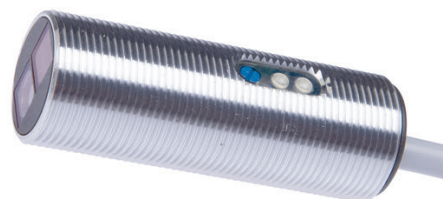


**OT181106**
**OPTICAL SENSORS • DIFFUSE REFLECTION SENSORS WITH BACKGROUND SUPPRESSION**

sensor optical, diffuse-reflection sensor, M18x1 50long, Sn: 10-120, 10-35V DC, 1x NPN NO (NO), Cable 3pin 2m PVC, IP67, Brass Chrome-plated+Glass, 0.5kHz, Background suppression, Polarity free red light, Point, Manual adjustment


**MECHANICAL FEATURES**

|                                             |                        |
|---------------------------------------------|------------------------|
| Ambient temperature                         | -25 °C ... 55 °C       |
| Cable length                                | 2 m                    |
| Degree of protection (IP)                   | IP67                   |
| Design                                      | Cylinder, screw-thread |
| Housing coating                             | Chrome-plated          |
| Housing material                            | Brass                  |
| Material of cable sheath                    | PVC                    |
| Material of optical surface                 | Glass                  |
| Max. tightening torque                      | 20 Nm                  |
| Reflector included in the scope of delivery | -                      |
| Sensor length                               | 50 mm                  |
| Thread length                               | 50 mm                  |
| Thread pitch                                | 1 mm                   |
| Thread size, metric                         | 18                     |
| Wire cross section                          | 0.25 mm <sup>2</sup>   |

**ELECTRICAL FEATURES**

|                               |                  |
|-------------------------------|------------------|
| Adjustment range              | 10 mm ... 120 mm |
| Analog output 0 mA ... 20 mA  | -                |
| Analog output 0 V ... 10 V    | -                |
| Analog output -10 V ... +10 V | -                |
| Analog output 4 mA ... 20 mA  | -                |
| Decay time                    | 1 ms             |
| Hysteresis                    | 10 %             |
| Max. switching distance       | 120 mm           |
| No-load current               | 25 mA            |
| Number of pins                | 3                |
| Number of switching outputs   | 1                |
| Operating voltage             | 10 V ... 35 V    |
| Rated switching current       | 200 mA           |
| Rated switching distance      | 120 mm           |
| Readiness delay               | 20 ms            |
| Response time                 | 1 ms             |

## ELECTRICAL FEATURES

|                               |                            |
|-------------------------------|----------------------------|
| Reverse polarity protection   | +                          |
| Scanning function             | Light switching            |
| Sensing range                 | 10 mm ... 120 mm           |
| Setting procedure             | Manual adjustment          |
| Short-circuit protection      | +                          |
| Switching frequency           | 500 Hz                     |
| Type of electrical connection | Cable                      |
| Type of switching function    | Normally open contact (NO) |
| Type of switching output      | NPN                        |
| Voltage drop                  | 2 V                        |
| Voltage type                  | DC                         |
| With LED display              | +                          |
| With LED display (reception)  | +                          |
| With LED display (signal)     | +                          |
| With other analog output      | -                          |
| With time function            | -                          |

## OPTICAL FEATURES

|                          |                         |
|--------------------------|-------------------------|
| Light source             | Polarity free red light |
| Wavelength of the sensor | 660 nm                  |
| Triangulation            | Background suppression  |
| Light beam form          | Point                   |
| Background suppression   | +                       |

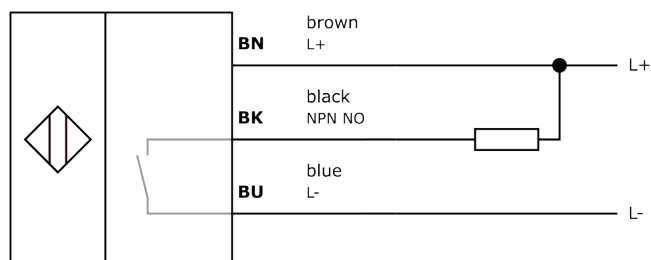
## Other

|                      |                        |
|----------------------|------------------------|
| Packaging dimensions | 185.0mm x 20mm x 210mm |
| Shipping weight      | 0.13kg                 |
| Tariff code          | 85365019               |

## Classification

|                   |          |
|-------------------|----------|
| ipf product group | 100      |
| eClass 8.0        | 27270904 |
| eClass 9.0        | 27270904 |
| eClass 9.1        | 27270904 |
| ETIM-5.0          | EC002719 |
| ETIM-6.0          | EC002719 |
| ETIM-7.0          | EC002719 |

## Connection



## 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.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.