

Lumistar Luminaire Lumiflex USL 07 ALF-Ex



II 2G Ex de IIC T4/T6 Gb
II 2D Ex tb IIIC T80°C/T130°C Db

CE 0158

3755.265 d

- For mounting on sight glass fittings; particularly for the selective illumination of processes on machines and reactors with limited space, especially in **potentially explosive operating areas**.

- **This Lumiglas luminaire has been specifically developed for light guide applications:**

- Economical power consumption
- Low maintenance: lamp service life of up to 6,000 hours
- Flexible light guide made of stainless steel
- Easy to clean

- **Application:**

For illuminating individual processes and/or the interior of reactors, containers, apparatuses, etc. in potentially explosive environments in Zones 1 and 2 as well as Zones 21 and 22.

- **Protection:** IP 65 and IP 67 acc. to DIN EN 60 529

- **Operating conditions:**

Independent of internal pressure/vacuum in the vessel.
On no account should a sight glass luminaire be used on its own to close a vessel port or as a substitute for the cover flange or the sight glass/flange assembly.

- **Lumistar luminaires of this type are approved for applications in ambient temperatures of between -20°C and +60°C.**

- **Technical data on Ex protection:**

This luminaire satisfies the general health and safety regulations by complying with the specifications for

a) **Gas**

- EN 60079-0: 2009 General Requirements
- EN 60079-1: 2007 Flameproof enclosure 'd'
- EN 60079-7: 2007 Increased safety 'e'
- Group: IIC (incorporating IIA and IIB)
- Temperature class: T6 at ambient temperature 40°C
T4 at ambient temperature 60°C

b) **Dust**

- EN 60079-0: 2009 General Requirements
- EN 60079-31: 2009 Protection by enclosure 't'
- Group: IIIC (incorporating IIIA and IIIB)
- Temperature class: T80°C at ambient temperature 40°C
T130°C at ambient temperature 60°C

- **EC type examination certificate:** BVS 10 ATEX E 100 X

(X = OEM replacement parts must be used!)

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- **Operating voltage** with built-in transformer:

- | | |
|-----------------------|----------------------|
| 24 V AC halogen lamp | 12 V/20 W, 10 V/39 W |
| 120 V AC halogen lamp | 12 V/20 W, 10 V/39 W |
| 230 V AC halogen lamp | 12 V/20 W, 10 V/39 W |
| 240 V AC halogen lamp | 12 V/20 W, 10 V/39 W |



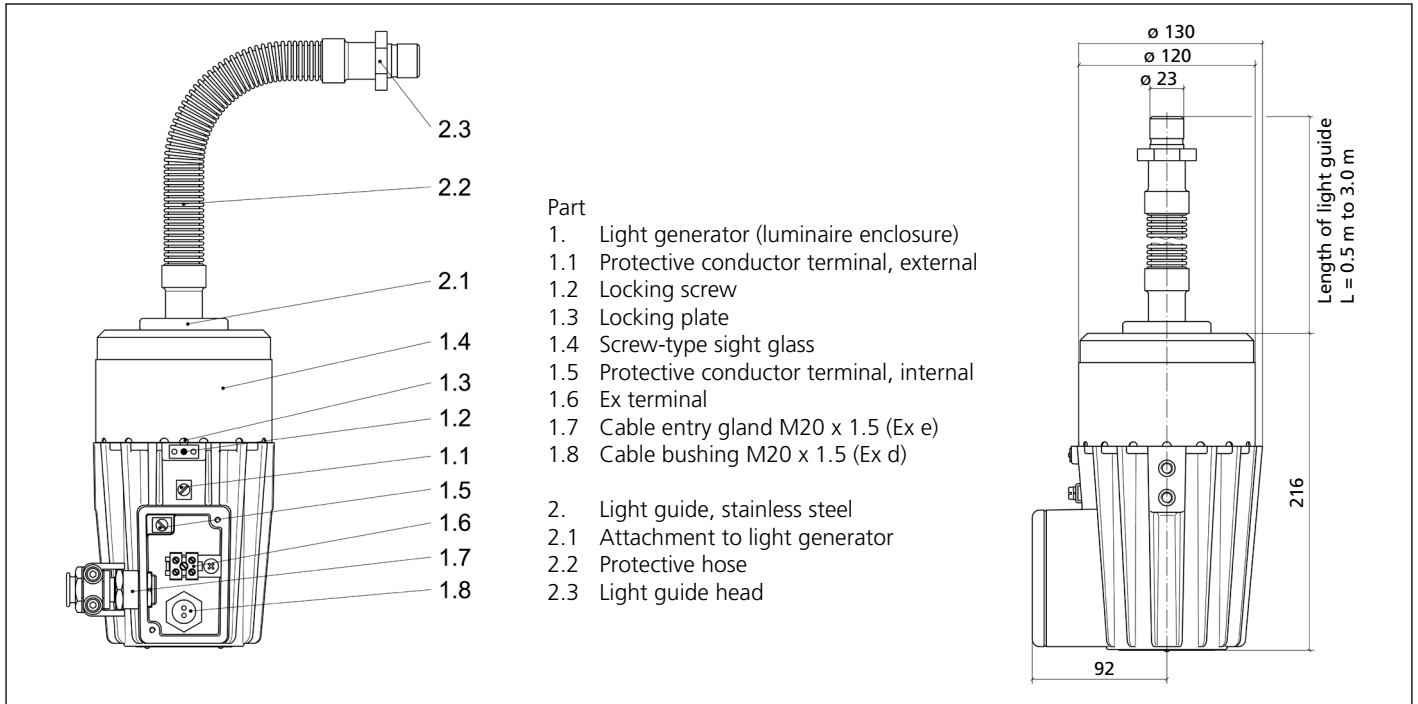
Lumistar luminaire Lumiflex USL 07 ALF-Ex

