

zehnder

always the
best climate

Always the best climate for

EFFICIENT ILLUMINATION

The new LED 2.0 for all radiant ceiling panels from Zehnder

Zehnder LED 2.0 – Innovation meets aesthetics

Lighting and radiant ceiling panels share the ideal space on the ceiling – the perfect combination. Why? Both systems transmit energy in the form of radiation. The radiant ceiling panels from Zehnder use infrared radiation, while the new Zehnder LED 2.0 use light. This clever and space-saving combination optimises the available space on the ceiling as much as possible.

Coordinated planning of light and heat is used as the basis for creating individual project solutions, ensuring the perfect application of both systems. Everything from a single source – from Zehnder.

Innovative plug-and-play principle



Keep it simple – Quick and easy installation of the LED components directly on site.

Individual project solutions



The Zehnder LED 2.0 is available in different lengths and beam angles. The modular concept can be flexibly combined and individually adapted to the customer project.

Everything from a single source



System design incorporating light calculations by Zehnder mean you are always on the safe side and can help save time.

Modern lightweight design



Simple and fast handling from transport to installation – the low weight of the Zehnder LED 2.0 ensures effective and time-saving work on site.

ZEHNDER ZFP

Design example using
LED 2.0 model Z 670



**ZEHNDER ZIP**

Design example using
LED 2.0 model Z 2010

Safe application

Zehnder LED 2.0 can be used in sports halls without restrictions and offer ball impact resistance according to DIN 18032. All components are tested in accordance with the general safety requirements for luminaires as per EN 60598-1.

**Retrofitting existing systems**

Existing installations can also be easily upgraded using Zehnder LED 2.0.

**Complete aesthetic solution**

The combination of Zehnder radiant ceiling panels and the new Zehnder LED 2.0 creates an aesthetic and space-saving 2-in-1 solution that blends in perfectly with the architecture of any room.

