




Lumiglas Luminaire Series USL06-Ex, II 2 G EEx d (e) IIC T3/T4

DATA SHEET 07.06

- **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:**
dazzle free illumination; for use with circular sightglass fittings to DIN 28120 / DIN 28121 or similar as well as fittings equivalent to DIN 11851 and flow indicators. Nominal sizes, depending on type of fitting, DN 50 upward.
- **Large light aperture thanks to screwed lens ring design.**
- **Application:**
For illumination of internals of normally closed vessels such as storage tanks, columns, reactors, mixers as well as flow indicators in **explosion hazardous areas, Zone 1 and 2 according to IEC 79-10**; suitable for use in food processing.
- **Protection:** Dust and waterjet proof to IP 65 to EN 60529/ DIN VDE 0470 part 1.
- **Operating conditions:** totally independent of vessel internal pressure/vacuum.
- **Lumiglas luminaires of this series are approved for use in ambient temperatures of up to 60° C.**
EC-Type-Examination Certificate: PTB 99 ATEX 1157,
 II 2 G EEx d (e) IIC T3/T4 or 120° C.
- **Ignition protection class:**
 - Version I incl. cable tail: EEx d Flameproof Enclosure to DIN EN 50018: 1994.
 - Version II with terminal box: EEx de Flameproof Enclosure and Increased Safety to DIN EN 50019: 1994.
- **Explosion group:** IIC (all explosion classes)
- **Temperature class:** up to T4 (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 20 W, 35 W or 50 W
 - 24 V... Halogen filament lamp 20 W or 50 W
 - 230 V... Halogen filament lamp 50 Wwith integral transformer:
 - 120 V... Halogen filament lamp 12 V/20 W
 - 230 V... Halogen filament lamp 12 V/20 W
 - 240 V... Halogen filament lamp 12 V/20 W
- **Lamp holder:** See table on page 3.
- **Connecting cable (Version I only):** Cable tail is resin cast in trumpet style screwed cable entry gland to provide pressure tight joint at manufacturer's works, providing 2 m (standard), 5, 10, 20 m options; these can be changed easily by user.
Terminal box (Version II only): Cable can be any desired length.
- **Accessories:**
 - mounting: stainless steel hinged bracket or adapter flange
 - claw spanner for lens ring to open/close luminaire
 - integral 'Lumiglas timer' 5 minutes time delay to 'off'
 - EEx separate push button time delay switch for timed illumination
 - connecting cable



Lumiglas Luminaire USL06-Ex with cable tail and hinged mounting bracket



Lumiglas Luminaire USL06-Ex with terminal box and hinged mounting bracket

• Dimensions and electrical data for Lumiglas Luminaire series USL06-Ex

Part 1 external earthing terminal
 2 locking screw
 3 locking tab
 4 screwed lens assembly

Dimensions: 61, 167, 72.5, 63, 16, 58.5, 35.5, $\phi 95$, $\phi 100$, $\phi 110$

- **Version I (incl. cable tail EEx d)**
 - cable gland: with resin cast supply cable (Siemens 4GMHAG-J 3 x 1,5 mm²)
 - earthing terminals: Internal terminal ready connected to externally mounted earth terminal
 - weight (excl. cable): without integral transformer 1,7 kg; with integral transformer 2,3 kg

Part 1 external earthing terminal
 2 locking screw
 3 locking tab
 4 screwed lens assembly
 5 internal earthing terminal
 6 Ex-terminal

Dimensions: 88, 167, 72.5, 63, 16, 58.5, 35.5, $\phi 95$, $\phi 100$, $\phi 110$

- **Version II (with 'terminal box' EEx de)**
 - cable gland M 20 x 1,5
 - weight: without integral transformer 1,8 kg; with transformer 2,4 kg

• Parts, construction and materials:

- luminaire body: corrosion resistant Die Cast Al alloy, GK-AL Si 12 Mg
- lens assy: Al ring and glass bonded unit, O ring seal
- mounting bracket: stainless steel, see under accessories

