.76	647
672314.004	815	701086.004	415	701117.009	421	721716.114	641	721733.004.76	647
672314.004.89	815	701087.002	416	701118.002	421	721716.114.1	641	721733.1131	647
672315.002	816	701087.003	416	701118.003	421	721716.114.1.76	641	721733.1131.1	647
672315.002.89	816	701087.004	416	701118.009	421	721716.114.76	641	721733.1131.1.76	647
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672315.0031.89	816	701088.003	413	70318.002	418	721717.0031.1	641	721733.114.1	647
672315.004	816	701088.004	413	70318.003	418	721717.0031.1.76	641	721734.1131	653
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672316.1131	821	701089.003	413	70319.002	419	721717.004	641	721734.1131.1.76	653
672316.1131.1	821	701089.004	413	70337.002	424	721717.004.1	641		
672316.114	821	701090.002	413	70337.003	424	721717.004.1.76	641		
672316.114.1	821	701090.003	413	70337.009	424	721717.004.76	641		
701035.002	418	701090.004	413	70348.000	425				
701035.003	418	701091.004	417	70349	419				
701035.009	418	701092.002	415	70349.003	419				
701055.012	425	701092.003	415	70351.002	424				

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
721734.1131.76	653	721813.004	633	722050.004.1	383	741858.004.1	407	741921.003.2.76	407
721734.114	653	721813.004.1	633	722050.004.1.76	383	741858.004.1.76	407	741921.004.1	407
721734.114.1	653	721813.004.1.76	633	722050.004.76	383	741858.004.2	407	741921.004.1.76	407
721734.114.1.76	653	721813.004.76	633	722051.002	383	741858.004.2.76	407	741921.004.2	407
721734.114.76	653	721814.0031	633	722051.002.1	383	741859.002.1	407	741921.004.2.76	407
721802.0031	631	721814.0031.1	633	722051.002.1.76	383	741859.002.1.76	407	741922.002.1	407
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721803.004	631	722045.002.76	383	722052.002.1.76	383	741860.002.1.76	407	741995.002	405
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721804.0031.1.76	631	722045.004.1	383	722052.004	383	741860.003.2.76	407	741996.002	405
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721809.004	632	722048.002.1	383	722055.002	383	741865.004.2.76	407	742000.003	402
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721813.0031.76	633	722050.004	383	741858.003.2.76	407	741921.003.2	407	742002.004.76	403

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
742003.002	402	742009.004.76	403	742016.004.1.76	401	742023.004.1	400	742033.003	399
742003.002.1	402	742010.002	402	742016.004.76	401	742023.004.1.76	401	742033.003.1	399
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742008.004.1	402	742015.004.1	400	742022.004	400	742031.002.1	399	75.1004.04	279
742008.004.1.76	403	742015.004.1.76	401	742022.004.1	400	742031.003	399	75.1009.04	279
742008.004.76	403	742015.004.76	401	742022.004.1.76	401	742031.003.1	399	75.1012.04	281
742009.002	402	742016.002	400	742022.004.76	401	742031.004	399	75.1015.04	281
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742009.002.76	403	742016.002.76	401	742023.002.1.76	401	742032.002.1	399	75.1024.04	281
742009.003	402	742016.003	400	742023.002.76	401	742032.003	399	75.1027.04	281
742009.003.1	402	742016.003.1	400	742023.003	400	742032.003.1	399	75.1030.04	281
742009.003.1.76	403	742016.003.1.76	401	742023.003.1	400	742032.004	399	75.1033.04	281
742009.003.76	403	742016.003.76	401	742023.003.1.76	401	742032.004.1	399	75.1034.00	279
742009.004	402	742016.004	400	742023.003.76	401	742033.002	399	75.1039.04	279
742009.004.1	402	742016.004.1	400	742023.004	400	742033.002.1	399	75.1040.04	279

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
75.1041.04	279	901369.002.76	237	901517.002.1	342	901538.002	345	901557.002.1	334
75.1042.04	279	901370.002.76	213	901517.002.1.76	342	901538.002.1	345	901557.002.1.76	334
75.1043.04	279	901371.002.76	213	901517.002.76	342	901538.002.1.76	345	901557.002.2.730	334
75.1044.04	279	901372.002.76	211	901518.002	342	901538.002.76	345	901557.002.76	334
75.1045.04	279	901373.002.76	211	901518.002.1	342	901539.002	345	901557.004	334
75.1046.04	279	901403.002.76	238	901518.002.1.76	342	901539.002.1	345	901557.004.1	334
75.1047.04	279	901405.002.76	238	901518.002.76	342	901539.002.1.76	345	901557.004.1.76	334
75.1048.04	279	901410.002.76	237	901519.002	342	901539.002.76	345	901557.004.2.730	334
75.1049.04	279	901412.002.76	237	901519.002.1	342	901540.002	345	901557.004.76	334
75.1050.04	279	901431.002	347	901519.002.1.76	342	901540.002.1	345	901558.002	334
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75.1052.04	281	901433.002	347	901520.002	342	901540.002.76	345	901558.002.1.76	334
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75.1067.04	279	901452.002	313	901523.002.76	342	901544.002.1.76	345	901560.002.1	335
75.1068.04	279	901452.002.1	313	901524.002	343	901544.002.76	345	901560.002.1.76	335
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751141.002.1	409	901452.002.76	313	901524.002.1.76	343	901545.002.1	327	901560.004	335
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751141.002.76	409	901453.002.1	313	901525.002	343	901545.002.76	327	901560.004.1.76	335
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751141.004	409	901455.002	347	901526.002.1	343	901547.002	327	901561.002.2.730	335
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751141.004.1.76	409	901472.002	354	901526.002.76	343	901547.002.1.76	327	901561.004	335
751141.004.76	409	901472.002.76	354	901527.002	343	901547.002.76	327	901561.004.1	335
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751142.002.1.76	409	901473.002	354	901527.002.76	343	901548.002.1.76	327	901561.004.76	335
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751142.004.76	409	901484.002.76	313	901530.002	343	901550.002.76	327	901563.002	336
90-2780	507	901485.002	349	901530.002.1	343	901551.002	367	901563.002.1	336
90-4013.002	739	901485.002.1	349	901530.002.1.76	343	901551.002.1	367	901563.002.1.76	336
90-4013.003	739	901485.002.1.76	349	901530.002.76	343	901552.002	367	901563.002.76	336
90-4164.002	745	901485.002.76	349	901531.002	344	901552.002.1	367	901563.004	336
90-6054.0031	671	901486.002	349	901531.002.1	344	901552.002.1.76	367	901563.004.1	336
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90-6055.0031	671	901486.002.1.76	349	901531.002.76	344	901553.002	367	901563.004.76	336
90-6055.004	671	901486.002.76	349	901532.002	344	901553.002.1	367	901564.002	336
90-6056.0031	671	901487.002	349	901532.002.1	344	901553.002.1.76	367	901564.002.1	336
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901288.004	354	901488.002	349	901533.002.1	344	901554.002.1.76	367	901564.004.1	336
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901289.004	354	901495.002	365	901534.002.1	344	901555.002.1.76	334	901565.002.1	336
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901360.002.76	211	901496.002.1	365	901535.002	344	901555.004.1	334	901565.002.76	336
901361.002.1.76	211	901496.002.1.76	365	901535.002.1	344	901555.004.1.76	334	901565.004	336
901361.002.76	211	901496.002.76	365	901535.002.1.76	344	901555.004.76	334	901565.004.1	336
901362.002.76	211	901497.002	365	901535.002.76	344	901556.002	334	901565.004.1.76	336
901363.002.1.76	211	901497.002.1	365	901536.002	344	901556.002.1	334	901565.004.2.730	336
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901364.002.1.76	211	901497.002.76	365	901536.002.1.76	344	901556.002.76	334	901566.002	336
901364.002.76	211	901498.002	365	901536.002.76	344	901556.004	334	901566.002.1	336
901365.002.76	211	901498.002.1	365	901537.002	344	901556.004.1	334	901566.002.1.76	336
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901367.002.76	238	901498.002.76	365	901537.002.1.76	344	901556.004.76	334	901566.004	336
901368.002.76	237	901517.002	342	901537.002.76	344	901557.002	334	901566.004.1	336

