

## LS030312

### Fiber optic sensors • Fiber optic glass barrier

fiber optic barrier, 0.3m, head: Stainless steel 35long Ø7.6, Light exit Lateral, conductor: Glassfiber+Silicone, end piece: M18x1 Brass, Sn: 300, -40-180°C, IP67



Fiber optics in combination with the appropriate fiber optic amplifier function as contactless and wear-free position switches that can also be used in harsh environmental conditions. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). Because the ends and heads of the fiber optics have small dimensions and the fiber optics are flexible, very elegant solutions can be created for detecting objects in places that are difficult to access. Fiber optics can be used without special precautions in potentially explosive areas and in zones with electrical and/or magnetic fields (high-voltage installations, electrical welding equipment) as their function is not thereby affected. Fiber optics are available in versions for implementing the function as through-beam sensor or diffuse reflection sensor.

#### Electrical features

|                                     |            |
|-------------------------------------|------------|
| Bending section of the sensing head | 0 mm       |
| Bending angle of the sensing head   | 0 °        |
| Short-circuit protection            | No         |
| Sensing head length                 | 35 mm      |
| Switching distance                  | 0 - 300 mm |
| Reverse polarity protection         | No         |

**Mechanical features**

|   |                   |
|---|-------------------|
| Type of fiber                               | Multi             |
| Design                                      | Cylinder plain    |
| Bending radius (flexible)                   | 50 mm             |
| Bending radius (fixed)                      | 25 mm             |
| Sensing head diameter 1                     | 8                 |
| Fiber diameter                              | 2.3 mm            |
| End piece diameter                          | 20 mm             |
| Fiber optic cable diameter, receiver end    | 6.7               |
| Fiber optic cable diameter, transmitter end | 6.7               |
| Sensing head diameter                       | 7.6 mm            |
| Number of fibers                            | 2                 |
| End piece thread pitch                      | 1 mm              |
| Length                                      | 300 mm            |
| End piece length                            | 28 mm             |
| Degree of protection (IP)                   | IP67              |
| Sheathing material                          | Silicone          |
| End piece material                          | Brass             |
| Fiber optics core material                  | Glass             |
| Sensing head material                       | Stainless steel   |
| Ejection control                            | Yes               |
| Strong vibration / motion                   | Yes               |
| Design of the fiber optic connection        | screw fitting M18 |
| Thread dimension of the end piece           | M18               |
| Ambient temperature                         | -40 - 180 °C      |

**Optical features**

|            |         |
|------------|---------|
| Light exit | Lateral |
|------------|---------|

**Other features**

|                     |                                     |
|---------------------|-------------------------------------|
| Feeding technology  | Yes                                 |
| ardTE00_Anwendungen | Stanzwerkzeuge starke Verschmutzung |