• Ordering information, see table on page 3:

e. g. Lumiglas Luminaire Type USL06-Ex, version I, 12 V/20 W, part No. 3541.001.00
 (please advise if luminaire to be supplied with flood reflector)

Ordering information for accessories for Lumiglas Luminaire USL06-Ex

a) for both versions:

Item	Cat. No.
• luminaire mounting bracket	0354.016.00
• luminaire mounting adapter collar	1356.015.00
• Lumiglas timer – works fitted only	(see data sheet 09.01)
• claw spanner	6805.001.00

b) for version I (with cable tail):

• cable gland complete with	
– 5 m cable	1084.015.00
– 10 m cable	1084.016.00
– 20 m cable	1084.017.00



• Connecting Data for Lumiglas Luminaire Series USL06-Ex

Version 1 (with cable tail)

Part	Type USL06-Ex	Cat. No.	Supply/ Voltage	Integral Transformer	Halogen Filament Lamp			Temperature Class at max. ambient temp.	
					Socket	Voltage/W	Cat. No.	40° C	60° C
1									
2	(12 V) 20 W	3541.001.00	12 .	–	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
3									
4	(24 V) 20 W	3541.006.00	24 .	–	G4	24 V/20 W	3232.206.00	T 4	T 4
5									
6	(24 V) 20 W	3541.007.00	24 .	–	G4	(Refl.) 24 V/20 W	3232.222.00	T 4	T 4
7									
8	(120 V/12 V) 20 W	3541.011.00	120 ,	with	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
9									
10	(230 V/12 V) 20 W	3541.016.00	230 ,	with	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
11									
12	(240 V/12 V) 20 W	3541.021.00	240 ,	with	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
13									
14									
15									
16	(12 V) 35 W	3541.026.00	12 .	–	GY 6.35	12 V/35 W	3232.232.00	T 4	T 3
17									
18									
19									
20	(12 V) 50 W	3541.031.00	12 .	–	GY 6.35	12 V/50 W	3232.238.00	T 3	–
21									
22	(24 V) 50 W	3541.036.00	24 .	–	GY 6.35	24 V/50 W	3232.242.00	T 3	–
23									
24	(230 V) 50 W	3541.041.00	230 .	–	GZ10	230 V/50 W	3232.261.00	T 3	–

Version 2 (with terminal box)

Part	Type USL06-Ex	Cat. No.	Supply/ Voltage	Integral Transformer	Halogen Filament Lamp			Temperature Class at max. ambient temp.	
					Socket	Voltage/W	Cat. No.	40° C	60° C
31									
32	(12 V) 20 W-AK	3541.051.00	12 .	–	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
33									
34	(24 V) 20 W-AK	3541.056.00	24 .	–	G4	24 V/20 W	3232.206.00	T 4	T 4
35									
36	(24 V) 20 W-AK	3541.057.00	24 .	–	G4	(Refl.) 24 V/20 W	3232.222.00	T 4	T 4
37									
38	(120 V/12 V) 20 W-AK	3541.061.00	120 ,	with	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
39									
40	(230 V/12 V) 20 W-AK	3541.066.00	230 ,	with	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
41									
42	(240 V/12 V) 20 W-AK	3541.071.00	240 ,	with	GY 6.35	12 V/20 W	3232.240.00	T 4	T 4
43									
44									
45									
46	(12 V) 35 W-AK	3541.076.00	12 .	–	GY 6.35	12 V/35 W	3232.232.00	T 4	–
47									
48									
49									
50	(12 V) 50 W-AK	3541.081.00	12 .	–	GY 6.35	12 V/50 W	3232.238.00	T 3	–
51									
52	(24 V) 50 W-AK	3541.086.00	24 .	–	GY 6.35	24 V/50 W	3232.242.00	T 3	–
53									
54	(230 V) 50 W-AK	3541.091.00	230 .	–	GZ10	230 V/50 W	3232.261.00	T 4	–

- **Simple fitting with special mounting accessories:**

On circular sightglass units and flow indicators the luminaire is fitted to the cover flange using the hinged bracket. On the screwed sightglass the luminaire is fitted to the slotted cover nut.