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
901566.004.1.76	336	901592.002.76	209	901602.003.2.76	322	901613.003.2	374	901632.002	308
901566.004.76	336	901593.002	321	901602.003.76	322	901613.003.2.76	374	901632.002.1	308
901567.002	337	901593.002.1	321	901603.002	322	901613.003.76	374	901632.002.1.76	308
901567.002.1	337	901593.002.2	321	901603.002.1	322	901614.002	374	901632.002.76	308
901567.002.1.76	337	901593.003	321	901603.002.2	322	901614.002.1	374	901633.002	310
901567.002.76	337	901593.003.1	321	901603.003	322	901614.002.1.76	374	901633.002.1	310
901567.004	337	901593.003.2	321	901603.003.1	322	901614.002.2	374	901633.002.1.76	310
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901567.004.1.76	337	901594.002.1	321	901604.002	322	901614.002.76	374	901634.002	309
901567.004.76	337	901594.002.2	321	901604.002.1	322	901614.003	374	901634.002.1	309
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901568.004.1.76	337	901595.002.2	321	901605.002.2	373	901615.002.1	374	901638.002	205
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901569.002.2.730	337	901595.003.1.76	321	901606.002.1	373	901616.002	374	901639.002.1	205
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901570.002	337	901596.002.2	321	901607.002.1.76	373	901617.002.1	206	901641.002	233
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901570.002.76	337	901596.003	321	901607.002.76	373	901618.002	206	901641.002.76	233
901570.004	337	901596.003.1	321	901607.003	373	901618.002.1	206	901642.002	323
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901587.002.1.76	365	901601.002.1	322	901611.002	374	901625.002.76	233	901646.002	323
901587.002.76	365	901601.002.1.76	322	901611.002.1	374	901626.002	235	901646.002.1	323
901588.002	365	901601.002.2	322	901611.002.2	374	901626.002.1	235	901646.002.1.76	323
901588.002.1	365	901601.002.2.76	322	901611.003	374	901626.002.1.76	235	901646.002.2	323
901588.002.1.76	365	901601.002.76	322	901611.003.1	374	901626.002.76	235	901646.002.2.76	323
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No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
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901649.002	207	901665.002.76	330	911409.002.1.76	377	911416.002.76	387	911423.002.1.76	388
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No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
911430.002	388	911436.004.76	391	911443.004.1.76	391	911450.004.1	392	911457.004	392
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911436.002.1	391	911443.002	391	911449.004.76	392	911456.004.1.76	392	911463.004.1	379
911436.002.1.76	391	911443.002.1	391	911450.002	392	911456.004.76	392	911463.004.1.76	379
911436.002.76	391	911443.002.1.76	391	911450.002.1	392	911457.002	392	911463.004.76	379
911436.003	391	911443.002.76	391	911450.002.1.76	392	911457.002.1	392	911464.002	379
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911436.004	391	911443.003.76	391	911450.003.1.76	392	911457.003.1	392	911464.003	379
911436.004.1	391	911443.004	391	911450.003.76	392	911457.003.1.76	392	911464.003.1	379
911436.004.1.76	391	911443.004.1	391	911450.004	392	911457.003.76	392	911464.003.1.76	379

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
911464.003.76	379	911471.003.1.76	379	911478.003.1	177	921499.003	465	925172.002	432
911464.004	379	911471.003.76	379	911478.003.1.76	177	921499.003.1	465	925173.002	432
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911464.004.1.76	379	911471.004.1	379	911478.004	177	921500.003	465	925175.002	432
911464.004.76	379	911471.004.1.76	379	911478.004.1	177	921500.003.76	465	925176.002	432
911465.002	379	911471.004.76	379	911478.004.1.76	177	921501.003	465	925177.002	432
911465.002.1	379	911472.002	379	911478.004.76	177	921501.003.1	465	925178.002	432
911465.002.1.76	379	911472.002.1	379	911479.002	177	921501.003.76	465	925179.002	432
911465.002.76	379	911472.002.1.76	379	911479.002.1	177	921502.003	465	925180.002	432
911465.003	379	911472.002.76	379	911479.002.1.76	177	921502.003.76	465	925181.002	432
911465.003.1	379	911472.003	379	911479.002.76	177	921503.003	465	925182.002	432
911465.003.1.76	379	911472.003.1	379	911479.003	177	921503.003.1	465	925183.002	432
911465.003.76	379	911472.003.1.76	379	911479.003.1	177	921503.003.76	465	925184.002	432
911465.004	379	911472.003.76	379	911479.003.1.76	177	921504.003	469	925184.002.1	433
911465.004.1	379	911472.004	379	911479.003.76	177	921505.003	469	925186.002	435
911465.004.1.76	379	911472.004.1	379	911479.004	177	921506.003	469	925187.002	434
911465.004.76	379	911472.004.1.76	379	911479.004.1	177	925137.002	439	925188.000	432
911466.002	379	911472.004.76	379	911479.004.1.76	177	925137.002.76	439	925189.002	434
911466.002.1	379	911473.002	379	911479.004.76	177	925138.002	439	925190.002	434
911466.002.1.76	379	911473.002.1	379	911480.002	178	925138.002.76	439	925191.002	434
911466.002.76	379	911473.002.1.76	379	911480.002.1	178	925139.002	439	925192.002	434
911466.003	379	911473.002.76	379	911480.002.1.76	178	925139.002.76	439	925193.002	434
911466.003.1	379	911473.003	379	911480.002.76	178	925140.002	439	925194.002	434
911466.003.1.76	379	911473.003.1	379	911480.003	178	925140.002.76	439	925195.004	289
911466.003.76	379	911473.003.1.76	379	911480.003.1	178	925141.002	439	925196.004	289
911466.004	379	911473.003.76	379	911480.003.1.76	178	925141.002.76	439	925197.004	289
911466.004.1	379	911473.004	379	911480.003.76	178	925142.002	439	925198.004	289
911466.004.1.76	379	911473.004.1	379	911480.004	178	925142.002.76	439	925199.004	289
911466.004.76	379	911473.004.1.76	379	911480.004.1	178	925143.002	439	925200.004	289
911467.002	379	911473.004.76	379	911480.004.1.76	178	925143.002.76	439	925201.000	290
911467.002.1	379	911474.002	379	911480.004.76	178	925144.002	439	925201.002	290
911467.002.1.76	379	911474.002.1	379	911481.002	178	925144.002.76	439	925202.002	290
911467.002.76	379	911474.002.1.76	379	911481.002.1	178	925145.002	439	925203.000	290
911467.003	379	911474.002.76	379	911481.002.1.76	178	925145.002.76	439	925203.002	290
911467.003.1	379	911474.003	379	911481.002.76	178	925146.002	439	925204.002	290
911467.003.1.76	379	911474.003.1	379	911481.003	178	925146.002.76	439	925205.002	438
911467.003.76	379	911474.003.1.76	379	911481.003.1	178	925147.002	439	925206.002	438
911467.004	379	911474.003.76	379	911481.003.1.76	178	925147.002.76	439	925206.002.76	438
911467.004.1	379	911474.004	379	911481.003.76	178	925148.002	439	925207.002	438
911467.004.1.76	379	911474.004.1	379	911481.004	178	925148.002.76	439	925207.002.76	438
911467.004.76	379	911474.004.1.76	379	911481.004.1	178	925149.002	439	925208.002	438
911468.002	379	911474.004.76	379	911481.004.1.76	178	925149.002.76	439	925209.002	438
911468.002.1	379	911475.002	379	911481.004.76	178	925150.002	439	925210.002	438
911468.002.1.76	379	911475.002.1	379	921462.003.76	461	925150.002.76	439	925211.002	438
911468.002.76	379	911475.002.1.76	379	921463.003.76	461	925151.002	439	925212.002	441
911468.003	379	911475.002.76	379	921464.003.76	461	925151.002.76	439	925213.002	441
911468.003.1	379	911475.003	379	921465.003.76	461	925152.002	439	925214.002	441
911468.003.1.76	379	911475.003.1	379	921466.003.76	461	925152.002.76	439	925223.002	439
911468.003.76	379	911475.003.1.76	379	921467.003.76	461	925153.002	436	925223.002.76	439
911468.004	379	911475.003.76	379	921468.003.76	461	925153.002.76	436	925224.002	439
911468.004.1	379	911475.004	379	921469.003.76	461	925154.002	436	925224.002.76	439
911468.004.1.76	379	911475.004.1	379	921470.003.76	463	925154.002.76	436	925225.002	439
911468.004.76	379	911475.004.1.76	379	921471.003.76	463	925155.002	436	925225.002.76	439
911469.002	379	911475.004.76	379	921472.003.76	463	925155.002.76	436	925226.002	439
911469.002.1	379	911476.002	177	921483.003	466	925156.002	436	925226.002.76	439
911469.002.1.76	379	911476.002.1	177	921483.003.76	466	925156.002.76	436	925227.002	436
911469.002.76	379	911476.002.1.76	177	921484.003	466	925157.002	436	925227.002.76	436
911469.003	379	911476.002.76	177	921484.003.76	466	925157.002.76	436	925228.002	436
911469.003.1	379	911476.003	177	921485.003	466	925158.002	436	925228.002.76	436
911469.003.1.76	379	911476.003.1	177	921485.003.76	466	925158.002.76	436	925229.002	436
911469.003.76	379	911476.003.1.76	177	921486.003	466	925159.002	436	925229.002.76	436
911469.004	379	911476.003.76	177	921486.003.76	466	925159.002.76	436	925230.002	436
911469.004.1	379	911476.004	177	921487.003	466	925160.002	436	925230.002.76	436
911469.004.1.76	379	911476.004.1	177	921487.003.76	466	925160.002.76	436	925231.002	438
911469.004.76	379	911476.004.1.76	177	921488.003	466	925161.002	436	925231.002.76	438
911470.002	379	911476.004.76	177	921488.003.76	466	925161.002.76	436	925233.002	438
911470.002.1	379	911477.002	177	921492.003	466	925162.002	436	925237.002	798
911470.002.1.76	379	911477.002.1	177	921492.003.76	466	925162.002.76	436	925237.002.04	798
911470.002.76	379	911477.002.1.76	177	921493.003	466	925163.002	436	925237.002.07	798
911470.003	379	911477.002.76	177	921493.003.76	466	925163.002.76	436	925238.002	798
911470.003.1	379	911477.003	177	921494.003	466	925164.002	436	925238.002.89	798
911470.003.1.76	379	911477.003.1	177	921494.003.76	466	925164.002.76	436	925240.002	434
911470.003.76	379	911477.003.1.76	177	921495.003	467	925165.002	436	925241.002	434
911470.004	379	911477.003.76	177	921495.003.2.76	467	925165.002.76	436	925242.002	434
911470.004.1	379	911477.004	177	921495.003.76	467	925166.002	436	925248.002	433
911470.004.1.76	379	911477.004.1	177	921496.003	467	925166.002.76	436	925249.009	433
911470.004.76	379	911477.004.1.76	177	921496.003.2.76	467	925167.002	436	925254.002	437
911471.002	379	911477.004.76	177	921496.003.76	467	925167.002.76	436	925254.002.76	437
911471.002.1	379	911478.002	177	921497.003	467	925168.002	436	925255.002	437
911471.002.1.76	379	911478.002.1	177	921497.003.2.76	467	925168.002.76	436	925255.002.76	437
911471.002.76	379	911478.002.1.76	177	921497.003.76	467	925169.002	432	925256.002	437
911471.003	379	911478.002.76	177	921498.003	465	925170.002	432	925256.002.76	437
911471.003.1	379	911478.003	177	921498.003.76	465	925171.002	432	925257.002	437

