

**PT171420**
**LASER SENSORS • DIFFUSE REFLECTION SENSORS WITH BACKGROUND SUPPRESSION**

sensor laser, diffuse-reflection sensor, 50x50x15mm, Sn: 25-300, 10-30V DC, 2x NPN, Connector M12 4pin, IP67, Zinc die-cast+Glass, Background suppression, Laser diode, red light, Point, Manual adjustment


**MECHANICAL FEATURES**

|                                             |               |
|---------------------------------------------|---------------|
| Degree of protection (IP)                   | IP67          |
| Design                                      | Cuboid        |
| Housing material                            | Zinc die-cast |
| Material of optical surface                 | Glass         |
| Reflector included in the scope of delivery | -             |
| Sensor height                               | 50 mm         |
| Sensor length                               | 50 mm         |
| Sensor width                                | 15.4 mm       |
| Volume                                      | Medium        |

**ELECTRICAL FEATURES**

|                               |                     |
|-------------------------------|---------------------|
| Adjustment range              | 25 mm ... 300 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                    | 0.6 ms              |
| Laser power                   | 1 mW                |
| Max. switching distance       | 300 mm              |
| Number of pins                | 4                   |
| Number of switching outputs   | 2                   |
| Operating voltage             | 10 V ... 30 V       |
| Rated switching current       | 200 mA              |
| Rated switching distance      | 300 mm              |
| Response time                 | 0.6 ms              |
| Reverse polarity protection   | +                   |
| Scanning function             | Light-/dark-on mode |
| Sensing range                 | 25 mm ... 300 mm    |
| Setting procedure             | Manual adjustment   |
| Short-circuit protection      | +                   |
| Type of electrical connection | Connector M12       |
| Type of switching output      | NPN                 |
| Voltage type                  | DC                  |

## ELECTRICAL FEATURES

|                          |   |
|--------------------------|---|
| With LED display         | + |
| With other analog output | - |
| With time function       | - |

## OPTICAL FEATURES

|                          |                        |
|--------------------------|------------------------|
| Light source             | Laser diode, red light |
| Wavelength of the sensor | 650 nm                 |
| Triangulation            | Background suppression |
| Light beam form          | Point                  |
| Background suppression   | +                      |
| Laser focus distance     | 80 mm                  |
| Laser class              | EV006627               |

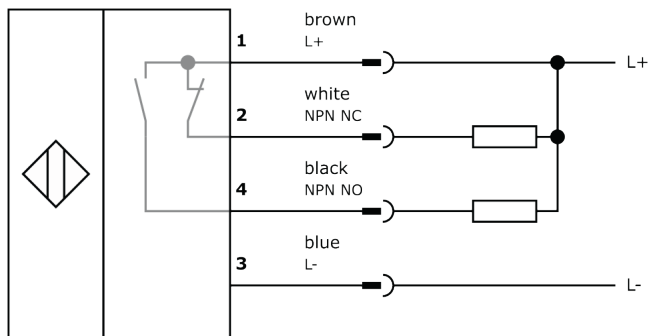
## Other

|                      |                           |
|----------------------|---------------------------|
| Packaging dimensions | 77.0mm x 25.0mm x 123.0mm |
| Shipping weight      | 0.13kg                    |
| Tariff code          | 85365019                  |

## Classification

|                   |          |
|-------------------|----------|
| ipf product group | 160      |
| 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.