

Installation and Operating Instructions



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Lumistar Luminaires USL 13/USL 33 and U_L-listed versions

Important, please note:

Sight glass luminaires are purpose-designed and intended solely for mounting on the top or side of sight glass units. Under no circumstances should a luminaire be used to replace a cover flange or complete sight glass fitting nor as a closure for an opening in a process vessel. Luminaires for use in potentially explosive environments must be mounted, installed and serviced by staff who have the relevant qualifications and have been trained and authorised to do such work.

Electrical data, general:

- The voltage, output and protection type are shown on the type plate.
- Excess voltage will cause premature lamp failure.

General operating conditions:

- Independent of internal vessel pressure/vacuum
- Max. admissible ambient temperature at cable entry gland: Halogen version - 90°C; LED version - 40°C
- 50 W-powered luminaire versions must always be operated by pushbutton!

Caution!

No matter whether the luminaire is fitted with a standard or a high-performance lamp, when in continuous ON mode, the temperature of the luminaire, the glass lens and the light/sight glass fitting should be checked at regular intervals. The temperature at these points must not be allowed to exceed the values shown in the relevant data sheet and/or in the separate "Installation and Operating Instructions". Once these values become critical, a push-button/time delay switch should be installed in the power supply to the luminaire to prevent overheating.

Installation – mechanical:

The Lumistar luminaire USL 13 with the required fixture fits the following sight glass sizes:

Type of fitting	from DN	Hinged bracket	Flanged adapter
Sight glass unit, circular acc. to DIN 28120/28121	50	+	-
Flow indicator	50	+	-
Screwed sight glass unit acc. to DIN 11851	50/65	-	+
	80	+	-
	100	+	-
	125	+	-

Mounting with hinged bracket:

The hinged bracket can be used to fasten the luminaire to the cover flange of a circular sight glass fitting (or flow indicator) or to the slotted cover nut of a screwed sight glass to DIN 11851. The bracket is fixed in place in a blind hole tapped on the bolt pitch circle of the cover flange face, using the M6 screw provided. Alternatively, the bracket can be welded on.

Mounting with flange adapter:

The adapter is mounted between the glass lens and the slotted cover nut (DIN 11851). To do this, place an appropriate gasket between the glass disc and the adapter and tighten the grub screws located around the edge. The adapter may have to be ordered separately if it is not included in the scope of supply.

The Lumistar luminaire USL 33 fits on the sight glass unit using the appropriate mounting attachment, as follows:

The luminaire is mounted over a special circular collar or connecting piece on the cover flange and secured in place. An O-ring is inserted as a seal for the sight glass. A tried-and-tested alternative is to mount the luminaire using an adapted clamped joint to DIN 32676/ISO 2852. The tapered mating flange to the nozzle clamp flange forms a special ring construction with a concentric sight glass fused into the metal and an upstand with a groove for the O-ring on the outer

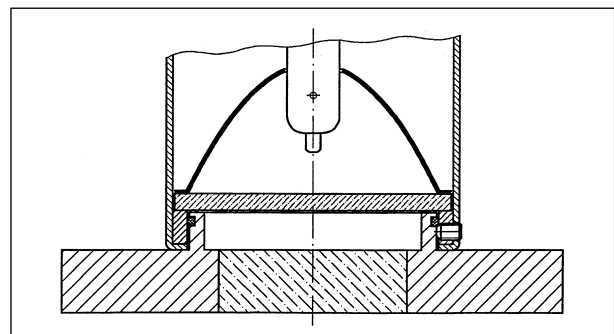


Lumistar luminaire USL 13

surface. The extended, reinforced lip of the USL 33 luminaire forms a sleeve which fits over the collar, with the O-ring providing the seal to the clamp flange. Tightening the clamp then provides the necessary closing pressure and seals the fused metal-glass flange to the nozzle.

Electrical connection:

- The connecting cable (3 m) comes ready connected to the luminaire via the cable entry gland.
- The unit is internally wired and is ready for operation.



• **Changing the lamp:**

- Switch off power to the luminaire.
- Loosen both screws in the back plate of the luminaire.
- Lift off the back plate complete with attached lamp socket and lamp to be replaced.
- Pull off the defective lamp.
- Holding the new lamp with a protective cloth, carefully insert it into the 2-pin or Ba 15d socket and push it firmly into place.
- Refit the back plate complete with the new lamp in its socket, paying attention to the correct positioning of the cables. Tighten the screws to fix in place.
- Switch on power.

• **Caution:**

- **Caution:** Do not look into light – danger of impaired eyesight!
- Check the temperature of the lamp body before opening the luminaire.
- Only use lamps of the same type and with the same wattage!
- To minimise the risk of fire, lamps identified for use in enclosed luminaires should not be used.

• **Installation instructions:**

- To reduce the risk of fire or injury to persons do not use a lamp identified for use in enclosed luminaires without a housing.
- Save these instructions carefully.
- Note the nameplate for power supply and wattage.

• **Maintenance:**

- Keep the luminaire clean and free of dust.
- The average service life of the bulb should be observed.
- Please use original replacement parts only.

• **Replacement parts and ordering information:**

Halogen filament lamp			
Lamp socket	Voltage/ power	Part No.	Manufacturer
GY6.35	24 V/50 W	3232.242.00	Osram
Ba15d	120 V/50 W	3232.275.00	Hikari
G9	230 V/20 W	3232.276.00	
LED illuminant			
Lamp socket	Voltage/ power	Part No.	Manufacturer
GU4	12 V/2 W	3232.026.00	

Component	Part No.
Hinged bracket mounting	0527.008.00
Flange adapter mounting DN 65	1356.007.00
Push button	6412.016.00
Protective cap for push button	2330.014.00
Reflector for 24 V/50 W	5904.025.00
Reflector for 120 V/50 W	5904.054.00
Gasket 70.5 x 1.5 mm, 80 Shore, Viton (between back plate and body)	0853.009.00
Lamp socket Ba 15d	1202.013.00
Lamp socket (UL) 2-pin G6.35	1202.025.00
Lamp socket 2-pin G9	1202.026.00