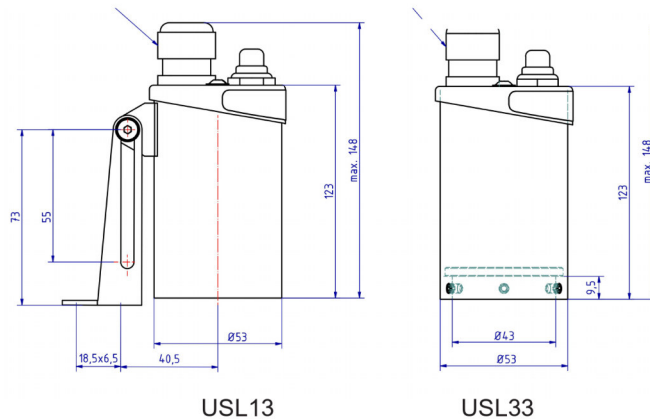


Luminaire USL33 / USL13 with hinged bracket



Application

- It is ideal for illuminating bioreactors, laboratory mixers and filters as well as the interiors of tanks, agitators, separators, pipelines and other, usually closed, vessels in non-explosive operating environments.
- USL13: for universal application with hinged bracket, similar to DIN 28120/DIN 28121, for screw-type sight glass fittings
- USL33: special variant for sterile environments with adapter collar for fitting over flanges etc. For example: similar to DIN 11851 and for METAGLAS® and BioControl fittings

Protection class:

- Dust- and waterjet proof, IP 65 according to EN 60 529 / DIN VDE 0470, Part 1

Technical data

Lumistar luminaires USL 13-LED fit the following sizes:

- Circular sight glass fitting similar to DIN 28120: from DN 25
- Circular sight glass fitting similar to DIN 28121: from DN 40
- Visual flow indicators: from DN 25
- Screw-type sight glass fittings similar to DIN 11851: from DN 50

Operating conditions:

- Independent of the internal pressure/vacuum in the vessel. Under no circumstances should a sight glass luminaire be used on its own to close a vessel port or as a replacement for the mating flange or the complete sight glass flange assembly
- Maximum admissible ambient temperature at the cable entry gland: 40°C
- Operating voltage:
 - 12 V/24 V AC/DC
- Colour temperature: 4000 K
- Luminous flux: 180 lm
- Reflected beam angle: 36°

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Betriebstemperatur

- Maximum admissible ambient temperature at the cable entry gland: 40°C

Type	Nominal Voltage	Push button	Switch	Socket
USL13/33				
(24 V) 3,5 W	24 ≈	with	-	GU4
(24 V) 3,5 W	24 ≈	without	-	GU4
(24 V) 3,5 W	24 ≈		with	GU4
(12 V) 3,5 W	12 ≈	with	-	GU4
(12 V) 2,5 W	12 ≈	without	-	GU4

Installation and Operating Instructions for Luminaire USL33 / USL13 with hinged bracket

Important, please note

- Sight glass luminaires are purpose-designed and intended solely for mounting on the top or side of sight glass units. Under no circumstances should a luminaire be used to replace a cover flange or complete sight glass fitting nor as a closure for an opening in a process vessel. Luminaires must be mounted, installed and serviced by staff who have the relevant qualifications and have been trained and authorised to do such work.

Caution:

- Do not look into light – danger of impaired eyesight!

Electrical data, general:

- The voltage, output and protection type are shown on the name plate.
- Excess voltage will cause premature lamp failure.

General operating conditions:

- Independent of internal vessel pressure/vacuum
- Max. admissible ambient temperature at cable entry gland: 40°C
- The lights are designed for continuous operation. But they can also be delivered with a pushbutton.

Electrical connection:

- The connecting cable (3 m) comes ready connected to the luminaire via the cable entry gland.
- The unit is internally wired and ready for operation

Changing the illuminant:

- 1 Switch off power to the luminaire.
- 2 Loosen both screws in the back plate of the luminaire.
- 3 Lift off the back plate complete with the attached lamp socket and the illuminant to be replaced.
- 4 Pull off the defective illuminant.
- 5 Holding the new illuminant carefully insert it into the
- 6 2-pin socket and push it firmly into place.
- 7 Refit the back plate complete with the new illuminant into socket, paying attention to the correct positioning of the cables. Tighten the screws to fix in place.

Mounting with hinged bracket:

The hinged bracket can be used to fasten the luminaire to the cover flange of a circular sight glass fitting (or flowindicator) or to the slotted cover nut of a screwed sight glass similar to DIN 11851. The 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:

The adapter is mounted between the glass disc and the slotted cover nut (DIN 11851). To do this, place an appropriate gasket between the glass disc and the adapter. Plug in the luminaire and tighten the grub screws located around the edge. The adapter is to be ordered separately.

The Lumistar luminaire USL 33-LED fits on the sight glass unit using the appropriate mounting attachment, as follows:

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 similar 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

Caution:

- Only use lamps of the same type and with the same wattage!

Maintenance:

- Keep the luminaire clean and free of dust.
- Please use original replacement parts only.
- Note the nameplate for power supply and wattage.