# Lumiglas

## Mini Lumistar luminaires USL 01 and USL 31, stainless steel

CE

3755.272 a

**USL 01:** for general applications, mounted with hinged bracket, clamp fastening or flanged adapter collar

**USL 31:** special variant for sterile environments with adapter collar for fitting over flanges, etc.

- **Perfect combination of flush screwed assembly and smooth surface:**
  This sight glass luminaire is designed for mounting on sight glass fittings in universal applications. It is ideal for use in combined sight and light ports (single-flange version) or arranged separately (two-flange version). The integrated fastening clamp enables convenient mounting on a Lumiglas sight glass wiper assembly SW I.

- **Compact design; powerful light output:**
  Glare-free illumination; suitable for use with circular sight glass fittings to DIN 28120 / DIN 28121 or similar, or with screw-type sight glass fittings in compliance with DIN 11851.

- **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.

- **Maximum permitted ambient temperature at the cable entry gland:** 90°C

- **Very easy to install using special fastening system, ensuring convenience of use:**
  The luminaire can either be attached to the cover flange of the circular sight glass fitting or the visual flow indicator using the hinged bracket, or fastened to the slotted nut on screw-type sight glass fittings.
  **Caution:** Avoid looking into the light source – risk of damage to the eyes!

  **Lumiglas luminaire USL 01 and USL 31 fit the following sizes:**
  a) Circular sight glass fitting to DIN 28120: from DN 25
  b) Circular sight glass fitting 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

- **Voltage type:** AC/DC
  **Operating voltage:** 12 V, 24 V
  **Wattage:** up to 20 W, depending on operating voltage

- **Operating voltage:**
  12 V… Halogen bulb 5 W, without integrated pushbutton switch
  24 V… Halogen bulb 20 W, with integrated pushbutton switch



Mini Lumistar luminaire USL 01, mounted on a screw-type sight glass fitting with Lumiglas sight glass wiper SW l



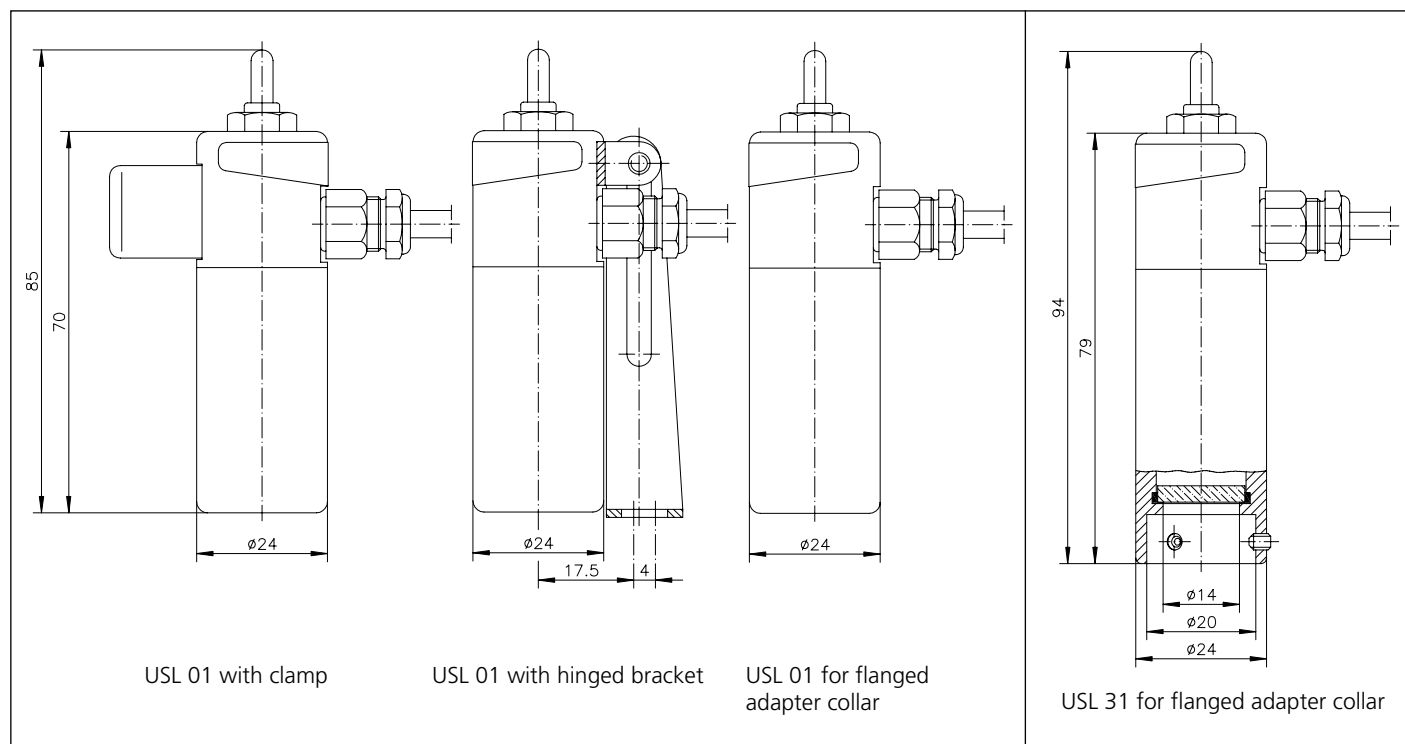Mini Lumistar luminaire USL 31 for BioControl applications

