

LS060510**FIBER OPTIC SENSORS • FIBER OPTICS GLASS FIBERS**

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.

**MECHANICAL DATA**

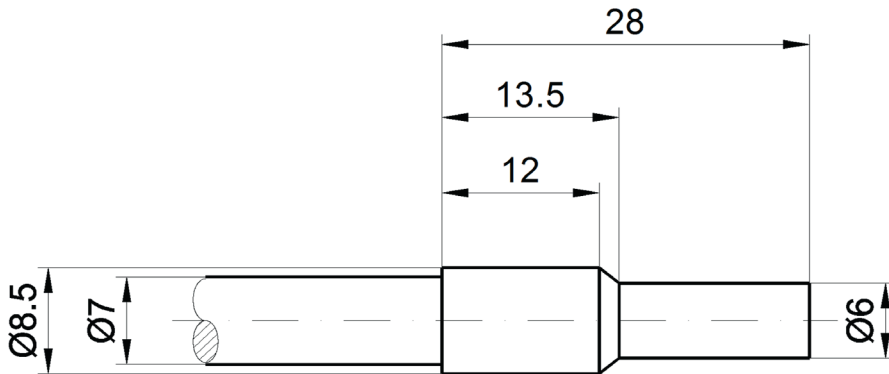
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|--|--|
| Ambient temperature (MAX) | 180 °C |
| Ambient temperature (MIN) | -40 °C |
| Bending radius (fixed) | 25 mm |
| Bending radius (flexible) | 50 mm |
| Degree of protection (IP) | IP67 |
| End piece diameter | 8.5 mm |
| End piece length | 12 mm |
| Fiber diameter | 7 mm |
| Fiber optics core material | Glass |
| Heavy soiling | Yes |
| Housing design | Cylinder plain |
| Housing material | Stainless steel |
| Increased ambient temperature $\leq 180^{\circ}\text{C}$ | Yes |
| Material of cable sheath | Silicone |
| Number of fibers | 2 |
| Overall length | 600 mm |
| Punching tools | Yes |
| Sensing head diameter | 6 mm |
| Sheathing material | Stainless steel inner helix/braided glass fibers |
| Strong vibration / motion | Yes |
| Version | Through-beam sensors |

ELECTRICAL DATA

| | |
|--------------------------------|--------|
| Analogue output 4 mA ... 20 mA | No |
| Light exit | Axial |
| Max. switching distance | 700 mm |
| Sensing head length | 28 mm |

OPTICAL DATA

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|-------|--------|
| Range | 700 mm |
|-------|--------|

DIMENSIONAL DRAWING**INSTALLATION**

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

DISPOSAL**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.