

Lumiglas® *explosion-proof*

Lumistar Luminaire ESL25LED-Ex



II 2G Ex db IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

For mounting on sight glass fittings:

Designed for universal applications, this Ex-type sight glass luminaire has been developed for use in potentially explosive environments. It is ideal for combined sight glass and light assemblies, either as a single-flange version or with two separate flanged ports.

Compact yet powerful:

Dazzle-free illumination, for use with circular sight glass fittings to DIN 28120/DIN 28121 or similar, with screwed sight glass units in compliance with DIN 11851, and in visual flow indicators.

Large light aperture thanks to optimised screw-in lens design

Applications: For illuminating visual flow indicators, pipelines, laboratory mixers, bioreactors as well as the interior of pressure vessels, tanks, agitators and other – normally closed – processing vessels in potentially explosive environments. Gas: Zones 1 and 2; Dust: Zones 21 and 22.

Especially suitable for use in sterile and food areas

Protection class: IP 65 and IP 67 according to DIN EN 60529

Operating conditions: Independent of the internal pressure/vacuum in vessel. Under no circumstances should a sight glass luminaire be used to replace the mating flange or the sight glass/luminaire assembly or on its own to close a vessel port.

Attention: Do not look into light – danger of impaired eyesight!

Lumistar luminaires of this type are approved for use in ambient temperatures up to 50°C.

Technical data Ex protection:

This luminaire meets the essential safety and health requirements by complying with the regulations for

a) Gas

EN IEC 60079-0: 2018
EN 60079-1: 2014
Explosion group:
Temperature class:

General requirements
Flame-proof Enclosure 'd'
IIC (includes IIA and IIB)
T6

b) Staub

EN IEC 60079-0: 2018
EN 60079-31: 2014
Explosion group:
Temperature class:

General requirements
Protection by Enclosures 't'
IIIC (includes IIIA and IIIB)
T80°C

Certification: EU Type-Examination Certificate
BVS 08 ATEX E 137



II 2G Ex db IIC T6 Gb
II 2D Ex tb IIIC T80°C Db



Lumistar luminaire USL 25LED-Ex

Straightforward electrical connection via integrated cable tail or Ex d cable entry gland.

Connecting cable: pressure-tight, cast connection cable with cable gland at the factory, 2 m (standard), alternatively 10 m length or externally tested and approved cable entry M20x1.5

Mounting options:

With circular sight glass fittings and flow indicators the luminaire is secured to the mating flange by means of the hinged bracket. With screw-type sight glass units the luminaire is mounted on the slotted cover nut.

The Lumistar luminaire USL 25LED-Ex fits the following nominal sizes:

- a) Circular sight glass fittings to DIN 28120: DN 25
- b) Circular sight glass fittings to DIN 28121: DN 40
- c) Flow indicators: from DN 50
- d) Screwed sight glass fittings similar to DIN 11851:
 - with DN 65, mounting is by way of separate flange adapter collar
 - from DN 80 up, the hinged bracket is possible

For sterile applications, a version of this Lumistar luminaire is available with a sleeve that fits over a raised lip on the mating flange.

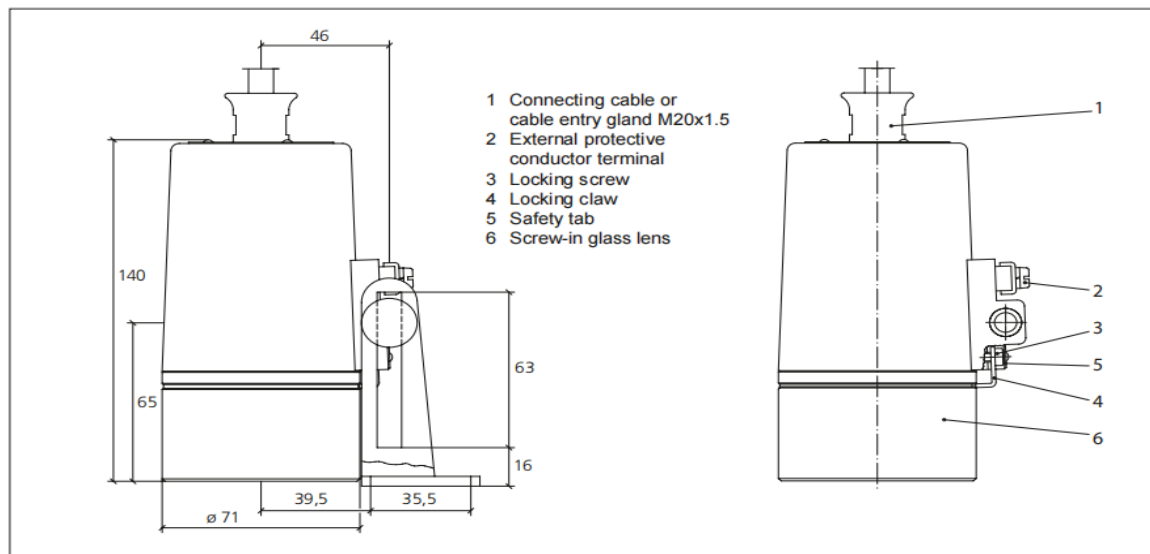
Voltage : Alternating/direct current, depending on luminaire type

Operating voltage:

24 V AC/DC – 7.5 W
110-230 V AC – 7.5 W
Colour temperature: 6500 K
Luminous flux: 360-430 lm (depending on beam angle)

Beam angle: 12°; 25°; 38°

Dimensions and electrical data for Lumistar luminaire ESL 25LED-Ex:



Parts, design and materials:

- Body of luminaire: Stainless steel 1.4404, polished
- Fastening components: Stainless steel 1.4301 (see 'Accessories')
- Cable entry gland: M20 x 1.5
- Weight: 1.8 kg

Connecting data: Temperature classification and electrical parameters (see also EU Type-Examination Certificate)

Item	ESL25LED-Ex	Variant with 2 m connection cable part no.	Variant with cable gland 7-12 mm part no.	Variant for sterile applic. with 2 m connection cable part no.	Ambient temperature range -20°C ≤ T _a ≤ +50°C	
1	24 V AC/DC – 7.5 W	3540.924.00	3540.949.00	3542.015.00	2G T6	2D T80°C
2	110-230 V AC – 7.5 W	3540.925.00	3540.950.00	3542.016.00	2G T6	2D T80°C

Accessories:

Item	Component	Part no.
1	Hinged bracket mounting for luminaire	0354.019.00
2	Flanged adapter collar mounting: MV 50 – welded on; MV 65 – Ø 80 mm	1356.010.00
3	Flanged adapter collar mounting: MV 80 – Ø 94 mm	1356.029.00
4	Claw spanner for screw-in lens	6816.001.00
5	Timer module, Ex version	on request
6	Connecting cable	on request

Order data:

e.g. Lumistar luminaire ESL25LED-Ex, 24 V – 7.5 W, with 2 m connecting cable, part no. 3540.924.00