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

- **Pushbutton:**
  20 W luminaires are always supplied with pushbutton switch.

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**• Dimensions and electrical data for Mini Lumistar luminaires USL 01 and USL 31:**



USL 01 with clamp   USL 01 with hinged bracket   USL 01 for flanged adapter collar

USL 31 for flanged adapter collar

**• Components and materials:**
- Body and head of luminaire: stainless steel 1.4404
- Fastening elements: stainless steel 1.4301
  (hinged bracket or flanged adapter collar for
  attachment to screw-type sight glass fitting)

- Connecting cable: 3 m (3 x 0.75 mm²) works fitted
- Weight: 0.150 kg

**• Connecting data:**

| | Mini Lumistar luminaires USL 01 and USL 31 | | | | Replacements halogen lamps | | |
|---|---|---|---|---|---|---|---|
| Item | Type | Part No. | Voltage V | Push-button | Voltage/wattage | Socket | Part No. |
| | **USL 01 with clamp fastening** | | | | | | |
| 1 | (12 V) 5 W | 3540.001.00 | 12 ≃ | without | 12 V/5 W | G4 | 3232.221.00 |
| 2 | (24 V) 20 W | 3540.002.00 | 24 ≃ | with | 24 V/20 W | G4 | 3232.206.00 |
| | **USL 01 with hinged mounting** | | | | | | |
| 3 | (12 V) 5 W | 3540.003.00 | 12 ≃ | without | 12 V/5 W | G4 | 3232.221.00 |
| 4 | (24 V) 20 W | 3540.004.00 | 24 ≃ | with | 24 V/20 W | G4 | 3232.206.00 |
| | **USL 01 with flanged adapter collar** | | | | | | |
| 5 | (12 V) 5 W | 3540.005.00 | 12 ≃ | without | 12 V/5 W | G4 | 3232.221.00 |
| 6 | (24 V) 20 W | 3540.006.00 | 24 ≃ | with | 24 V/20 W | G4 | 3232.206.00 |
| | **USL 31 with flanged adapter collar** | | | | | | |
| 7 | (12 V) 5 W | 3540.007.00 | 12 ≃ | without | 12 V/5 W | G4 | 3232.221.00 |
| 8 | (24 V) 20 W | 3540.008.00 | 24 ≃ | with | 24 V/20 W | G4 | 3232.206.00 |

**• Order data:** e. g.
Mini Lumistar luminaire USL 01, stainless steel, 24 V/20 W,
with pushbutton, part no. 3540.002.00, clamp fastening

All dimensions in mm unless stated otherwise. Subject to change without prior notice. 11.15

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