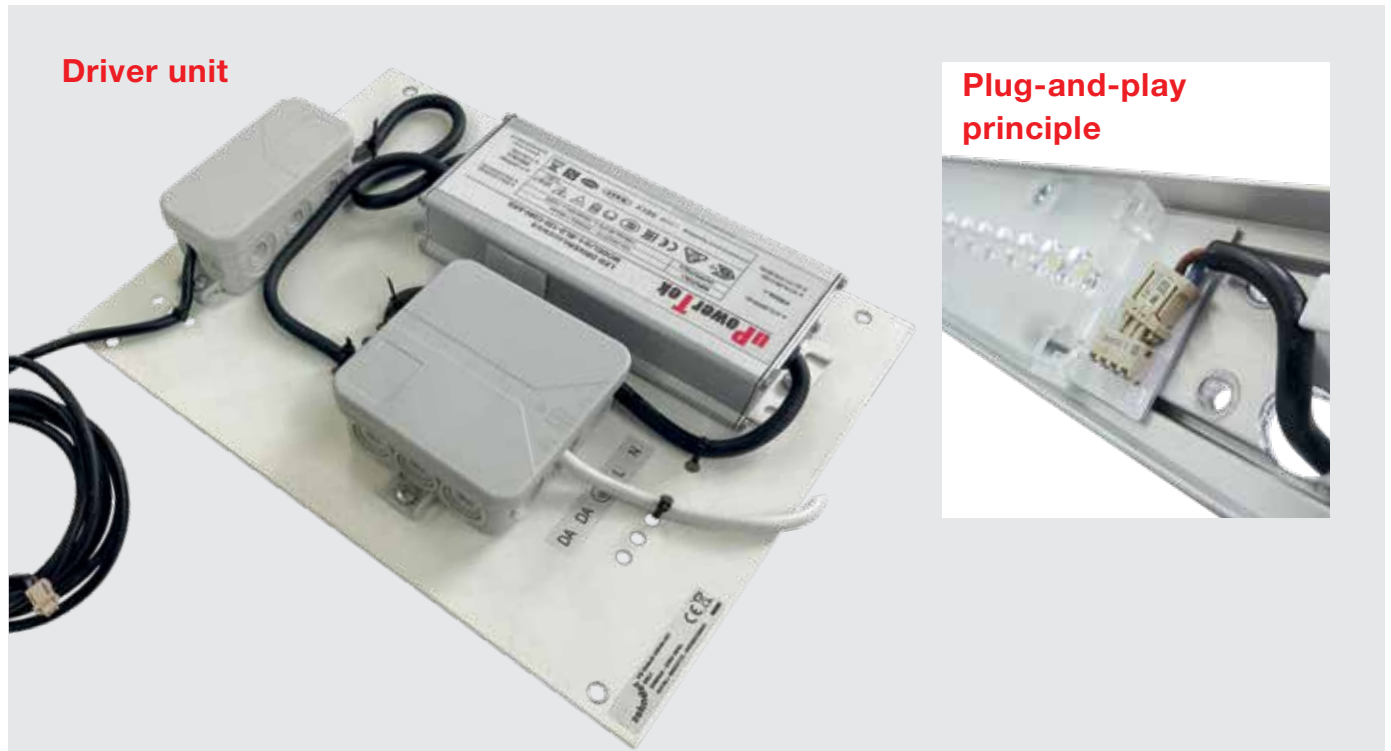
**Efficient operation**

A long life cycle and high switching durability ensure efficient use.



Installation made easy

The Zehnder LED 2.0 can be seamlessly combined with all Zehnder radiant ceiling panels. Thanks to the innovative plug-and-play principle, the LED components can be installed quickly and easily directly on site.



Driver unit


Plug-and-play principle

Technical specifications

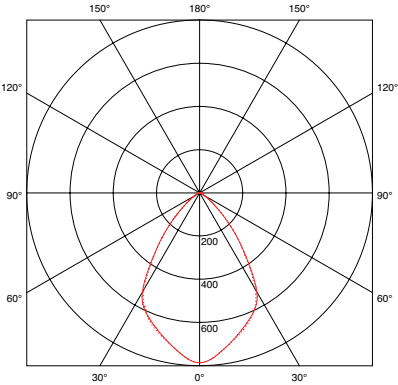
Model	Driver unit	Terminator	Connection cable, 2 m
Article number	516360	516370	516390
Length [mm]	290		2,000
Width [mm]	225		
Height [mm]	40		
Weight [kg]	1.65		
Connection terminals	5-pole connection: Conductor, non-conductor, ground and DALI bus (+/-) 230 V / 50 Hz		
DALI addresses / LED drivers	1/1		
Number of driver units / fuses	7 PCS @ 16 A-C		
Connected load [W] / 2,500 mA	132 +/- 5%		
Note	Ballast / driver unit for LED surface mounted light Type Z incl. 1 x connection cable, 2,000 mm and screws Connected load 132 W Supply of up to 4 x Z 670 Alternative: 2 x Z 1340; 1 x Z 2010; 1 x Z 2680	Terminator / Terminating resistor To be fitted on site to the slot of the last light on a lighting strip 1 piece per ballast	Connecting cable / connection for LED surface mounted light type Z Length = 2,000 mm

Optimum illumination for every building project

The Zehnder LED 2.0 can be used for any room height. The different beam angles allow for flexibility in the lighting design and ensure the best possible illumination of the room – regardless of the building situation.

