

# LUMISTAR EX LAMPER, ATEX

Aluminium

P-L3541.086.00

USL 06-Ex skueglas lampe 24V/50W



- Alle Ex skueglas lamper er godkendte til Zone 1
- Forsyningsspænding afhængig af type:  
12V/24V/120V/230V
- Effekt afhængig af størrelse: 20W, 50W, 100W
- Anvendelig til skueglas armatur DIN28120/DIN28121 og DIN11851
- De fleste i beskyttelsesklasse IP 65 og IP 67 iht. DIN EN 60529



## PRODUKTBESKRIVELSE

Lumistar Ex lamper til montering på glasfittings:

Denne type belysning til skueglas er designet til universelle anvendelser i eksplosionsfarlige omgivelser. Lumistar Ex lamper er ideelle til brug i kombineret syns- og lysanordning (enkeltflange version) eller med to separate porte (2-flange version).

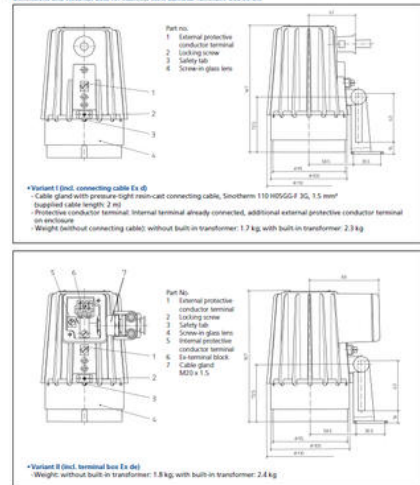
Kompakt design - kraftig lysudgang:

Egnet til cirkulære blikglasbeslag til DIN 28120 / DIN 28121 eller lignende, skruetype glasfittings i overensstemmelse med DIN 11851 og til visuelle flowindikatorer.

Generøs lysåbning og bekvem lampeudskiftning takket være optimalt designet skruet linselukning.

Anvendes til belysning af tanke, beholdere, siloer, omrørere og andre for det meste lukkede applikationer, beholdere og reaktorer samt visuelle flowindikatorer i eksplosionsfarlige omgivelser. Velegnet til brug i fødevarerindustrien.

• Dimensions and electrical data for stainless steel Lumistar luminaires USL 06-Ex:



• Dimensions and electrical data for Lumistar luminaires USL 05-Ex and USL 05-LED-Ex:

**Weight:** without built-in transformer: 0.8 kg, with built-in transformer: 1.0 kg

**Components, design and materials:**  
- Body of luminaire: Corrosion-resistant die-cast aluminium alloy, GK-ALSi10Mg  
- Cable gland with pressure-tight resin-cast connecting cable, Sinotherm 110 H05GG-F 3G, 1.5 mm², standard cable length: 2 m  
- Protective conductor terminal: Internal terminal already connected, additional external protective conductor terminal on enclosure  
- Light exit: Bonded unit made of aluminium ring and glass, Vision seal  
- Fastening components: See accessories

**Connecting data: Temperature classification and electrical parameters (see also: EC Type Examination Certificate)**

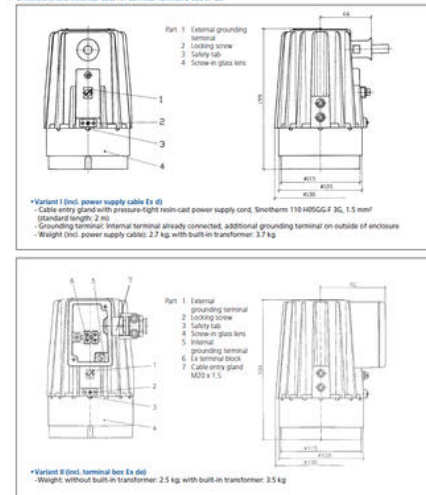
| Ref. | Type USL 05-Ex | Part No.    | Voltage | Built-in transformer | Maximum lamp or LED filament voltage | Endfit | Ambient temperature range            |
|------|----------------|-------------|---------|----------------------|--------------------------------------|--------|--------------------------------------|
| 1    | 12 V/5 W       | 2540.031.00 | 12 V    | without              | 12 V/5 W                             | G4     | -20°C ≤ t ≤ +40°C, -20°C ≤ t ≤ +40°C |
| 2    | 120 V/12 V/5 W | 2540.032.00 | 120 V   | with                 | 12 V/5 W                             | G4     | 25 T4, 20 T80°C, 25 T4, 20 T100°C    |
| 3    | 230 V/12 V/5 W | 2540.033.00 | 230 V   | with                 | 12 V/5 W                             | G4     | 25 T4, 20 T80°C, 25 T4, 20 T100°C    |
| 4    |                |             |         |                      |                                      |        |                                      |
| 5    | 12 V/20 W      | 2540.035.00 | 12 V    | without              | 12 V/20 W                            | G4     | 25 T4, 20 T100°C, 25 T3, 20 T100°C   |
| 6    | 24 V/20 W      | 2540.037.00 | 24 V    | without              | 24 V/20 W                            | G4     | 25 T4, 20 T100°C, 25 T3, 20 T100°C   |
| 7    |                |             |         |                      |                                      |        |                                      |
| 8    |                |             |         |                      |                                      |        |                                      |
| 9    | 230 V/4 W-LED  | 2540.039.00 | 230 V   | without              | 230 V/4 W-LED                        | G210   | -20°C ≤ t ≤ +40°C, -20°C ≤ t ≤ +40°C |