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
925257.002.76	437	931193.002.1.76	360	981685.000	722	981883.002.1	725	982002.000	647
925258.002	437	931193.002.76	360	981686.000	722	981883.004.1	725	982002.0031	647
925258.002.76	437	931194.002	360	981687.000	722	981884.002.1	725	982002.004	647
925259.002	440	931194.002.1	360	981694.002	363	981884.004.1	725	982003.000	647
925259.002.76	440	931194.002.1.76	360	981694.004	363	981892.000	17	982003.0031	647
925260.002	440	931194.002.76	360	981701.004	720	981893.000	17	982003.004	647
925260.002.76	440	931195.002	360	981702.004	720	981895.002	338	982004.000	647
925261.002	440	931195.002.1	360	981712.0024/301	65	981895.004	338	982004.0031	647
925261.002.76	440	931195.002.1.76	360	981712.0024/381	65	981895.012	338	982004.004	647
925262.002	440	931195.002.76	360	981712.0024/497	65	981895.014	338	982005.000	647
925262.002.76	440	981096.002	103	981753.002	338	981895.022	338	982005.0031	647
925263.002	440	981096.004	103	981753.004	338	981895.024	338	982005.004	647
925263.002.76	440	981096.0042	103	981753.012	338	981895.032	338	982011.000	625
925313.002	437	981096.005	103	981753.014	338	981895.034	338	982012.000	625
925313.002.76	437	981097.002	103	981753.022	338	981896.002	338	982013.000	625
925314.002	437	981097.004	103	981753.024	338	981896.004	338	982014.000	625
925314.002.76	437	981097.0042	103	981753.032	338	981896.032	338	982014.010	625
925315.002	437	981097.005	103	981753.034	338	981896.034	338	982014.020	626
925315.002.76	437	981098.002	103	981754.002	338	981896.042	338	982014.030	626
925316.002	437	981098.004	103	981754.004	338	981896.044	338	982015.003	625
925316.002.76	437	981098.0042	103	981754.032	338	981896.052	338	982016.000	625
931169.002	363	981098.005	103	981754.034	338	981896.054	338	982019.000	647
931169.002.1	363	981100.002	103	981754.042	338	981896.062	338	982029.002	687
931169.002.1.76	363	981100.004	103	981754.044	338	981896.064	338	982032.002	687
931169.002.76	363	981100.0042	103	981754.052	338	981897.002	338	982035.002	201
931169.004	363	981100.005	103	981754.054	338	981897.004	338	982041.002	283
931169.004.1	363	981129.002	103	981754.062	338	981897.012	338	982042.002	283
931169.004.1.76	363	981129.004	103	981754.064	338	981897.014	338	982043.002	283
931169.004.76	363	981129.0042	103	981755.002	338	981897.022	338	982045.000	647
931171.002	363	981129.005	103	981755.004	338	981897.024	338	982045.0031	647
931171.002.1	363	981142.0131	613	981755.012	338	981897.032	338	982045.004	647
931171.002.1.76	363	981143.0131	615	981755.014	338	981897.034	338	982046.000	647
931171.002.76	363	981143.014	615	981756.002	338	981898.002	338	982046.0031	647
931171.004	363	981144.002	745	981756.004	338	981898.004	338	982046.004	647
931171.004.1	363	981151.0044	171	981756.012	338	981898.012	338	982047.000	638
931171.004.1.76	363	981152.0044	171	981756.014	338	981898.014	338	982047.0031	638
931171.004.76	363	981167.002	735	981756.022	338	981899.002	338	982047.004	638
931175.002	31	981168.002	750	981756.024	338	981899.004	338	982048.000	638
931175.002.1	31	981210.002	574	981756.032	338	981899.012	338	982048.0031	638
931176.002	31	981211.002	573	981756.034	338	981899.014	338	982048.004	638
931176.002.1	31	981212.002	569	981757.002	338	981899.022	338	982049.000	638
931178.002	31	981221.0044	171	981757.004	338	981899.024	338	982049.0031	638
931178.002.1	31	981222.000	167	981757.012	338	981899.032	338	982049.004	638
931180.002	31	981230.0044	167	981757.014	338	981899.034	338	982050.000	638
931180.002.1	31	981457.002	133	981757.022	338	981902.002S1	487	982050.0031	638
931181.002	195	981464.002	133	981757.024	338	981902.003S1	487	982050.004	638
931181.002.1	195	981466.002	133	981757.032	338	981903.002.1S1	489	982052.0031	647
931182.002	195	981467.002	133	981757.034	338	981903.003.1S1	489	982052.004	647
931182.002.1	195	981470.002	133	981758.000	338	981905.002	491	982053.0031	653
931183.002	195	981485.002	749	981758.002	338	981905.003	491	982053.004	653
931183.002.1	195	981502.000	704	981758.010	338	981908.002	493	982058.000	638
931184.002	195	981502.000.04	704	981758.020	338	981908.003	493	982058.0031	638
931184.002.1	195	981504.000	704	981761.0024/301	65	981913.002	499	982059.000	653
931185.002	363	981504.000.04	704	981761.0024/381	65	981913.003	499	982059.0031	653
931185.002.1	363	981506.000	704	981761.0024/497	65	981921.002	767	982059.004	653
931185.002.1.76	363	981506.000.04	704	981762.000	17	981933.0031	637	982060.004	641
931185.002.76	363	981508.000	704	981763.000	17	981933.004	637	982066.002	681
931185.004	363	981508.000.04	704	981777.012.1	725	981933.0131	637	982066.012	681
931185.004.1	363	981510.000	704	981777.014.1	725	981933.014	637	982067.002	681
931185.004.1.76	363	981510.000.04	704	981777.032.1	725	981934.0031	641	982067.012	681
931185.004.76	363	981512.000	704	981777.034.1	725	981934.004	641	982068.002	681
931188.002	359	981512.000.04	704	981779.002.1	725	981934.0131	641	982068.012	681
931188.002.1	359	981581.004	720	981779.004.1	725	981934.014	641	982072.002	350
931188.002.1.76	359	981583.002	749	981780.002.1	725	981935.000	697	982073.002	350
931188.002.76	359	981629.002	23	981780.004.1	725	981941.002	199	982074.002	350
931189.002	359	981630.002	23	981796.000	701	981942.002	200	982081.000	637
931189.002.1	359	981631.002	23	981797.002.1	725	981947.002	217	982081.000.1	637
931189.002.1.76	359	981632.002	21	981797.004.1	725	981948.002	217	982082.000	641
931189.002.76	359	981633.002	21	981804.002	96	981952.002	493	982082.000.1	641
931190.002	359	981634.002	21	981804.004	96	981959.002	637	982083.000	647
931190.002.1	359	981639.010	720	981804.0042	96	981960.003	641	982083.000.1	647
931190.002.1.76	359	981639.020	721	981805.002	98	981962.003	639	982084.000	637
931190.002.76	359	981639.040	720	981805.004	98	981963.002	767	982084.000.1	637
931191.002	359	981639.060	721	981805.0042	98	981978.000	199	982085.000	641
931191.002.1	359	981640.004	720	981806.002	96	981979.000	203	982085.000.1	641
931191.002.1.76	359	981647.010	720	981806.004	96	981980.012	199	982086.000	638
931191.002.76	359	981647.040	720	981806.0042	96	981984.0031	647	982086.0031	638
931192.002	360	981675.030	338	981867.002	297	981984.004	647	982088.000	623
931192.002.1	360	981675.032	338	981868.002	297	981986.002	416	982088.010	623
931192.002.1.76	360	981675.040	338	981869.002	297	981986.003	416	982089.003	623
931192.002.76	360	981675.050	338	981870.002	297	981986.100	416	982090.000	638
931193.002	360	981678.002	363	981871.002	297	981987.012	205	982091.000	638
931193.002.1	360	981678.004	363	981872.002	297	981995.000	491	982092.000	642

