

Lumiglas Luminaire Series USL 05

- for use with sightglass fittings -

ISO 9001

DATA SHEET 02-0160 01/02

Application:

This super-compact luminaire provides for integral light/sight port (single flange version) or separate light and sight port (dual flange version) illumination of visual flow indicators, pipelines, laboratory mixers and other closed vessels and reactors. The USL 05 is suitable for food processing and is designed for Non Hazardous Areas. The luminaire must never be inserted into a vessel wall as sealing element, i.e. without appropriate sightglass disc and fitting.

Sightglass Styles and Size:

This powerful, super-compact luminaire is designed to give glare free illumination in combination with circular sightglasses of the following styles and sizes:

- circular flanges Model DIN 28120, DN 50 and larger
- circular flanges Bolt-on type
- visual flow indicators
- circular screwed flanges Series MV 65 and larger
 - on DN 65 fittings the luminaire is installed by means of an adapter flange which fits under the cover nut
 - on fittings size DN 80 or larger the luminaire is installed by means of a hinged bracket

Protection:

Dust and waterjet proof to IP 65 and EN 60598.

Ambient Condition Operating Range:

The unit is independent of any internal vessel pressure or vacuum. It is suitable for ambient temperatures of 80 °C at the cable gland. When ambient temperature exceeds 40°C, consult factory when ordering.

Power supply:

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

- with built-in transformer VDE 0551
 - supply 230 V; halogen lamp 12V/5 W
 - supply 120 V; halogen lamp 12V/5 W
- without built-in transformer
 - supply 12 V; halogen lamp 5 W or 10 W
 - Mini Spot halogen reflector lamp 20 W
 - supply 24 V; halogen lamp 50 W
 - Mini Spot halogen reflector lamp 20 W
 - supply 120 V; halogen lamp 50 W

Lamp sockets:

Please see table overleaf

Transformers:

Separate transformers with 12 V or 24 V secondary voltage are available.

Installation:

The luminaire is usually bolted with its hinged bracket to the respective sightglass assembly, such as the cover flange of a bolted circular sightglass or the slotted cover nut of a screwed flange sightglass. The necessary M6 bolt is furnished with the luminaire.

Lamp Change:

- switch off the luminaire and disconnect the power supply
- take special spanner to unscrew the glass lens ring
- replace halogen lamp with lamp of same type and size, ensure bare fingers do not touch the glass
- refit luminaire glass cover tightly and reconnect power



Lumiglas luminaire USL 05, hinged bracket installation



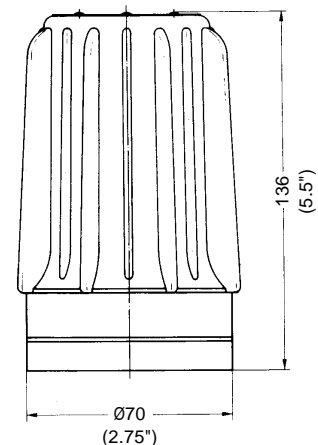
Lumiglas luminaire USL 05, pivoted back off the sightglass

ISO 9001 QA CERTIFICATE
GERMAN MANUFACTURER:
F.H. PAPANMEIER AWARDED QA APPROVAL CERTIFICATE



Dimensions and Connection Data for Lumiglas Luminaire type USL 05

Pos	Supply Voltage	Power Intake	Luminaire Type	Built-in Transformer with PTC fusing V sec.	Halogen Lamp	
					Type	Socket
1	12	5 W	USL 05 5H	no	halogen 12V 5W	G4
2	12	10 W	USL 05 10H	no	halogen 12V 10W	G4
3	12	20 W	USL 05 20H	no	minispot halogen 12V 20W	G4
4	24	20 W	USL 05 20H	no	minispot halogen 24V 20W	G4
5	24	50 W	USL 05 50H	no	halogen 24V 50W	GY6.35
6	220	5 W	USL 05 5H	yes, 12 V secondary	halogen 12V 5W	G4
7	120	5 W	USL 05 5H	yes, 12 V secondary	halogen 12V 5W	G4
8	120	50 W	USL 05 50H	no	halogen 120V 50W	GY6.35



All dimensions in mm unless stated otherwise Subject to change without prior notice

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 the gland cover nut and seals
- use the special claw spanner to loosen the glass lens ring and remove lens ring
- loosen the gland cover nut
- insert gland through opening and ensure that the outer cable sheath protrudes well into the housing
- connect the bared leads properly to the ceramic terminal block inside the luminaire and tighten gland cover nut
- when closing the luminaire, ensure that the rubber ring seal has been inserted properly into the groove of the luminaire body
- tighten lens ring firmly with special spanner

Parts, Construction and Materials:

Luminaire body:

Corrosion resistant die cast aluminium, G-Al Si 10 Mg

Cable gland

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

Fastenings: stainless steel 304 or similar

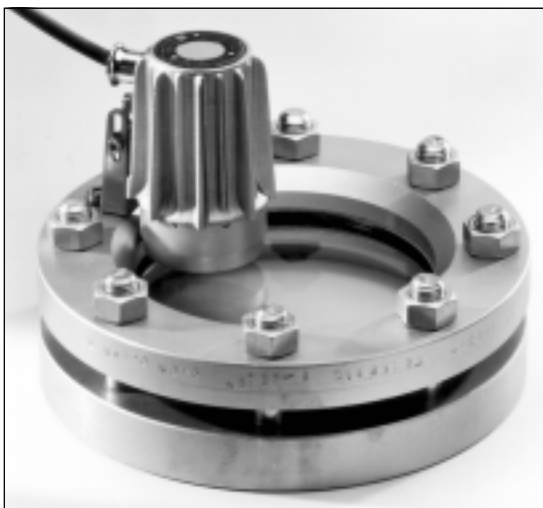
Ordering Information

Please state luminaire type and lamp type, e.g.

Luminaire USL 05 20H, 24V/20W

Application examples

USL 05 type luminaires are optionally available as "Ex" types for use in explosion hazardous areas.



Lumiglas USL 05 combined sight/light port on a flange sightglass fitting Model DIN 28120 DN 100.

Lumiglas USL 05 with adapter flange, installed as light port on a screwed flange sightglass fitting Series MV, DN 65



Lumiglas USL 05 with hinged bracket installed as light port on a bolted flange sightglass fitting DN 50



Lumiglas USL 05 light port on a visual flow indicator

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