

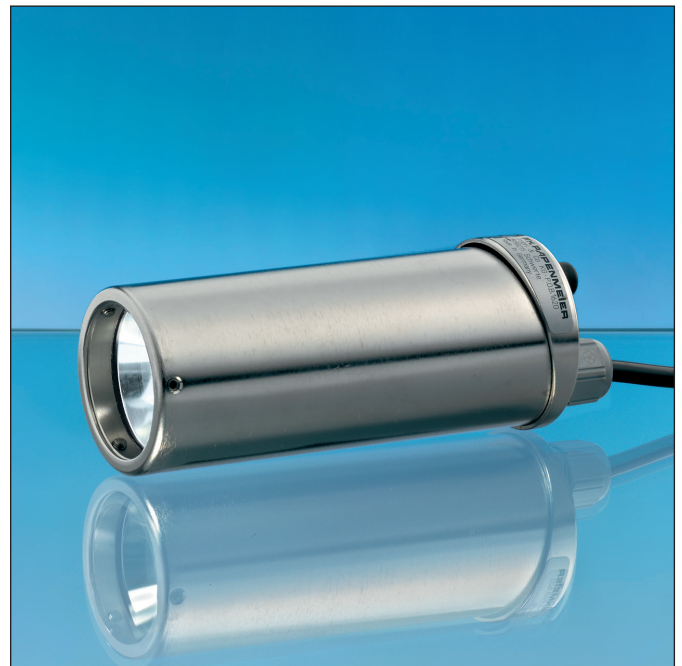
Lumistar luminaires USL 13-LED and USL 33-LED

USL13-LED: for universal application with hinged bracket
USL 33-LED: special variant for sterile environments with adapter collar for fitting over flanges etc.

- **For mounting on sight glass fittings:**
 This sight glass luminaire is designed for universal applications. It is ideal for use in combined sight and light ports (single-flange version) or for two separate ports (2-flange version).
- **Compact design, powerful light output:**
 Glare-free illumination; suitable for circular sight glass fittings similar to DIN 28120/DIN 28121, for screw-type sight glass fittings similar to DIN 11851 and for METAGLAS® and BioControl fittings.
- **Application in chemical, pharmaceutical, biogas and food processing industries:**
 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.
- **Protection class:**
 Dust- and waterjet proof,
 IP 65 according to EN 60 529 / DIN VDE 0470, Part 1
- **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
- **Very easy to install using special mountings, ensuring convenience of use:**
 USL 13-LED: The luminaire is attached to the mating flange of the circular sight glass fitting or the visual flow indicator with a hinged bracket, or fastened to the grooved nut on screw-type sight glass fittings.
 USL 33-LED: The luminaire is mounted over an adapter collar.
- **Caution:**
 Do not look into light – Danger of impaired eyesight!
- **Lumistar luminaires USL 13-LED fit the following sizes:**
 - a) Circular sight glass fitting similar to DIN 28120: from DN 25
 - b) Circular sight glass fitting similar to DIN 28121: from DN 40
 - c) Visual flow indicators: from DN 25
 - d) Screw-type sight glass fittings similar to DIN 11851: from DN 50
- **Operating voltage:**
 12 V/24 V AC/DC
 Colour temperature: 4000 K
 Luminous flux: 180 lm
- **Reflected beam angle:** 36°
- **Transformers:**
 Transformers or power supplies for 230 V/24 V AC are available on request.



