

Lumiglas Luminaire Series USL 07

DATA SHEET 06.07

–for use with sightglass fittings –

This compact, powerful luminaire can be used for integral light/sight port (single flange version) or separate light and sight ports (dual flange version) to illuminate the internals of vessels, reactors, mixers, pipelines, through-flow indicators and others which are normally closed.

This model is intended for use in all **Non Ex Hazardous Areas**.

The unit is suitable for food processing.

The luminaire must never be inserted into a vessel wall as a sealing element, i.e. without appropriate sightglass disc and fitting.

Sightglass Styles:

This powerful, compact size luminaire is designed to give glare free illumination in combination with sightglass styles as the following:

- bolted circular flanges acc. DIN 28 120/DIN 28 121 or similar styles
- circular screwed flanges acc. DIN 11851, DN 100 and larger
- through flow indicators (tubular or cruciform opposed flat glass disc)

Size:

The luminaire is mostly suitable for sightglasses DN 50 and larger.

Protection:

Dust and waterjet proof – when correctly installed – to IP 65 EN 60529 / DIN VDE 0470 Part 1.

Ambient Condition Operating Range::

This unit is suitable for ambient temperatures of 80° C at the cable gland. Where ambient temperature lies above 40° C, heat-resistant cable eg. 4GMH4G-J3x1,5mm² must be fitted.

It is independent of internal vessel pressure or vacuum.

Power supply:

The unit can be fitted with various halogen lamps, and thus is suited for AC or DC voltage.

without integral transformer:

24 V... Halogen filament lamp 50 W or 100 W AC/DC

230 V... Halogen filament lamp 50 W, 75 W, 100 W AC/DC

with integral transformer:

230 V... Halogen filament lamp 12 V/50 W AC

120 V... Halogen filament lamp 12 V/50 W AC

Lamp sockets: See table following page.

Transformers: Transformers with 24 V secondary voltage are optionally available.

Additions:

- Lamp mounting twin brackets:
 - DN 50 to DN 100 for Light ports only (straight brackets).
 - DN 125 to DN 200 for single flange light/sight ports (angular brackets).
- Special claw spanner: for opening/tightening the lens ring.
- Installed automatic delay switch Lumiglas Timer, five minutes of operating time.

For Installation Instructions please see page 3.

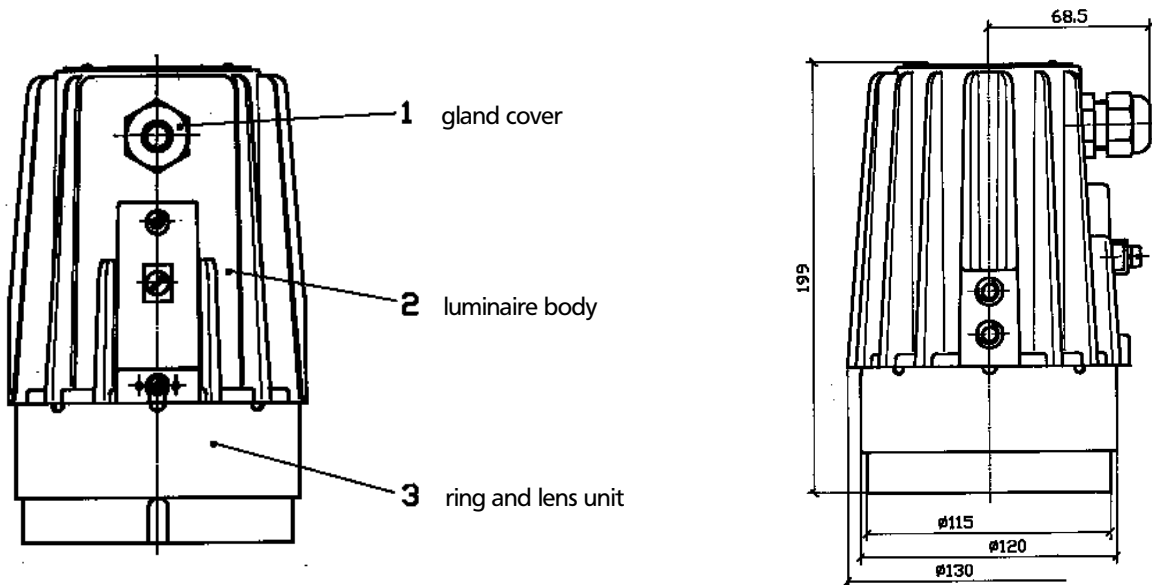


Lumiglas Luminaire USL 07 with fastenings.



Lumiglas Luminaire USL 07 installed on a circular sightglass DIN 28120.

Dimensions for Lumiglas Luminaire type USL 07:



Parts, Construction and Materials:

Luminaire body: Corrosion resistant die cast aluminium G-AlSi 10Mg.

Light window: Unit of aluminium ring, glass, rubber ring seal.

