

Lumistar luminaires stainless steel USL 13 and USL 33 and (UL)-listed types

USL 13: for general applications, mounted with hinged bracket
USL 33: 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 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 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 13: 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 33: The luminaire is mounted over an adapter collar.

Caution: Do not look into light – Danger of impaired eyesight!

Lumistar luminaire USL 13 and USL 33 fit the following sizes:

- Circular sight glass fitting acc. to DIN 28120: from DN 25
- Circular sight glass fitting acc. to DIN 28121: from DN 40
- Visual flow indicators: from DN 25
- Screw-type sight glass fittings in compliance with DIN 11851: from DN 50

- **Voltage type:** AC/DC
Operating voltage: 12 V, 24 V, 120 V, 230 V
Wattage: up to 50 W, depending on operating voltage

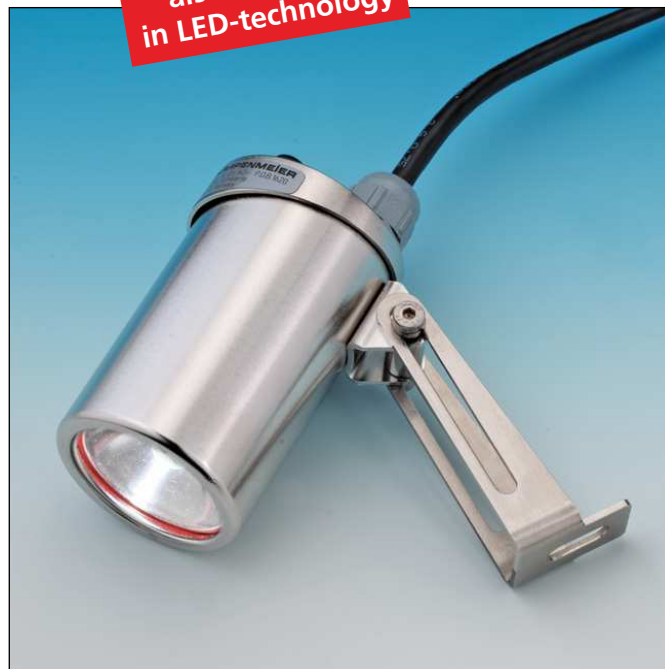
- **Transformers:**
 Transformers for 12 V or 24 V secondary voltage can be supplied on request.

- **Push-button:**
50-watt luminaires should only be operated by push-button (not in continuous mode). Should an integrated push-button not

CE

also available
in LED-technology

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Lumistar luminaire USL 13 with hinged bracket mounting