No.	Page	No.	Page	No.	Page	No.	Page	No.	Page
982093.000	642	982197.000	290	982295.002	201	982410.003	517	99220.003.N	553
982097.002.76	279	982198.000	290	982295.012	207	982411.003	669	99220.003.N/K	553
982098.003	655	982199.000	290	982295.022	207	982412.003	649	99220.003.O	553
982099.000	655	982200.000	290	982299.002	308	982413.002	760	99220.003.O/K	553
982100.000	655	982201.000	290	982300.002	308	982414.002	760	99220.003.P	553
982101.003	655	982202.000	290	982301.002	308	982415.002	760	99220.003.P/K	553
982102.003	655	982203.000	291	982302.002	309	982416.002	760	99220.003.Q	553
982103.000	599	982204.000	290	982304.002	308	982416.002.04	760	99220.003.Q/K	553
982103.010	595	982205.000	291	982305.002	308	982416.002.07	760	99220.003.R	553
982104.0031	613	982206.000	291	982306.002	308	982419.002	177	99220.003.R/K	553
982106.002	201	982207.000	291	982307.002	309	982420.002	178	99220.003.S	553
982108.002	523	982208.000	291	982309.002	308	982421.002	177	99220.003.S/K	553
982109.002	605	982209.000	291	982310.002	308	982422.002	178	99220.003.T	553
982110.002	524	982210.000	291	982311.002	308	982423.002	733	99220.003.T/K	553
982112.003	466	982211.002	291	982312.002	309	982424.002	733	99220.003.U	553
982114.004	466	982212.002	291	982314.002	308	982425.002	733	99220.003.U/K	553
982115.000	466	982213.002	291	982315.002	308	982425.002.04	733	99220.003.V	553
982115.010	467	982214.002	291	982316.002	308	982425.002.07	733	99220.003.V/K	553
982116.000	489	982215.002	291	982317.002	309	982426.002	207	99220.003.W	553
982117.009	457	982221.012	793	982319.002	313	982429.009	455	99220.003.W/K	553
982118.000	457	982224.002.1	729	982320.002	313	982430.000	455	99220.003.X	553
982119.002	350	982224.004.1	729	982321.002	302	982431.002	383	99220.003.X/K	553
982132.002	609	982229.0044	167	982322.002	302	982431.003	383	99220.003.Y	553
982133.002	609	982230.0044	167	982323.002	209	982431.004	383	99220.003.Y/K	553
982138.002	349	982231.0044	167	982324.002	313	982432.002	383	99220.003.Z	553
982139.002	349	982232.002	292	982325.002	313	982432.003	383	99220.003.Z/K	553
982140.002	349	982232.002.76	292	982326.002	302	982432.004	383	99221.003.0	553
982141.002	349	982233.002	279	982327.002	302	982433.002	383	99221.003.1	553
982142.002	605	982233.002.76	279	982328.002	209	982433.003	383	99221.003.2	553
982143.002	605	982234.002	292	982337.003	467	982433.004	383	99221.003.3	553
982151.002	523	982234.002.76	292	982338.004	467	982436.000	665	99221.003.4	553
982152.002	606	982235.002	292	982341.002	733	982441.002	303	99221.003.5	553
982154.002	606	982235.002.76	292	982354.002	739	982442.002	303	99221.003.6	553
982155.000	599	982236.000	611	982357.012	205	982443.002	303	99221.003.7	553
982155.010	595	982237.000	434	982367.009	637	982444.002	303	99221.003.8	553
982156.000	606	982241.0031	631	982368.003	177	982448.003	405	99221.003.9	553
982157.000	609	982242.0031	632	982368.013	177	982451.002	476	99221.003.A	553
982159.006	631	982244.002	703	982368.023	177	982452.002	476	99221.003.A/K	553
982159.007	631	982244.002.04	703	982369.003	177	982453.000	651	99221.003.B	553
982159.0077	631	982244.002.07	703	982369.013	177	982453.000.1	651	99221.003.B/K	553
982159.008	631	982245.002	703	982369.023	177	982454.000	651	99221.003.C	553
982160.006	632	982245.002.04	703	982369.033	177	985405.1	695	99221.003.C/K	553
982160.007	632	982245.002.07	703	982369.043	177	991126.04	725	99221.003.D	553
982160.008	632	982246.002	703	982370.000	177	991129.03	725	99221.003.D/K	553
982161.006	633	982246.002.04	703	982370.010	177	991130.04	729	99221.003.E	553
982161.007	633	982246.002.07	703	982371.003	177	991152	746	99221.003.E/K	553
982161.0077	633	982248.002	703	982372.003	178	991153	745	99221.003.F	553
982161.008	633	982248.002.04	703	982372.013	178	99220.003.0	553	99221.003.F/K	553
982161.008	633	982248.002.07	703	982372.023	178	99220.003.1	553	99221.003.G	553
982162.003	631	982249.002	703	982372.033	178	99220.003.2	553	99221.003.G/K	553
982163.003	632	982249.002.04	703	982373.003	178	99220.003.3	553	99221.003.H	553
982164.003	633	982249.002.07	703	982373.013	178	99220.003.4	553	99221.003.H/K	553
982165.003	631	982250.002	703	982373.023	178	99220.003.5	553	99221.003.I	553
982166.003	632	982250.002.04	703	982374.000	178	99220.003.6	553	99221.003.I/K	553
982167.003	633	982250.002.07	703	982374.010	178	99220.003.7	553	99221.003.J	553
982168.003	631	982251.000	491	982375.003	178	99220.003.8	553	99221.003.J/K	553
982169.003	632	982252.002	479	982377.002	475	99220.003.9	553	99221.003.K	553
982170.003	633	982253.002	293	982378.002	475	99220.003.A	553	99221.003.K/K	553
982171.002	682	982254.002	479	982378.012	475	99220.003.A/K	553	99221.003.L	553
982171.002.1	682	982257.002	763	982378.022	475	99220.003.B	553	99221.003.L/K	553
982172.002	682	982260.0031	599	982378.032	475	99220.003.B/K	553	99221.003.M	553
982172.002.1	682	982260.004	599	982378.042	475	99220.003.C	553	99221.003.M/K	553
982173.002	682	982261.0031	601	982379.002	475	99220.003.C/K	553	99221.003.N	553
982173.002.1	682	982261.004	601	982384.002	479	99220.003.D	553	99221.003.N/K	553
982174.002	683	982262.0031	603	982386.002	365	99220.003.D/K	553	99221.003.O	553
982174.002.1	683	982262.004	603	982387.002	365	99220.003.E	553	99221.003.O/K	553
982175.002	46	982263.0031	599	982388.002	365	99220.003.E/K	553	99221.003.P	553
982175.002.1	46	982263.004	599	982389.002	365	99220.003.F	553	99221.003.P/K	553
982176.002	609	982264.0031	601	982390.009	475	99220.003.F/K	553	99221.003.Q	553
982179.009	455	982264.004	601	982391.009	475	99220.003.G	553	99221.003.Q/K	553
982180.000	455	982265.003	465	982394.002	450	99220.003.G/K	553	99221.003.R	553
982181.002	350	982266.004	465	982395.000	450	99220.003.H	553	99221.003.R/K	553
982182.002	350	982267.000	465	982396.002	450	99220.003.H/K	553	99221.003.S	553
982183.002	350	982270.002.25	687	982398.003	619	99220.003.I	553	99221.003.S/K	553
982186.009	455	982271.002.25	687	982399.003	619	99220.003.I/K	553	99221.003.T	553
982187.012	206	982274.002	731	982400.003	433	99220.003.J	553	99221.003.T/K	553
982187.022	199	982275.003	651	982401.0031	647	99220.003.J/K	553	99221.003.U	553
982190.012	207	982290.012	206	982401.004	647	99220.003.K	553	99221.003.U/K	553
982190.022	201	982291.002	206	982404.003	405	99220.003.K/K	553	99221.003.V	553
982190.032	207	982292.002	206	982405.003	405	99220.003.L	553	99221.003.V/K	553
982194.003	619	982292.012	200	982407.003	649	99220.003.L/K	553	99221.003.W	553
982195.002	739	982293.012	207	982408.000	619	99220.003.M	553	99221.003.W/K	553
982196.002	290	982294.002	207	982408.010	619	99220.003.M/K	553	99221.003.X	553

