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Lumiglas Luminaire USL07-Ex,
II 2G Ex de IIC T3/T4/T6/120°C (Gas)
II 2D Ex tD A21 IP67 T195/T130/T80/T 120°C

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/light-glass assemblies (1 flange version) as well as on separate port (2 flange version) arrangement.

Compact design; powerful light output:
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 illuminating the interior of tanks, hoppers, silos, agitators and other, usually closed, vessels and reactors as well as visual flow indicators **in potentially explosive environments**. Suitable for use in food processing industries.

Protection: Dust and waterjet tight to IP 65 and IP 67 acc. to EN 60 529/ DIN VDE 0470 part 1

Operating conditions:
Independent of the internal pressure/vacuum in the vessel. On no account should a sightglass luminaire be used on its own to close a vessel port or as a replacement for the cover flange or instead of the complete sightglass flange assembly.

Lumiglas luminaire USL 07-Ex is approved for use in ambient temperatures up to 60 °C, depending on the type of lamp bulb used.

Technical data, explosion protection:
This luminaire meets the essential safety and health requirements by complying with the regulations for

a) Gas
EN 60079-0: 2006	General Requirements
EN 60079-1: 2007	Flame-proof Enclosure
EN 60079-7: 2007	Increased Safety (relates to terminal box)
Explosion group:	IIC (includes IIA and IIB)
Temperature Class:	T3/T4/T6/120°C (depending on wattage)

b) Dust
EN 61241-0: 2006	General Requirements
EN 61241-1: 2004	Protection by Enclosures
Temperature Class:	T195/T130/T80/T120°C (depending on wattage)

Test Certification: EC type-examination certif. BVS 08 ATEX E 136
II 2G Ex d IIC T3/T4/T6/120°C
II 2D Ex tD A21 IP67 T195/T130/T80/T120°C

Voltage: AC/DC, depending on luminaire type

Operating voltage:
Without integrated transformer:
12 V	Halogen lamp	50 W
24 V	Halogen lamp	20 W, 50 W
230 V	Halogen lamp	50 W, 75 W

With integrated transformer:
PTC-protected (5 W), otherwise thermal fuse (> 5 W)
120 V	Halogen lamp	12 V/5 W
230 V	Halogen lamp	12 V/20 W, 35 W, 50 W
240 V	Halogen lamp	12 V/35 W, 50 W

CE 0158

Lumiglas luminaire USL07-Ex wiht power supply cable
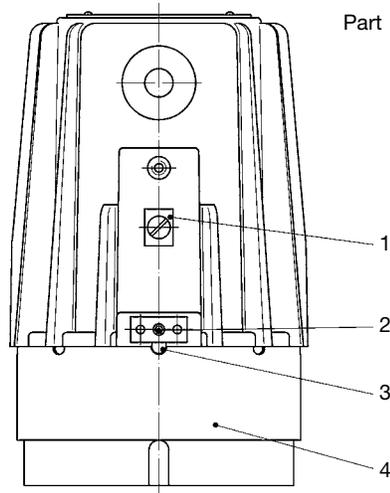

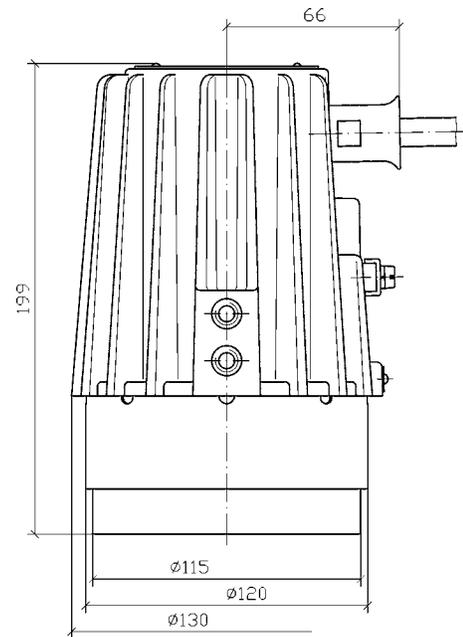Lumiglas luminaire USL07-Ex with terminal box

Direct electrical connection via
- **Power supply cable** (version I only):
  Pressure-tight, resin-cast flared cable entry gland with power supply cable installed by manufacturer.
  Cable lengths: 2 m (standard), 5 m or 20 m
  Replacement possible at any time by operating company.

