

**OT370505****OPTICAL SENSORS • DIFFUSE REFLECTION SENSORS WITH BACKGROUND SUPPRESSION**

sensor optical, diffuse-reflection sensor, 36x25x14mm, Sn: 20-100, 10-30V DC, -30°C, 2x PNP/NPN Push-pull, Cable 5m, IP67 / IP69k, V4A+PMMA, 1kHz, Background suppression, Polarity free red light, Line, Manual adjustment

**MECHANICAL FEATURES**

|                                             |                        |
|---------------------------------------------|------------------------|
| Ambient temperature                         | -30 °C ... 70 °C       |
| Cable length                                | 5 m                    |
| Degree of protection (IP)                   | IP67 / IP69k           |
| Design                                      | Cuboid                 |
| Housing material                            | Stainless steel 1.4404 |
| Increased ambient temperatures >70°C        | +                      |
| Material of optical surface                 | PMMA                   |
| Number of cores                             | 4                      |
| Reflector included in the scope of delivery | -                      |
| Sensor height                               | 35.5 mm                |
| Sensor length                               | 25 mm                  |
| Sensor width                                | 14 mm                  |
| Storage temperature                         | -30 °C ... 70 °C       |
| Volume                                      | Small                  |

**ELECTRICAL FEATURES**

|                               |                     |
|-------------------------------|---------------------|
| Adjustment range              | 20 mm ... 100 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                    | 0.5 ms              |
| Max. switching distance       | 100 mm              |
| No-load current               | 15 mA               |
| Number of switching outputs   | 2                   |
| Operating voltage             | 10 V ... 30 V       |
| Rated switching current       | 100 mA              |
| Rated switching distance      | 100 mm              |
| Readiness delay               | 300 ms              |
| Residual ripple               | 15 %                |
| Response time                 | 0.5 ms              |
| Scanning function             | Light-/dark-on mode |
| Sensing range                 | 20 mm ... 100 mm    |

## ELECTRICAL FEATURES

| Setting procedure             | Manual adjustment |
|-------------------------------|-------------------|
| Short-circuit protection      | +                 |
| Switching frequency           | 1000 Hz           |
| Type of electrical connection | Cable             |
| Type of switching function    | Push-pull         |
| Type of switching output      | PNP/NPN           |
| Voltage drop                  | 2 V               |
| Voltage type                  | DC                |
| With LED display              | +                 |
| With LED display (operation)  | +                 |
| With LED display (signal)     | +                 |
| With other analog output      | -                 |
| With time function            | -                 |

## OPTICAL FEATURES

|                          |                         |
|--------------------------|-------------------------|
| Light source             | Polarity free red light |
| Light spot               | 120 mm <sup>2</sup>     |
| Wavelength of the sensor | 620 nm                  |
| Triangulation            | Background suppression  |
| Light beam form          | Line                    |
| Background suppression   | +                       |

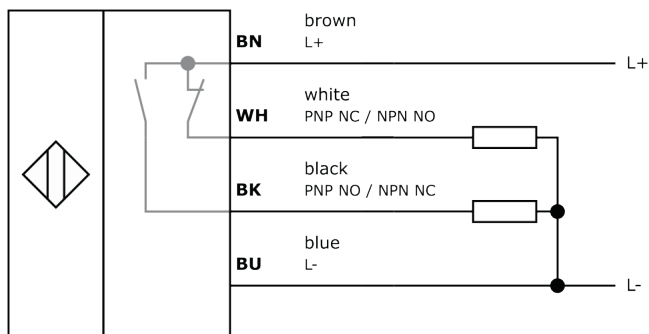
## Other

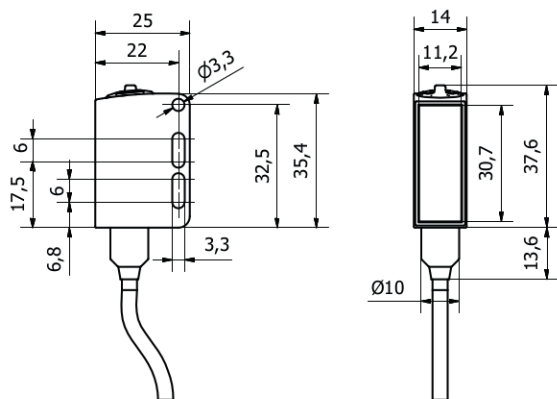
|                      |                        |
|----------------------|------------------------|
| Packaging dimensions | 110mm x 45.0mm x 180mm |
| Shipping weight      | 0.2kg                  |
| Tariff code          | 85365019               |

## 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.