

**Lumiglas Luminaire USL07-Ex, Ex II 2 G EEx d (e) IIC T3...T6 (Gas)
II 2 D IP 67 T 195° C...T 80° C (Dust)**

ISO 9001

DATA SHEET 02-0240 05/05

For mounting on sightglass fittings:

The product is a universally applicable sightglass luminaire constructed to Ex standard which is ideally suited for use on combined sight/lightglass assemblies (1 flange version) as well as on separate port (2 flange version) arrangement.

Compact yet powerful:

Glare free illumination; for use with circular sightglass fittings to DIN 28120, bolt-ons or similar as well as fittings equivalent to MV's and visual flow indicators. Nominal sizes, depending on type of fitting, DN 50 upward.

Large light aperture due to screwed lens ring design.

Application:

For illumination of internals of normally closed vessels such as storage tanks, columns, reactors, mixers as well as visual flow indicators in explosion hazardous areas zones 1 & 2 (gas) as well as zones 21 & 22 (dust) to IEC 79-10. Also suitable for use in food processing.

Protection:

Dust and waterjet tight to IP 67 to EN 60529/ DIN VDE 0470 part 1

Operating conditions:

Completely independent of vessel internal pressure/vacuum

Lumiglas luminaire USL 07-Ex is approved for use in ambient temperatures up to 60 °C.

EC-Type-Examination Certificate: PTB 01 ATEX 1031

- II 2 G EEx d (e) IIC T3/T4/T6 or 120° C

EC-Type-Examination Certificate: DMT 01 ATEX E 144

- II 2 D IP 67 T195° C/T130° C/T120° C/T80° C

Ignition protection class:

- **Version I with cable tail:** EEx d (Flameproof Enclosure) to DIN EN 50014:1997 + A1 + A2 and EN 50018: 1994 and EN 50281-1-1: 1998 dust explosion protection

- **Version II with terminal box:** EEx de (Flameproof Enclosure) and Increased Safety to DIN EN 50014:1997 + A1 + A2 and EN 50018: 1994 and EN 50019: 1994 and EN 59281-1-1: 1998 dust explosion protection

Explosion group: IIC (all explosion groups)

Temperature class: up to T6 or T80° C (depending on power)

Electrical data and lamps: in accordance with EC-Type-Examination Certificate

Supply: AC/DC, depending on luminaire model

Operating voltage:

- without integral transformer:

12 V... Halogen filament lamp 50 W

24 V... Halogen filament lamp 50 W or 20 W

230 V... Halogen filament lamp 75 W or 50 W

- with integral transformer:

120 V... Halogen filament lamp 12 V/50 W or 35 W

230 V... Halogen filament lamp 12 V/50 W, 35 W or 20 W

240 V... Halogen filament lamp 12 V/50 W or 35 W

Lamp holder: see table on page 3

Electric connection

- **Cable tail (version I only):** resin cast (at manufacturer's plant) in flared screwed cable entry gland to provide pressure tight joint, providing 2 m (standard), 5, 10 or 20 m length. These can be changed by user.

- **Terminal box (version II only):** any desired cable length.