**Order data:**  
- e.g. Lumistar luminaire USL 05-Ex, 12 V/20 W, Part no. 3540.035.00, with accessories: hinged bracket, Part no. 6354.014.00 and claw spanner, Part no. 6816.001.00

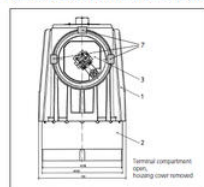
**Accessories:**

| No. | Component                                                                              | Part No.    |
|-----|----------------------------------------------------------------------------------------|-------------|
| 1   | Luminaire mounting, hinged bracket, stainless steel                                    | 6354.014.00 |
| 2   | Luminaire mounting, flanged adapter collar, stainless steel                            | 1354.010.00 |
| 3   | Lumiglas timer module, Ex timer switch, external, for timed light switching on request |             |
| 4   | Claw spanner for screw-in lens, for opening the lamp                                   | 6816.001.00 |

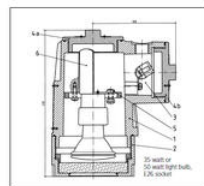
• Dimensions and electrical data for Lumistar luminaires USL 09-Ex:



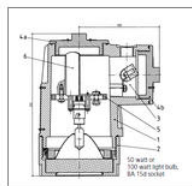
# • Dimensions and electrical data for Luminaire luminaires USL 08 Ex:



- Pos. Part
- 1 Body of luminaire
  - 2 Screw-type lens
  - 3 Terminal compartment with terminals
  - 4a Housing cover for replacing light bulb
  - 5 Housing cover for terminal compartment
  - 6 Screw with self-locking nut for light bulb socket
  - 7 Mounting bracket for light bulb socket
- 2 openings with M12 x 1, thread for cable entry options



- Terminal compartment open, housing cover removed
- Body of luminaire made of non-corrosive cast aluminum alloy, G4-AG10Mg
- Light aperture as unit made of aluminum ring and glass with O-ring seal
- Fastening parts: see Accessories G-AG10Mg
- Weight: 2.2 kg



- Terminal compartment open, housing cover removed
- Body of luminaire made of non-corrosive cast aluminum alloy, G4-AG10Mg
- Light aperture as unit made of aluminum ring and glass with O-ring seal
- Fastening parts: see Accessories G-AG10Mg
- Weight: 2.2 kg

## • Parts, design and materials:

- Luminaire shell (1) and cover (2)
- AISI 316-L stainless-steel aluminum alloy
- AISI 316-L stainless steel 1.4304
- Screwed cable gland M20 x 1.5 (1)
- Light port as a unit consisting of a ring (aluminum or stainless steel) and glass (3)
- Mounting with hinged bracket (7) stainless steel 1.4301 (to be ordered extra)
- Weight: AISI 316-L: 1.8 kg; AISI 316-L: 3.8 kg

## • Accessories - to be ordered separately:

- Mounting hinged bracket, part no. 0354.025.00
- Mounting attachment flange adapter collar for use with screw-type light glass fittings (on request)
- Time delay module, external, for time-dependent lighting
- Pushbutton or switch
- Optional 10° or 20° light aperture reflector

## • Mechanical installation:

- When installing the round light glass fitting or the light flow indicator, the luminaire is mounted on the cover flange with the hinged bracket. With the screw-type light glass fitting, the lamp is mounted on the ground nut or by means of a flange attachment - see (3) below.

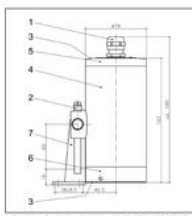
## The luminaire luminaires AISI 316-L and AISI 316-L are compatible with the following external dimensions:

- a) Circular light glass fitting acc. to DIN 28120: DN 40
- b) Circular light glass fitting acc. to DIN 28120: DN 40
- c) Light glasses in flow indicators: DN 50
- d) Screw-type light glass fittings similar to DN 11851
- DN 50 is mounted by way of a separate flange attachment from DN 50 up, the unit is secured using the hinged bracket.