No.	Page	No.	Page	No.	Page	No.	Page
99221.003.X/K	553	99222.003.C/K	553	99222.013.N	545	99223.013.L	545
99221.003.Y	553	99222.003.D	553	99222.013.N/K	545	99223.013.M	545
99221.003.Y/K	553	99222.003.D/K	553	99222.013.O	545	99223.013.N	545
99221.003.Z	553	99222.003.E	553	99222.013.O/K	545	99223.013.O	545
99221.003.Z/K	553	99222.003.E/K	553	99222.013.P	545	99223.013.P	545
99221.013.0	545	99222.003.F	553	99222.013.P/K	545	99223.013.Q	545
99221.013.1	545	99222.003.F/K	553	99222.013.Q	545	99223.013.R	545
99221.013.2	545	99222.003.G	553	99222.013.Q/K	545	99223.013.S	545
99221.013.3	545	99222.003.G/K	553	99222.013.R	545	99223.013.T	545
99221.013.4	545	99222.003.H	553	99222.013.R/K	545	99223.013.U	545
99221.013.5	545	99222.003.H/K	553	99222.013.S	545	99223.013.V	545
99221.013.6	545	99222.003.I	553	99222.013.S/K	545	99223.013.W	545
99221.013.7	545	99222.003.I/K	553	99222.013.T	545	99223.013.X	545
99221.013.8	545	99222.003.J	553	99222.013.T/K	545	99223.013.Y	545
99221.013.9	545	99222.003.J/K	553	99222.013.U	545	99223.013.Z	545
99221.013.A	545	99222.003.K	553	99222.013.U/K	545	99224.003.0	553
99221.013.A/K	545	99222.003.K/K	553	99222.013.V	545	99224.003.1	553
99221.013.B	545	99222.003.L	553	99222.013.V/K	545	99224.003.2	553
99221.013.B/K	545	99222.003.L/K	553	99222.013.W	545	99224.003.3	553
99221.013.C	545	99222.003.M	553	99222.013.W/K	545	99224.003.4	553
99221.013.C/K	545	99222.003.M/K	553	99222.013.X	545	99224.003.5	553
99221.013.D	545	99222.003.N	553	99222.013.X/K	545	99224.003.6	553
99221.013.D/K	545	99222.003.N/K	553	99222.013.Y	545	99224.003.7	553
99221.013.E	545	99222.003.O	553	99222.013.Y/K	545	99224.003.8	553
99221.013.E/K	545	99222.003.O/K	553	99222.013.Z	545	99224.003.9	553
99221.013.F	545	99222.003.P	553	99222.013.Z/K	545	99224.003.A	553
99221.013.F/K	545	99222.003.P/K	553	99223.003.0	553	99224.003.B	553
99221.013.G	545	99222.003.Q	553	99223.003.1	553	99224.003.C	553
99221.013.G/K	545	99222.003.Q/K	553	99223.003.2	553	99224.003.D	553
99221.013.H	545	99222.003.R	553	99223.003.3	553	99224.003.E	553
99221.013.H/K	545	99222.003.R/K	553	99223.003.4	553	99224.003.F	553
99221.013.I	545	99222.003.S	553	99223.003.5	553	99224.003.G	553
99221.013.I/K	545	99222.003.S/K	553	99223.003.6	553	99224.003.H	553
99221.013.J	545	99222.003.T	553	99223.003.7	553	99224.003.I	553
99221.013.J/K	545	99222.003.T/K	553	99223.003.8	553	99224.003.J	553
99221.013.K	545	99222.003.U	553	99223.003.9	553	99224.003.K	553
99221.013.K/K	545	99222.003.U/K	553	99223.003.A	553	99224.003.L	553
99221.013.L	545	99222.003.V	553	99223.003.B	553	99224.003.M	553
99221.013.L/K	545	99222.003.V/K	553	99223.003.C	553	99224.003.N	553
99221.013.M	545	99222.003.W	553	99223.003.D	553	99224.003.O	553
99221.013.M/K	545	99222.003.W/K	553	99223.003.E	553	99224.003.P	553
99221.013.N	545	99222.003.X	553	99223.003.F	553	99224.003.Q	553
99221.013.N/K	545	99222.003.X/K	553	99223.003.G	553	99224.003.R	553
99221.013.O	545	99222.003.Y	553	99223.003.H	553	99224.003.S	553
99221.013.O/K	545	99222.003.Y/K	553	99223.003.I	553	99224.003.T	553
99221.013.P	545	99222.003.Z	553	99223.003.J	553	99224.003.U	553
99221.013.P/K	545	99222.003.Z/K	553	99223.003.K	553	99224.003.V	553
99221.013.Q	545	99222.013.0	545	99223.003.L	553	99224.003.W	553
99221.013.Q/K	545	99222.013.1	545	99223.003.M	553	99224.003.X	553
99221.013.R	545	99222.013.2	545	99223.003.N	553	99224.003.Y	553
99221.013.R/K	545	99222.013.3	545	99223.003.O	553	99224.003.Z	553
99221.013.S	545	99222.013.4	545	99223.003.P	553	E90-6706.000	72
99221.013.S/K	545	99222.013.5	545	99223.003.Q	553	E90-6706.010	72
99221.013.T	545	99222.013.6	545	99223.003.R	553	E90-6707.000	72
99221.013.T/K	545	99222.013.7	545	99223.003.S	553	E90-6707.010	72
99221.013.U	545	99222.013.8	545	99223.003.T	553	E90-6708.000	72
99221.013.U/K	545	99222.013.9	545	99223.003.U	553	E90-6708.010	72
99221.013.V	545	99222.013.A	545	99223.003.V	553	E90-6823.000	72
99221.013.V/K	545	99222.013.A/K	545	99223.003.W	553	E90-6823.010	72
99221.013.W	545	99222.013.B	545	99223.003.X	553	E90-6843.000	73
99221.013.W/K	545	99222.013.B/K	545	99223.003.Y	553	E90-6843.000.1	73
99221.013.X	545	99222.013.C	545	99223.003.Z	553	E90-6843.010	73
99221.013.X/K	545	99222.013.C/K	545	99223.013.0	545	E90-6843.010.1	73
99221.013.Y	545	99222.013.D	545	99223.013.1	545	E90-6843.020	72
99221.013.Y/K	545	99222.013.D/K	545	99223.013.2	545	E90-6843.020.1	72
99221.013.Z	545	99222.013.E	545	99223.013.3	545	E90-6844.000	73
99221.013.Z/K	545	99222.013.E/K	545	99223.013.4	545	E90-6844.000.1	73
99222.003./	553	99222.013.F	545	99223.013.5	545	E90-6844.010	73
99222.003.0	553	99222.013.F/K	545	99223.013.6	545	E90-6844.010.1	73
99222.003.1	553	99222.013.G	545	99223.013.7	545	E90-6844.020	72
99222.003.2	553	99222.013.G/K	545	99223.013.8	545	E90-6844.020.1	72
99222.003.3	553	99222.013.H	545	99223.013.9	545	NVG200-12-DC-G	704
99222.003.4	553	99222.013.H/K	545	99223.013.A	545	NVG200-18-DC-G	704
99222.003.5	553	99222.013.I	545	99223.013.B	545	NVG200-26-DC-G	704
99222.003.6	553	99222.013.I/K	545	99223.013.C	545	NVG200-45-DC-G	704
99222.003.7	553	99222.013.J	545	99223.013.D	545	NVG200-7-DC-G	704
99222.003.8	553	99222.013.J/K	545	99223.013.E	545	NVG200-90-DC-G	704
99222.003.9	553	99222.013.K	545	99223.013.F	545	W06630	209
99222.003.A	553	99222.013.K/K	545	99223.013.G	545		
99222.003.A/K	553	99222.013.L	545	99223.013.H	545		
99222.003.B	553	99222.013.L/K	545	99223.013.I	545		
99222.003.B/K	553	99222.013.M	545	99223.013.J	545		
99222.003.C	553	99222.013.M/K	545	99223.013.K	545		