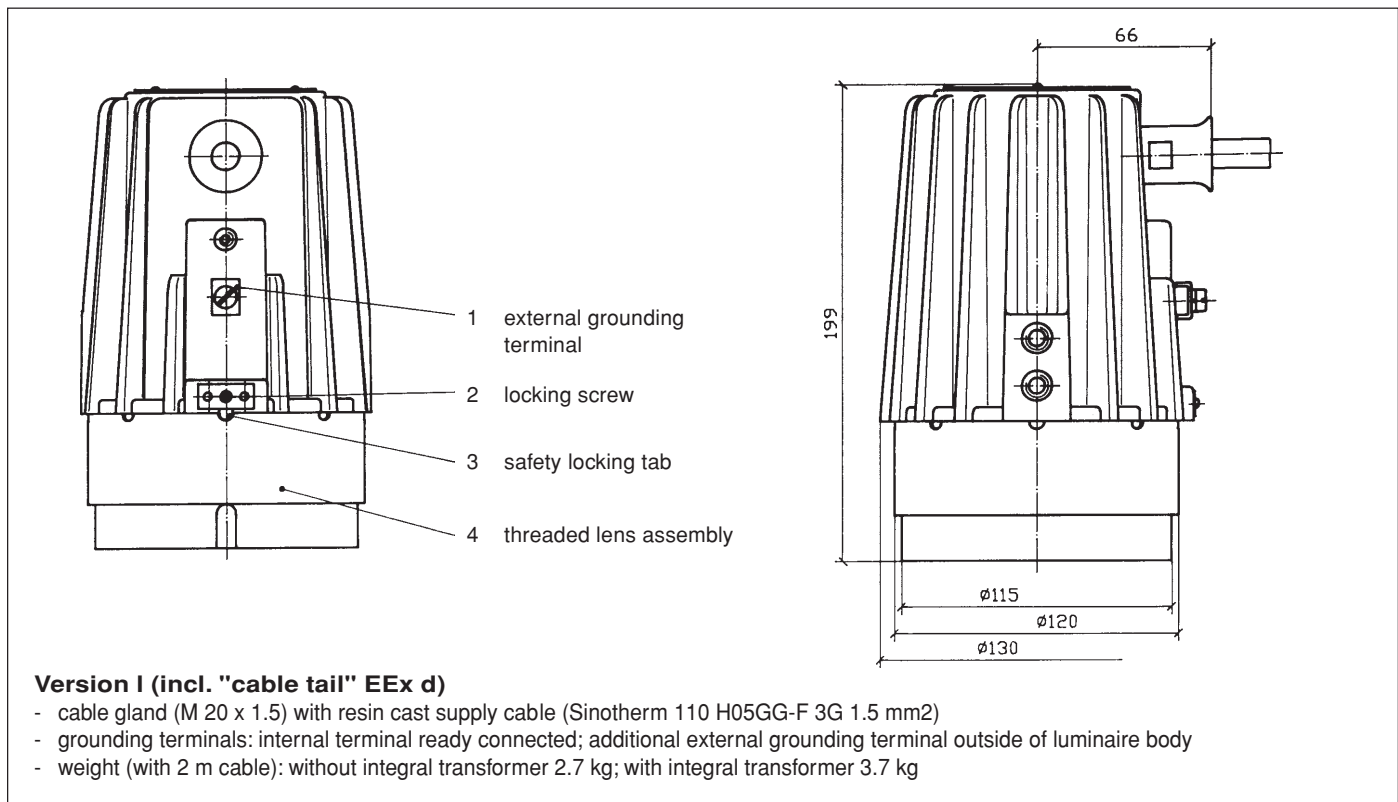


Lumiglas luminaire USL07-Ex d with mounting brackets
Version I with "cable tail"



Lumiglas luminaire USL07-Ex d (e)
Version II with "terminal box"

Dimensions of Lumiglas Luminaire type USL 07-EX



Part	Type USL 07-EX Version I	Cat. No.	Supply Voltage	Integral Transformer	Halogen Filament Lamp			Temperature Class at max. ambient temperatures			
					Voltage/W	Socket	Cat. No.	G 40°C	D 40°C	G 60°C	D60°C
1	(230V/12V) 20W	07E1-A4CNNN0N	230~	with	12V/20W	GY6.35	BLB-L20-GYN	T 6	T 80°	-	-
2	(24V) 20W	07E1-A2CNNN0N	24~	without	24V/20W	G4	BLB-H20-G4N	T 6	-	-	-
3	(230V/12V) 35W	07E1-A4DNNN0N	230~	with	12V/35W	GY6.35	BLB-L35-GYN	T 4	T 130°	-	-
4	(240V/12V) 35W	07E1-A5DNNN0N	240~	with	12V/35W	GY6.35	BLB-L35-GYN	T 4	T 130°	-	-
5	(12V) 50W	07E1-A1FNNN0N	12~	without	12V/50W	GY6.35	BLB-L50-GYN	T 4	T 130°	T 3	T 195°
6	(24V) 50W	07E1-A2FNNN0N	24~	without	24V/50W	GY6.35	BLB-H50-GYN	T 4	T 130°	T 3	T 195°
7	(120V/12V) 50W	07E1-A3FNNN0N	120~	with	12V/50W	GY6.35	BLB-L50-GYN	T 3	T 195°	-	-
8	(230V) 50W	07E1-A4FNNN0N	230~	without	230V/50W	GZ10	BLB-E50-GZ10	T 4	T 130°	T 3	T 195°
9	(230V/12V) 50W	Call Factory	230~	with	12V/50W	GY6.35	BLB-L50-GYN	T 4	T 130°	-	-
10	(240V/12V) 50W	07E1-A5FNNN0N	240~	with	12V/50W	GY6.35	BLB-L50-GYN	T 3	T 195°	-	-
11	(240V) 75W	07E1-A5HNNN0N	230~	without	230V/75W	GZ10	BLB-E75-GZ10	T 3	T 195°	-	-

