

Installation and Operating Instructions for Lumiglas luminaires

Lumiglas luminaire series USL05

• **Important note:**

Sightglass luminaires are specifically and solely designed for mounting on top or side of sightglass units. Never use a luminaire in place of cover flange or complete sightglass unit to provide a closure for an opening in a process vessel.

• **Operating conditions – general:**

- Independent of vessel internal pressure/vacuum
- Max. permissible ambient temperature at cable entry gland 80° C. Where ambient temperatures exceed 40° C heat resistant cable such as Sinotherm 110 H05GG-F 3G 1,5 mm², must be used.
- Protection Index: dust and waterjet proof, IP 65 to EN 60529/DIN VDE 0470 part 1

• **Electrical data – general:**

- Voltage, power and protection are shown on the identity plate
- The version with built in transformer is PTC protected; fuse change becomes unnecessary!
- Supply: AC or DC depending on luminaire make up

Caution:

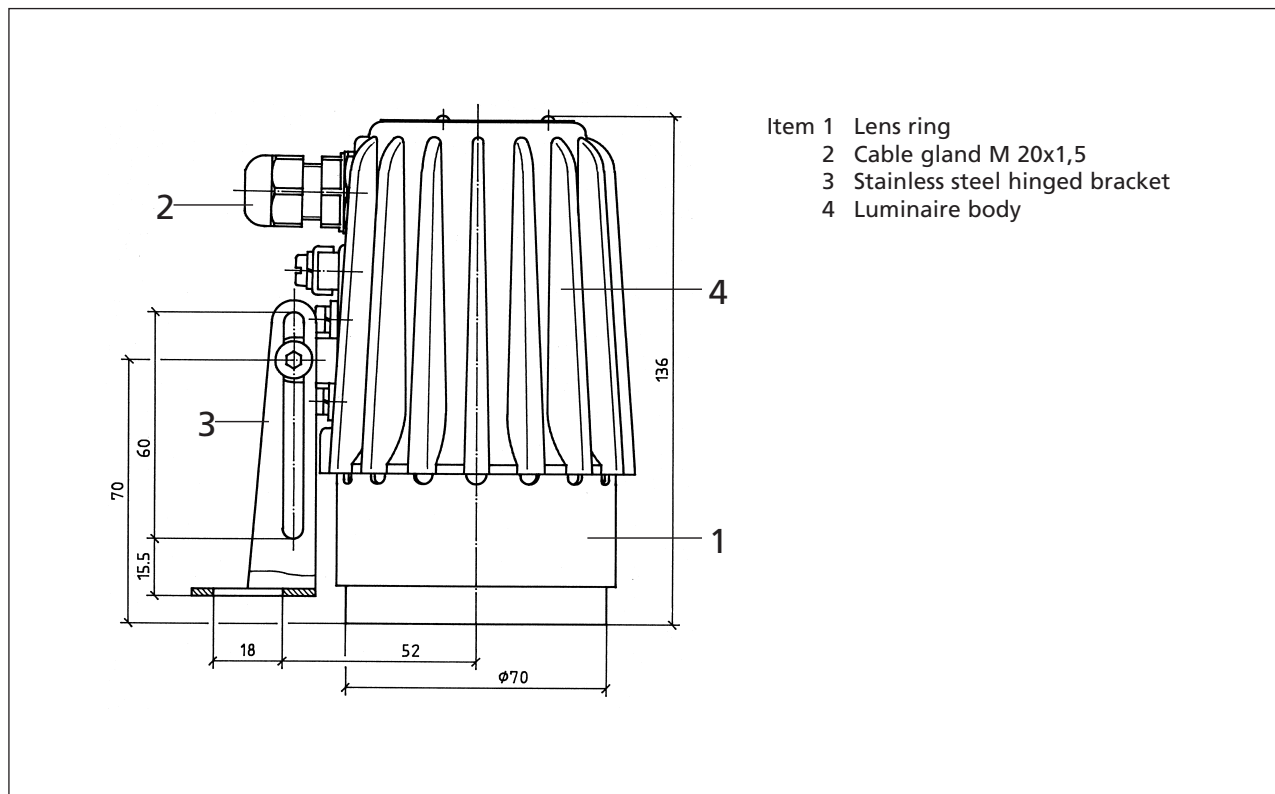
- Luminaires with integral transformer only AC may be used!
- Excessive voltage will shorten lamp life

