

# LT060291

## Accessories • Fiber optics for color sensors - Diffuse reflection sensors

fiber optic diffuse-reflection sensor, 0.6m, head: Aluminum 30long Ø7 line, Light exit Axial, conductor: Glassfiber+Silicone, end piece: M18x1 Plastic, -40-180°C



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	30 mm
Reverse polarity protection	No

**Mechanical features**

Type of fiber	Multi
Design	Cylinder plain
Bending radius (fixed)	23.2 mm
Light exit width	3
Sensing head diameter 1	7
End piece diameter	22 mm
Fiber optic cable diameter	5.8
Sensing head diameter	7 mm
Number of fibers	1
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	Aluminum
Light exit height	0.5
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	axial
Fiber optic with linear light beam	Yes

**Other features**

Suitable for	Color sensors with white light source / fiber optics
Feeding technology	Yes
ardTE00_Awendungen	Stanzwerkzeuge starke Verschmutzung

**Classification**

ETIM 8	EC002651 Fiber optic sensor/amplifier
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**More**

IPF Product Group	154 glass fibers (color recognition)
packaging dimensions	123 x 77 x 25 mm
gross weight	80 g
Customs tariff number	90011090
WEEE number	40951076
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

**Extract accessories program****AY000009**

accessories sensor, Ø6mm,  
Aluminum, For sensor 6mm, for  
Wall mounting, Screw mounting

**AY000019**

accessories sensor, Ø6,5mm,  
Aluminum, For sensor 6.5mm, for  
Wall mounting, Screw mounting

**AL000070**

accessories fiber optic, Lens, zoom  
lens, diffuse-reflection sensor,  
color detection, M12x1 65long, für  
Diffuse reflection sensor, External  
thread, Sn: 10-100,  
Aluminum+Glass

**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.