## OL151175

## 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

| Amplifier height | 30 mm |
| :--- | :--- |
| Amplifier length | 30 mm |
| Amplifier width | 15 mm |
| Degree of protection (IP) | IP67 |
| Housing design | Cuboid |
| Housing material | PBT |
| Type of mechanical connection | Clamped terminal connection |

ELECTRICAL DATA

| Analogue output $0 \mathrm{~mA} \ldots 20 \mathrm{~mA}$ | No |
| :--- | :--- |
| Analogue output $0 \mathrm{~V} \ldots 10 \mathrm{~V}$ | No |
| Analogue output $-10 \mathrm{~V} \ldots+10 \mathrm{~V}$ | No |
| Analogue output $4 \mathrm{~mA} \ldots 20 \mathrm{~mA}$ | No |
| No-load current | 20 mA |
| Operating voltage | $10 \mathrm{~V} \mathrm{..} 35 V$. |
| Rated control supply voltage Us at DC | $10 \mathrm{~V} \ldots 35 \mathrm{~V}$ |
| Response/decay time | 0.5 ms |
| Scanning function | Light switching |
| Setting procedure | Manual adjustment |
| Switching frequency | 1000 Hz |
| Type of switching output | NPN |
| Voltage type | DC |
| With blanking function | Yes |
| OPTICAL DATA |  |
| Light source | Polarity free red light |
| Wavelength of the sensor | 660 nm |

## CONNECTION



Colors: $1=\mathrm{BN}$ (brown), $3=\mathrm{BU}$ (blue), $4=\mathrm{BK}$ (black)
Functions: 1 = L+, 3 = L-, 4 = NPN 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!

