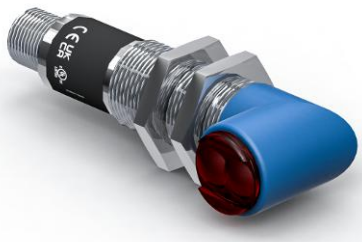
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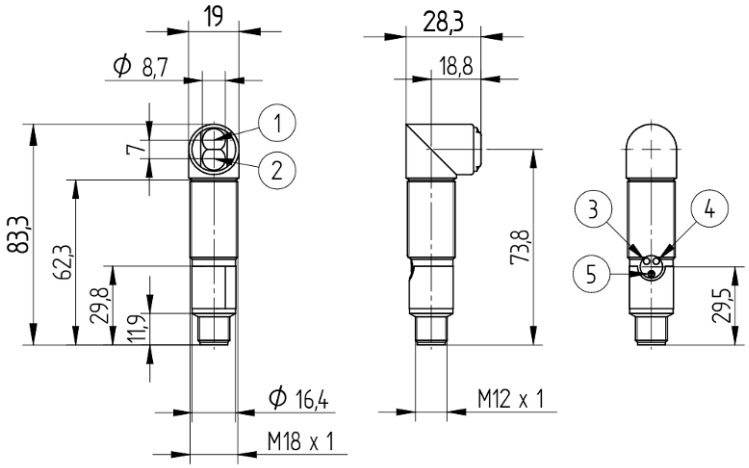
# Technical Data

# P18L002

# Retro-Reflex Sensor

Universal






| Symbol | Key |
|---|---|
| 1 | Emitter diode |
| 2 | Receiver diode |
| 3 | Power LED |
| 4 | Switching status indicator/contamination warning |
| 5 | Switching distance adjuster |

EN

Dimensions in mm
Subject to change without notice
Version 1
**www.wenglor.com**

## Technical data

| Optical Data | |
|---|---|
| Range | 6000 mm |
| Reference Reflector/Reflector Foil | RQ100BA |
| Switching Hysteresis | < 15 % |
| Light Source | LED, red |
| Polarization Filter | yes |
| Service Life (T = +25 °C) | 100000 h |
| Max. Ambient Light | 10000 Lux |
| Opening Angle | 5 ° |
| Optics | Two-Lens Optic |

| Electrical Data | |
|---|---|
| Supply Voltage | 10...30 V DC |
| Supply Voltage with IO-Link | 18...30 V DC |
| Current Consumption (Ub = 24 V) | < 30 mA |
| Switching Frequency | 1000 Hz |
| Switching frequency (speed mode) | 1500 Hz |
| Response Time | 0.5 ms |
| Response time (speed mode) | 0.35 ms |
| Temperature Drift | < 10 % |
| Temperature Range | -10...60 °C |
| Switching Output Voltage Drop | < 2 V |
| PNP Switching Output/Switching Current | 100 mA |
| Residual Current Switching Output | < 50 µA |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Overload Protection | yes |
| Lockable | yes |
| Interface | IO-Link V1.1 |
| Protection Class | III |

| Mechanical Data | |
|---|---|
| Setting Method | Potentiometer |
| Housing Material | Stainless steel, V2A (1.4305/303)<br>Plastic, PBT |
| Full Encapsulation | yes |
| Degree of Protection | IP67 |
| Connection Type | Plug variant |
| Connection | M12 × 1; 4-pin |

| Safety-relevant Data | |
|---|---|
| MTTFd (EN ISO 13849-1) | 3126.88 a |

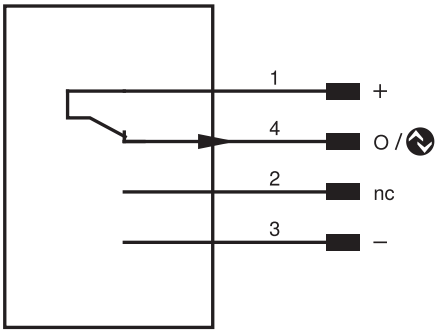
| General Data | |
|---|---|
| Scope of delivery | 1 × initial start-up instructions<br>1 × MUTTER-M18-E003 hex nut<br>1 × sensor |

| Adjustable parameters | |
|---|---|
| Output | Push-pull<br>NPN<br>PNP |
| Circuit | inactive<br>Error output<br>NC<br>NC+NO<br>NO |
| Other parameters | Off-delay<br>On-delay<br>Mode of operation<br>Hysteresis<br>Switching point<br>Emitted light |

All other parameters can be found in the product documentation.

| BMECat data | |
|---|---|
| eCl@ss 5.1.4 | 27-27-09-02 Reflection light barrier |
| eCl@ss 6.x | 27-27-09-02 Reflection light barrier |
| eCl@ss 7.0 | 27-27-09-02 Reflection light barrier |
| eCl@ss 7.1 | 27-27-09-02 Reflection light barrier |
| eCl@ss 8.x | 27-27-09-02 Reflection light barrier |
| eCl@ss 10.0.1 | 27-27-09-02 Reflection light barrier |

## Technical illustrations




| Pin | Pin function | Polarity | Circuit |
|---|---|---|---|
| 1 | Supply Voltage + | | |
| 2 | Not connected | | |
| 3 | Supply voltage 0 V | | |
| 4 | Switching output IO-Link | PNP | NC |

| Reflector data | |
|---|---|
| RQ100BA | 0.02...6 m |
| RE18040BA | 0.02...3.3 m |
| RQ84BA | 0.01...4.5 m |

| Reflector data | |
|---|---|
| RR84BA | 0.02...4.5 m |
| RE9538BA | 0.02...1.5 m |
| RE6151BM | 0.01...4.5 m |
| RE6151BA | 0.02...2.3 m |
| RR50_A | 0.02...4 m |
| RE6040BA | 0.02...4 m |
| RE8222BA | 0.01...2 m |
| RR34_M | 0.01...2.4 m |
| RE3220BM | 0.01...1.6 m |
| RE6210BM | 0.01...1.6 m |
| RR25_M | 0.02...1.6 m |
| RR25KP | 0.02...1.4 m |
| RR21_M | 0.01...1.6 m |
| ZRAE02B01 | 0.02...3 m |
| ZRME01B01 | 0.02...1 m |
| ZRME03B01 | 0.02...2.8 m |
| ZRMR02K01 | 0.02...1.1 m |
| ZRMS02_01 | 0.01...1.5 m |
| RF505 | 0.06...1.6 m |
| RF255 | 0.06...1.2 m |
| RF508 | 0.06...1.6 m |
| RF258 | 0.06...1.2 m |
| ZRDF__K01 | 0.06...4 m |

Reflector type, mounting distance