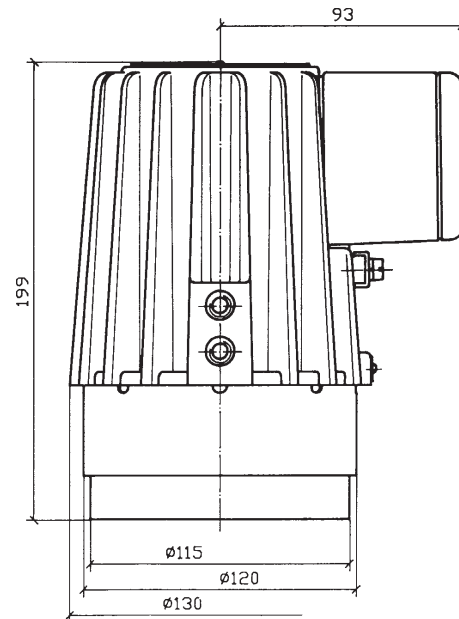
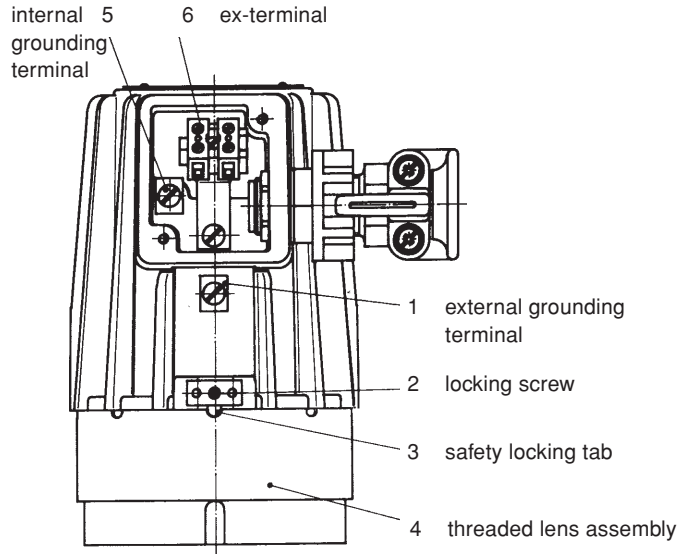
Ordering information: e. g. Lumiglas luminaire USL07-Ex, Version I, 230 V/50 W (if flood-reflector required, please specify!)

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Version II (with 'terminal box' EEx de)

- cable gland (M 20 x 1.5)
- weight: without integral transformer 2.5 kg; with integral transformer 3.5 kg

Parts, construction and materials:

- luminaire body: corrosion resistant Die Cast Al alloy, GK-Al Si 12Mg
- lens assy: Al ring and glass bonded unit, O ring seal
- mounting bracket: (straight or angled) G-Al Si 10Mg

Part	Type USL 07-EX Version II	Cat. No.	Supply Voltage	Integral Transformer	Halogen Filament Lamp			Temperature Class at max. ambient temperatures			
					Voltage/W	Socket	Cat. No.	G 40°C	D 40°C	G 60°C	D 60°C
1	(230V/12V) 20W-AK	07E2-A4CNNNNN	230~	with	12V/20W	GY6.35	BLB-L20-GYN	T 6	T 80°	-	-
2	(24V) 20W-AK	07E2-A2CNNNNN	24~	without	24V/20W	G4	BLB-H20-G4N	T 6	-	-	-
3	(230V/12V) 35W-AK	07E2-A4DNNNNN	230~	with	12V/35W	GY6.35	BLB-L35-GYN	T 4	T 130°	-	-
4	(240V/12V) 35W-AK	07E2-A5DNNNNN	240~	with	12V/35W	GY6.35	BLB-L35-GYN	T 4	T 130°	-	-
5	(12V) 50W-AK	07E2-A1FNNNNN	12~	without	12V/50W	GY6.35	BLB-L50-GYN	T 4	T 130°	-	-
6	(24V) 50W-AK	07E2-A2FNNNNN	24~	without	24V/50W	GY6.35	BLB-H50-GYN	T 4	T 130°	-	-
7	(120V/12V) 50W-AK	07E2-A3FNNNNN	120~	with	12V/50W	GY6.35	BLB-L50-GYN	T 3	T 195°	-	-
8	(230V) 50W-AK	07E2-A4FNNNNN	230~	without	230V/50W	GZ10	BLB-E50-GZ10	T 4	T 130°	-	-
9	(230V/12V) 50W-AK	Call Factory	230~	with	12V/50W	GY6.35	BLB-L50-GYN	T 4	T 130°	-	-
10	(240V/12V) 50W-AK	07E2-A5FNNNNN	240~	with	12V/50W	GY6.35	BLB-L50-GYN	T 3	T 195°	-	-
11	(230V) 75W-AK	07E2-A4HNNNNN	230~	without	230V/75W	GZ10	BLB-E75-GZ10	T 3	T 195°	-	-

