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.

Ideal for applications in sterile areas

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.

Lumiglas 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 169

Lumiglas Luminaire Stainless Steel
ESL 55-LED-Ex

II 2G Ex d IIC Gb
II 2D Ex tb IIC T80°C Db

Operating voltage:
24 V AC/DC LED 11 W/15 W
120-230 V AC/DC LED 11 W/15 W
Equipped with 1 A miniature fuse.

Voltage: AC/DC

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

Electrical connection options:
a) 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 length available on request: 10 m
b) By way of screwed cable gland acc. to EN 60079-14
c) 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 Lumiglas luminaire 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:
   - 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.

In sterile environments, this Lumiglas luminaire is fitted over the raised edge of the cover flange.
**Components and materials:**
- Luminaire body (4) and end cover (5): Stainless steel 1.4404, polished
- Light port lens (6): Unit consisting of ring flange (stainless steel 1.4404, polished) and borosilicate glass

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

| No. | ESL 55-LED-Ex Variant | Part No. | Voltage Volt | Illuminant | Ambient temperature range 
-20°C ≤ T_a ≤ +40°C |
<table>
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<tbody>
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<td>1</td>
<td>(24 V) 11 W</td>
<td>3541.552.00</td>
<td>24 =</td>
<td>3 LEDs</td>
<td>2G T6, 2D T80°C</td>
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<td>(120-230 V) 11 W</td>
<td>3541.553.00</td>
<td>120-230 =</td>
<td>3 LEDs</td>
<td>2G T6, 2D T80°C</td>
</tr>
<tr>
<td>3</td>
<td>(24 V) 15 W</td>
<td>3541.555.00</td>
<td>24 =</td>
<td>6 LEDs</td>
<td>2G T6, 2D T80°C</td>
</tr>
<tr>
<td>4</td>
<td>(120-230 V) 15 W</td>
<td>3541.556.00</td>
<td>120-230 =</td>
<td>6 LEDs</td>
<td>2G T6, 2D T80°C</td>
</tr>
</tbody>
</table>

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

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

**Accessory groups:**
- Components and materials:
- Connecting data:

**Accessories:**

<table>
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<th>No.</th>
<th>Component</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>1</td>
<td>Luminaire mounting bracket (hinged)</td>
<td>0354.025.00</td>
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<tr>
<td>2</td>
<td>Luminaire mounting attachment, flanged adapter collar MV65</td>
<td>1356.039.00</td>
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<td>3</td>
<td>Ex-timer switch</td>
<td>See data sheet 09.02</td>
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<td>4</td>
<td>Connecting cable</td>
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**Order data:**
Lumiglas luminaire ESL 55-LED-Ex, (24 V) 11 W, Ex d IIC T6, with 2 m connecting cable, Part No. 3541.552.00