Lumistar Luminaire 'Lumiflex' ESL55LED-ALF-Ex

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

- For mounting on sight glass fittings; ideal for spotlighting processes on machines and reactors where space is restricted; suitable for use in potentially explosive operating areas.

- This Lumistar luminaire has been specifically developed for light guide technology:
  - extreme light efficiency thanks to high-power LEDs
  - low energy consumption
  - convenient to service due to long-life high-power LEDs
  - flexible light guide with stainless steel sheath
  - easy to clean

- Application:
  For illuminating special processes and/or the interior of reactors, containers and apparatuses in potentially explosive environments, zones 1 and 2 as well as zones 21 and 22.

- Protection class: IP 65 and IP 67 acc. to DIN EN 60529

- Operating conditions:
  Independent of vacuum/pressure in the vessel. Under no circumstances 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 +50°C.

- Technical data – Ex protection:
  This luminaire fulfils the fundamental health and safety regulations by complying with the provisions for:
  a) Gas
    EN 60079-0: 2012 + A11: 2013 General requirements
    EN 60079-1: 2007 Flameproof encapsulation ‘d’
    Explosion group: IIC (includes II A and II B)
    Temperature class: T6 at ambient temperature 50°C
  b) Dust
    EN 60079-0: 2012 + A11: 2013 General requirements
    EN 60079-31: 2009 Protection by enclosure ‘t’
    Explosion group: IIC (includes II A and II B)
    Temperature class: T80°C at ambient temperature 50°C

- EC type examination certificate: BVS 14 ATEX E 172 X
  (X = The connecting cable must be protected against electrostatic discharge for applications in areas where there is a risk of dust explosions)

- Operating voltage:
  24 V AC/DC LED 7 W
  120-230 V AC/DC LED 7 W
  Protected by internal micro-fuse.

- Voltage type: AC/DC

- Simple electrical connection by integrated cable tail or by Ex d cable entry gland
**Dimensions and electrical data for Lumistar luminaire ‘Lumiflex’ ESL55LED-ALF-Ex**

<table>
<thead>
<tr>
<th>ESL55LED-ALF-Ex</th>
<th>Part No.</th>
<th>Mains voltage</th>
<th>Temperature class at ambient temperature -20°C to +50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 V 7 W</td>
<td>3541.367.00</td>
<td>24 V AC/DC</td>
<td>T6 / T80°C</td>
</tr>
<tr>
<td>120 V-230 V 7 W</td>
<td>3541.368.00</td>
<td>120 V-230 V AC/DC</td>
<td>T6 / T80°C</td>
</tr>
</tbody>
</table>

**Description and materials:**
- **Light generator:** non-corrosive stainless steel 1.4404
- **Light aperture:** unit consisting of stainless steel ring, glass and O-ring
- **Fastening elements for light generator:** bracket (included in scope of supply), stainless steel 1.4301, part no. 0354.031.00
- **Light guide** (please specify length!) stainless steel attachment for light guide head (part no. 1947.005.00)
- **Weight:** 3.9 kg (excl. light guide)

**Connecting data for Lumistar luminaire ‘Lumiflex’ ESL55LED-ALF-Ex:**

<table>
<thead>
<tr>
<th>Cable gland types</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HSK-M-Ex-d, part no. 9103.124.00</td>
<td>EVA sheathed cable, Sinotherm 110, part no. 3403.017.00, 3x1.5 qmm, ø 8.5 mm</td>
</tr>
<tr>
<td>M20x1.5, 1.4404 (from Hummel)</td>
<td>Ölflex Heat 180, part no. 3403.045.00, 3x1.5 qmm, ø 8.9 mm</td>
</tr>
<tr>
<td>KU1BPM20-Ex-d-Alpha X, part no. 9103.131.00</td>
<td>Ölflex Heat 180, Silflex UR-AWG18, part no. 3403.044.00, 5x1.0 qmm, ø 10.3 mm</td>
</tr>
<tr>
<td>M20x1.5, Edelstahl (from RST)</td>
<td>Ölflex Classic 110 Black, part no. 3403.051.00, 3x1.5 qmm, ø 10.1 mm</td>
</tr>
</tbody>
</table>

**Straightforward mechanical installation using special fixture for practical application:**
- **Caution:** avoid looking into the light source – risk of damage to the eyes!
- The light generator is mounted at a suitable place on the reactor, apparatus, etc., using the fastening element provided. The light guide must be mounted free of tension or twisting with a bending radius of at least 170 mm, together with the holder bracket of the light guide head.
- The light guide head is screwed to the place to be illuminated using the relevant stainless steel fastening unit.

**Order data:**
- e.g. Lumistar luminaire ‘Lumiflex’ ESL 55-LED-ALF-Ex, 230 V/7W, part no. 3541.368.00
  - light guide, length 1.5 m, part no. 3383.023.00
  - bracket for light guide head, part no. 1947.005.00

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