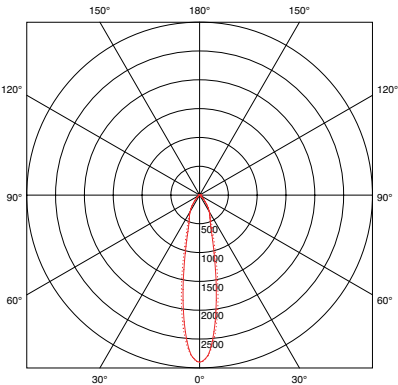


WIDE BEAM
2 X 35°



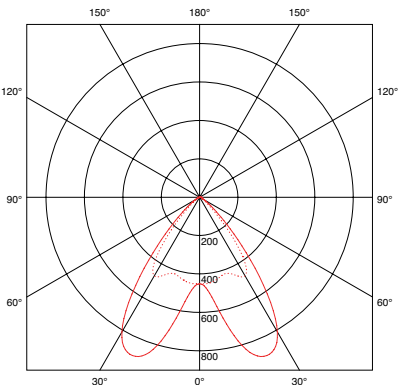
Room height approx. 5–8 m

NARROW BEAM
2 X 15°



Room height over approx. 8 m

VERY WIDE BEAM
2 X 45°



Room height approx. 2.5–5 m

— C0 / C180
- - - C90 / C270

Zehnder – a strong partner at your side

Zehnder stands for individual customer care and outstanding service.

The Zehnder LED 2.0 service offers reliable advice, planning and lighting calculations for our customers. We work with you to develop the perfect solution for your project.

Our years of experience – delivering the assurances you need.



Advice

Zehnder will be available right from the planning phase providing valuable expert knowledge. Your personal point of contact will address your concerns directly:

- Technical consulting expertise
- Many years of practical experience
- On hand at all times

Planning

We develop a tailored project solution using appropriate products from the tried and tested Zehnder LED 2.0 portfolio:

- 4 different light lengths
- 3 different lens optics
- Plug-and-play principle
- Ball impact resistance according to DIN 18032
- All components tested according to EN 60598-1

Lighting calculation

Benefit from our Zehnder LED 2.0 service.

We create your project-specific lighting design using Relux as the basis for the tender:

- Calculation report as a PDF
- Computational and graphical representation of the results
- List of materials
- Tender specifications

Lighting calculation: Example of a three-pitch sports hall

In the lighting calculation, uniform illumination as well as object use must be taken into account.

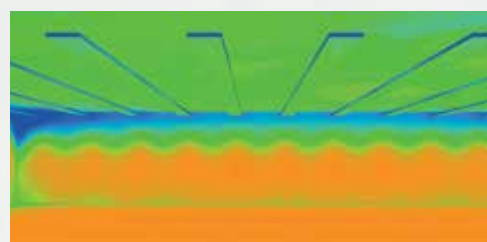
Whether it concerns an evening event or a sports activity – the dimmable Zehnder LED 2.0 can master any requirement.