Ordering information: e. g. Lumiglas luminaire USL07-Ex, Version II, 230 V/50 W-AK (if flood-reflector required, please specify!)

Accessories for Lumiglas luminaire USL07-Ex:

Part	Cat. No.
a) for both luminaire versions:	
Mounting brackets; Al alloy:	
- luminaire mounting bracket, straight (only suitable for use on light port) DN 50 to 100	0354.005.00
- luminaire mounting bracket, angled (also suitable for combined light/sight port) DN 125 to 200	0354.006.00
- Lumiglas timer (integral time delay module, 5 minutes ON-mode setting)	factory fitted
- EEx separate time delay switch for timed or permanent illumination	refer to data sheet 02-0270
- claw spanner for lens ring open luminaire	6805.002.00
- filament lamps	see tables on page 3
b) for version I (with cable tail):	
cable entry gland complete with:	
- 2 m cable tail	1084.013.00
- 5 m cable tail	1084.015.00
- 10 m cable tail	1084.016.00
- 20 m	1084.017.00

Simple fitting by means of purpose designed mounting brackets

The luminaire is usually attached by means of the mounting brackets onto the cover flange of the circular sightglass fitting or flow indicator or onto the slotted cover nut of a screwed sightglass fitting.

Luminaire USL007-Ex is suitable for use from following nominal fitting sizes upwards:

- a) circular sightglass weld-on fittings DIN 28120: DN 50...
- b) circular sightglass flanged fittings Bolt-On: 2"...
- c) Visual Flow Indicators: 2"...
- d) Weld-neck sightglass fittings similar to MV: DN 100...

Easy lamp replacement due to threaded opening

Mounting example:

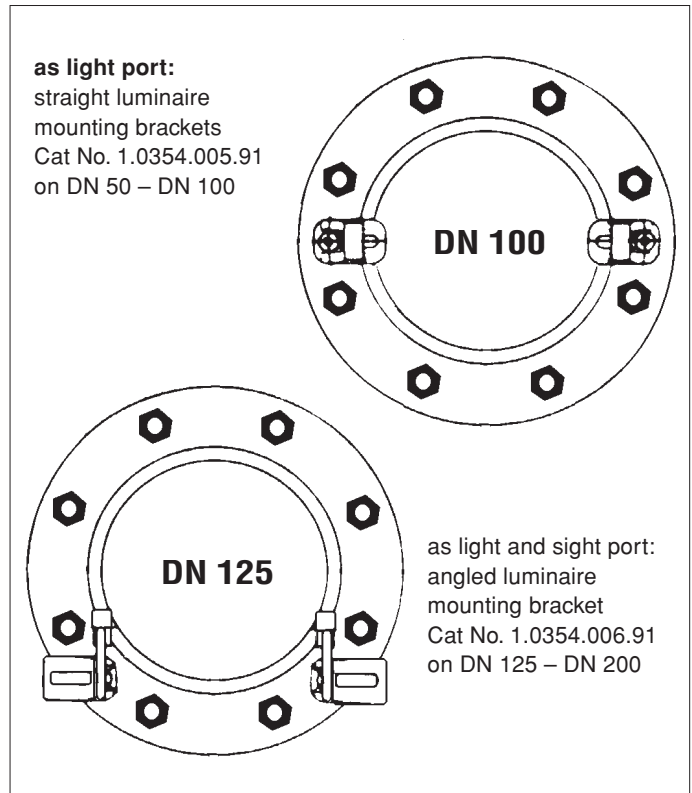


Mounted on a weld-on sightglass assembly DIN 28120 to form a combined sight and light port

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



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



Possible mounting combinations