

Lumistar luminaires USL 16 and USL 36, stainless steel

USL 16: for general applications, mounted with hinged bracket

USL 36: special variant for sterile environments with adapter collar for fitting over flanges, etc.

- **The perfect combination of flush contours and smooth surface:**
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 to DIN 28120/DIN 28121 or similar, for screw-type sight glass fittings in compliance with 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 cover flange or instead of the complete sight glass flange assembly.
 - **Max. admissible ambient temperature at the cable entry gland with halogen version: 90°C; with LED version: 40°C.**
 - **Very easy to install using special mountings, ensuring convenience of use:**
USL 16: The luminaire is attached to the cover 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 36: The luminaire is mounted over an adapter collar.
- Lumistar luminaire types USL 16 and USL 36 fit the following sizes:**
- a) Circular sight glass fitting acc. to DIN 28120: from DN 40
 - b) Circular sight glass fitting acc. to DIN 28121: from DN 40
 - c) Visual flow indicators: from DN 40
 - d) Screw-type sight glass fittings in compliance with DIN 11851: from DN 50
- **Voltage type:** AC/DC
Operating voltage: 24 V, 120 V, 230 V
Wattage: up to 100 W, depending on operating voltage
 - **Transformers:**
Transformers for 24 V secondary voltage can be supplied on request.

- **Push-button:**

Luminaires with a wattage of 50 W should only be operated by push-button (not in continuous mode). Should an integrated push-button not be included in the order/scope of supply, it is essential for an external momentary-contact push-button or



Lumistar luminaire USL 16 with hinged bracket mounting



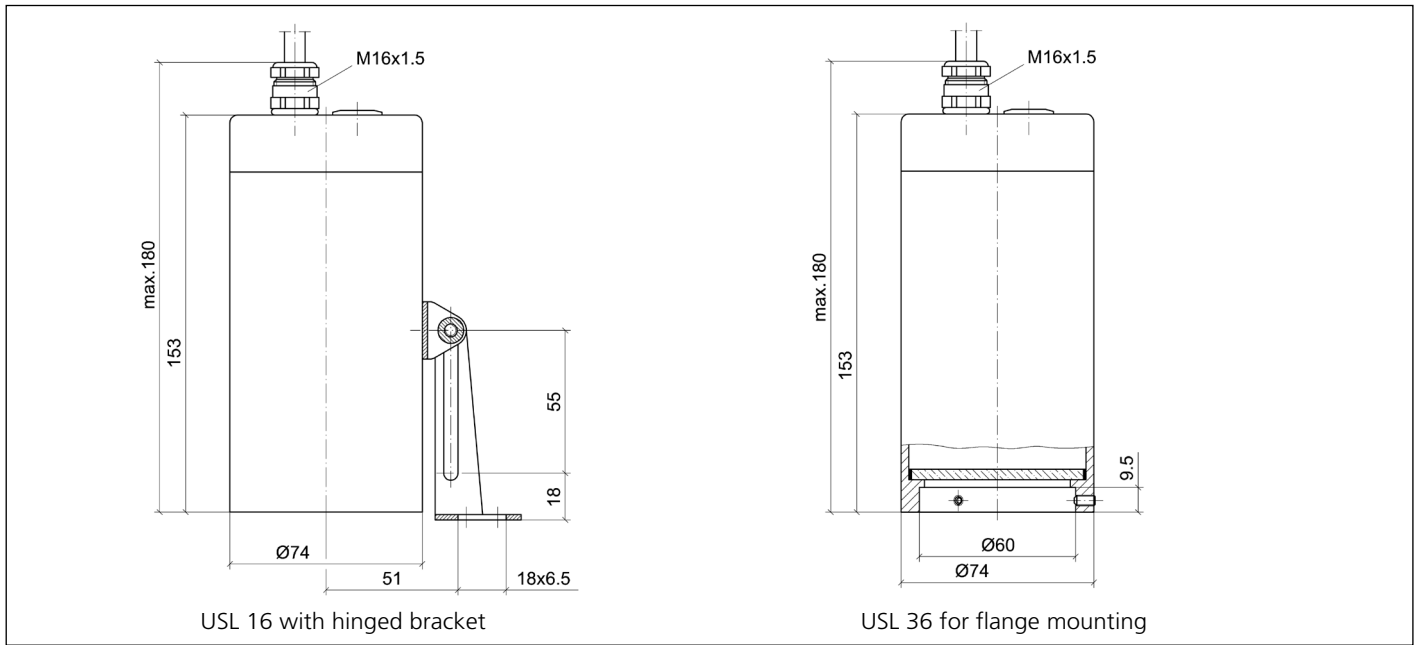
Lumistar luminaire USL 16, push-button operation

a timer to be installed in the power supply line, outside the luminaire! Under no circumstances should the maximum temperatures specified for the luminaire be exceeded.

- **Mounting parts for USL 16:**

The luminaire mounting (hinged bracket) is included in the scope of supply. The flange collar for mounting on screw-type sight glass fittings of DN 40 and greater should be ordered separately.

• **Dimensions and electrical data for Lumistar luminaires USL 16 and USL 36**



• **Components and materials:**

- Body and cover: Stainless steel 1.4404
- Mounting parts (hinged bracket and flange adapter for attachment to screw-type sight glass fitting DN 50/65): Stainless steel 1.4301

- Power cable: 3 m (3 x 0.75 mm²) works fitted
- Weight:
without integrated transformer: 1.42 kg
with integrated transformer: 1.80 kg

• **Connecting data:**

Item	Type USL 16/36	Nominal voltage V	Push-button	Transformer	Socket	USL 16 Part no.	USL 36 Part no.
1	(24 V) 20 W	24 ≈	with	without	G4	3541.703.00	3541.753.00
2	(24 V) 20 W	24 ≈	without	without	G4	3541.704.00	3541.754.00
3	(230 V/12 V) 20 W	230 ~	with	with	G4	3541.709.00	3541.759.00
4	(24 V) 50 W	24 ≈	with	without	GY6.35	3541.713.00	3541.763.00
5	(120 V) 50 W	120 ≈	with	without	GY6.35	3541.715.00	3541.765.00
6	(230 V) 50 W	230 ≈	with	without	GZ10	3541.719.00	3541.769.00
7	(24 V) 100 W	24 ≈	with	without	GY6.35	3541.723.00	3541.773.00
8	(120 V) 100 W	120 ≈	with	without	GY6.35	3541.725.00	3541.775.00
LED Version							
10	(230 V) 5 W	230 ~	with	without	GZ10	3541.743.00	3541.793.00

Further versions on request.

• **Lumistar luminaires USL 16/USL 36 can be installed:**

- on a BioControl sight glass fitting, DN 40
- on a metal fused sight glass for clamped fittings (Metaclamp), for clamp connections to DIN 32676/ISO 2852 with a metal fused sight glass disk for aseptic screw-type sight glass fittings, DIN 11864
- with a metal fused sight glass for NA-Connect® fastenings
- with a metal fused sight glass for VARIVENT® in-line housings

- **Order details:** e. g. Lumistar luminaire USL 16, 24 V/20 W, with push-button, without transformer, part no. 3541.703.00