

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

• **Application:** 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 | General Requirements |
| EN 60079-1: 2014 | Flame-proof Enclosure 'd' |
| Explosion group: | IIC (includes II A and II B) |
| Temperature class: | T6 |

b) Staub

| | |
|----------------------|---------------------------------|
| EN IEC 60079-0: 2018 | General Requirements |
| EN 60079-31: 2014 | Protection by Enclosures 't' |
| Explosion group: | IIIC (includes III A and III B) |
| Temperature class: | T80°C |

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



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II 2D Ex tb IIIC T80°C Db

• **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°

CE 0158

3755.561



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

• **Connection 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 ESL25LED-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

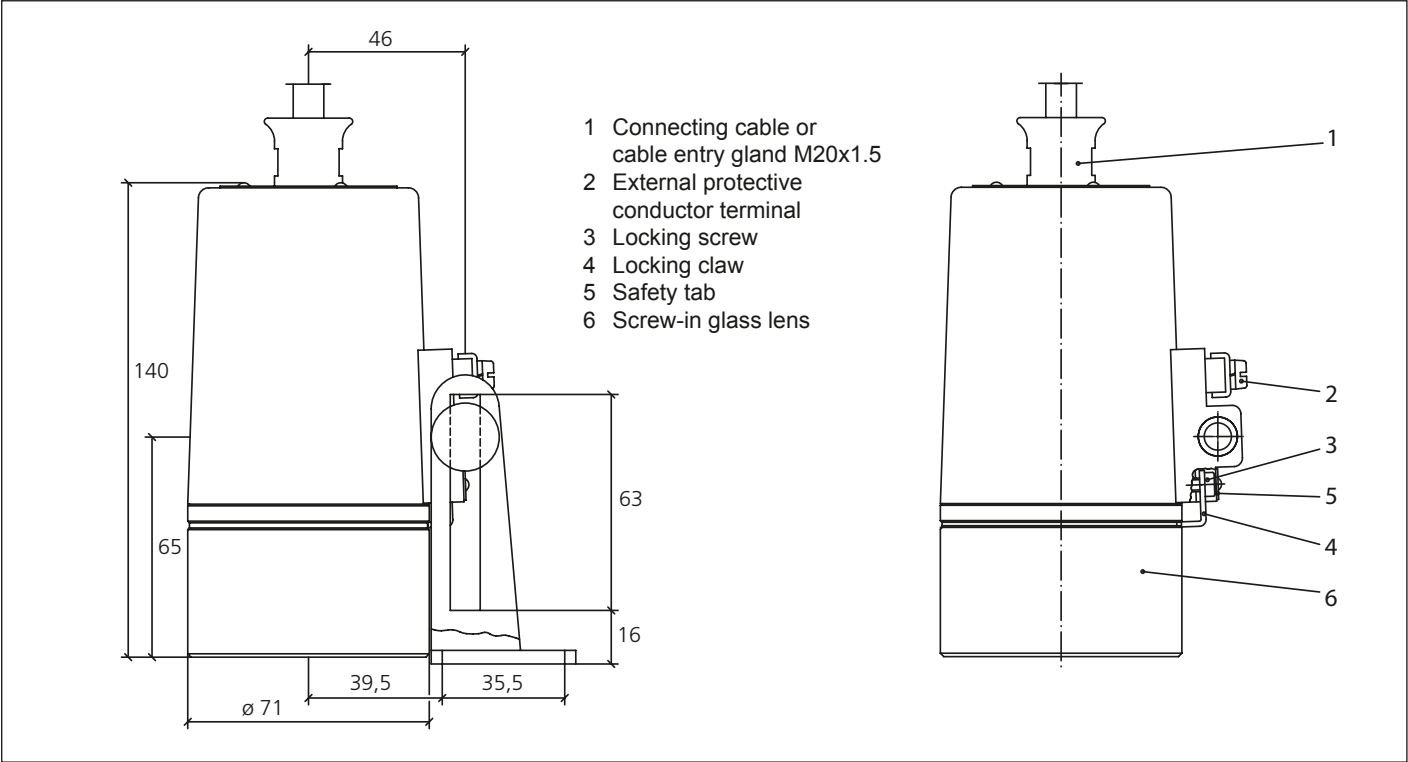
d) Screwed sight glass fittings similar to DIN 11851:

- 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.**

• Dimensions and electrical data for Lumistar luminaire ESL25LED-Ex:



• Components 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

All dimensions in mm unless stated otherwise. Picture credits: ©F.H. Papenmeier GmbH & Co. KG/Thomas Keuchel. Subject to change without prior notice. 12.19