

Lighting device

Protective LED tube light optionally with junction box

The lighting devices of Igema's level indicators have been equipped with innovative LED technology. Its use offers a number of advantages: they are very long-lasting, robust, insensitive to vibrations and consume little energy. The rational use of efficient, energy-saving light sources pays its way for the user and protects the environment.

This LED lighting has been developed specially for use in high ambient temperatures. In order to ensure a long operating life in these extreme conditions of use, only high temperature-resistant materials and components are used.

Application

This LED lighting device is part of the level indicator product range. The water level in a steam and water room is made visible by backlighting. The strong, directed light of Igema LED lights is focused on the viewing area of the level indicators. This guarantees optimum illumination of the steam and water room with minimum sideways dazzle.

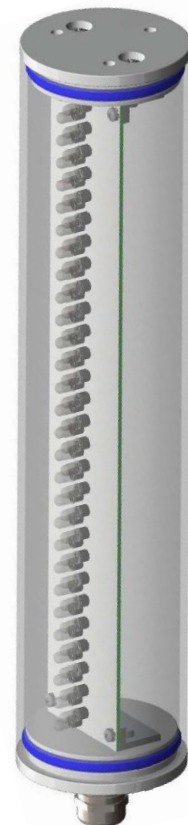
Areas of use are:

- Transparent indicators of glass and glass mica types
- Transparent indicators of mica and black and white mica types
- Type G remote indicators

There are three different light tube lengths used depending on the viewing length. Light tubes of different power levels are used depending on the thickness of the mica wafers so as to provide the best possible illumination of the viewing area. You will find a summary of all the types of lighting in the tables on Page 2 and 3.

General technical data

Protection type according to DIN EN 60529	IP65
Operating voltage	230V 50Hz oder 110-120V 60Hz
Output	5-7W
Electrical fuses	T 200mA
Electrical connection	3 m connector cable pre-manufactured with core end sheaths
Max. ambient temperature	T _a = -20°C bis +70 °C
Light tube diameter	70 mm
Light tube length	See following tables



TG32 & TG120

Size	Light	Length	LEDs	Art.-no. (assembly / lamp)
Connection voltage 230V 50Hz				
5 & 8	LED-320-230-L	320 mm	57	15-14304 / 40-04455
9 & 10	LED-370-230-L	370 mm	66	15-14305 / 40-04459
11	LED-440-230-L	440 mm	80	15-14394 / 40-04463
Connection voltage 110-120V 60Hz				
5 & 8	LED-320-110-L	320 mm	57	15-14306 / 40-04457
9 & 10	LED-370-110-L	370 mm	66	15-14307 / 40-04461
11	LED-440-110-L	440 mm	80	15-14395 / 40-04465

Remote indicator

Size	Light	Length	LEDs	Art.-no. (assembly / lamp)
Connection voltage 230V 50Hz				
310	LED-370-230-H	370 mm	66	15-06360 / 40-04458
390	LED-440-230-H	440 mm	80	15-06366 / 40-04462
Connection voltage 110-120V 60Hz				
310	LED-370-110-H	370 mm	66	15-06362 / 40-04460
390	LED-440-110-H	440 mm	80	15-06368 / 40-04464

Mica and black and white up to PS=100 bar

Size	Light	Length	LEDs	Art.-no. (assembly / lamp)
Connection voltage 230V 50Hz				
7 & 8	LED-320-230-H	320 mm	57	15-06354 / 40-04454
9 & 10	LED-370-230-H	370 mm	66	15-06360 / 40-04458
11	LED-440-230-H	440 mm	80	15-06366 / 40-04462
Connection voltage 110-120V 60Hz				
7 & 8	LED-320-110-H	320 mm	57	15-06356 / 40-04456
9 & 10	LED-370-110-H	370 mm	66	15-06362 / 40-04460
11	LED-440-110-H	440 mm	80	15-06368 / 40-04464

Mica and black and white from PS=160 bar upwards

Size	Light	Length	LEDs	Art.-no. (assembly / lamp)
Connection voltage 230V 50Hz				
7 & 8	LED-320-230-H	320 mm	57	15-06355 / 40-04454
9 & 10	LED-370-230-H	370 mm	66	15-06361 / 40-04458
11	LED-440-230-H	440 mm	80	15-06367 / 40-04462
Connection voltage 110-120V 60Hz				
7 & 8	LED-320-110-H	320 mm	57	15-06357 / 40-04456
9 & 10	LED-370-110-H	370 mm	66	15-06363 / 40-04460
11	LED-440-110-H	440 mm	80	15-06369 / 40-04464

Glass-glass and glass-mica

Size	Light	Length	LEDs	Art.-no. (assembly / lamp)
Connection voltage 230V 50Hz				
7 & 8	LED-320-230-L	320 mm	57	15-06358 / 40-04455
9 & 10	LED-370-230-L	370 mm	66	15-06364 / 40-04459
11	LED-440-230-L	440 mm	80	15-06370 / 40-04463
Connection voltage 110-120V 60Hz				
7 & 8	LED-320-110-L	320 mm	57	15-06359 / 40-04457
9 & 10	LED-370-110-L	370 mm	66	15-06365 / 40-04461
11	LED-440-110-L	440 mm	80	15-06371 / 40-04465

Junction box (optionally)

The clever solution for connecting Igema lighting units.

This box is of a compact design with width 300 mm x height 200 mm x depth 150 mm. The Igema junction box allows quick and uncomplicated installation of up to six Igema lighting units with easy to install and connect components. The junction box has been prewired by experts and the equipment labelled. When it gets to the customer, only the supply line at the input terminals as well as the lighting and the cable glands have to be installed. All the lighting units of a water level indicator may be switched off with the built-in main switch.

The junction box is equipped to allow safe activation of the lighting unit with a main switch. The main switch can be locked in the 0 position. The cable protection is achieved by a 1-pole+N miniature Circuit-Breaker (MCBs) with a rated current of 6A. The tripping characteristic "B" gives a quick-tripping operating current of 3 - 5 x I_n

The junction box may only be connected and commissioned by qualified electricians. The general safety and installation regulations are to be observed.



Fig. Junction box (optionally)

General technical data

Article number	25-13250
Type of protection	IP65 / Nema 4x
Dimensions	300 x 200 x 150 (W x H x D)
Housing material	Stainless Steel 1.4404 (316L)
Doors	With neoprene seal, 125° opening angle
Lock	Quarter-turn fastener with slotted insert
Operating voltage	230V 50 Hz or 110-120V 60 Hz
Electrical protection	1pole +N MCBs 6A tripping characteristic B
Main switch	2 pole, lockable in 0 position
Supply	1 pc M20 x 1.5 Cable gland material: Brass nickel
Light outputs	6 pcs M16 x 1.5 Blanking plugs material: Brass nickel
Fixing	4 wall brackets with 11 mm hole
optional accessories	Cable gland M16 x 1,5 material: Brass nickel for the light output