

## LT208158

### Fiber optic sensors • Fiber optics plastic fiber diffuse-reflection sensor

fiber optic diffuse-reflection sensor, 2m, head: Brass 24long Ø4 Ø6, Light exit Axial, conductor: Plasticfiber+Plastic, -30-70°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                 | 24 mm     |
| Switching distance                  | 0 - 75 mm |
| Reverse polarity protection         | No        |

**Mechanical features**

|                                             |                     |
|---------------------------------------------|---------------------|
| Type of fiber                               | Mono                |
| Design                                      | Cylinder plain      |
| Bending radius (fixed)                      | 25 mm               |
| Sensing head diameter 1                     | 4                   |
| Sensing head diameter 2                     | 6                   |
| Fiber diameter                              | 1 mm                |
| Fiber optic cable diameter, receiver end    | 2.2                 |
| Fiber optic cable diameter, transmitter end | 2.2                 |
| Sensing head diameter                       | 4 mm                |
| Number of fibers                            | 1                   |
| Length                                      | 2000 mm             |
| Degree of protection (IP)                   | IP67                |
| Sheathing material                          | Plastic             |
| Fiber optics core material                  | Plastic             |
| Sensing head material                       | Brass               |
| Ejection control                            | Yes                 |
| Design of the fiber optic connection        | terminal connection |
| Ambient temperature                         | -30 - 70 °C         |

**Optical features**

|                            |       |
|----------------------------|-------|
| Light exit                 | axial |
| Nominal operating distance | 75 mm |

**Other features**

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

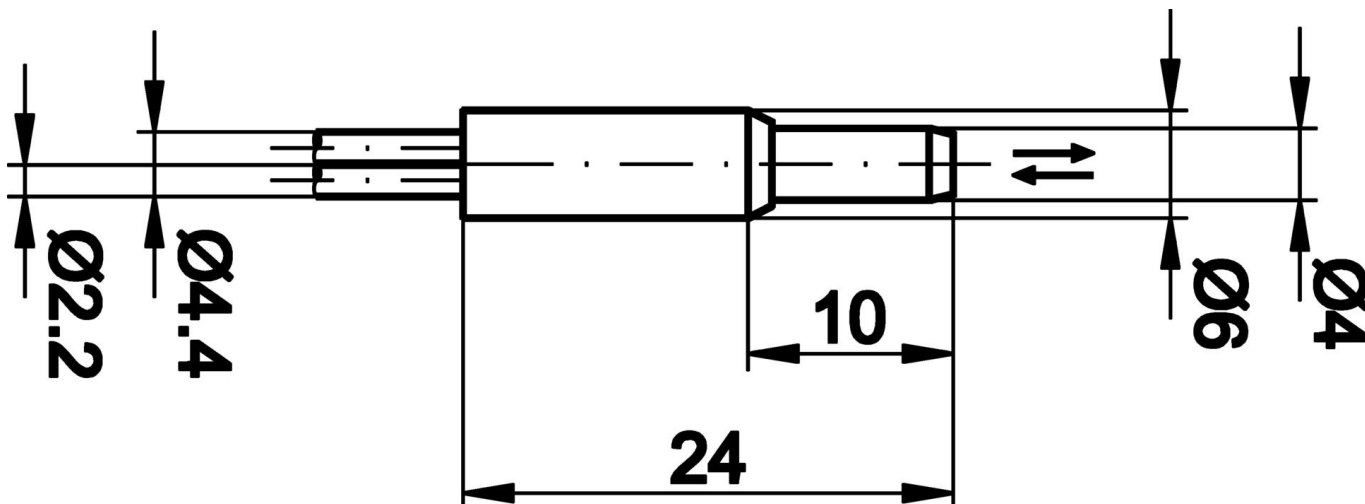
**Classification**

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

**More**

|                       |                    |
|-----------------------|--------------------|
| IPF Product Group     | 151 plastic fibers |
| packaging dimensions  | 123 x 77 x 25 mm   |
| gross weight          | 30 g               |
| Customs tariff number | 90011090           |
| WEEE number           | 40951076           |
| OzDS-compliant        | Yes                |
| POP-compliant         | Yes                |
| Reach-compliant       | Yes                |
| RoHS-compliant        | Yes                |

**Dimensional drawing**



**Extract accessories program**

**OL100340**



fiber optic-amplifier,  
30x70x10mm, 12-24V DC, 1x PNP  
NC/NO, Plug-in connection 3pin,  
IP40, Plastic, Polarity free red light

**OL100341**



fiber optic-amplifier,  
30x70x10mm, 12-24V DC, 1x PNP  
NC/NO, Plug-in connection 3pin,  
IP40, Plastic ABS, Blue light

**AL000007**



accessories fiber optic, Fiber  
cutter, barrier, diffuse-reflection  
sensor, 13mm high, Cubic,  
Stainless steel

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

**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.