

Lumiglas Light-/Screwed Sightglass Units with Luminaires Series MV-SLM or MV-ME

DATA SHEET 08.01.

• Applications:

This integral light/sight port has a weld-on sightglass fitting with a screwed cover flange which holds luminaire – alternatively aluminium or stainless steel – and sightglass simultaneously. It is designed to illuminate and to give view into process vessels, silos, mixers, separators, pipelines, and other usually closed containers. This model is intended for use in all **Non Ex Hazardous Areas**. The unit is particularly suitable for pharmaceutical, food and beverage processing, e. g. in breweries, dairies etc.

• Sightglass Styles and Size:

This unit is available from sightglass size (similar to DIN 11851) DN 65 to DN 125.

• Protection:

When correctly fitted, dust and waterjet proof to IP 65, EN 60 529/ DIN VDE 0470 Part 1.

• Operating Conditions:

Pressure: 6 bar (higher pressure ratings on request), vacuum.

• Temperature:

Screwed Sightglass Fitting: max. 220° C (see temperature diagram).

Luminaire: 80° C at the cable gland.

Where ambient temperature lies above 40° C heat resistant cable, e.g. 4GMH4G-J3x1,5 mm² must be fitted. Lumistar Luminaires Series ME will have been works fitted with 3 m cable, temperature resistant up to 90° C.

• Electrical Data:

- Power supply 24 V (12 V available as alternative).
- 2-pin halogen lamp 20, 50, 100 W.

• Lamp holder: 2-pin socket.

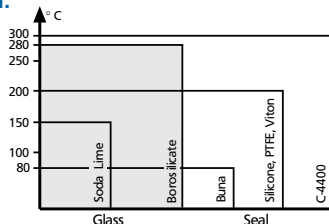
• Switch/Pushbutton: MV-SLM/MV-ME type luminaires are supplied with built-in pushbutton as standard.

• Transformers: Transformers can be supplied optionally (separate units).

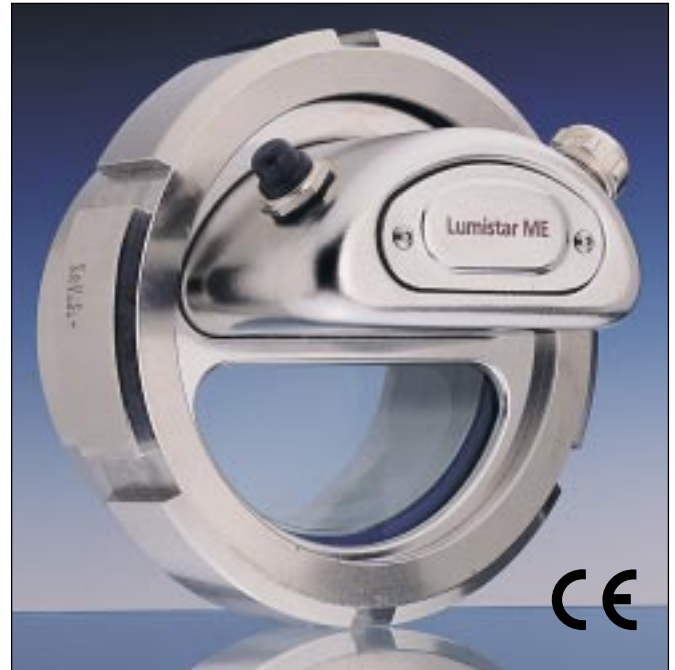
• Parts and Materials drawing on the right:

Parts Name	Material options
1 luminaire	
1.1 luminaire housing	alternatively cast aluminium, painted (RAL 9007) or stainless steel 1.4301, polished. silicone (max. 220° C)
1.2 luminaire cover	
1.3 flat seal with bridge	
2 screwed sightglass fitting	
2.1 slotted cover nut	stainless steel 1.4301 (1.4307)
2.3 sightglass disc	- soda lime glass, toughened (tempered) to DIN 8902, max. temp.: 150° C or - borosilicate glass, toughened (tempered) to DIN 7080, max. temp.: 280° C.
2.4 ring seal (alternative)	Viton, PTFE, Perbunan, Silicon
2.5 weld neck nozzle	stainless steel 1.4301; (1.4307); 1.4404
3 vessel wall	

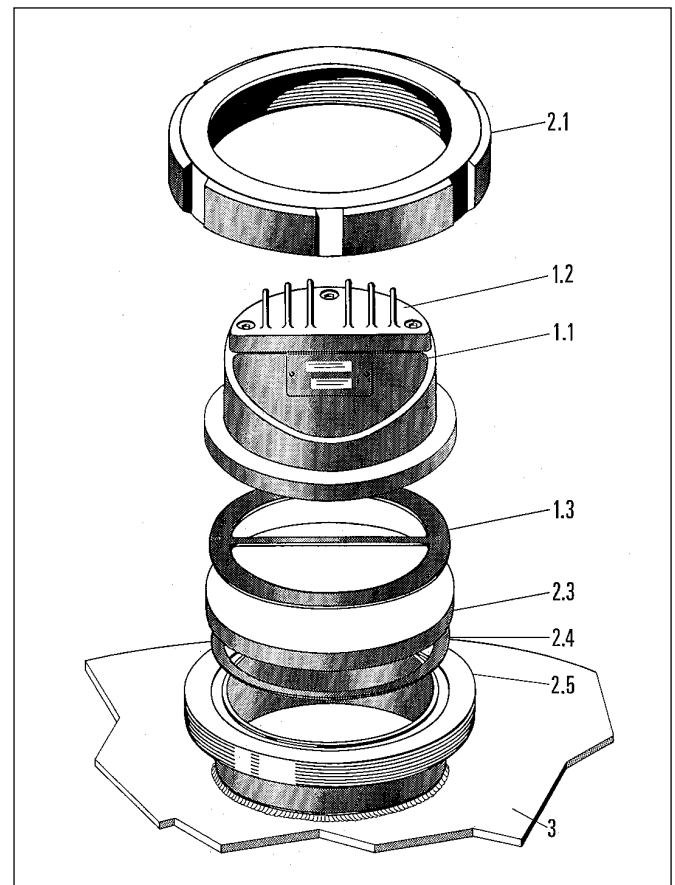
• Diagram for individual temperature rating depending on material selection:



Due to flat seal with bridge in the Lumiglas luminaire, max. operating temperature 220° C.

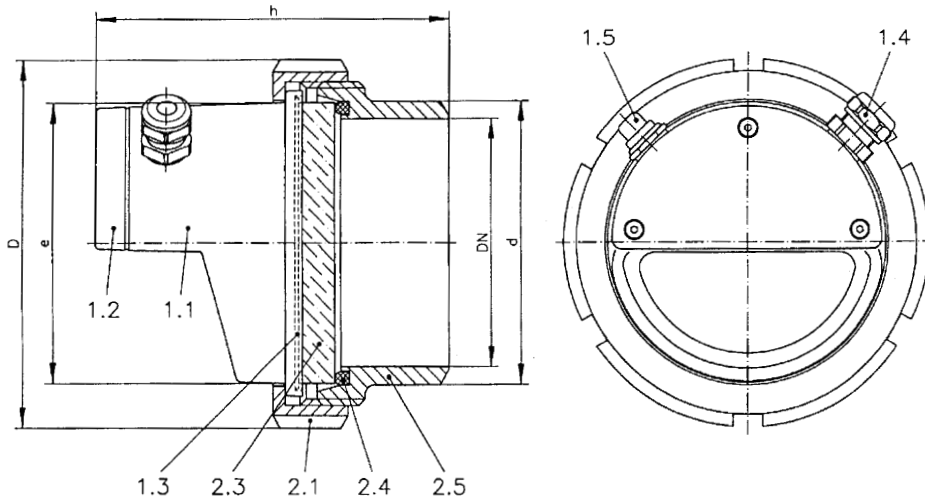


Complete unit Lumiglas screwed sightglass fitting with Lumiglas stainless steel Luminaire Lumistar ME.



Exploded view of a Lumiglas MV-SLM combined light/sightglass unit.

• **Dimensions, mechanical and electrical data of Lumiglas Light/Sightglass Assembly Series MV/SLM or MV-ME:**



- Pos. 1.1 luminaire housing
- 1.2 cover
- 1.3 flat gasket with bridge
- 1.4 cable gland
- 1.5 push button with separate sealing cap
- 2.1 slotted cover nut
- 2.3 sightglass disc
- 2.4 O-ring profile seal
- 2.5 weld neck

• **Parts, Construction and Materials:**

- Luminaire body: Corrosion resistant die cast aluminium, painted RAL 9007 (suitable for food processing) or stainless steel 1.4301.
- Luminaire cover (1.2) is screwed to luminaire housing (1.1) with inserted flat flexible gasket to form the connector box. A built-in push button with separate sealing cap (1.5) for intermittent use is standard.

Size		1	2	3	4*	
Lumiglas Luminaire	type	MV 65/SLM 65	MV 80/SLM 80	MV 100/SLM 100	MV 125/SLM 125	Luminaire aluminium
compatible	DN	65	80	100	125	* can be combined with Lumiglas sightglass wiper type SW I. The dimensions of the version MV/ME – stainless steel – are lowly different.
Voltage	V	24	24	24	24	
Wattage	W	20	20	50	50, (100 only SLM)	
Dimensions	D	112	127	148	178	
	d	79	93	114	136	
	e	78	92	113	136	
	h	110	125	143	140	
alternatively	type	MV 65/ME 65	MV 80/ME 80	MV 100/ME 100	MV 125/ME 125	Luminaire stainless steel

• **Ordering Information:** Please state for example: Lumiglas Light/Sightglass Unit MV 80/ME 80, 24 V – 20 W.

• **Mechanical Installation of Assembly:**

Please note: Electrical connection should be carried out only after the mechanical fitting! Lumiglas luminaire (1) and flat seal (1.3) are bonded together at the factory and come as a unit. After welding nozzle (2.5) into the vessel wall (3), fit O-ring seal (2.4), glass disc (2.3) and luminaire (1.1) as shown in the drawing overleaf. Tighten all these parts down against the nozzle by cover nut (2.1). Always use the special 'C-Spanner'. Finally check if the sightglass disc sits correctly in the fitting. Please refer also to Data sheet 01.06 (Screwed Sightglass Fittings Series MV).

• **Details:** please refer to separate Data sheets and Installation and Operating Instructions:

- 06.02.01 Lumiglas Luminaires, Lumistar SLM (Alu)
- 06.02.02 Stainless Steel Lumiglas Luminaires, Lumistar ME
- 01.06 Screwed Sightglass Fittings Series MV

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

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