A		B					
Abbreviations	826	Baleva	130-131	Centryxx® RZ IP65	766	DKN® Classic	114-115
Alea optical system	205	Ballast	827	Centryxx® W	769	DKN® Kreis silk finish	114-115
Alphabetical Index	858-861	Basic	47	Centryxx® W IP65	773	DKN® Quadrat	114-115
Alu-Design		Basic Ball	170-171	Centryxx® W IP65plus	771-772	Douala®	
Ceiling and wall luminaires	576-577	Basic Ball LED	166-169	Chintz lampshades	209	Ceiling and wall luminaires	58-59
Emergency lighting	812-813	Beam angle	830	Colonna IP 44	46	Pendant luminaires	157
Wall luminaires	516-517	Binning	827	Colour	140	Recessed ceiling and wall luminaires	16-17
Alu oval bulkhead luminaires	136-137	Bocaro®	594-595	Commercial luminaires	459-471	Douala® Kristall	
Alu-Lux oval		Bollards	589-615	Conditions of sale and delivery	832-833	Ceiling and wall luminaires	62-63
Ceiling and wall luminaires	584-585	Bollards Overview	590-591	Cone diagram	829	Pendant luminaires	160-161
Wall luminaires	537	Brick® EVO		Conference and training centre	828	Douala® Slim	
Alu-Quadrat	548	Recessed luminaires	510-511	Continuous line luminaire systems	427-441	Ceiling and wall luminaires	60-61
Alu-Rund		Wall luminaires	520-521	Coros® Kristall	44-45	Pendant luminaires	159
Ceiling and wall luminaires	578-579	Brick® Steps	506-509	Coros® White	44-45	Recessed ceiling and wall luminaires	18-19
Wall luminaires	536			Cyl	530-531	Double Schuko power socket for garden application with earth spike	658
Aluminium striplights for linear lamps	135	C		Cyllo		E	
Aluminium striplights with LED lamp	134	Cadéro® Disca		Ceiling luminaires	32-35	Econe®	
Alu-Standard		Ceiling and wall luminaires	572-573	Pendant luminaires	172-174	Ceiling and wall luminaires	236-239
Indoor lighting	136-137	Emergency lighting	810-811	Cyllo Track	175	Pendant luminaires	236-239
Outdoor lighting	582-583	Cadéro® Quadra		D		Recessed ceiling and wall luminaires	212-213
Alu-Standard LED		Ceiling and wall luminaires	572, 574	DALI Interface	694-695	Edo 3	780-781
Indoor lighting	136-137	Emergency lighting	810-811	DALI-Repeater	479	Edo 4	780-781
Outdoor lighting	582-583	Calido®	404-405	DALI rotary potentiometers	479	EEC	830
Alu-Star Maxi	630-633	Catalogues	828	DALI touch dimmer	479	Electrotechnical variants and additions	827
Alu-Star Midi	630-633	Ceiling and wall luminaires		Damp-proof luminaires	443-457	Emergency lighting	
Alu-Star Mini		Indoor lighting	49-143	Deecos P Maxi	176-178	Indoor lighting	689-807
Garden spotlight	634-635	Outdoor lighting	555-587	Deecos P Mini	176-178	Outdoor lighting	810-823
Spotlight	630-633	Ceiling luminaires	25-37	Deecos R Mini	378-381	Emergency lighting module for LED	702
Alu-Superior	534-535, 580-581	Central power supply (CPS)	692-693	Deecos S Maxi	398-403	Energy Efficiency Class	830
Andho® Flat	362-363	Centryxx®	767	Deecos S Mini	398-403	Energio® Darklight	326-327
Andho® High	362-363	Centryxx® 2-LED	768	Deecos S Mini B	398-403	Explanation of Icons in this catalogue	834
Andho® Midi	362-363	Centryxx® D IP65	730-731	Digital Media	10	Explanation of declared values in this catalogue	830
Appendix	825-864	Centryxx® D RZ IP65	732-733	Dim to Warm	834	Explanation of graphics	829
Arelo®	324-325	Centryxx® IP65	762-765				
Areno®		Centryxx® IP65plus	771-772				
Indoor lighting	136-137	Centryxx® RZ	770				
Outdoor lighting	582-583						

F

Fabric lampshades luminaires	295-315
Flat Basic	102-104
Flat Kreis Glas	108-109
Flat Kreis Kunststoff	110-111
Flat Polymero®	
Ceiling and wall luminaires	96-99
Emergency lighting	804-807
Pendant luminaires	188
Flat Polymero® IP44	100-101
Flat Polymero® Kreis	
Ceiling and wall luminaires	86-89
Emergency lighting	808-809
Pendant luminaires	184
Flat Polymero® Kreis Slim	
Ceiling and wall luminaires	80-83
Pendant luminaires	180-181
Flat Polymero® Kreis XXL	
Ceiling and wall luminaires	84-85
Pendant luminaires	182-183
Flat Polymero® Sensation Kreis	
Indoor lighting	85
Outdoor lighting	586-587
Flat Polymero® Sensation XXL	94
Flat Polymero® Super XXL	
Ceiling and wall luminaires	92-93
Pendant luminaires	186-187
Flat Polymero® XXL	
Ceiling and wall luminaires	94
Pendant luminaires	186-187
Flat Quadrat Glas	116-117
Flat Quadrat Kunststoff	116-117
Flat Slim	
Indoor lighting	70-75
Outdoor lighting	556-561
Flatliner	296-299
Flatliner Slim	300-305
Floodlights	629-661
Free-standing luminaires	241-251

G

GAEB texts	828
Garden spotl.	634-635, 639, 658, 659
General information	827
Glasdownlight	
Ceiling luminaires	30-31
Pendant luminaires	195
Golas	390-393
Gonia®	664-665
Group battery systems (LPS)	692-693
GSUN® 2	742-743
GSUN® 3	744-747
GSUN® 4	748-751
GSUN® D	728-729
GSUN® RS	726-727
GSUN® S	724-725

H

HACCP	834
Halyxx®	718-723
Heledon®	
Recessed downlights	328-331
Surface mounted downlights	358-361
Hemis®	36-37
Highbay luminaires	459-471
High Power	280-281
House number luminaires	541-553

