

Installation and Operating Instructions **CE**

Lumistar Luminaire USL 07 LED

Description:

Lumistar luminaires are intended for observing processes in reactors, apparatuses, vessels, etc. Under no circumstances should a luminaire be utilised as a substitute for the mating flange or the complete sight glass flange fitting or used on its own to close a vessel port.

Lumistar luminaires must always be installed, connected and serviced by persons who have been trained expressly for this purpose and are authorised to do this work.

Caution: Avoid looking into the light source – risk of damage to the eyes!

Electrical and technical data – general:

- Supply voltage to the luminaire:
24 V AC/DC \pm 10%
120 V - 230 V AC \pm 10%
- Max. power draw: 14 W
- Protection class IP65 and IP67 acc. to EN 60529/
DIN VDE 0470 part 1

Marking:

The luminaire is marked with a permanent, easily visible and legible type plate specifying:

- Name and address of manufacturer
- Luminaire type: USL 07 LED
- Ambient temperature range: $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- Production number/year of manufacture
- Supply voltage
- Power draw
- Protection class IP65
- CE mark

Caution: It is essential to observe the warnings specified on the type plate!

Connecting cable:

The cables used must be temperature-resistant up to at least -20°C to $+80^{\circ}\text{C}$.

Connecting data:

USL 07 LED Variant	Part no.	Nominal voltage V	Illuminant	Reflected beam angle
(24 V) 14 W	3541.287.00	24 \approx	LED	11°
(120-230 V) 14 W	3541.288.00	120-230 \approx	LED	11°
(24 V) 14 W	3541.293.00	24 \approx	LED	26°
(120-230 V) 14 W	3541.294.00	120-230 \approx	LED	26°

Mechanical installation:

The Lumistar USL 07 LED luminaire fits the following nominal sizes with the corresponding attachment:

Type of fitting	from DN	Hinged bracket	Flange adapter
Circular sight glass fitting			
	DIN 28120	+	-
DIN 28121	50	+	-
Visual flow indicator	50	+	-
Screw-type sightglass fitting similar to DIN 11851	65	-	+
	80	-	+
	100	-	+
	125	+	+



Lumistar luminaire USL 07 LED with terminal box

Mounting by bracket attachment:

The luminaire is mounted on the counter-flange of the circular sight glass fitting or flow sight glass using the mounting parts – straight or angled bracket – or on the slotted nut in the case of screw-type sight glass fittings. Straight bracket for DN 50 to DN 100
Angled bracket for DN 125 to DN 200

Mounting by flange adapter:

The flange adapter can be welded to the slotted nut (DIN 11851 or similar) or underlaid with the corresponding size.

Please order any required mounting parts separately.

• Electrical connection:

- Open the cover of the terminal compartment
- Insert cable through the cable entry gland (3) into the terminal compartment
- Wire cable to Ex terminals (4)
- Rated cross-section = 2.5 mm² (single, fine and stranded wired)
- Then replace the cover of the terminal compartment complete with seal, and screw the cover back on again
- The external protective conductor terminal (1) needs to be connected to a separate operational ground
- The luminaire is internally fused with a 1A or 1.6A micro-fuse on the power supply card
- The connecting cable should be secured after a maximum distance of 1 metre
- **Caution:** Overvoltage or undervoltage may cause a luminaire failure!

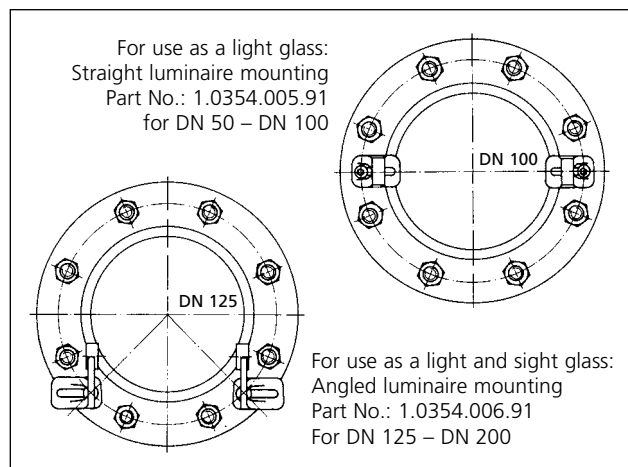
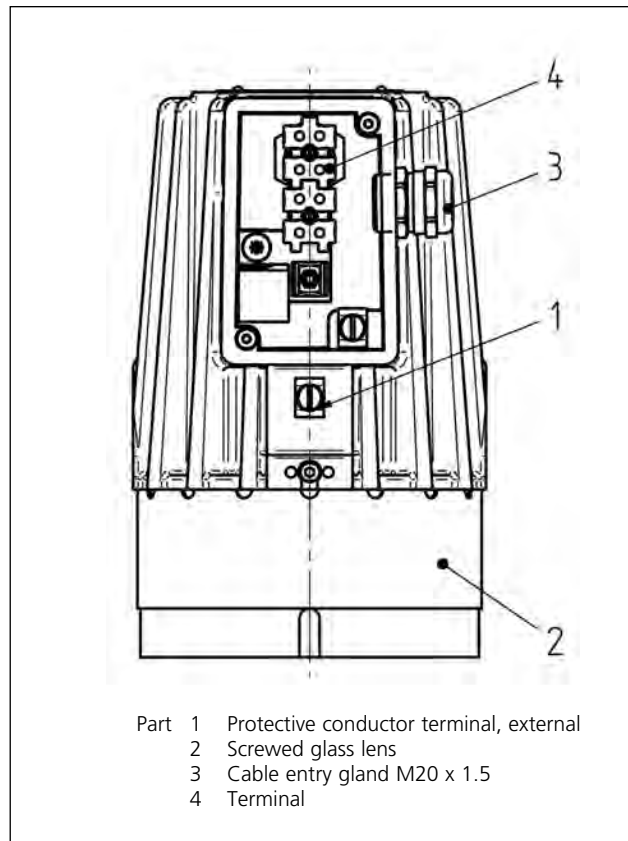
When using 24 V mains power supply, the parallel connection of luminaires with only one feed line should be avoided. The resulting major impedances in the feed line due to the reduced line cross-section together with contact resistances caused by terminals and connectors can lead to malfunctions in the luminaire.

• Accessories/replacement parts:

	Part no.
Screwed glass lens	1774.121.00
O-ring seal (Ø 110 x 2.5)	0862.040.00
Luminaire mounting, straight bracket	0354.005.00
Luminaire mounting, angled bracket	0354.006.00
Special spanner (to open luminaire)	6805.002.00
Flat gasket	0854.058.00

• Maintenance:

- Please use only original replacement parts
- Accessories need to be ordered separately
- The luminaire should be kept clean. To ensure optimum light emission, the glass lens should be cleaned at regular intervals
- After opening the luminaire, the thread of the screwed lens should be regreased (e.g. with AEMA-SOL 6 B made by A. E. Matthes)



Combination options