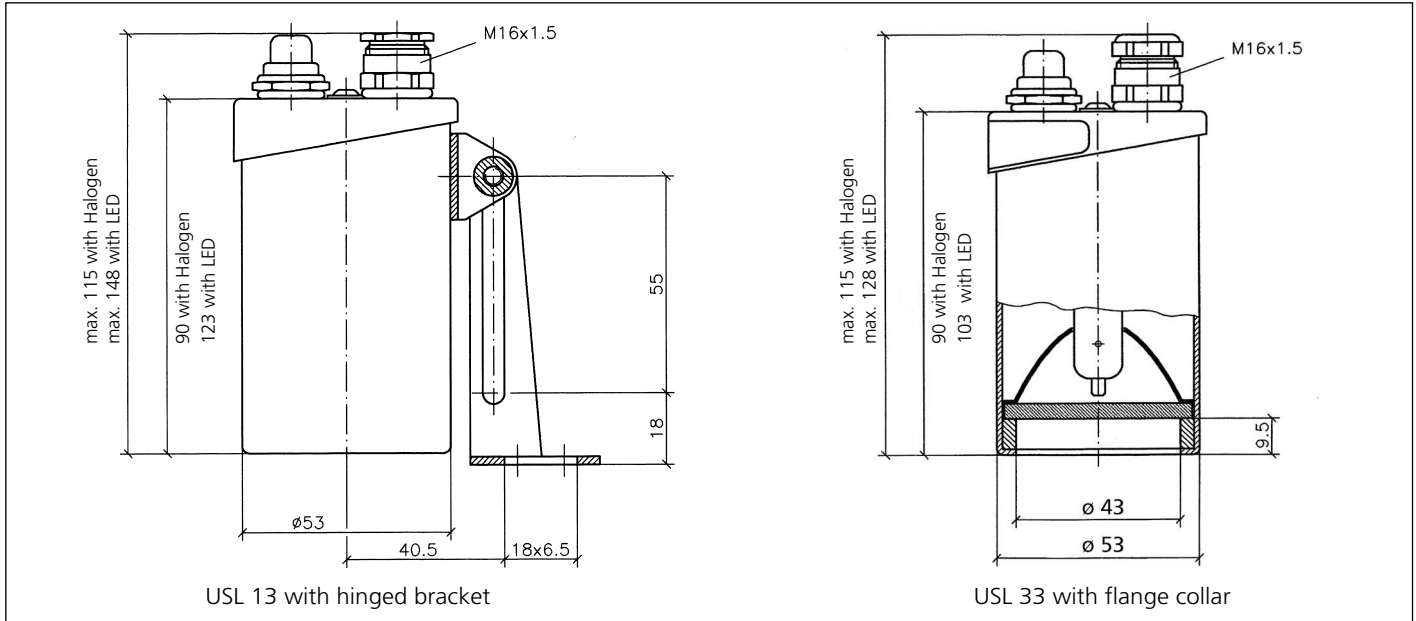


Lumistar luminaire USL 33

be included in the order/scope of supply, it is essential for an external momentary-contact push-button or 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 13:**
 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 50/65 and greater should be ordered separately.

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



• 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
- Weight: 0.58 kg

• Connection data:

| Item | Type USL 13/33 | Nominal Voltage V | Push-button | Transformer | Socket | USL 13 Part. No. | USL 33 Part. No. | USL 13-UL Part. No. | USL 33-UL Part. No. |
|---------------------|----------------|-------------------|-------------|-------------|--------|------------------|------------------|---------------------|---------------------|
| 1 | (12 V) 20 W | 12 ≈ | with | without | GY6.35 | 3540.206.00 | 3540.341.00 | - | - |
| 2 | (12 V) 20 W | 12 ≈ | without | without | GY6.35 | 3540.207.00 | 3540.342.00 | - | - |
| 3 | (24 V) 20 W | 24 ≈ | with | without | G4 | 3540.208.00 | 3540.223.00 | 3540.441.00 | 3540.443.00 |
| 4 | (24 V) 20 W | 24 ≈ | without | without | G4 | 3540.209.00 | 3540.224.00 | 3540.442.00 | 3540.444.00 |
| 5 | (120 V) 20 W | 120 ≈ | with | without | GY6.35 | 3540.210.00 | 3540.212.00 | - | - |
| 6 | (120 V) 20 W | 120 ≈ | without | without | GY6.35 | 3540.211.00 | 3540.21300 | - | - |
| 7 | (120 V) 20 W | 120 ≈ | with | without | BA15d | - | - | 3540.593.00 | 3540.595.00 |
| 8 | (120 V) 20 W | 120 ≈ | without | without | BA15d | - | - | 3540.594.00 | 3540.596.00 |
| 9 | (230 V) 20 W | 230 ≈ | with | without | G9 | 3540.277.00 | - | - | - |
| 10 | (12 V) 50 W | 12 ≈ | with | without | GY6.35 | 3540.215.00 | 3540.216.00 | - | - |
| 11 | (24 V) 50 W | 24 ≈ | with | without | GY6.35 | 3540.217.00 | 3540.218.00 | 3540.975.00 | 3540.977.00 |
| 12 | (120 V) 50 W | 120 ≈ | with | without | BA15d | - | - | 3540.685.00 | 3540.687.00 |
| 13 | (120 V) 50 W | 120 ≈ | with | without | GY6.35 | 3540.219.00 | 3540.221.00 | - | - |
| 14 | (120 V) 50 W | 120 ≈ | without | without | GY6.35 | 3540.220.00 | 3540.222.00 | - | - |
| LED Versions | | | | | | | | | |
| 15 | (24 V) 2 W | 24 ≈ | with | Wandler | GU4 | 3541.414.00 | - | - | - |
| 16 | (24 V) 2 W | 24 ≈ | without | Wandler | GU4 | 3541.415.00 | 3541.417.00 | - | - |

Further versions on request.

• Accessories (for USL 13 only):

| Item | Luminaire mounting | Part No. |
|------|--|-------------|
| 1 | Flange collar DN 50, stainless steel (no hinged mounting bracket required) | 1356.000004 |
| 2 | Flange collar DN 65, stainless steel (no hinged mounting bracket required) | 1356.030.00 |

• Order data: e. g. Lumistar luminaire USL 13, 24 V/20 W, with push-button, part no. 3540.208.00