I

Impact protection	826
Industrial Hall Maxi	464-467
Industrial Hall Maxi HT	468-469
Industrial Hall Midi	464-467
Industrial Hall Mini	464-467
Indoor lighting	13-471
In-ground luminaires	617-627

Interface for local switch 475, 491, 494

Internet 828

ISO lampholders for linear lamps 135

ISO striplights for linear lamps 135

ISO striplights with LED linear lamps 134

K

Keralux 142

Kreis 112-113

Kreis with light-sensitive switch 550

Kugel Opal 522, 524

L

Laruta® 666-667

Lavano®

Ceiling and wall luminaires 122-124

Pendant luminaires 192-193

Lavano® UNO

Ceiling and wall luminaires 122-124

Pendant luminaires 192-193

Lavano® Wing

Ceiling and wall luminaires 122-124

Pendant luminaires 192-193

LED it Strip 282-285

LED continuous line luminaire 439-440

LED conversion kits

Indoor lighting 678-683

Outdoor lighting 684-687

LED continuous line luminaire systems 427-441

LED linear systems 253-293

Ledona ECO Round 346-347

Ledona ECO Square 346-347

Ledona Round IP20 340-345

Ledona Round IP65 340-345

Ledona Square IP20 340-345

Ledona Square IP65 340-345

Less is more® 21 254-257

Less is more® 27

Free-standing luminaires 242-245

Linear systems 258-265

Less is more® 27 Kristall
190-191, 274-275

Less is more® 50 276-277

Less is more® Flex 286-293

Levido Round 320-323

Levido Round Darklight 320-323

Levido Square 320-323

Levido Square Darklight 320-323

Levido Swing Round 372-375

Levido Swing Square 372-375

Light and presence sensor
 light control +³ 487, 489, 493
 smart+free 476

Light colour 830

Light laboratory 828

Light management 473-499

Light planning 828

Light sensor 493

Light distribution curve 829

light control +³ 480-499

light control +³ Ambiente 490-491

light control +³ Economy 486-489

light control +³ Professional 492-499

Lightstream Box-Type® Maxi 660-661

Lightstream Box-Type® Midi 660-661

Lightstream Box-Type® Mini 660-661

Lightstream® LED Maxi 646, 652-653

Lightstream® LED Midi 640, 650-651

Lightstream® LED Mini

Emergency lighting 820-821

Garden spotlight 639

Projectors 636-638, 648-649

Linear System 278-279

Linear systems 253-293

Specifications subject to alteration

859

Lucio	774-775	N		Planox Tube	456-457	Rechteck 485	752-757
Luminaire showroom	828	Nadelspot	530-531	Plastic oval luminaires	138-140	Reference number index	835-857
Luminaire flux	830	O		Plastic round luminaires	138-140	Remote control Economy	489
Lupalo	668-669	Opal glass luminaires	549, 551-552	Pole top luminaires	663-675	Remote control set	491
M		Outdoor lighting	501-675	Polymero® Long	126	Ring of Fire®	
Magcardo® Maxi	382-385	Oval bulkhead luminaires	136-140	Portable safety spotlight	823	Ceiling luminaires	26-29
Mega Glaspoller	614-615	Overview light control+3	484-485	Powerbox 15	706-707	Pendant luminaires	162-165
Mega Gürtellinse	612-613	P		Powerbox Flood	708-709	Wall luminaires	40-41
Mega Kugel	610-611	PAR16		Print Media	11	Rondos Maxi	386-389
Mega Lamelle	600-601	Garden spotlights	658	Projectors	629-661	Rondos Mini	386-389
Mega Laterne	600, 603	Recessed downlights	319	Protection classes	826	Rounded® EVO	518-519
Mega Square	608-609	Recessed projectors	371	Q		Rounded® Maxi	
Mega Tower	598-599	Spotlights	656-657	Quadraled	42-43	Emergency lighting	818-819
Mega Tube	604-607	Parledo®	210-211	Quadrat	118-119	Outdoor lighting	568-571
Minisign	736-737	Pascala® EVO	332-339	Quadrat with daylight sensor	546-547	Rounded® Midi	
Modular luminaires	215-239	PC-Kit	491	Quality	828	Emergency lighting	814-817
Moist/humid luminaires	443-457	Pendant mounted modular luminaires	215-239	Quardo® LED 165	354-355	House number luminaires	542-543
Mondana®-A		Pendant luminaires	145-195	Quick calculation	829	Outdoor lighting	514-515, 564-567
Outdoor lighting	562-563	Pendant luminaires Overview	146-147	Quick service	828	RT 44	128-129
Indoor lighting	64-65	Phase-cut	834	R		S	
Mondana®-E		Planos LED IP 20	439	R40	127	Safety	828
Outdoor lighting	502-503	Planos LED IP 54	440	Ralite® Highbay II	460-461	Safety lighting	689-823
Indoor lighting	20-21	Planos LED continuous line luminaire system	428-441	Ralite® Highbay II HT	462-463	Safety marks, symbols	828
Mondana®-HE		Planos LED continuous line luminaire system		Recessed ceiling and wall luminaires	15-23	Santos Kreis	106
Outdoor lighting	504-505	LED insert	436-437	Recessed downlights	317-355	Santos Quadrat	107
Indoor lighting	22-23	Continuous line luminaire module	438	Recessed modular luminaires	197-213	Scapha®	
Monitoring systems	694-701	Installations accessories	434-435	Recessed luminaires	501-511	Ceiling and wall luminaires	56-57
Monitoring system MWEBplus	698-699	Mounting track and accessories	432-433	Recessed projectors	369-395	Pendant luminaires	154-155
Movement sensor	493	Planos LED insert		Rechteck		Screwneck glasses	143
MultiDigit® S63	700-701	Emergency lighting	796-798	Indoor lighting	120-121	Self-adhesive black numbers and letters	553
MultiDigit®plus	696-697	Planox		Outdoor lighting	539	Self-contained safety luminaires	689-823
Multivariabel	734-735	Ceiling and wall luminaires	444-447	Rechteck 250	752-757	Self-contained monitoring systems	694-701
MWEBplus	698-699	Emergency lighting	800-803	Rechteck 360	752-757	Service	826-831
		Planox ECO	452-455			Service life criteria	827
		Planox PRO	448-451				

Sidelite®		Strip-Light LED	132-133	Turia®	776-779
Ceiling and wall luminaires	216-219	Surface mounted downlights	357-367	Turia® L	778
Free-standing luminaires	246-249	Surface mounted projectors	367-409	Turia® RZ	779
Pendant luminaires	216-219	System power	830	Types of protection	826
Sidelite® ECO		T		U	
Ceiling and wall luminaires	220-223	T5 Strip-Light	132-133	UGR	830
Emergency lighting	792-793	Tarek R	394-395	Universal 3	744-747
Free-standing luminaires	250-251	Tarek S	406-407	Universal 4	748-751
Pendant luminaires	224-227	Techno	530, 532	Universal D	728-729
Recessed ceiling luminaires	198-201	Tenuo®	710-717	Universal RS	726-727
Sidelite® ECO 35		Terra Edelstahl 130	618-619	Universal S	724-725
Ceiling and wall luminaires	228-229	Terra Edelstahl 190	620-623	V	
Pendant luminaires	228-229	Terra Edelstahl 245	624-627	Varioplast I	738-741
Recessed ceiling luminaires	202-203	The Ultimate Ultra-flat House Number Luminaire	544-545	Vortex	376-377
Sidelite® Ellypsoid	152-153	Tholus	194	W	
Sidelite® Round		Toledo	352-353	Wall Head	538
Ceiling and wall luminaires	52-53	Toledo Flat	208-209	Wallscaping	528-532
Pendant luminaires	148-149	Toledo Flat Round		Wall luminaires	
Sidelite® Round FerroMurano		Fabric lampshades lum.	312-313	Indoor lighting	39-47
Ceiling and wall luminaires	54-55	Recessed downlights	348-351	Outdoor lighting	513-539
Pendant luminaires	150	Recessed emergency lighting	782-787	X	
Signal luminaires	140	Surface mounted downl.	364-367	XXL luminaires	84-85, 92-94, 182-183, 186-187
Signcube Midi	758-761	Surface mounted emergency lighting	788-791	Z	
Signcube Mini	758-761	Toledo Flat Square		Zono	530, 532
Slopia®	533	Recessed downlights	348-351	Zylinder Opal	522-523
Slopia® 0'Top	592-593	Recessed emergency lighting	782-787	3	
Slopia® 40'Top	592-593	Surface mounted downlights	364-367	3-circuit-tracks	412-419
Slopia® Sky	670-674	Surface mounted emergency lighting	788-791	3-circuit-DALI-tracks	420-425
smart+free	474-477	Toledo Flatliner	306-311		
Sonis A Asym	230	Tracks	411-425		
Sonis EVO		Triade LED	408-409		
Ceiling luminaires	232-235	Trima	525		
Emergency lighting	794-795	Tube luminaire	456-457		
Pendant luminaires	232-235	Tunable White	834		
Recessed ceiling luminaires	204-207				
Standard					
Plastic oval luminaires	138-139				
Plastic round luminaires	140				
Standard oval bulkhead ECO-LED	138-139				
Standard-Spot, portable	659				
Steel poles	654-655, 675				





