

OL40A167

FIBER OPTIC SENSORS • FIBER OPTIC AMPLIFIERS

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	-10 °C ... 60 °C
Amplifier height	42 mm
Amplifier length	83.5 mm
Amplifier width	40 mm
Degree of protection (IP)	IP65
Housing design	Cuboid
Housing material	Aluminium
Type of mechanical connection	Screw connection M18

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
Hysteresis	15 %
Max. output current	400 mA
No-load current	30 mA
Number of pins	3
Operating voltage	10 V ... 35 V
Rated control supply voltage U_s at DC	10 V ... 35 V
Response/decay time	1 ms
Reverse polarity protection	Yes
Scanning function	Light-/dark-on mode
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Switching frequency	500 Hz
Type of electrical connection	Connector M12
Type of switching output	PNP/NPN
Voltage drop	2 V

ELECTRICAL DATA

Voltage type	DC
With blanking function	Yes
With LED display	Yes

OPTICAL DATA

Light source	Infrared light
Wavelength of the sensor	880 nm

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!