

## Lumistar Luminaire ASL 55-LED-Ex, Aluminium

CE 0158

3755.454 e



II 2G Ex d IIC T6 Gb

II 2D Ex tb IIIC T80°C Db

### • For mounting on sight glass fittings:

This Ex-type sight glass luminaire is designed for universal applications and is ideal for use in combined sight and light ports (single-flange version) or with two separate ports (2-flange version).

### • The special advantages of Lumiglas LED technology:

- vibration-proof
- long service life and operational reliability
- continuous LED operation up to around 50,000 hours
- optimal for fittings that are difficult to access
- no heat radiation in the light aperture (cold light)
- no unwanted additional heat in chemical and/or biological processes
- extremely high-contrast illumination

### • Compact design, powerful light output:

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

### • Application:

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.

### • Protection class:

IP 65 and IP 67 acc. to DIN EN 60529

### • Operating conditions:

Independent of the internal pressure/vacuum in the vessel. On no account should a sight glass luminaire be used as a substitute for the cover flange or instead of the complete sight glass flange assembly or on its own to close a vessel port.

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

### • Optional with 10° or 25° light aperture reflector

### • Technical data Ex protection:

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

#### a) Gas

EN 60079-0: 2009 General Requirements  
EN 60079-1: 2007 Flame-proof Enclosures ,d'  
Explosion group: IIC (includes IIA and IIB)  
Temperature class: T6

#### b) Dust

EN 60079-0: 2009 General Requirements  
EN 60079-31: 2009 Protection by Enclosures ,t'  
Explosion group: IIIC (includes IIIA and IIIB)  
Temperature class: T80°C

### • EC-Type Examination Certificate: BVS 09 ATEX E 170



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### • Operating voltage:

24 V AC/DC LED 11 W/15 W  
120-230 V AC/DC LED 11 W/15 W  
Protected by 1A miniature fuse.  
Equipped with 3 or 6 high-power LEDs.



Lumistar luminaire ASL 55-LED-Ex

### • Voltage:

AC/DC

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

### • Electrical connection options:

- Works-fitted connection cable (2 m standard length), resin-cast in screwed cable gland for pressure-tight cable entry, temperature-resistant up to 110°C. Other lengths available on request: 5 m, 10 m, 20 m
- By way of screwed cable gland acc. to EN 60079-14
- Other types of cable glands and cables are shown in the table overleaf.

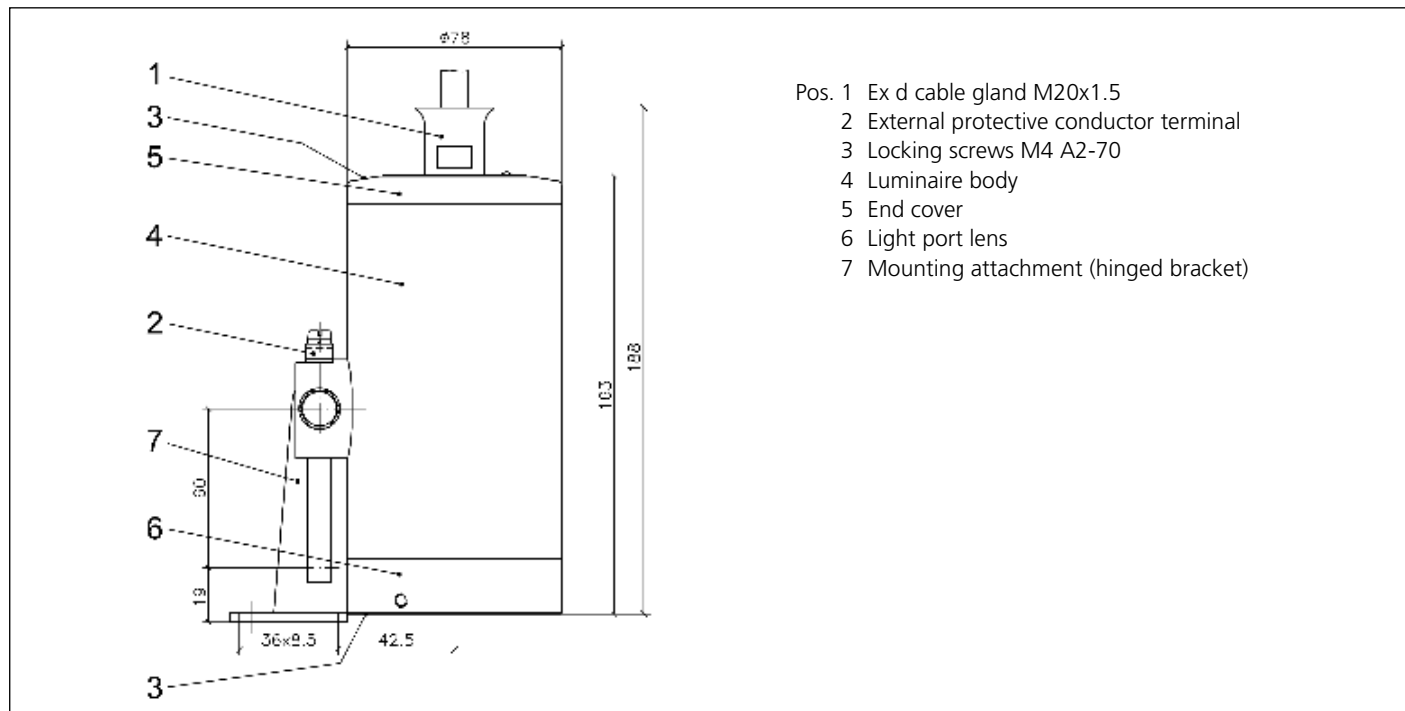
### • Fastening options:

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 slotted cover nut.

### The Lumistar luminaire ASL 55-LED-Ex fits the following nominal sizes:

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

• **Dimensions and electrical data for Lumistar luminaire ASL 55-LED-Ex:**



• **Components and materials:**

- Luminaire body (4) and end cover (5): Aluminium alloy AlMgSi 0.5, paint finish RAL 9007
- Light port lens (6): Unit consisting of ring flange (aluminium alloy AlMgSi 0.5, paint finish RAL 9007) and borosilicate glass

- Hinged mounting bracket (7): Stainless steel 1.4301 (see accessories)
- Cable gland (1): M20x1.5

• **Weight (with 2 m connecting cable): 1.5 kg**

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

No.	ASL 55-LED-Ex Variant	Part No.	Voltage Volt	Illuminant	Ambient temperature range $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$	
1	(24 V) 11 W	3541.652.00	24 $\approx$	3 LEDs	2G T6	2D T80°C
2	(120-230 V) 11 W	3541.653.00	120-230 $\approx$	3 LEDs	2G T6	2D T80°C
3	(24 V) 15 W	3541.655.00	24 $\approx$	6 LEDs	2G T6	2D T80°C
4	(120-230 V) 15 W	3541.656.00	120-230 $\approx$	6 LEDs	2G T6	2D T80°C

• **Only combinations of the following cable entry glands and cables should be used:**

Cable gland types	Cable types
HSK-M-Ex-d, Part No. 9103.123.00 M20x1.5, nickel-plated brass (by Hummel)	EVA flexible sheathed cable, Sinotherm 110, Part No. 3403.017.00, 3x1.5 mm <sup>2</sup> , Ø 8.5 mm
KU1BPM20-Ex-d-Alpha X Part No. 9103.130.00 M20x1.5, nickel-plated brass (by RST)	Ölflex Heat 180, Part No. 3403.045.00, 3x1.5 mm <sup>2</sup> , Ø 8.9 mm
	Ölflex Heat 180, Silflex UR-AWG18, Part No. 3403.044.00, 5x1.0 mm <sup>2</sup> , Ø 10.3 mm
	Ölflex Classic 110 black, Part No. 3403.051.00, 3x1.5 mm <sup>2</sup> , Ø 10.1 mm

• **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	On request
4	Connecting cable	On request
5	Luminaire with Ex 'd' cable gland	On request

• **Order data:**

e.g. Lumistar luminaire ASL 55-LED-Ex (24V) 11 W, Ex d IIC T6 with 2 m connecting cable, part no. 3541.652.00

All dimensions in mm unless stated otherwise. Subject to change without prior notice. 10.15