Project details

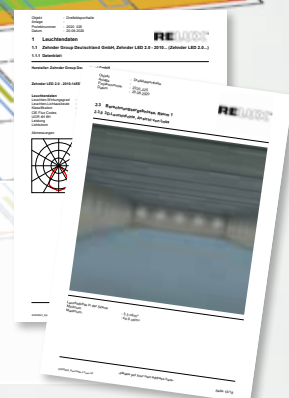
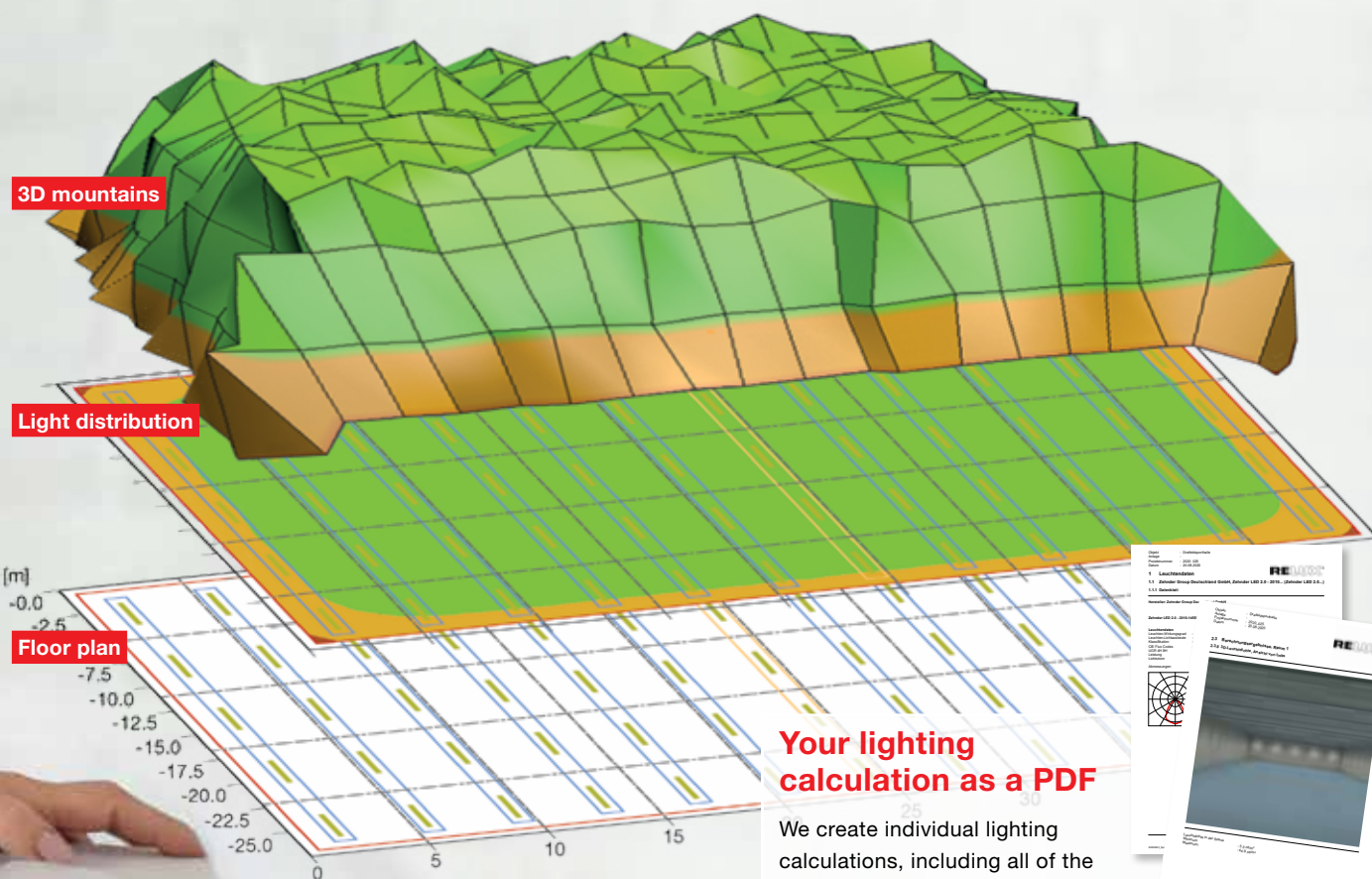
- Three-pitch sports hall, 45 x 27 m
- Room height: 7 m
- Height at working level: 0.75 m
- Height at light level: Suspension height of the lights 6.60 m
- 60 x Zehnder LED 2.0 model Z 2010



