Lumiglas Luminaire Aluminium ASL 55-LED-Ex

⟨Ex⟩ II 2G Ex d IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

CE 0158

- **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 of LED 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 visual 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.

- **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 'd'
  Explosion group: IIC (includes IIA and IIB)
  Temperature class: T6
  b) Dust
  EN 60079-0: 2009 General Requirements
  EN 60079-31 Protection by Enclosures 'tb'
  Dust group: 2009 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.

Lumiglas luminaire ASL 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 (2 m standard), temperature-resistant up to 110°C.
  Alternative length available: 5 m, 20 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!
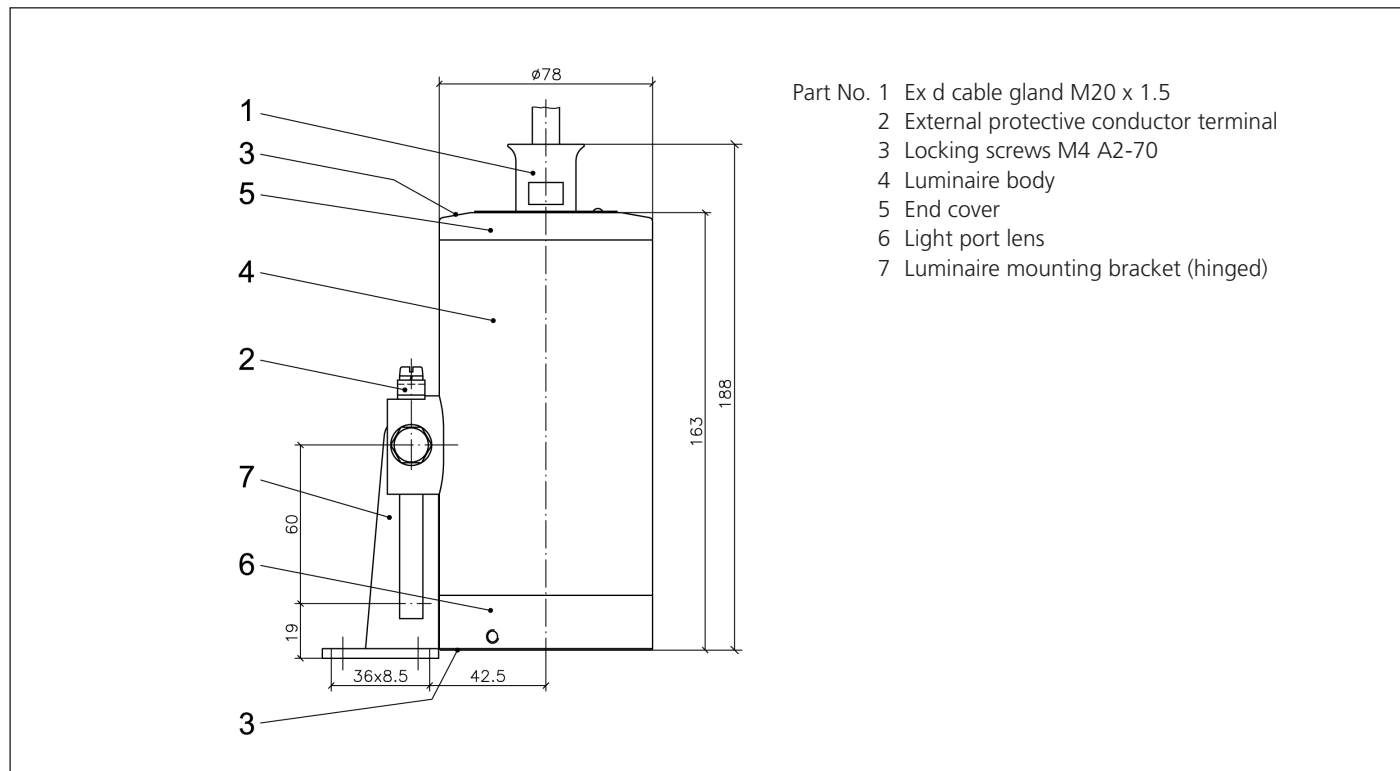
- **Fastening options:**
  Luminaires for sight glasses on circular fittings and visual flow indicators are mounted on the cover flange by means of the hinged bracket. With screw-type sight glass fittings, the luminaire is attached to the grooved nut.

  The Lumiglas luminaire ASL 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.

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

Part No. 1   Ex d cable gland M20 x 1.5
2   External protective conductor terminal
3   Locking screws M4 A2-70
4   Luminaire body
5   End cover
6   Light port lens
7   Luminaire mounting bracket (hinged)

• Components, design and materials:
- Luminaire body (4) and end cover (5):
  Aluminium alloy AlMgSi 0.5, finish: RAL 9007
- Light port lens (6): Unit consisting of ring
  (aluminium alloy AlMgSi 0.5, finish: RAL 9007) 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): 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	Illuminant	Ambient temperature range -20°C ≤ T_a ≤ +40°C	
1	(24 V) 11 W	3541.652.00	24 ≃	3 LEDs	2G T6	2D T80°C
2	(120-230 V) 11 W	3541.653.00	120-230 ≃	3 LEDs	2G T6	2D T80°C
3	(24 V) 15 W	3541.655.00	24 ≃	6 LEDs	2G T6	2D T80°C
4	(120-230 V) 15 W	3541.656.00	120-230 ≃	6 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
5	Luminaire with Ex 'd' screwed gland	On request

• Order data: e. g.
Lumiglas luminaire ASL 55-LED-Ex, (24 V) 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.

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