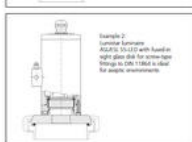
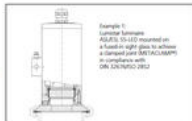
## Luminaire luminaires AISI 316-L and AISI 316-L have a special adapter in the light port as a standard feature, making this type of lamp ideal for applications in acidic and basic environments. Excellent results are assured by using light glasses fused to a metal frame (METAGLAS) and with the BioControl (BIOCMQ) range of products. METAGLAS® combines optimally with clamp fittings (METACLAAMP) as well as with NaA Connect™ technology.

## • For Luminaire luminaires intended for sterile environments, the following installation and fastening method is pre-tive proven:

- The luminaire is fitted over the flange with the flange on the cover flange, where it is secured in place. An O-ring inserted between the two effectively seals the closure to the light port. An alternative is to mount the luminaire by means of an adapter (opened joint acc. to DIN 2324/ISO 2852). The mating flange to the lamp connection is a special adapter (opened joint acc. to DIN 2324/ISO 2852).
- When used with screw-type light glass fittings, the metal-glass ring is provided with a stainless-steel ring which the luminaire luminaire is fitted. An O-ring is inserted to seal the joint, tightening the clamp then provides the necessary closing pressure, see Example 2.



Dimensions for Luminaire luminaires AISI 316-L and AISI 316-L

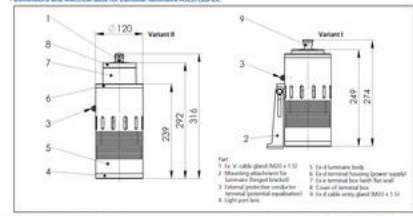


Example 1



Example 2

# • Dimensions and electrical data for Luminaire luminaires AISI316L Ex:



- Part
- 1 Ex V cable gland M20 x 1.5
  - 2 Ex terminal box with 4x 1.5
  - 3 Ex terminal box with 4x 1.5
  - 4 Ex terminal box with 4x 1.5
  - 5 Ex terminal box with 4x 1.5
  - 6 Ex terminal box with 4x 1.5
  - 7 Ex terminal box with 4x 1.5
  - 8 Ex terminal box with 4x 1.5
  - 9 Ex terminal box with 4x 1.5

## • Components, design and materials:

- Luminaire body (1) and cover of terminal box (2): Aluminum alloy EN AW-2007, paint finish RAL 9007
- Light port lens (3): Unit consisting of ring flange aluminum alloy EN AW-2007, paint finish RAL 9007, and borosilicate glass
- Hinged mounting bracket (2): Stainless steel 1.4301 (see accessories)
- Cable gland (3): M20 x 1.5
- Weight (with 2 m connecting cable): 4.6 kg

## • Connecting data: Temperature classification and electrical penetration: see also (C) Type Examination Certificate

| Item                                   | AISI316L-Ex      | Part No.    | Voltage V | Mounting         | Ambient temperature range -20°C ≤ T <sub>a</sub> ≤ +40°C |
|----------------------------------------|------------------|-------------|-----------|------------------|----------------------------------------------------------|
| Variant 1 (with connecting cable 2 m)  |                  |             |           |                  |                                                          |
| 1                                      | Q4-VI 25 W       | 3541.484.00 | 24        | 1 high-power LED | 20 78°C                                                  |
| 2                                      | (120-230 V) 25 W | 3541.482.00 | 120-230   | 1 high-power LED | 20 78°C                                                  |
| Variant 2 (with integral terminal box) |                  |             |           |                  |                                                          |
| 3                                      | Q4-VI 25 W       | 3541.483.00 | 24        | 1 high-power LED | 20 78°C                                                  |
| 4                                      | (120-230 V) 25 W | 3541.481.00 | 120-230   | 1 high-power LED | 20 78°C                                                  |

## • For variant 1 only combinations of the following cable entry glands and cables should be used:

| Cable gland type                        | Cable type                                                                                  |
|-----------------------------------------|---------------------------------------------------------------------------------------------|
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.017.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.045.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.046.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.047.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.048.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.049.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |
| M20x1.5, metal-plated brass (by Hummel) | Ex cable shielded cable, Sinterflex 110, p. no. 3403.050.00, 3x1.5 mm <sup>2</sup> e 8.5 mm |

## • Accessories:

| Item | Component                                                                                     | Part No.                            |
|------|-----------------------------------------------------------------------------------------------|-------------------------------------|
| 1    | Luminaire mounting - hinged bracket                                                           | 0354.025.00                         |
| 2    | Luminaire mounting - flange adapter collar for welding on M20 x 1.5 (M20 x 1.5) and M20 x 1.5 | M20 x 1.5 (M20 x 1.5) and M20 x 1.5 |
| 3    | Ex-time delay switch                                                                          | on request                          |

• Order data: e.g. Luminaire luminaires AISI316L-Ex (Q4-VI 25 W, Ex d HC T6 with 2 m connecting cable, part no. 3541.484.00

all dimensions in mm unless otherwise stated; all connecting cables: 3x1.5