The application image shows:
Less is more® 27

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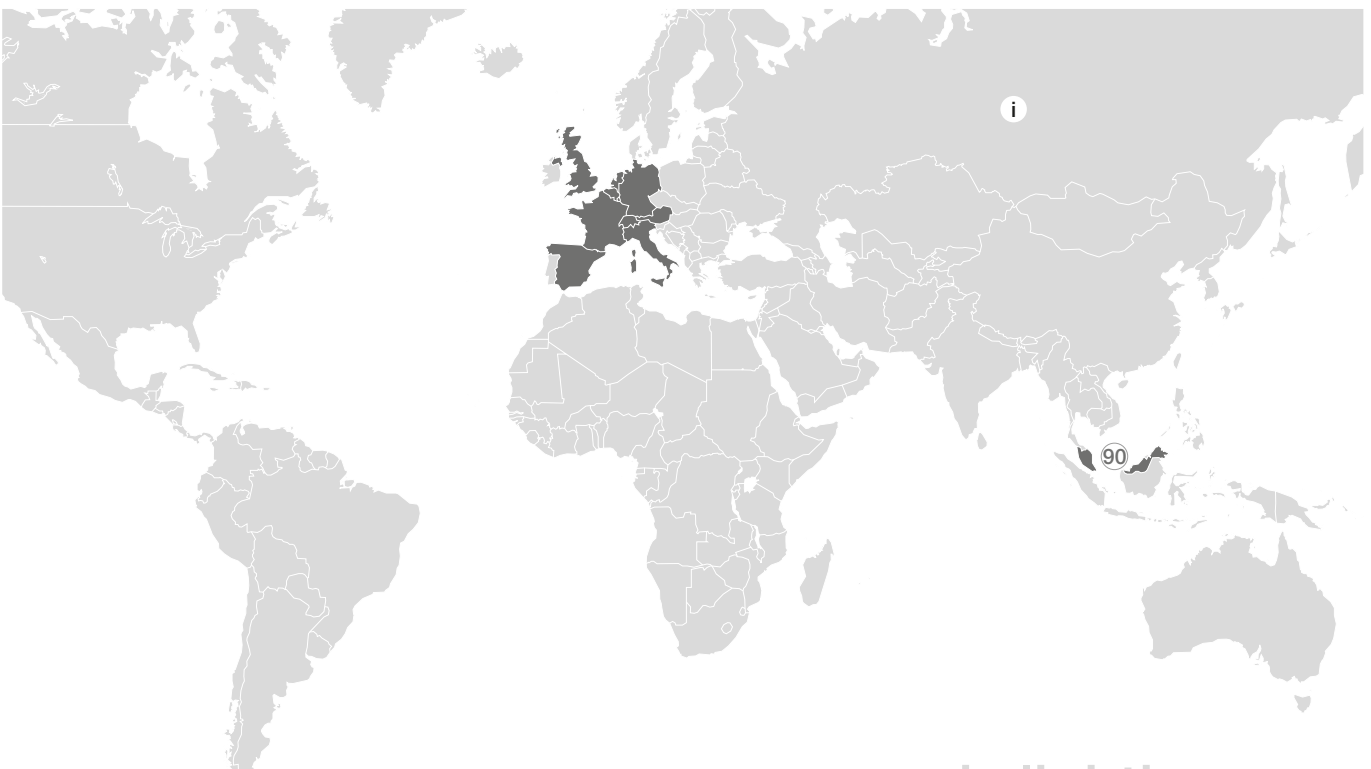
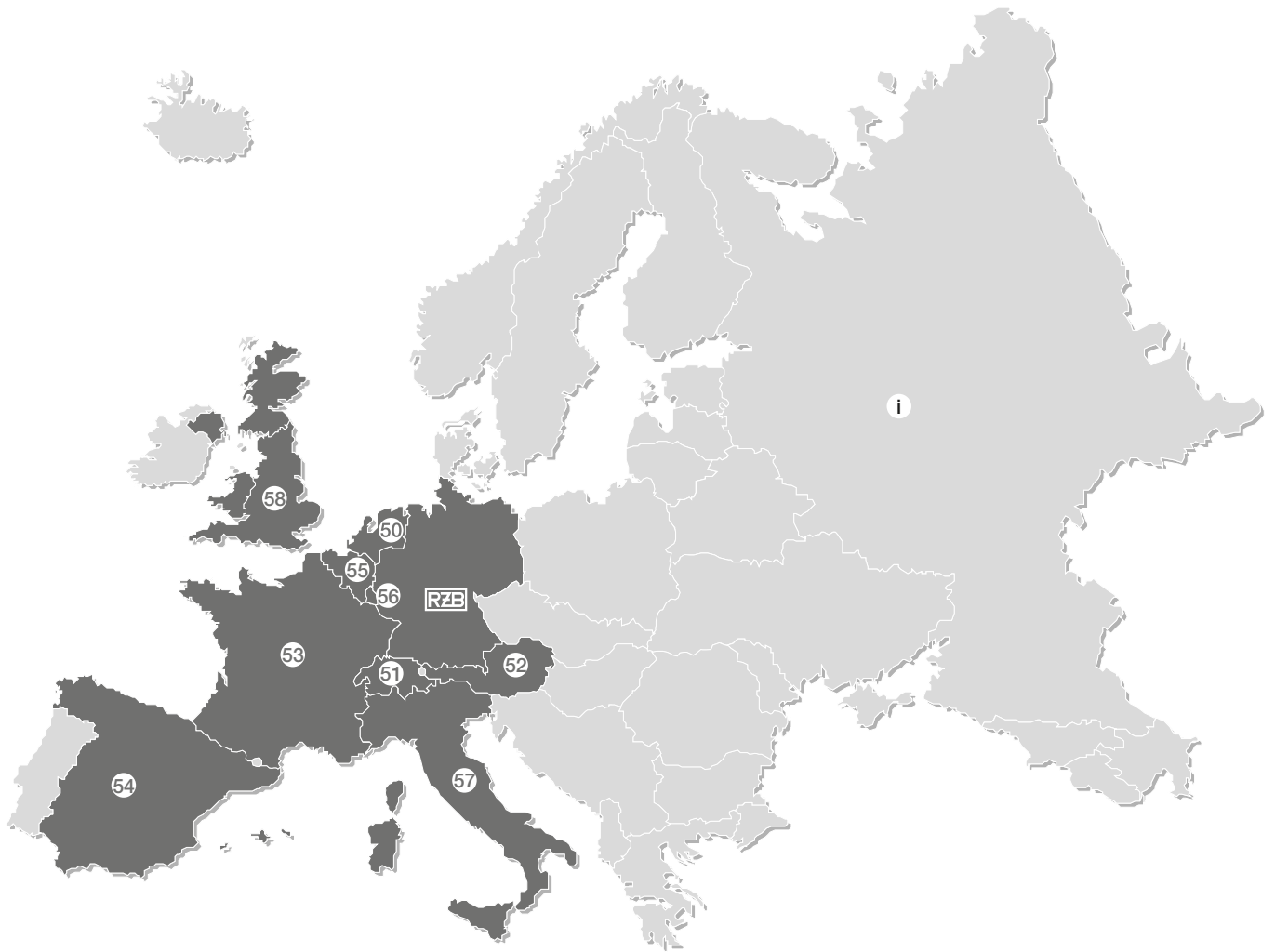
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