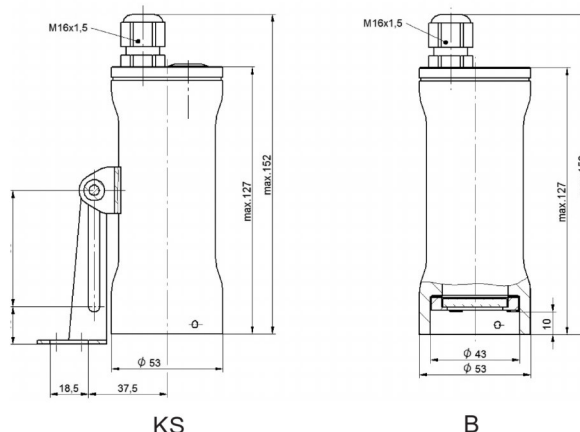


Lumistar luminaire ESL 53-LED

For general use with hinged bracket or special sterile version with Metaglas sight glasses



Application

- For illuminating the interior of vessels, tanks, agitators, silos and other closed containers and reactors and also in visual flow indicators in non-explosive environments
- ESL 53-LED-KS: with hinged bracket for general use
- ESL 53-LED-B: for mounting on a sight glass fitting acc. DIN11851 or Metaglas Type 80.USL33, 84.USL33 - needs to be ordered separately
- optionally available with pushbutton or switch

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.

Operating temperature

- Maximum admissible ambient temperature: 40°C

Operating voltage

- 24 V AC/DC - 7W
- Colour temperature: 6500 K
- Luminous flux: 500 lm
- Reflected beam angle: 18°C or 25°C

Materials

- Luminaire body: stainless steel 1.4404
- Hinged bracket and flange adapter for fastening the luminaire to screw-type sight glass fitting DN 50/65 stainless steel 1.4301
- Connecting cable: 3 m (3 x 0.75 mm²) factory-fitted (other lengths on request)

Advantage

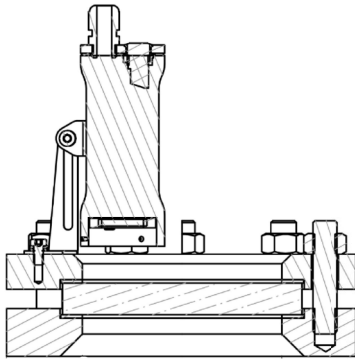
- Glare-free illumination; fits circular sight glass fittings similar to DIN 28120/DIN 28121, screw-type sight glass fittings similar to DIN 11851, as well as METAGLAS® and BioControl fittings.
- The luminaire is fixed to the cover flange by a hinged bracket in the case of circular sight glass fittings and visual flow indicators. With screw-type sight glass fittings, the luminaire can be fastened with a flange adapter or on a Metaglas unit.
- This luminaire is designed for continuous operations. As an alternative, however, it can also be supplied with a switch or pushbutton (see chart).
- Circular sight glass fitting similar to DIN 28120: from DN 25
- Circular sight glass fitting similar to DIN 28121: from DN 40
- Visual flow indicator: from DN 25
- Screw-type sight glass fitting similar to DIN 11851: from DN 50

Protection class:

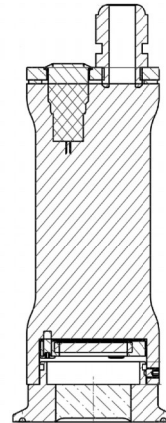
- dust-tight and water jet-proof, IP 65 according to EN 60 529 / DIN VDE 0470 part 1

Type	Hinged bracket	Flange attachment (Metaglas)
ESL 53-LED-B	without	with
ESL 53-LED-KS	with	without

Lumistar luminaire ESL 53-LED - Installation and operating instruction



Luminaire ESL53 mounted with hinged bracket



Luminaire mounted on Metaglas

Important, please note:

- Sight glass luminaires are purpose-designed and are intended
- solely for mounting on sight glass fittings. Under no circumstances should a luminaire be utilised as a substitute for the cover flange or the complete sight glass flange fitting or used on its own to cover a vessel port.
- These luminaires must always be installed, connected and serviced by persons who have been specially trained and authorised to do this work.

Electrical data - general

- 24 V AC/DC - 7W
- The connecting cable (3 m) comes ready connected to the luminaire via the cable entry gland.
- The unit is internally wired and ready for use
- Connecting cable: 3 m (3 x 0.75 mm²) factory-fitted (other lengths on request)

Protection class:

- dust-tight and water jet-proof, IP 65 according to EN 60 529 / DIN VDE 0470 part 1
-

Protection class:

- dust-tight and water jet-proof, IP 65 according to EN 60 529 / DIN VDE 0470 part 1

Mechanical installation:

- **Mounting with hinged bracket:**
The hinged bracket is used to mount the luminaire on the cover flange of a circular sight glass fitting (or flow sight glass) or to the slotted cover nut of a screwed sight glass to DIN 11851. The hinged bracket is fixed in place in a blind hole tapped on the bolt pitch circle of the cover flange face, using the M6 screw provided. Alternatively, the bracket can be welded on.
- **Mounting with flange adapter or Metaglas sight glasses Type 80.USL33**
The luminaire is mounted over a special circular collar or connecting piece on the cover flange and secured in place. An O-ring is inserted as a seal for the sight glass. A tried-and-tested alternative is to mount the luminaire using an adapted clamped joint to DIN 32676/ISO 2852. The tapered mating flange to the nozzle clamp flange forms a special ring construction with a concentric sight glass fused into the metal and an upstand with a groove for the O-ring on the outer surface. The extended, reinforced lip of the Lumistar luminaire ESL 53-LED-B forms a sleeve which fits over the collar, with the O-ring providing the seal to the clamp flange. Tightening the clamp then provides the necessary closing pressure and seals the fused metal-glass disk towards the connecting piece.

Installation notes:

- Instructions relating to risk of fire or injury' and 'Important safety precautions' or relevant instructions together with the advice to 'Keep these instructions in a safe place or similar take priority
- For power supply and series: see chart

Caution:

- Avoid looking into the light source – risk of damage to the eyes!
- Check the temperature of the lamp body before opening the luminaire