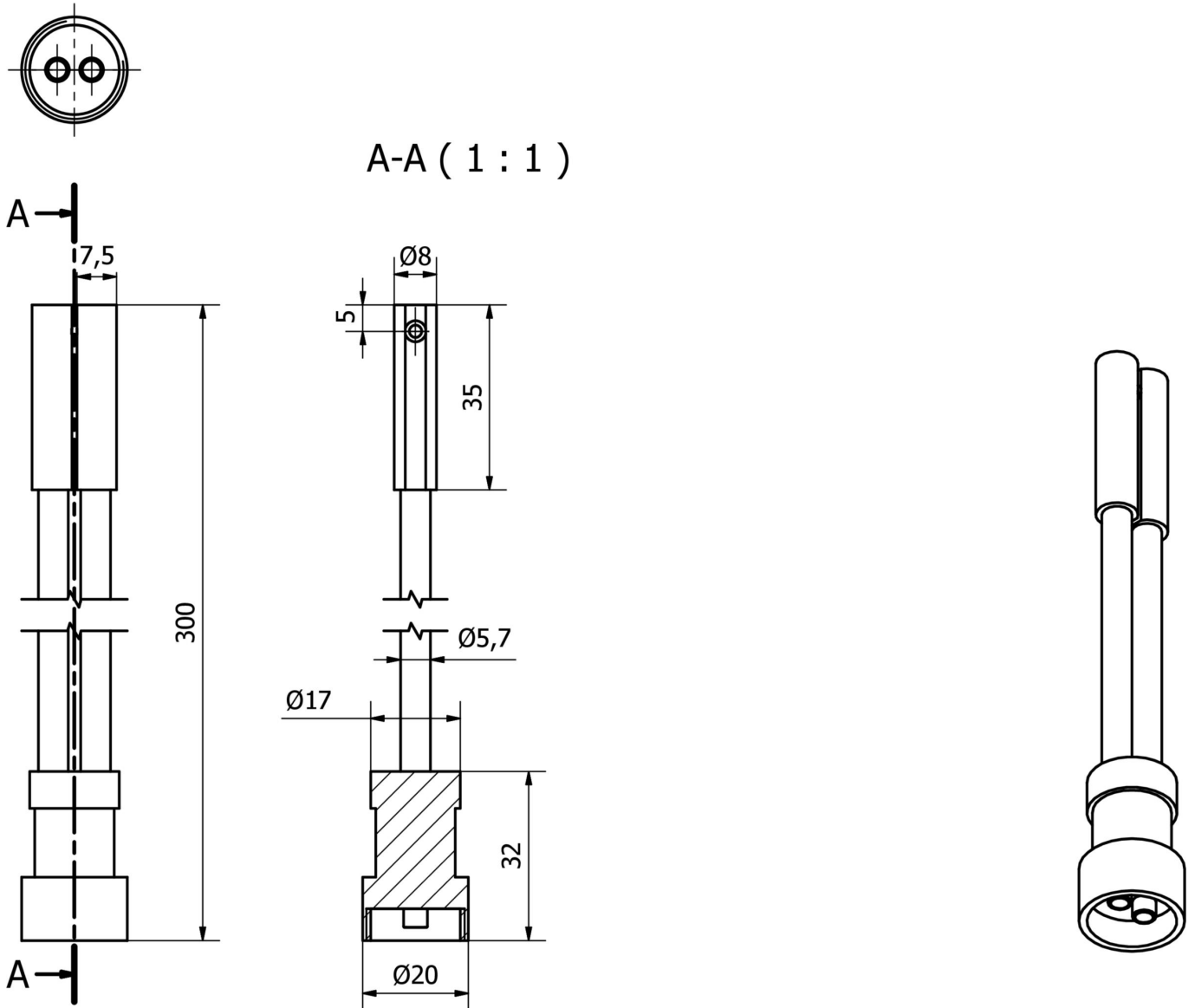
**Classification**

|        |                                       |
|--------|---------------------------------------|
| ETIM 8 | EC002651 Fiber optic sensor/amplifier |
|--------|---------------------------------------|

**More**

|                       |                  |
|-----------------------|------------------|
| IPF Product Group     | 150 glass fibers |
| packaging dimensions  | 123 x 77 x 25 mm |
| gross weight          | 80 g             |
| Customs tariff number | 90011090         |
| WEEE number           | 40951076         |
| Reach-compliant       | Yes              |
| RoHS-compliant        | Yes              |

**Dimensional drawing**



**Extract accessories program**

**OL400321**



fiber optic-amplifier,  
42x84x40mm, 10-35V DC, 1x PNP/  
NPN NC/NO, Connector M12 4pin,  
IP65, Aluminum, Infrared light

**OL400721**



fiber optic-amplifier,  
42x84x40mm, 10-35V DC, 2x PNP/  
NPN NC/NO, Connector M12 4pin,  
IP65, Aluminum, Infrared light,  
Alarm output

You can find further accessories on our homepage



**Installation**

Mounting / installation may only be carried out by a qualified electrician!



**Disposal**

WEEE number according to § 6 para. 3  
ElektroG: 40951076

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**Safety warnings**

- / Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
- / Never use these devices in applications where the safety of a person depends on their functionality.