- **Terminal box** (version II only): Any cable length possible.
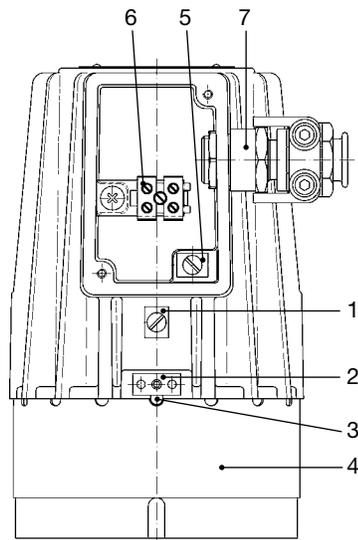
Dimensions of Lumiglas Luminaire type USL 07-EX

Part 1 External grounding terminal

   2 Locking screw

   3 Safety tab

   4 Screw-in glass lens
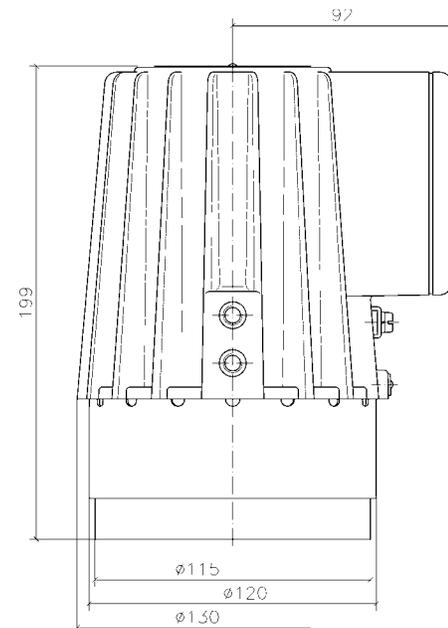
66

199

Ø115
Ø120
Ø130

Version I (incl. power supply cable Ex d)
- Cable gland with pressure-tight resin-cast power supply cord, Sinotherm 110 H05GG-F 3G, 1.5 mm²
- Grounding terminal: internal terminal already connected, additional grounding terminal on outside of enclosure
- Weight (includes power supply cable): 6 lbs.; with built-in transformer: 8 lbs.

6 5 7

Part 1 External grounding terminal

   2 Locking screw

   3 Safety tab

   4 Screw-in glass lens

   5 Internal grounding terminal

   6 Ex terminal block

   7 Cable entry gland M20 x 1.5

1
2
3
4

92

199

Ø115
Ø120
Ø130

Version II (incl. terminal box Ex de)
- Weight: without built-in transformer: 5.5 lbs.; with built-in transformer: 7.7 lbs.

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Item	Type USL 07-EX Variant I	Part No.	Nominal Voltage	Integrated Transformer	Halogen Lamp Voltage/W	Socket	Cat. No.	Ambient Temperature Range -20°C≤Ta≤+40°C		-20°C≤Ta≤+60°C	
1	(230V/12V) 20W	07E1-A4CNNN0N	230~	with	12V/20W	GY6.35	BLB-L20-GYN	2G T6	2D T80°	–	–
2	(24V) 20W	07E1-A2CNNN0N	24≈	without	24V/20W	G4	BLB-H20-G4N	2G T6	2D T80°	–	–
3	(230V/12V) 35W	07E1-A4DNNN0N	230~	with	12V/35W	GY6.35	BLB-L35-GYN	2G T4	2D T130°	–	–
4	(240V/12V) 35W	07E1-A5DNNN0N	240~	with	12V/35W	GY6.35	BLB-L35-GYN	2G T4	2D T130°	–	–
5	(12V) 50W	07E1-A1FNNN0N	12≈	without	12V/50W	GY6.35	BLB-L50-GYN	2G T4	2D T130°	2G T3	2D T195°
6	(24V) 50W	07E1-A2FNNN0N	24≈	without	24V/50W	GY6.35	BLB-H50-GYN	2G T4	2D T130°	2G T3	2D T195°
7	(120V/12V) 50W	07E1-A3FNNN0N	120~	with	12V/50W	GY6.35	BLB-L50-GYN	2G T3	2D T195°	–	–
8	(230V) 50W	07E1-A4FNNN0N	230≈	without	230V/50W	GZ10	BLB-E50-GZ10	2G T4	2D T130°	2G T3	2D T195°
9	(230V/12V) 50W	Call Factory	230~	with	12V/50W	GY6.35	BLB-L50-GYN	2G T4	2D T130°	–	–
10	(240V/12V) 50W	07E1-A5FNNN0N	240~	with	12V/50W	GY6.35	BLB-L50-GYN	2G T3	2D T195°	–	–
11	(230V) 75W	07E1-A5HNNN0N	230≈	without	230V/75W	GZ10	BLB-E75-GZ10	2G T3	2D T195°	–	–

Ordering information: (please specify if flood reflector is preferred) e. g. Lumiglas luminaire USL07-Ex, version I, 120 V/50 W

