

Lumiglas Luminaire Stainless Steel ESL 55-LED-Ex



II 2G Ex d IIC T6

II 2D Ex tD A21 IP67 T80°C

• For mounting on sight glass fittings:

This Ex-type sight glass luminaire is designed for universal applications in potentially explosive environments. It is ideal for combined sight and light glass units, either as a single-flange version or with two separate flanged ports.

• The special advantages of Lumiglas LED technology:

- Insensitive to vibration
- Long service life and high operational reliability
- Continuous operation for up to c. 50,000 hours
- Ideal wherever fittings are difficult to access
- No heat radiation in the light port (cold light)
- No additional heat which is undesirable in chemical and/or biological processes
- High-contrast illumination

• Compact yet powerful:

Dazzle-free illumination; suitable for use with circular sight glass fittings to DIN 28120/DIN 28121 or similar, with screw-type sight glass fittings in compliance with DIN 11851, and in sight flow indicators.

• Applications:

For illuminating visual flow indicators, pipelines, laboratory mixers, bio-reactors as well as the interior of tanks, hoppers, silos, agitators and other, normally closed, vessels and reactors in **potentially explosive environments**.

Gas: Zones 1 and 2, Dust: Zones 21 and 22.

• Ideal for applications in sterile areas.

• Protection class:

IP 65 and IP 67 to DIN EN 60529

• Operating conditions:

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

• Lumiglas luminaires of this series are approved for use in ambient temperatures of between -20°C and +40°C.

• Technical data Ex protection:

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

a) Gas

EN 60079-0: 2006 General Requirements
EN 60079-1: 2007 Flame-proof Enclosures
Explosion group: IIC (includes IIA and IIB)
Temperature class: T6

b) Dust

EN 61241-0: 2006 General Requirements
EN 61241-1: 2004 Protection by Enclosures
Temperature class: T80°C

• EC-Type Examination Certificate:

BVS 09 ATEX E 169



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• Operating voltage:

24 V AC/DC LED 11 W
120-230 V AC/DC LED 11 W
Protected by 1A miniature fuse.
Equipped with 3 high-power LEDs, approx. 3 W each.

CE 0158

Data Sheet 07.55-01 LED



Lumiglas luminaire ESL 55-LED-Ex

• Voltage:

AC/DC

• Simple electrical connection via integrated cable or via Ex d cable gland.

• Electrical connection:

Connecting cable options:

- a) Works-fitted connection cable, resin-cast in screwed cable gland for pressure-tight cable entry, temperature-resistant up to 110°C.
Standard cable length: 2 m
Alternative length available: 10 m
- b) Without works-fitted connecting cable. A suitable cable for screwed gland (M20 x 1.5) is to be provided by the operating company!

• Fastening options:

