

LT100204

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

| | |
|---------------------------------------|--|
| Ambient temperature | -40 °C ... 180 °C |
| Bending radius (fixed) | 15 mm |
| Bending radius (flexible) | 30 mm |
| Degree of protection (IP) | IP67 |
| Ejection control | Yes |
| End piece length | 15 mm |
| End piece thread pitch | 0.45 mm |
| Fiber diameter | 1.4 mm |
| Fiber optics core material | Glass |
| Heavy soiling | Yes |
| Housing design | Cylinder, screw-thread |
| Housing material | Stainless steel |
| Increased ambient temperature ≤ 180°C | Yes |
| Material of cable sheath | Silicone |
| Metric thread size of end piece | 2.5 mm |
| Number of fibers | 1 |
| Overall length | 1000 mm |
| Punching tools | Yes |
| Sensing head diameter | 2.5 mm |
| Sheathing material | Stainless steel inner helix/braided glass fibers |
| Strong vibration / motion | Yes |
| Type of mechanical connection | Screw connection M18 |
| Version | Push button |

ELECTRICAL DATA

| | |
|---------------------------------|----|
| Analogue output 0 mA ... 20 mA | No |
| Analogue output 0 V ... 10 V | No |
| Analogue output -10 V ... +10 V | No |
| Analogue output 4 mA ... 20 mA | No |

ELECTRICAL DATA

| | |
|------------------------------------|--------|
| Light exit | Axial |
| Max. switching distance | 25 mm |
| Metric thread size of sensing head | 2.5 mm |
| Sensing head length | 35 mm |
| With blanking function | Yes |

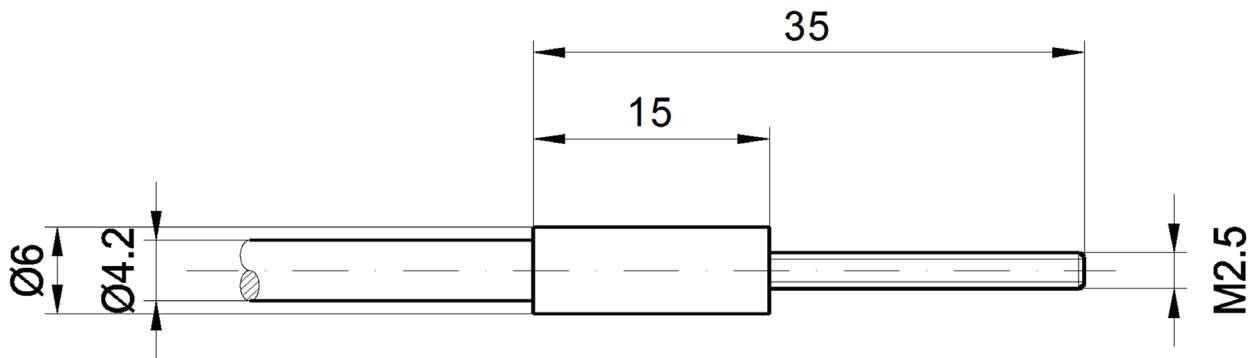
OPTICAL DATA

| | |
|-------|-------|
| Range | 25 mm |
|-------|-------|

OTHER DATA

| | |
|--------------------|-----|
| Feeding technology | Yes |
|--------------------|-----|

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!