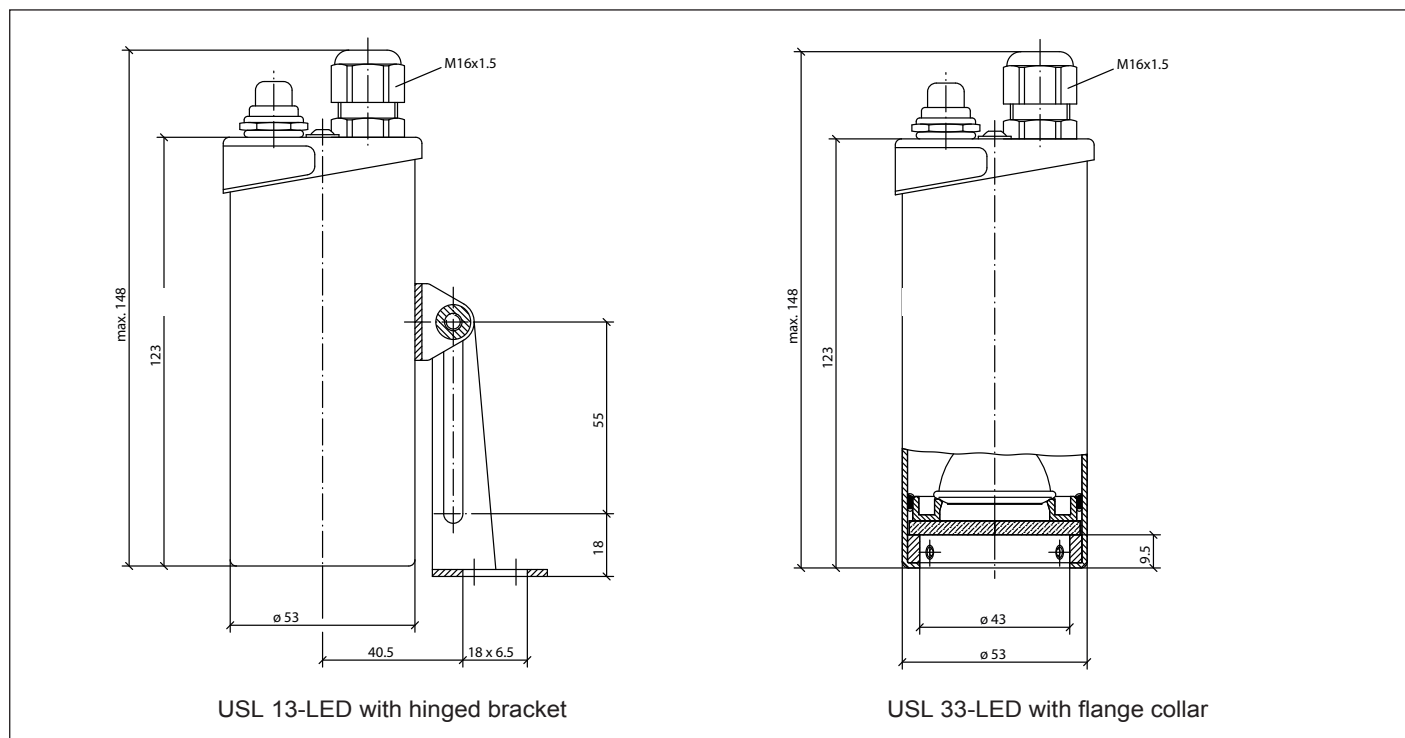
Lumistar luminaire USL 13-LED with hinged bracket



Lumistar luminaire USL 33-LED

- **Mounting parts for USL 13-LED:**
 The luminaire mounting (hinged bracket) is included in the scope of supply. The flange collar for mounting on screw-type sight glass fittings DN 50/65 and greater should be ordered separately.

• Dimensions and electrical data for Lumistar luminaires USL 13-LED and USL 33-LED:



• Components and materials:

- Luminaire body and cover: stainless steel 1.4404
- Hinged bracket and flange collar for attachment to screw-type sight glass fitting DN 50/65: stainless steel 1.4301
- Connecting cable: 3 m (3 x 0.75 mm²) works fitted, other lengths on request
- Weight: 0.58 kg

• Connection data (further versions on request):

Item	Type USL 13/33-LED	Nominal Voltage V	Pushbutton	LED	Socket	Part. no. USL 13-LED	Part. no. USL 33-LED
1	(24 V) 3.5 W	24 ≈	with	12 V 2,5 W	GU4	3541.414.00	3541.416.00
2	(24 V) 3.5 W	24 ≈	without	12 V 2,5 W	GU4	3541.415.00	3541.417.00
3	(24 V) 3.5 W	24 ≈	with switch	12 V 2,5 W	GU4	3541.410.00	3541.412.00
4	(12 V) 2,5 W	12 ≈	without	12 V 2,5 W	GU4	3541.422.00	./.
5	(12 V) 2,5 W	12 ≈	with	12 V 2,5 W	GU4	./.	3541.424.00

• Accessories (only for USL 13-LED):

Item	Luminaire mounting	Part. no.
1	Flange collar DN 50, stainless steel (no hinged mounting bracket required), Ø 62 mm	1356.027.00
2	Flange collar DN 65, stainless steel (no hinged mounting bracket required), Ø 65 mm	1356.030.00

• Order data: e.g. Lumistar luminaire USL 13-LED, 24 V/3,5 W, with pushbutton, with LED 12 V/2,5 W, part. no. 3541.414.00