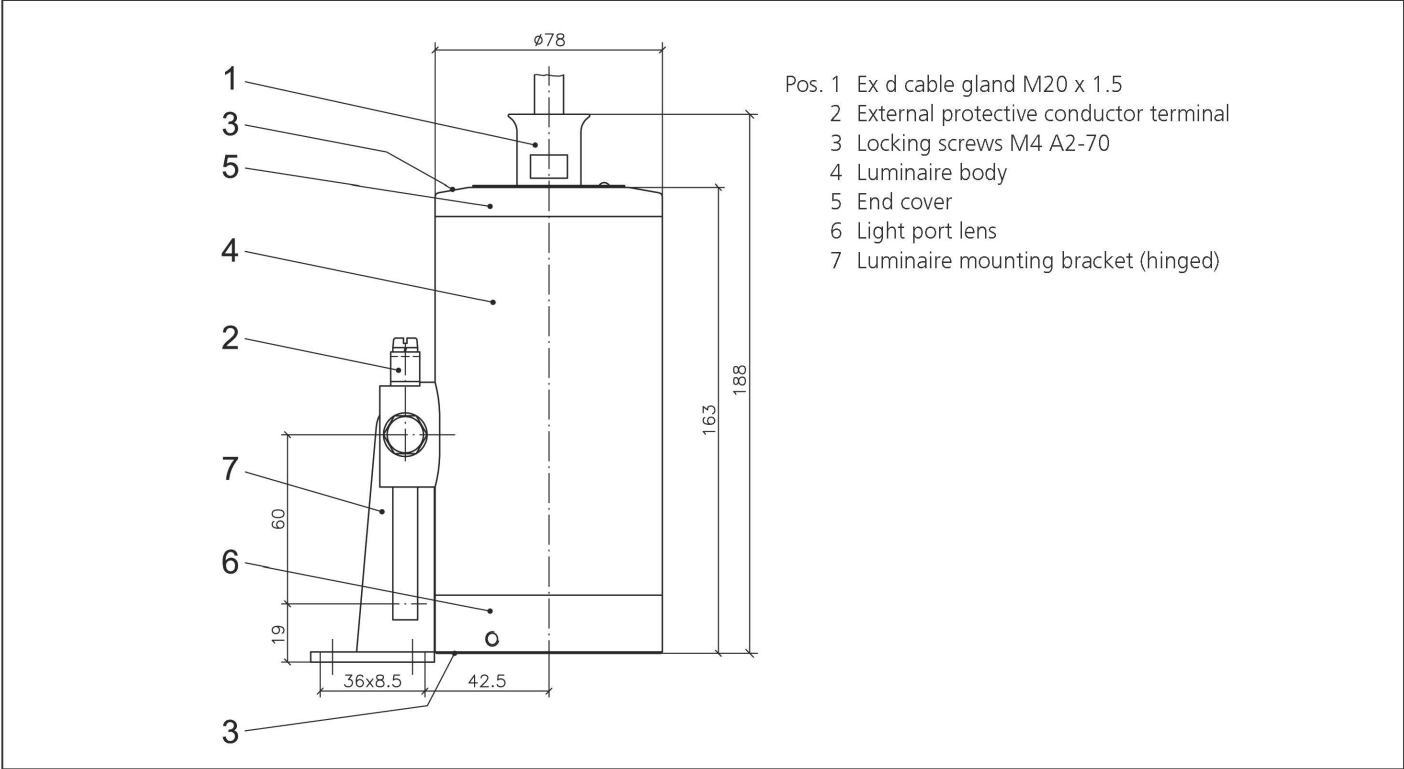
Luminaires for sight glasses on circular fittings and visual flow indicators are mounted on the cover flange by means of the hinged bracket. With screw-type sight glass fittings, the luminaire is attached to the grooved nut.

The Lumiglas luminaire type ESL 55-LED-Ex fits the following nominal sizes:

- a) Circular sight glass fitting acc. to DIN 28120: DN 40
- b) Circular sight glass fitting acc. to DIN 38121: DN 40
- c) Sight glasses in flow indicators: DN 50
- d) Screw-type sight glass fittings similar to DIN 11851:
 - DN 65 is mounted by way of a separate flange attachment.
 - From DN 80 up, the unit is secured using the hinged bracket.

• In sterile environments, this Lumiglas luminaire is fitted over the raised edge of the cover flange.

• **Dimensions and electrical data for Lumiglas luminaires ESL 55-LED-Ex:**



• **Components, design and materials:**

- Luminaire body (4) and end cover (5):
Stainless steel 1.4404, polished
- Light port lens (6): Unit consisting of ring
(stainless steel 1.4404, polished) and borosilicate glass
- Luminaire mounting bracket (7): Stainless steel 1.4301 (see accessories)
- Cable gland (1): M20 x 1.5

• **Weight (incl. 2 m connecting cable):** 3.8 kg

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

No.	ESL 55-LED-Ex Variant	Part No.	Voltage	Illuminant	Ambient temperature range -20°C ≤ T _a ≤ +40°C	
1	(24 V) 11 W	3541.552.00	24 ≈	3 LEDs	2G T6	2D T80°C
2	(120-230 V) 11 W	3541.553.00	120-230 ≈	3 LEDs	2G T6	2D T80°C

• **Accessories:**

No.	Component	Part No.
1	Luminaire mounting bracket (hinged)	0354.025.00
2	Luminaire mounting attachment, flanged adapter collar MV65	1356.039.00
3	Ex-timer switch	Please request data sheet 09.02
4	Connecting cable	On request

• **Order data:** e. g.

Lumiglas luminaire ESL 55-LED-Ex, (24 V) 11 W, Ex d IIC T6, with 2 m connecting cable, Part No. 3541.552.00

All dimensions in mm unless stated otherwise. Subject to change without prior notice.
WW 03.10 3755.453 b

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