• **Electrical connection:**

- The cable entry gland is designed only for use with cables which are not armoured. The cable sheath is sealed by the cable entry gland.
- Select a cable suitable for the operating conditions and the cable outside diameter should match the cable entry gland (2) – M20 x 1,5
- Loosen and unscrew lens ring (1) with claw spanner
- Loosen cable gland (2)
- Pass cable through cable entry gland (2) and fasten cores onto terminals in luminaire body (4)
- Tighten cable gland (2)
- Refit lens ring (1) and screw tight until seal is made: **Caution:** ensure O-ring gasket lies correctly in its recess in luminaire body!

• **Lamp change:**

- Disconnect power
- Unscrew lens ring (1) with claw spanner (to be ordered separately)
- Pull out defective lamp (2 pin)
- Holding new lamp (use only recommended parts) with protective material, carefully insert into two pins in socket and gently but firmly push home until correctly seated
- Screw lens ring (1) back in until fully sealed (O-ring squeezed)
- **Caution:** ensure O-ring gasket lies correctly in its recess in luminaire body
- Reconnect power



• **Mechanical installation:**

Before commencing installation please refer to the information sheet 'Important guidelines for use of sight-glass fittings...'

Where the luminaire is to be fitted to circular sightglasses or flow indicators, fastening is by means of the hinged securing bracket onto the cover flange. In the case of screwed sight-glass unit the luminaire is fastened to the slotted cover nut.

The lumiglas luminaire model USL05, with requisite securing bracket or flanged adapter collar, fits the following nominal sizes of sightglass:

Type of Fitting	from DN	Hinged bracket	Flanged adapter collar
Circular sightglass fitting DIN 28120 DIN 28121	25	+	-
	40	+	-
Flow indicator	50	+	-
Screwed sightglass fitting DIN 11851	65	+	+
	80	+	+
	100	+	-
	125	+	-
	150	+	-

• **Attachment with hinged bracket:**

The hinged bracket serves to secure the luminaire to the cover flange of a circular sightglass unit (and flow indicator) or the slotted cover nut of screwed sightglass similar to DIN 11851.

The bracket is fixed using the M6 screw supplied, and a blind hole drilled and tapped on the bolt pitch circle of the cover flange face. Alternatively the bracket can be welded on.

• **Attachment with flanged adapter collar:**

The flanged collar is laid between the slotted cover nut (DIN 11851) and glass disc:

- unscrew slotted cover nut
- fit a suitable gasket between glass and collar
- insert adapter collar
- retighten cover nut
- slide luminaire body into adapter collar
- tighten luminaire by radially located grub screw

Note: Fastening parts and possibly claw spanner – as far as not available – to be ordered separately.

• **Servicing:**

- Keep luminaire clean!
- After opening luminaire, lightly grease the lens ring (1) thread (e.g. with AEMA-SOL 6 B, made by A E Matthes).
- Allow for average lamp life span!
- Use only original replacement parts!

• **Accessories and replacement parts for Lumiglas luminaire USL05:**

Item	Description	Part No.
1	Lens ring unit (light outlet <u>with</u> reflector) for USL05, 5 W	1774.048.00
2	Lens ring unit (light outlet <u>with</u> reflector) for USL05, 50 W	1774.046.00
3	Lens ring unit (light outlet <u>without</u> reflector) for USL05, 20 W	1774.049.00
4	O-ring seal (Viton)	0862.036.00
5	Transformer <u>240 V</u> / 10,5 V	8711.023.00
6	Transformer <u>120 V</u> / 10,5 V	8711.024.00
7	Lamp socket G 4 (2 pin)	1202.011.00
8	Lamp socket GY 6.35 (2 pin)	1202.012.00
9	Mini-Spot Halogen reflector lamp <u>12 V/5 W</u>	3232.221.00
10	Mini-Spot Halogen reflector lamp <u>24 V/20 W</u>	3232.222.00
11	Halogen filament lamp 24 V/50 W	3232.242.00
12	Fastening part hinged bracket	0354.014.00
13	Fastening part adapter flange	1356.010.00
14	Special claw spanner	6816.001.00