# Lumiglas

# Lumistar luminaires stainless steel USL 13 and USL 33 and (III)-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<sup>®</sup> 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.

- 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 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: 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:

- a) Circular sight glass fitting acc. to DIN 28120: from DN 25
- b) Circular sight glass fitting acc. to DIN 28121: from DN 40
- c) Visual flow indicators: from DN 25
- d) 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



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.

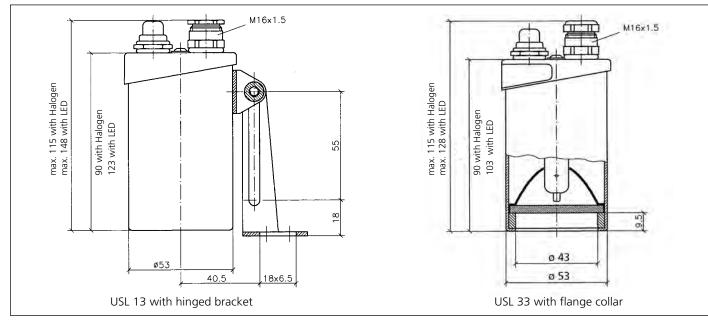
#### • Mounting parts for USL 13:

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.



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



#### • Components and materials:

- Connecting cable: 3 m (3 x 0.75 mm<sup>2</sup>) works fitted - Weight: 0.58 kg

Conne	ction data (furth	ner versions or	n request):						
Item	Type USL 13/33	Nominal Voltage V	Push- button	Trans- former	Socket	<b>USL 13</b> Part. no.	<b>USL 33</b> Part. no.	<b>USL 13-UL</b> Part. no.	<b>USL 33-UL</b> Part. no.
1	(12 V) <b>20 W</b>	12 ~	with	without	GY6.35	3540.206.00	3540.341.00	_	-
2	(12 V) <b>20 W</b>	12 ~	without	without	GY6.35	3540.207.00	3540.342.00	_	-
3	(24 V) <b>20 W</b>	24 ~	with	without	G4	3540.208.00	3540.223.00	3540.441.00	3540.443.00
4	(24 V) <b>20 W</b>	24 <i>≃</i>	without	without	G4	3540.209.00	3540.224.00	3540.442.00	3540.444.00
5	(120 V) <b>20 W</b>	120 ~	with	without	GY6.35	3540.210.00	3540.212.00	_	-
6	(120 V) <b>20 W</b>	120 ~	without	without	GY6.35	3540.211.00	3540.21300	_	-
7	(120 V) <b>20 W</b>	120 ~	with	without	BA15d	_	-	3540.593.00	3540.595.00
8	(120 V) <b>20 W</b>	120 ~	without	without	BA15d	_	-	3540.594.00	3540.596.00
9	(230 V) <b>20 W</b>	230 <i>≃</i>	with	without	G9	3540.277.00	-	_	-
10	(12 V) <b>50 W</b>	12 ~	with	without	GY6.35	3540.215.00	3540.216.00	_	-
11	(24 V) <b>50 W</b>	24 ~	with	without	GY6.35	3540.217.00	3540.218.00	3540.975.00	3540.977.00
12	(120 V) <b>50 W</b>	120 ~	with	without	BA15d	_	-	3540.685.00	3540.687.00
13	(120 V) <b>50 W</b>	120 ~	with	without	GY6.35	3540.219.00	3540.221.00	_	-
14	(120 V) <b>50 W</b>	120 ~	without	without	GY6.35	3540.220.00	3540.222.00	_	-
	LED Versions	•							
15	(24 V) <b>2 W</b>	24 ~	with	coverter	GU4	3541.414.00	3541.416.00	_	-
16	(24 V) <b>2 W</b>	24 ≃	without	converter	GU4	3541.415.00	3541.417.00	_	-
17	(24 V) <b>2 W</b>	24 ~		with switch		3541.410.00	3541.412.00	-	-

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# • 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

All dimensions in mm unless stated otherwise. Subject to change without prior notice. 06.17



<sup>-</sup> Luminaire body and cover: Stainless steel 1.4404 - Hinged bracket and flange collar for attachment to screwtype sight glass fitting DN 50/65): Stainless steel 1.4301