

## Installation and Operating Instructions for Lumiglas luminaires

### Lumiglas luminaire model ESL27-Ex

#### • 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. Luminaires which are Ex rated may only be installed or serviced by personnel specifically qualified for the job and duly authorized to do so.  
EC-Type-Examination Certificate must be observed!

#### • Operating conditions – general:

- Independent of vessel internal pressure/vacuum
- Approved for use in Ex hazardous zones 1 and 2
- Approved for use at ambient temperatures up to 40° C

#### • Electrical data – general:

- Voltage, power, temperature class and protection rating are shown on identity label, e. g.
  - name and address of manufacturer
  - type-marking
  - year of production
  - Ex-Approval:
    - EC-Type-Examination Certificate BVS 03 ATEX E311
    - ⊕ II 2G EEx d IIC T3, T4, T6
  - No. of production
  - No. of certificate
  - specification of installed halogen filament lamp
- The version with 20 VA integral transformer is PTC protected. Fuse exchange is not needed
- The version with 50 VA integral transformer is protected by a fine wire meltable delay action fuse (for 230 V/240 V – 0.315 At; for 120 V – 0.630 At)
- Adherence to data given in EC-Type-Examination Certificate is mandatory
- Supply: AC or DC depending on luminaire make up

#### • Caution:

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

#### • Electrical connection:

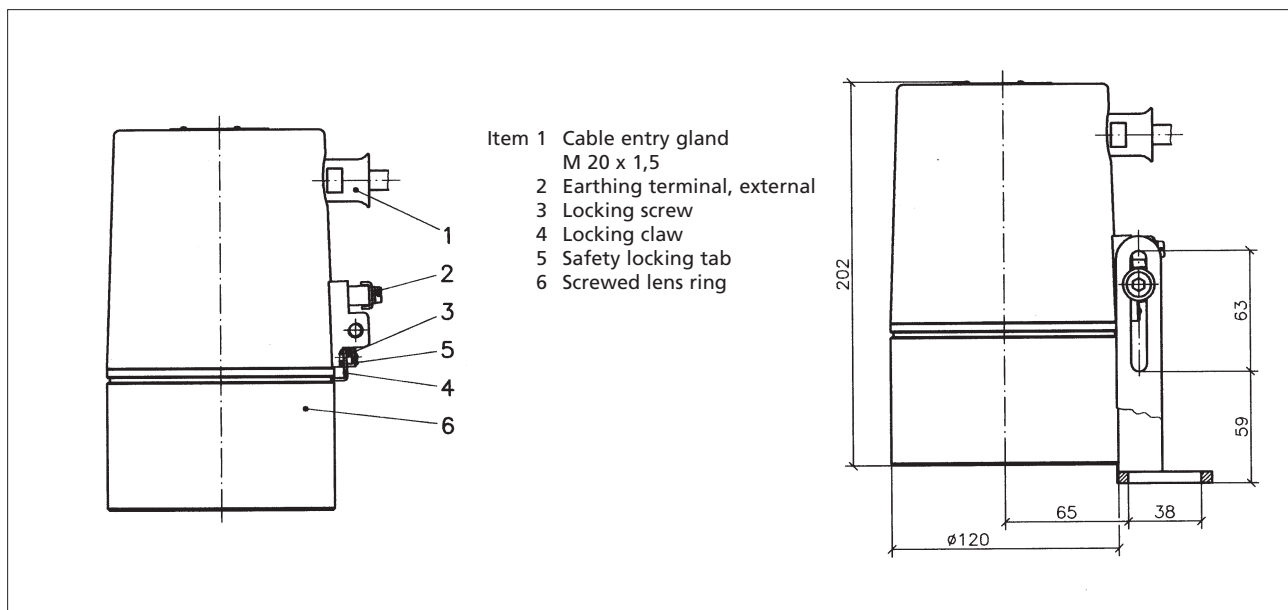
- Cable is firmly resin cast into the cable entry gland
- Luminaire is internally wired at manufacturers' works ready for operation!
- External safety earthing terminal (2) must be connected to a plant earthing point
- The cable must be supported within 1 m of entry gland
- Caution: When changing cable (e. g. for another length) ensure internal connections have been loosened before unscrewing the cable entry gland
- The cable core connections may only be made inside flame-proof enclosures which conform to EN 50014, section 1.2.

#### • Connecting cable:

- For models set down in Appendix to EC-Type-Examination Certificate, item 15.3.2. for use at requisite heightened operating temperature, a cable entry gland and cable suitable for a minimum temperature of 110° C must be used, e. g. Sinotherm 110 H05GG-F 3G 1,5 mm<sup>2</sup>.

#### • Lamp Exchange:

- Switch off power
- Allow to cool – see identity label
- Loosen locking screw (3) to lens ring (6) this frees safety locking claw (4)
- Using correct tool (lens ring claw spanner), unscrew lens ring (6)
- Pull out defective (2 pin) lamp
- Holding new lamp (use only recommended parts) with its protective material, insert carefully into 2 pin socket and push in firmly
- Replace and tighten lens ring (6) until seal made (O ring squeezed)
- Safety claw (4) must engage in corresponding slot to lock lens ring (6) in position
- Retighten locking screw (3)
- Switch on power



• **Caution:**

When changing lamps ensure that the light beam remains evenly distributed over the lamp glass, as designed. On no account should a 'hot spot' be allowed to develop externally to the luminaire (e. g. caused by mislocation of lamp or wrong lamp!)

• **Mechanical installation:**

The lumiglas luminaire model ESL27-Ex fits the following nominal sizes of sightglass with hinged bracket fitting:

Type of sightglass fitting	from DN
Circular sightglass fitting DIN 28120 DIN 28121	50
Flow indicator	50
Screwed sightglass fitting DIN 11851	65

• **Mounting with hinged bracket:**

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

The bracket is fixed using the M8 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.

• **Servicing:**

- Keep luminaire clean!
- After opening luminaire, lightly grease the lens ring (4) (e.g. with AEMA-SOL 6 B, made by A E Matthes)
- Allow for average lamp life span!
- Use only original replacement parts!

• **Replacement parts for Lumiglas luminaire ESL27-Ex:**

Item	Description	Part No.			
1	Lens ring unit	1774.086.00			
2	O-ring-seal (Viton)	0862.079.00			
3	Lamp socket G4 (2 pin)	1202.025.00			
4	Lamp socket GY 6.35 (2 pin)	1202.012.00			
<b>Halogen filament lamp (please indicate supplier and manufacturer's code!):</b>					
	<b>Socket</b>	<b>Voltage</b>	<b>Part No.</b>	<b>Supplier</b>	<b>Manufacturer's code</b>
5	GY 6.35	12 V/20 W	32.32.240.00	BLV	107130
6	G 4	24 V/20 W	32.32.206.00	Osram	64435 U
7	GY 6.35	12 V/35 W	32.32.232.00	Osram	64432 S
8	GY 6.35	12 V/50 W	32.32.238.00	Osram Philipps	64440 S 13102
9	GY 6.35	24 V/50 W	32.32.242.00	Osram Philipps	64445 U 13090

• **Example:**



Lumiglas luminaire model ESL27-Ex with hinged bracket fastening 50 W, T4