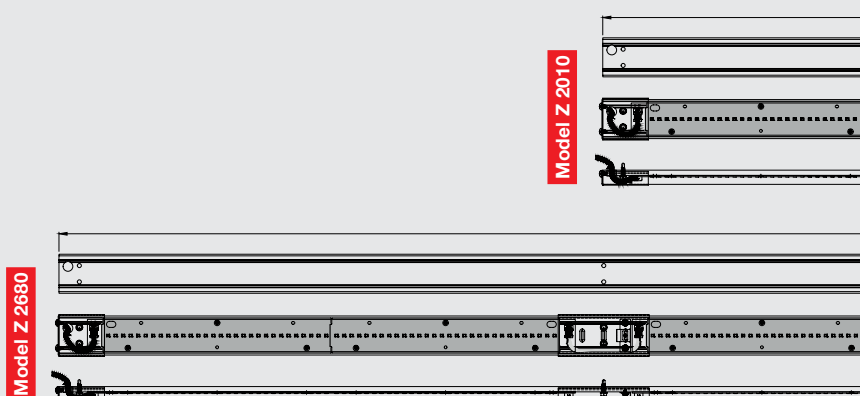
3D luminance, view from behind



3D false colours, view from front



Dimensions and technical specifications

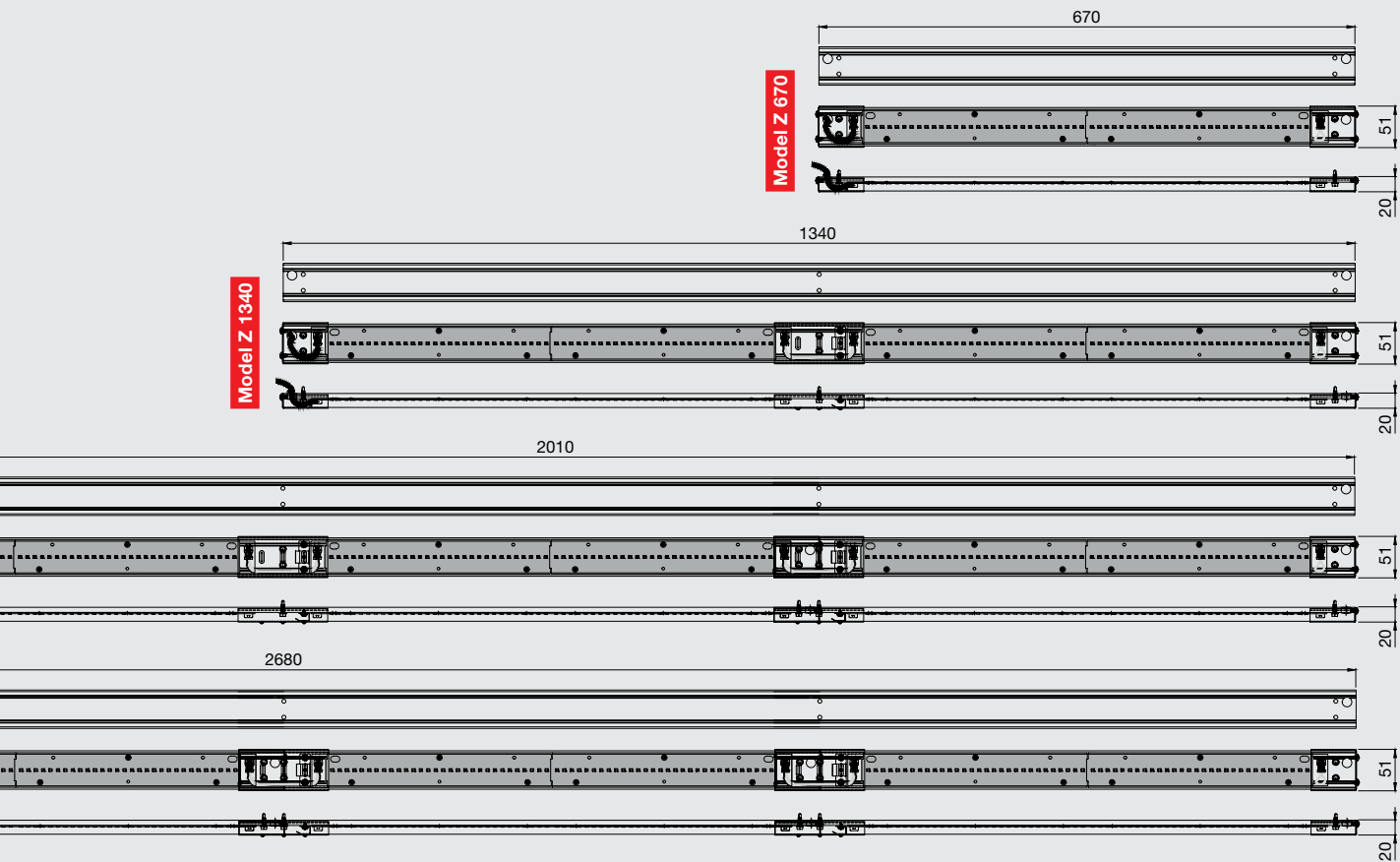


Technical specifications

Model	Z 670			Z 1340		
Article number	516200	516210	516220	516230	516240	516250
Length [mm]	670			1,340		
Width [mm]	51			51		
Height [mm]	20			20		
Light distribution	2 x 35° wide beam	2 x 15° narrow beam	2 x 45° very wide beam	2 x 35° wide beam	2 x 15° narrow beam	2 x 45° very wide beam
Weight [kg]	1			1.9		
Surface	Anodised aluminium			Anodised aluminium		
LED luminous flux [lm at 2,500 mA]	4853			9706		
Level of efficiency [%]	95			95		
Luminous flux / W at 2,500 mA [lm/W]	146			146		
Light colour / CRI	4,000 K / > 80			4,000 K / > 80		
Flow temperature*	up to max. 70 °C			up to max. 70 °C		
Max. number of lights per driver unit	4			2		
Protection class	II			II		
Degree of protection	IP 20			IP 20		
Connected load [W] / 2,500 mA	31.5			63		
Note	Ball impact resistance according to DIN 18032			Ball impact resistance according to DIN 18032		

Individual project solutions on request

*Other temperatures are available on request



Technical specifications

Model	Z 2010			Z 2680		
Article number	516260	516270	516280	516290	516300	516310
Length [mm]	2,010			2,680		
Width [mm]	51			51		
Height [mm]	20			20		
Light distribution	2 x 35° wide beam	2 x 15° narrow beam	2 x 45° very wide beam	2 x 35° wide beam	2 x 15° narrow beam	2 x 45° very wide beam
Weight [kg]	2.9			3.8		
Surface	Anodised aluminium			Anodised aluminium		
LED luminous flux [lm at 2,500 mA]	1,4559			1,9412		
Level of efficiency [%]	95			95		
Luminous flux / W at 2,500 mA [lm/W]	146			146		
Light colour / CRI	4,000 K / > 80			4000 K / > 80		
Flow temperature *	up to max. 70 °C			up to max. 70,°C		
Max. number of lights per driver unit	1			1		
Protection class	II			II		
Degree of protection	IP 20			IP 20		
Connected load [W] / 2,500 mA	94.5			126		
Note	Ball impact resistance according to DIN 18032			Ball impact resistance according to DIN 18032		

Individual project solutions on request

*Other temperatures are available on request

Tender specifications

Lights, wide beam

LED surface mounted light Z 670 – 31.5 W (670 mm)