Item	Type USL 07-EX Variant II	Part No.	Nominal Voltage	Integrated Transformer	Halogen Lamp Voltage/W	Socket	Cat. No.	Ambient Temperature Range -20°C≤Ta≤+40°C		-20°C≤Ta≤+60°C	
1	(230V/12V) 20W-AK	07E2-A4CNNNNN	230~	with	12V/20W	GY6.35	BLB-L20-GYN	2G T6	2D T80°	–	–
2	(24V) 20W-AK	07E2-A2CNNNNN	24≈	without	24V/20W	G4	BLB-H20-G4N	2G T6	2D T80°	–	–
3	(230V/12V) 35W-AK	07E2-A4DNNNNN	230~	with	12V/35W	GY6.35	BLB-L35-GYN	2G T4	2D T130°	–	–
4	(240V/12V) 35W-AK	07E2-A5DNNNNN	240~	with	12V/35W	GY6.35	BLB-L35-GYN	2G T4	2D T130°	–	–
5	(12V) 50W-AK	07E2-A1FNNNNN	12≈	without	12V/50W	GY6.35	BLB-L50-GYN	2G T4	2D T130°	–	–
6	(24V) 50W-AK	07E2-A2FNNNNN	24≈	without	24V/50W	GY6.35	BLB-H50-GYN	2G T4	2D T130°	–	–
7	(24V) 50W-AK	Call Factory	24≈	without	24V/50W	GY6.35	BLB-H50-GYN	2G T120°	2D T120°	–	–
8	(120V/12V) 50W-AK	07E2-A3FNNNNN	120~	with	12V/50W	GY6.35	BLB-L50-GYN	2G T3	2D T195°	–	–
9	(230V) 50W-AK	07E2-A4FNNNNN	230≈	without	230V/50W	GZ10	BLB-E50-GZ10	2G T4	2D T130°	–	–
10	(230V/12V) 50W-AK	Call Factory	230~	with	12V/50W	GY6.35	BLB-L50-GYN	2G T4	2D T130°	–	–
11	(240V/12V) 50W-AK	07E2-A5FNNNNN	240≈	with	12V/50W	GY6.35	BLB-L50-GYN	2G T3	2D T195°	–	–
12	(240V) 75W-AK	07E2-A5HNNNNN	230≈	without	230V/75W	GZ10	BLB-E75-GZ10	2G T3	2D T195°	–	–

Ordering information: (please specify if flood reflector is preferred) e. g. Lumiglas luminaire USL07-Ex, version II, 120 V/50

Accessories:

Item	Component	Part No.
1	fixture for luminaire, straight, DN 50 to 100	BRK EX 08 S
2	fixture for luminaire, angled, DIN 125 to 200	BRK EX 08 A
3	Lumiglas timer, integrated, for time-dependent illumination, 5 min.	On request
4	Lumiglas timer, external, for time-dependent illumination, Lumiglas Ex timer switch	L1048.2-XX
5	claw spanner for screw-in lens for opening the luminaire	L1106
6	cable entry gland complete with 5 m power supply cable (for variant I)	1084.015.00
7	cable entry gland complete with 20 m power supply cable (for variant I)	1084.017.00

Very easy to install using special mountings, ensuring convenience of use:

The luminaire is attached to the cover flange of a circular sight glassfitting or a visual flow indicator using the luminaire brackets, or secured to the grooved nut on weld-neck sight glass fittings.

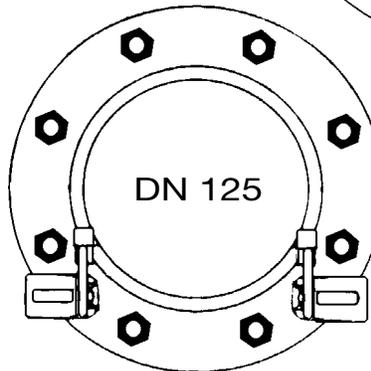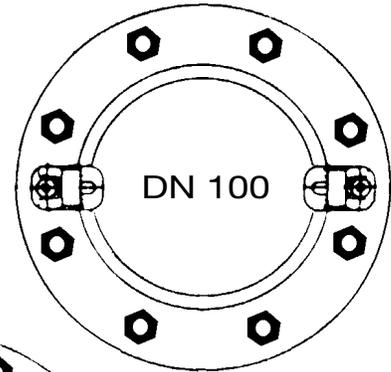**Lumiglas luminaires USL 07-Ex fit the following sizes:**

a) circular sightglass weld-on fittings DIN 28120: DN 50 and larger

b) circular sightglass flanged fittings Bolt-On: 2" and larger

c) Visual Flow Indicators: 2" and larger

d) Weld-neck sightglass fittings similar to MV: DN 100 and larger

Application as combined sight and light glass mounted on a sightglass port to DIN 28120

as a light glass:
straight lamp fixture
Part No. 1.0354.005.91
on DN 50 – DN 100

DN 100

DN 125

as a light and sight glass:
angular lamp fixture
Part No. 1.0354.006.91
on DN 125 – DN 200

Combination options

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