Luminaire model USL06-Ex fits the following nominal sizes:

- a) circular fittings to DIN 28120: DN 50...
- b) circular fittings to DIN 28121: DN 50...
- c) flow indicators: DN 50
- d) screwed fittings to DIN 11851:
 - sizes DN 65, 80, 100: using adapter collar
 - sizes DN 80, 100, 125: using hinged bracket
 - sizes DN 80 und 100: using either adapter collar or hinged bracket

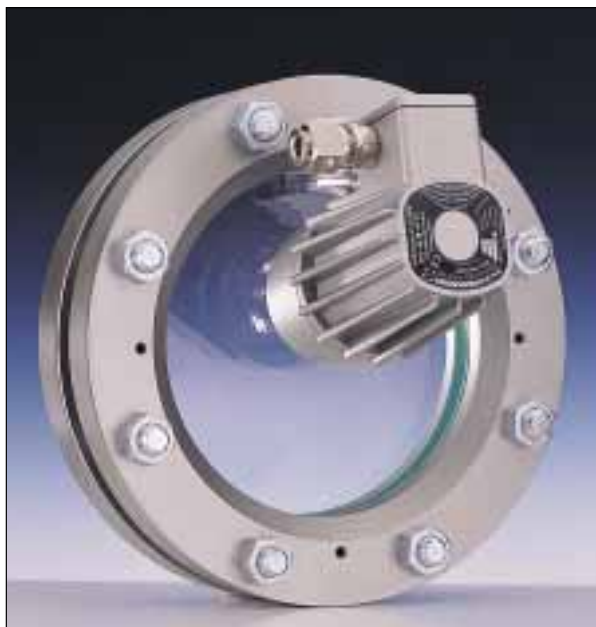
- **Problem free electrical connection**

alternatively via:

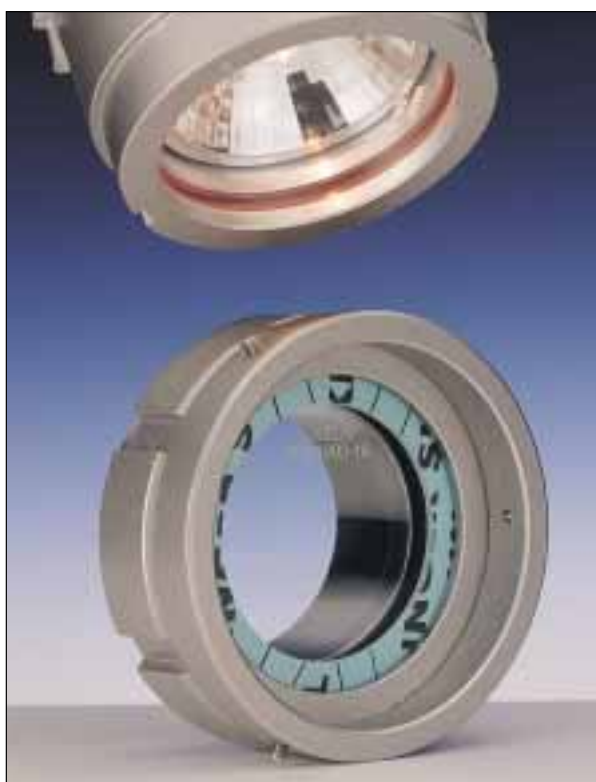
- terminal box
- or
- cable tail, installed at manufacturer's works

- **Easy lamp exchange**

thanks to lens ring design



Lumiglas Luminaire USL06-Ex mounted on a sightglass assembly to DIN 28120; using hinged mounting bracket, combined sight/light port



Lumiglas Luminaire USL06-Ex showing adapter collar fitted to a screwed sightglass assembly, forming a light port

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