

LS208051

FIBER OPTIC SENSORS • FIBER OPTICS PLASTIC 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 (MAX)	75 °C
Ambient temperature (MIN)	-40 °C
Bendable	Yes
Bending radius (fixed)	25 mm
Degree of protection (IP)	IP67
End piece diameter	4 mm
End piece length	11 mm
End piece thread pitch	0.7 mm
Fiber diameter	1 mm
Fiber optic with bendable head	Yes
Fiber optics core material	Plastic
Heavy soiling	Yes
Housing design	Cylinder, screw-thread
Housing material	Brass
Metric thread size of end piece	4 mm
Number of fibers	2
Overall length	2000 mm
Punching tools	Yes
Sensing head diameter	1.2 mm
Sheathing material	Plastic
Version	Through-beam sensors

ELECTRICAL DATA

Analogue output 4 mA ... 20 mA	No
Bending angle of the sensing head	90 °
Bending section of the sensing head	90 mm
Light exit	Axial
Max. switching distance	100 mm
Sensing head length	111 mm

ELECTRICAL DATA

Sensing head thread pitch

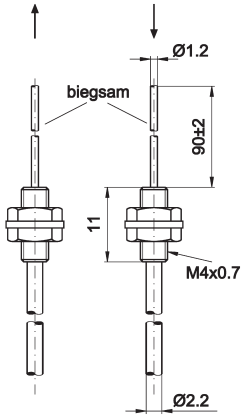
0.7 mm

OPTICAL DATA

Range

100 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.