Lumistar Luminaire ESL 27-Ex, Stainless Steel

II 2G Ex d IIC T3/T4/T6 Gb
II 2D Ex tb IIIC T80/T130/T195°C Db

• 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 use in combined sight and light glass units, either as a single flange version or with two separate flanged ports.

• 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.

• Optimum screw-in lens design ensures maximum light efficiency and convenient access when replacing lamps.

• Application: For illuminating visual flow indicators, pipelines, laboratory mixers, and bioreactors as well as the interior of tanks, hoppers, silos, agitators and other – normally closed – vessels in potentially explosive environments – Gas: Zones 1 and 2; Dust: Zones 21 and 22.

• Ideal for applications in sterile areas.

• Protection: IP 65 and IP 67 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 on its own to close a vessel port or to replace the cover flange or the sight glass / luminaire flange assembly.

• Lumistar luminaires of this series are approved for use in ambient temperatures of up to 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: 2009 General requirements
EN 60079-1: 2007 Flame-proof Enclosure ‘d’
Explosion group: IIC (including IIA and IIB)
Temperature class: up to T6 (depending on wattage)
b) Dust
EN 60079-0: 2009 General Requirements
EN 60079-31: 2009 Protection by Enclosures ‘t’
Explosion group: IIIC (including IIIA and IIIB)
Temperature class: up to T80°C (depending on wattage)

• EC type-examination certificate: BVS 08 ATEX E 139
II 2G Ex d IIC T3/T4/T6 Gb
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• Voltage type: AC/DC, depending on lamp

• Operating voltage:
Without integrated transformer:
12 V... Halogen lamp 50 W
24 V... Halogen lamp 20 W or 50 W
With integrated transformer:
120 V... Halogen lamp 12 V/50 W
230 V... Halogen lamp 12 V/20 W, 35 W or 50 W
240 V... Halogen lamp 12 V/35 W or 50 W

• Straightforward electrical installation via integrated connecting cable.

• Electrical connection:
Works-fitted connecting cable with side or top entry (please specify in order). Cable is pressure-tight resin-cast into trumpet entry gland. Cable length: 2 m (alternative length: 10 m).

Cable intended for use in temperature categories T3/T4 (35 W, 50 W) should be resistant to at least 110°C, e.g. Sinotherm 110 H05GG-F 3G 1.5 mm².

• Simple mounting thanks to special bracket ensuring convenience of use!

• 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 ESL 27-Ex fits the following nominal sizes:

a) Circular sight glass fittings to DIN 28120: DN 50
b) Circular sight glass fittings to DIN 28121: DN 50
c) Sight flow indicators: DN 50
d) Screw-type sight glass fittings similar to DIN 11851: DN 100

• When used in sterile environments, this Lumistar luminaire is fitted over the adapter collar of the cover flange.

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• Dimensions and electrical data for Lumistar luminaire ESL 27-Ex:

<table>
<thead>
<tr>
<th>No.</th>
<th>ESL 27-Ex Variant</th>
<th>Part No.</th>
<th>Voltage</th>
<th>Built-in transformer</th>
<th>Halogen lamp</th>
<th>Ambient temperature range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(230 V/12 V) 20 W</td>
<td>3541.201.00</td>
<td>230 ~</td>
<td>with</td>
<td>GY6.35</td>
<td>12 V/20 W</td>
</tr>
<tr>
<td>2</td>
<td>(24 V) 20 W</td>
<td>3541.203.00</td>
<td>24 ~</td>
<td>without</td>
<td>G4</td>
<td>24 V/20 W</td>
</tr>
<tr>
<td>3</td>
<td>(230 V/12 V) 35 W</td>
<td>3541.206.00</td>
<td>230 ~</td>
<td>with</td>
<td>GY6.35</td>
<td>12 V/35 W</td>
</tr>
<tr>
<td>4</td>
<td>(240 V/12 V) 35 W</td>
<td>3541.211.00</td>
<td>240 ~</td>
<td>with</td>
<td>GY6.35</td>
<td>12 V/35 W</td>
</tr>
<tr>
<td>5</td>
<td>(12 V) 50 W</td>
<td>3541.216.00</td>
<td>12 ~</td>
<td>without</td>
<td>GY6.35</td>
<td>12 V/50 W</td>
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<tr>
<td>6</td>
<td>(24 V) 50 W</td>
<td>3541.221.00</td>
<td>24 ~</td>
<td>without</td>
<td>GY6.35</td>
<td>24 V/50 W</td>
</tr>
<tr>
<td>7</td>
<td>(120 V/12 V) 50 W</td>
<td>3541.226.00</td>
<td>120 ~</td>
<td>with</td>
<td>GY6.35</td>
<td>12 V/50 W</td>
</tr>
<tr>
<td>8</td>
<td>(230 V/12 V) 50 W</td>
<td>3541.233.00</td>
<td>230 ~</td>
<td>with</td>
<td>GY6.35</td>
<td>12 V/50 W</td>
</tr>
<tr>
<td>9</td>
<td>(240 V/12 V) 50 W</td>
<td>3541.236.00</td>
<td>240 ~</td>
<td>with</td>
<td>GY6.35</td>
<td>12 V/50 W</td>
</tr>
</tbody>
</table>

- Components, design and materials:
  - Body of luminaire: Stainless steel 1.4404, polished
  - Fastening components: Stainless steel 1.4301 (see accessories)
  - Cable entry gland: M20 x 1.5

- Weight (with 2 m connecting cable):
  - Without built-in transformer: 7.2 kg
  - With built-in transformer: 8.2 kg

- Accessories:

<table>
<thead>
<tr>
<th>No.</th>
<th>Component</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mounting attachment for luminaire (hinged bracket)</td>
<td>0354.021.00</td>
</tr>
<tr>
<td>2</td>
<td>Installation tool – face spanner</td>
<td>6816.002.00</td>
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<tr>
<td>3</td>
<td>Timer module, ex-approved</td>
<td>On request</td>
</tr>
<tr>
<td>4</td>
<td>Connecting cable</td>
<td>On request</td>
</tr>
</tbody>
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- Order data:
e. g. Lumistar luminaire ESL 27-Ex (230 V/12 V) 50 W, Ex d IIC T4, with 2 m connecting cable, side cable entry, part no. 3541.233.00

- Please also see appropriate Installation and Operating Instructions.