- **Convenient electrical connection** via integrated terminal box; cable entry gland M20 x 1.5

- **Transformers:**

Transformers for 24 V secondary voltage can be supplied on request.

• **Dimensions and electrical data for Lumistar luminaire Lumiflex USL 07 ALF-Ex**



- Part
- 1. Light generator (luminaire enclosure)
 - 1.1 Protective conductor terminal, external
 - 1.2 Locking screw
 - 1.3 Locking plate
 - 1.4 Screw-type sight glass
 - 1.5 Protective conductor terminal, internal
 - 1.6 Ex terminal
 - 1.7 Cable entry gland M20 x 1.5 (Ex e)
 - 1.8 Cable bushing M20 x 1.5 (Ex d)
 - 2. Light guide, stainless steel
 - 2.1 Attachment to light generator
 - 2.2 Protective hose
 - 2.3 Light guide head

• **Description and materials:**

- **Light generator:** non-corrosive cast aluminium alloy, GK-AlSi 12 Mg
- **Light aperture:** unit of aluminium ring, glass and O-ring
- **Fastening elements for light generator:** (two pieces included in scope of supply) G-AlSi 10 Mg (part no. 0354.005.00)

- **Light guide** (please specify length!) including stainless steel fastening for light guide head (part no. 1947.005.00)
- **Weight:** 4.3 kg (excl. light guide)

• **Connecting data for Lumistar luminaire Lumiflex USL 07 ALF-Ex**

USL 07 ALF-Ex	part no.	power supply V	built-in transformer	halogen lamp		temperature class at max. ambient temperature	
				voltage wattage	part no.	G 40°C	G 60°C
24 V (12 V) 20 W	3541.326.00	24 ~	with	12 V/20 W	3232.279.00	T6	T4
24 V (10 V) 39 W	3541.336.00	24 ~	with	10 V/39 W	3232.280.00	T6	T4
120 V (12 V) 20 W	3541.327.00	120 ~	with	12 V/20 W	3232.279.00	T6	T4
120 V (10 V) 39 W	3541.337.00	120 ~	with	10 V/39 W	3232.280.00	T6	T4
230 V (12 V) 20 W	3541.328.00	230 ~	with	12 V/20 W	3232.279.00	T6	T4
230 V (10 V) 39 W	3541.338.00	230 ~	with	10 V/39 W	3232.280.00	T6	T4
240 V (12 V) 20 W	3541.329.00	240 ~	with	12 V/20 W	3232.279.00	T6	T4
240 V (10 V) 39 W	3541.339.00	240 ~	with	10 V/39 W	3232.280.00	T6	T4

• **Order data:**

Example: Lumistar luminaire Lumiflex USL 07 ALF-Ex, 230/10 V, 39 W, part no. 3541.338.00 with light guide length 1.5 m, part no. 3383.023.00 (see also accessories).

• **Straightforward mechanical assembly with special fixture ensures practical applications:**

- Caution: Avoid looking into the light source – risk of damage to the eyes!
- The light generator (1) is mounted at a suitable place on the reactor, apparatus, etc., using the fastening element provided. The light guide must be mounted free of tension or twisting with a bending radius of at least 170 mm and installed with the light guide head holder.

The light guide head (2.3) is screwed to the place to be illuminated using the relevant stainless steel fastening unit.

• **Accessories:**

- Claw spanner for screw-in lens, for opening the light generator, part no. 6805.002.00
 - Light guides are available in the following standard lengths (please specify when ordering!):
 - 0.5 m part no. 3383.021.00
 - 1.0 m part no. 3383.022.00
 - 1.5 m part no. 3383.023.00
 - 2.0 m part no. 3383.024.00
 - 3.0 m part no. 3383.026.00
- Other light guide lengths can be supplied as special versions.