

OL98A756

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	-25 °C ... 55 °C
Amplifier height	31.1 mm
Amplifier length	60 mm
Amplifier width	10 mm
Degree of protection (IP)	IP64
Housing design	Cuboid
Housing material	PBTP
Type of mechanical connection	Clamped terminal connection

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
Max. output current	200 mA
No-load current	15 mA
Number of pins	4
Operating voltage	10 V ... 35 V
Rated control supply voltage U_s at DC	10 V ... 35 V
Reverse polarity protection	Yes
Scanning function	Light-/dark-on mode
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Switching frequency	1500 Hz
Type of electrical connection	Connector M8
Type of indication	LED
Type of switch function	Normally closed contact/normally open contact
Type of switching output	PNP
Version of alarm output	PNP

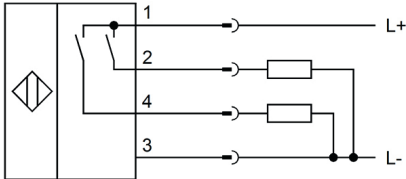
ELECTRICAL DATA

Voltage type	DC
With blanking function	Yes
With LED display	Yes

OPTICAL DATA

Light source	Polarity free red light
Wavelength of the sensor	680 nm

CONNECTION



Colors: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

Functions: 1 = L+, 2 = alarm, 3 = L-, 4 = PNP NO

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!