



Model Number

ML300-8-600-RT/25/103/115

Diffuse mode sensor
with 2 m fixed cable

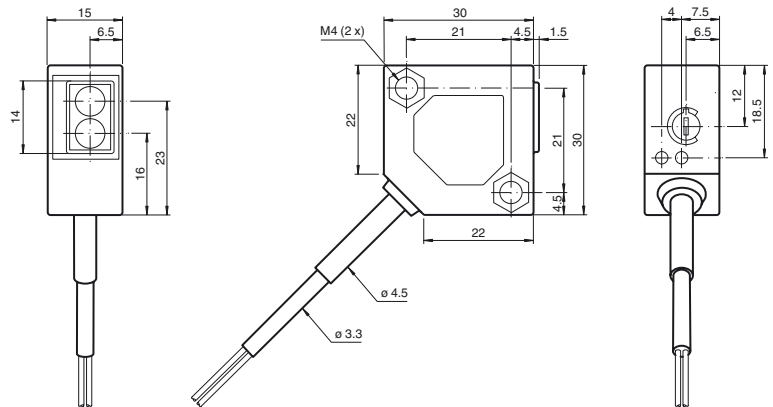
Features

- Miniature design
- Easy to use
- Visible red light
- 45° cable connector

Product information

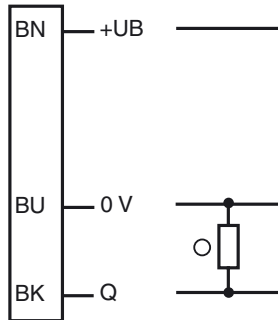
The ML300 series has a robust miniature housing and all the standard functional principles. Of particular note are the sensors with analog output, which return a value proportional to the distance. The 45° plug/cable connection ensures flexible mounting. An LED indicates a weak signal, e.g. due to dirt.

Dimensions



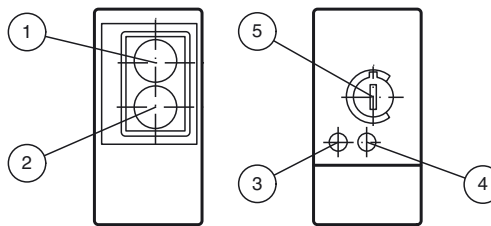
Electrical connection

Option: 103



- = Light on
- = Dark on

Indicators/operating means



| | | |
|---|------------------------|--------|
| 1 | Receiver | |
| 2 | Emitter | |
| 3 | Switching state | yellow |
| 4 | Stability control | green |
| 5 | Sensing range adjuster | |

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Technical data**General specifications**

| | |
|----------------------------|--|
| Detection range | 0 ... 600 mm , adjustable |
| Adjustment range | 150 ... 600 mm |
| Reference target | standard white 200 mm x 200 mm |
| Light source | LED |
| Light type | modulated visible red light , 660 nm |
| Diameter of the light spot | approx. 130 mm at a distance of 600 mm |
| Angle of divergence | approx. 13 ° |
| Ambient light limit | |
| Continuous light | 10000 Lux |
| Modulated light | 5000 Lux |

Indicators/operating means

| | |
|--------------------|--|
| Function indicator | LED yellow: lights up when output is active LED green: Sufficient stability control |
| Control elements | Sensing range adjuster |

Electrical specifications

| | | |
|------------------------|-------|----------------|
| Operating voltage | U_B | 10 ... 30 V DC |
| Ripple | | max. 10 % |
| No-load supply current | I_0 | max. 35 mA |

Output

| | | |
|---------------------|---|---------------|
| Switching type | light on | |
| Signal output | 1 PNP output, short-circuit protected, reverse polarity protected, open collector | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 0.1 A | |
| Voltage drop | U_d | ≤ 2 V DC |
| Switching frequency | f | 1000 Hz |
| Response time | | 0.5 ms |

Conformity

| | |
|------------------|--------------|
| Product standard | EN 60947-5-2 |
|------------------|--------------|

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 55 °C (-13 ... 131 °F) |
|---------------------|--------------------------------|

Mechanical specifications

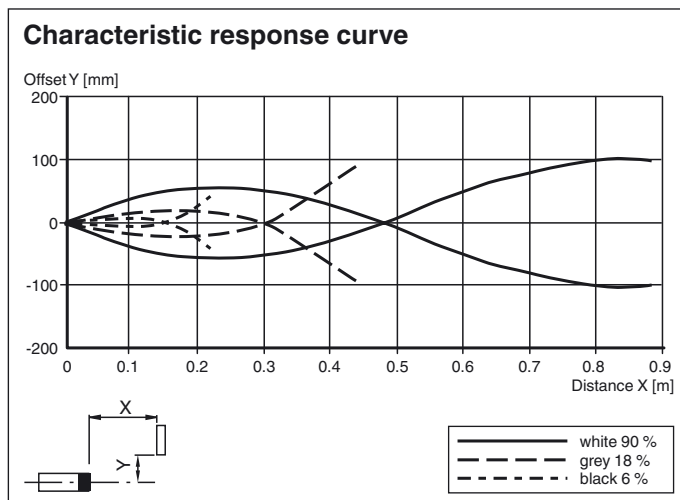
| | |
|----------------------|-----------------|
| Housing width | 30 mm |
| Housing height | 30 mm |
| Housing depth | 15 mm |
| Degree of protection | IP65 |
| Connection | 2 m fixed cable |
| Material | |
| Housing | ABS |
| Optical face | plastic |
| Cable | PVC |
| Mass | 75 g |

Compliance with standards and directives

| | |
|-----------------------------|---|
| Standard conformity | |
| Shock and impact resistance | EN 60947-5-7 30 g, 11 ms, all axes |
| Vibration resistance | EN 60947-5-7, 10-55 Hz/1.5 mm amplitude, all axes |

Approvals and certificates

| | |
|--------------|--|
| CCC approval | CCC approval / marking not required for products rated ≤ 36 V |
|--------------|--|

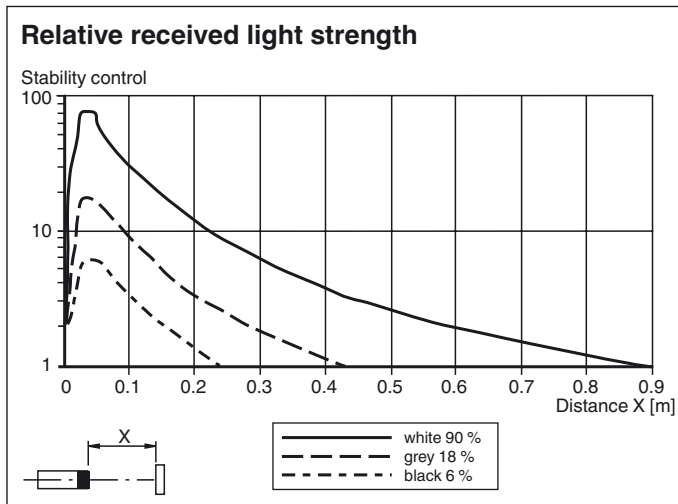
Curves/Diagrams**Accessories****OMH-ML300-01**

Bracket for mounting ML300 series sensors

OMH-ML300-02

Bracket for mounting ML300 series sensors on a 35 mm DIN rail

Other suitable accessories can be found at www.pepperl-fuchs.com



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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