

## LS060381

### Accessories • Color sensors - fiber optic light guides

Glass fiber optics barrier, 0.6m, head: stainless steel 24long Ø4.5 Ø6.6, axial light exit, conductor: glass fiber+silicone, end piece: M18x1 plastic, -40-180°C



Photoconductors in conjunction with the appropriate fiber optics amplifier are contactless and wear-free position switches that can also be used in harsh environmental conditions. They detect objects regardless of their properties (e.g. shape, color, surface structure, material). As the photoconductive ends or heads have small dimensions and the fiber optics are also flexible, object detection in hard-to-reach places can be solved very elegantly. Fiber optics can be used without special precautions in potentially explosive areas and in zones with electrical and/or magnetic fields (high-voltage systems, electrical welding equipment), as their function is not impaired by this. Fiber optics are available in versions to implement the function as a through-beam light barrier or diffuse reflection sensor.

#### Electrical features

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Bending section of the sensing head | 0 mm                                |
| Bending angle of the sensing head   | 0 °                                 |
| Sensing head length                 | 24 mm                               |
| ardTEEL_Schutzfunktionen            | Verpolungsschutz   Kurzschlusschutz |

**Mechanical features**

|   |                                   |
|---|-----------------------------------|
| Type of fiber                               | Multi                             |
| Design                                      | Cylinder plain                    |
| Sensing head diameter 1                     | 4.5                               |
| Sensing head diameter 2                     | 6.6                               |
| Fiber diameter                              | 2.5 mm                            |
| End piece diameter                          | 22 mm                             |
| Light exit diameter                         | 2.5                               |
| Fiber optic cable diameter, receiver end    | 5.8                               |
| Fiber optic cable diameter, transmitter end | 5.8                               |
| Sensing head diameter                       | 4.5 mm                            |
| Number of fibers                            | 2                                 |
| End piece thread pitch                      | 1 mm                              |
| Length                                      | 600 mm                            |
| End piece length                            | 35 mm                             |
| Sheathing material                          | Silicone                          |
| End piece material                          | Plastic                           |
| Fiber optics core material                  | Glass                             |
| Sensing head material                       | Stainless steel                   |
| Design of the fiber optic connection        | screw fitting M18                 |
| Thread dimension of the end piece           | M18                               |
| Ambient temperature                         | -40 - 180 °C                      |
| ardTEME_Umgebungsbestaendigkeiten           | starke Erschütterungen/Bewegungen |

**Optical features**

|                      |             |
|----------------------|-------------|
| Light source         | White light |
| Light exit           | axial       |
| Angle of beam spread | 67 °        |

**Other features**

|                     |                                       |
|---------------------|---------------------------------------|
| Version             | Through-beam sensor Color sensor      |
| ardTE00_Anwendungen | Stanzwerkzeuge   starke Verschmutzung |

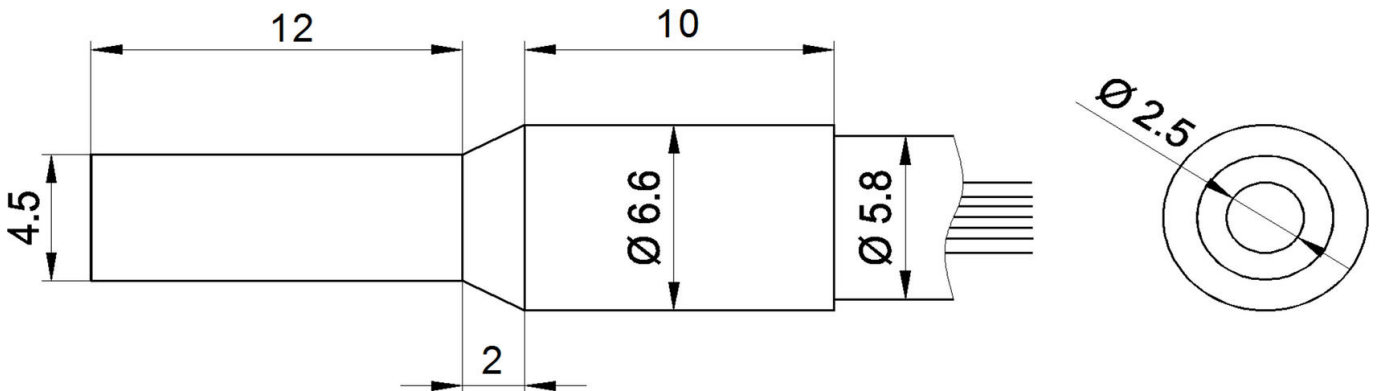
**Classification**

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

**More**

|                       |                                      |
|-----------------------|--------------------------------------|
| IPF Product Group     | 154 glass fibers (color recognition) |
| packaging dimensions  | 123 x 77 x 25 mm                     |
| gross weight          | 90 g                                 |
| Customs tariff number | 90011090                             |
| WEEE number           | 40951076                             |
| POP-compliant         | Yes                                  |
| Reach-compliant       | Yes                                  |
| RoHS-compliant        | Yes                                  |

**Dimensional drawing**



**Extract accessories program**

**OF500180**



sensor optical, color,  
36x50x50mm, White light, True  
color, Sn: 1-500, 22-26V DC, 2x  
PNP/NPN Push-pull, Connector M8  
4pin, IP64, Aluminum Anodised,  
With fiber optics connection, ΔE  
>= 0.5, 60kHz, 3 colors

**OF650080**



sensor optical, color,  
36x65x65mm, White light, True  
color, Sn: 1-500, 22-26V DC, 2x  
PNP/NPN Push-pull, Connector M9  
8pin, IP64, Aluminum Anodised,  
With fiber optics connection, ΔE  
>= 0.5, 60kHz, 3 colors

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.