Fastenings: See under 'Spares', G-AlSi 10Mg

Weight: 2.0 kg (ex power supply cable), 3.0 kg with built-in transformer

Connecting Data for Lumiglas Luminaire type USL-07

Pos.	Type USL 07	Part Number	Supply Voltage	Built-in Transformer	Halogen Lamp		
					Socket	Power Intake	Part-Number
1	(24 V) 50 W	3540.604.00	24	–	GY6.35	24 V/50 W	3232.242.00
2	(230 V) 50 W	3540.607.00	230	–	E27	230 V/50 W	3232.241.00
3	(230 V/12 V) 50 W	3540.614.00	230	with	GY6.35	12 V/50 W	3232.238.00
4	(120 V/12 V) 50 W	3540.612.00	120	with	GY6.35	12 V/50 W	3232.238.00
5							
6	(230 V) 75 W	3540.624.00	230	–	E27	230 V/75 W	3232.239.00
7							
8	(24 V) 100 W	3540.631.00	24	–	GY6.35	24 V/100 W	3232.244.00
9	(230 V) 100 W	3540.634.00	230	–	E27	230 V/100 W	3232.247.00

Installation Instructions:

General:

The unit is usually bolted by twin brackets to the sightglass assembly, i.e. to the cover flange of a bolted circular sightglass or a through flow indicator or to the slotted cover nut of a screwed flange sight-glass.

Lumiglas Luminaire type USL 07 can be used for the following sightglass sizes and larger:

- bolted circular flanges acc. DIN 28120: DN 50...
- circular screwed flanges acc. DIN 28121: DN 50...
- through flow indicators, DN 50
- circular screwed flanges style DIN 11851: DN 100 or larger

Electrical Connection:

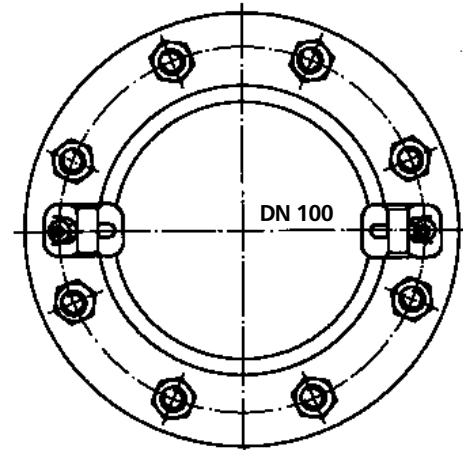
- The cable should be suitable for the ambient conditions, for low voltage and the selected power.
- Ensure that the cable outside diameter matches and gland cover nut and seals.
- Use the special claw spanner to loosen the lens ring (3) and remove lens ring.
- Loosen the gland cover nut (1).
- Insert gland through opening, ensure that the outer cable sheath protrudes well into the housing and that the rubber grommet is in position.
- Connect the bared leads properly to the ceramic terminal block inside the luminaire and tighten gland cover nut (1).
- When closing the luminaire, ensure that the rubber ring seal has been inserted properly into the groove of the luminaire body.
- Tighten lens ring (3) firmly with special spanner.

Lamp Change:

- Switch off the luminaire and disconnect the power supply.
- Use the special claw spanner to loosen the lens ring (3) and remove lens ring.
- Replace halogen lamp, ensure bare fingers do not touch the glass, lamps with E 27 socket are screwed in, the other types have two pins and are plugged into the socket.
- Refit lens ring, tighten firmly with special spanner.
- Reconnect power.

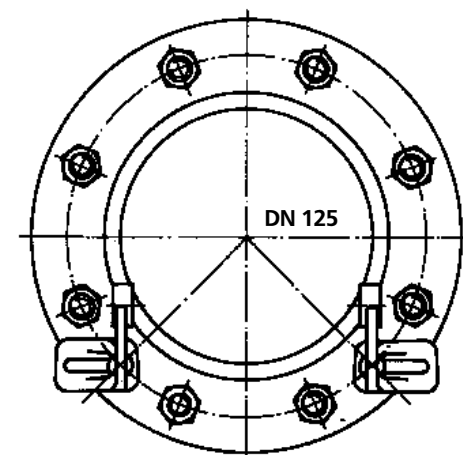
Light Port Installation

on twin bracket fastening 1.0354.005.91
suitable for fittings DN 50 to DN 100.



Light/Sight Port Installation

fastening 1.0354.006.91
suitable for fittings DN 125 to DN 200.





Spares and Additions for Lumiglas Luminaire type USL 07:

Item	No
lamp mounting straight bracket (DN 50 - 100)	0354.005.00
lamp mounting angular bracket (DN 125 - 200)	0354.006.00
Lumiglas-Timer	factory installed
lens and ring unit	1774.066.00
reflector (spot type)	5904.049.00
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O ring (Viton)	0862.040.00
special claw spanner (for lens ring)	6805.002.00
lamp socket GY6.35 (2-pin)	1202.012.00
lamp socket E27	1202.019.00
halogen lamps	see table overleaf