(Article no.: 516200)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 31.5 W (at 2.5 A), 4,000 K, 4,853 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 35°, wide beam

L x W x H: 670 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

LED surface mounted light Z 1340 - 63 W (1,340 mm)

(Article number: 516230)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 63 W (at 2.5 A), 4000 K, 9,706 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 35°, wide beam

L x W x H: 1,340 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

LED surface mounted light set Z 2010 – 94.5 W (2010 mm)

(Article number: 516260)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 94.5 W (at 2.5 A), 4,000 K, 14559 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 35°, wide beam

L x W x H: 2,010 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

Set consists of: 1 x LED surface mounted light Z 670 – 31.5 W

1 x LED surface mounted light Z 1,340 – 63 W

1 x centre cover

1 x spring clip for centre cover

1 x connecting cable / connection 100 mm

LED surface mounted light set Z 2680 – 126 W (2,680 mm)

(Article number: 516290)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 126 W (at 2.5 A), 4,000 K, 19412 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 35°, wide beam

L x W x H: 2,680 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

Set consists of: 2 x LED surface mounted lights Z 1340 – 63 W

1 x centre cover

1 x spring clip for centre cover

1 x connecting cable / connection 100 mm

Lights, narrow beam

LED surface mounted light Z 670 – 31.5 W (670 mm)

(Article no.: 516210)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 31.5 W (at 2.5 A), 4,000 K, 4,853 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 15°, narrow beam

L x W x H: 670 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

LED surface mounted light Z 1340 – 63 W (1,340 mm)

(Article no.: 516240)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 63 W (at 2.5 A), 4000 K, 9,706 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 15°, narrow beam

L x W x H: 1,340 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

LED surface mounted light set Z 2010 – 94.5 W (2010 mm)

