Lumistar Luminaire ASL 55-LED-Ex, Aluminium

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

- 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.
• 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)

<table>
<thead>
<tr>
<th>No.</th>
<th>ASL 55-LED-Ex</th>
<th>Part No.</th>
<th>Voltage Volt</th>
<th>Illuminant</th>
<th>Ambient temperature range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(24 V) 11 W</td>
<td>3541.652.00</td>
<td>24 ≈</td>
<td>3 LEDs</td>
<td>-20°C ≤ T_a ≤ +40°C</td>
</tr>
<tr>
<td>2</td>
<td>(120-230 V) 11 W</td>
<td>3541.653.00</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>3541.655.00</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>3541.656.00</td>
<td>120-230 ≈</td>
<td>6 LEDs</td>
<td>2G T6 2D T80°C</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Cable gland types</th>
<th>Cable types</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSK-M-Ex-d, Part No. 9103.123.00 M20x1.5, nickel-plated brass (by Hummel)</td>
<td>EVA flexible sheathed cable, Sinotherm 110, Part No. 3403.017.00, 3x1.5 mm², Ø 8.5 mm</td>
</tr>
<tr>
<td>KU1BPM20-Ex-d-Alpha X Part No. 9103.130.00 M20x1.5, nickel-plated brass (by RST)</td>
<td>Ölflex Heat 180, Part No. 3403.045.00, 3x1.5 mm², Ø 8.9 mm</td>
</tr>
<tr>
<td></td>
<td>Ölflex Heat 180, Silflex UR-AWG18, Part No. 3403.044.00, 5x1.0 mm², Ø 10.3 mm</td>
</tr>
<tr>
<td></td>
<td>Ölflex Classic 110 black, Part No. 3403.051.00, 3x1.5 mm², Ø 10.1 mm</td>
</tr>
</tbody>
</table>

• Accessories:

<table>
<thead>
<tr>
<th>No.</th>
<th>Component</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Luminaire mounting bracket (hinged)</td>
<td>0354.025.00</td>
</tr>
<tr>
<td>2</td>
<td>Luminaire mounting attachment, flanged adapter collar MV65</td>
<td>1356.039.00</td>
</tr>
<tr>
<td>3</td>
<td>Ex-timer switch</td>
<td>On request</td>
</tr>
<tr>
<td>4</td>
<td>Connecting cable</td>
<td>On request</td>
</tr>
<tr>
<td>5</td>
<td>Luminaire with Ex ‘d’ cable gland</td>
<td>On request</td>
</tr>
</tbody>
</table>

• Order data:
e.g. Lumistar 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. 10.15