(Article number: 516270)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 94.5 W (at 2.5 A), 4,000 K, 14559 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 15°, narrow beam

L x W x H: 2,010 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

Set consists of: 1 x LED surface mounted light Z 670 – 31.5 W

1 x LED surface mounted light Z 1,340 – 63 W

1 x centre cover

1 x spring clip for centre cover

1 x connecting cable / connection 100 mm

LED surface mounted light set Z 2680 – 126 W (2,680 mm)

(Article number: 516300)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 126 W (at 2.5 A), 4,000 K, 19412 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 15°, narrow beam

L x W x H: 2,680 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

Set consists of: 2 x LED surface mounted lights Z 1340 – 63 W

1 x centre cover

1 x spring clip for centre cover

1 x connecting cable / connection 100 mm

Lights, wide beam**LED surface mounted light Z 670 - 31.5 W (670 mm)**

(Article number: 516220)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 31.5 W (at 2.5 A), 4,000 K, 4853 lm, CRI > 80

Flow temperature: Up to max. 70,°C

Light distribution: 2 x 45°, very wide beam

L x W x H: 670 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

LED surface mounted light Z 1,340 - 63 W (1,340 mm)

(Article number: 516250)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 63 W (at 2.5 A), 4000 K | 9,706 lm | CRI > 80

Flow temperature: Up to max. 70,°C

Light distribution: 2 x 45°, very wide beam

L x W x H: 1,340 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

LED surface mounted light set Z 2010 – 94.5 W (2010 mm)

(Article number: 516280)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 94.5 W (at 2.5 A), 4,000 K, 14559 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 45°, very wide beam

L x W x H: 2,010 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

Set consists of: 1 x LED surface mounted light Z 670 – 31.5 W

1 x LED surface mounted light Z 1340 – 63 W

1 x centre cover

1 x spring clip for centre cover

1 x connecting cable / connection 100 mm

LED surface mounted light set Z 2,680 – 126 W (2,680 mm)

(Article number: 516310)

System for on-site installation on radiant ceiling panels

Surface: Anodised aluminium

Output: 126 W (at 2.5 A), 4,000 K, 19412 lm, CRI > 80

Flow temperature: Up to max. 70 °C

Light distribution: 2 x 45°, very wide beam

L x W x H: 2,680 x 51 x 20 mm

Protection class: 2, Degree of protection: IP 20, DALI dimmable

Driver unit, third-party (not part of the light)

Ball impact resistance according to DIN 18032

Set consists of: 2 x LED surface mounted lights Z 1340 – 63 W

1 x centre cover

1 x spring clip for centre cover

1 x connecting cable / connection 100 mm

Accessories**Driver**

(Article number: 516360)

Ballast / driver unit for LED surface mounted light

Type Z incl.1 x 2,000 mm connection cable and screws

Connection power: 132 W

Supply of up to 4 x Z 670

Alternative: 2 x Z 1340; 1 x Z 2010; 1 x Z 2680

Connection cable, 2 m

(Article number: 516390)

Connecting cable / connection for LED surface mounted light type Z

Length = 2,000 mm

Terminator

(Article number: 516370)

Terminator / terminating resistor to be fitted on site to the slot of the last light on a lighting strip

1 per ballast

Spare parts**Centre cover**

(Article number: 516330)

Centre cover for LED surface mounted light type Z consisting of: 1 x centre cover

1 x spring clip for centre cover

End cover

(Article number: 516320)

End cover for LED surface mounted light type Z

Connection cable, 100 mm

(Article number: 516380)

Connecting cable / connection for LED surface mounted light type Z

Length = 100 mm

Centre cover set

(Article number: 516350)

Centre cover set for LED surface mounted light type Z consisting of: 1 x centre cover

1 x spring clip for centre cover

1 x connection cable, 100 mm

Spring clip for centre cover

(Article number: 516340)

Spring clip, centre cover for surface mounted light type Z

Z-MASTER-V1120-RHC-PLD-LED-2.0, en, subject to change without notice