



Model Number

MD17/MV17/136/143

Thru-beam sensor
with 4-pin, M8 x 1 connector

Features

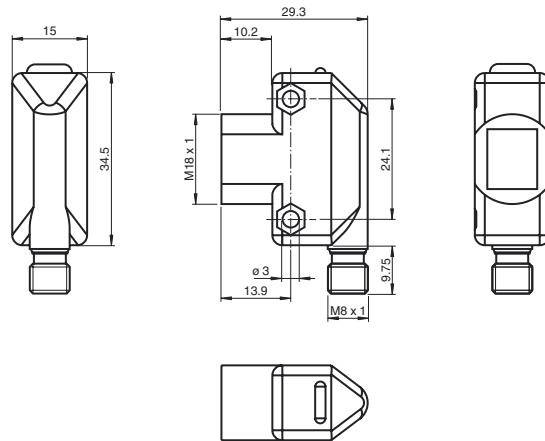
- Compact series in universal housing for standard applications
- Miniature design
- Front mounting with M18-threads or side mounting holes
- 360° high visibility LEDs
- Time-saving mounting with quick clamp system

Product information

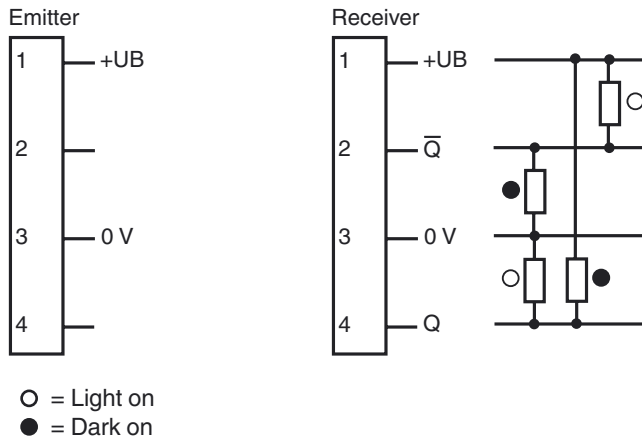
The ML17 sensor family offers diverse connection and installation options, which means that it can adapt to the most varied automation tasks. In addition to the usual fitting method using M4 screws, these sensors can also be installed by means of M18 threaded insert. All devices are equipped with a green Power On display and a yellow function display. These displays are arranged in such a way that they are clearly visible from different directions.

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Dimensions



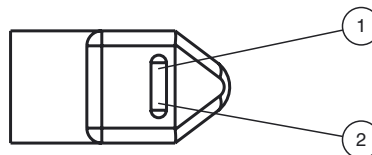
Electrical connection



Pinout



Indicators/operating means



| | | |
|---|-------------------|--------|
| 1 | Signal display | yellow |
| 2 | Operating display | green |

Technical data**System components**

| | |
|----------|--------------|
| Emitter | MD17/143 |
| Receiver | MV17/136/143 |

General specifications

| | |
|---------------------------|-----------------------------------|
| Effective detection range | 0 ... 15 m |
| Threshold detection range | 20 m |
| Light source | IREL |
| Light type | modulated infrared light , 950 nm |
| Ambient light limit | ≤ 10000 Lux |

Indicators/operating means

| | |
|-------------------|---|
| Operating display | LED green |
| Function display | LED yellow, lights up with receiver lit |

Electrical specifications

| | | |
|--------------------------------|-------|--------------------------|
| Operating voltage | U_B | 10 ... 30 V DC , class 2 |
| Ripple | | max. 10 % |
| No-load supply current | I_0 | < 25 mA |
| Operating current | | 100 mA max per output |
| Time delay before availability | t_v | ≤ 200 ms |

Output

| | | |
|---------------------|--|----------|
| Switching type | light/dark on | |
| Signal output | 2 push-pull (4 in 1) outputs, short-circuit protected, reverse polarity protected, overvoltage protected | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 100 mA | |
| Voltage drop | U_d | ≤ 2 V DC |
| Switching frequency | f | 150 Hz |
| Response time | | ≤ 3 ms |

Ambient conditions

| | |
|---------------------|-------------------------------|
| Ambient temperature | -20 ... 55 °C (-4 ... 131 °F) |
| Storage temperature | -20 ... 75 °C (-4 ... 167 °F) |

Mechanical specifications

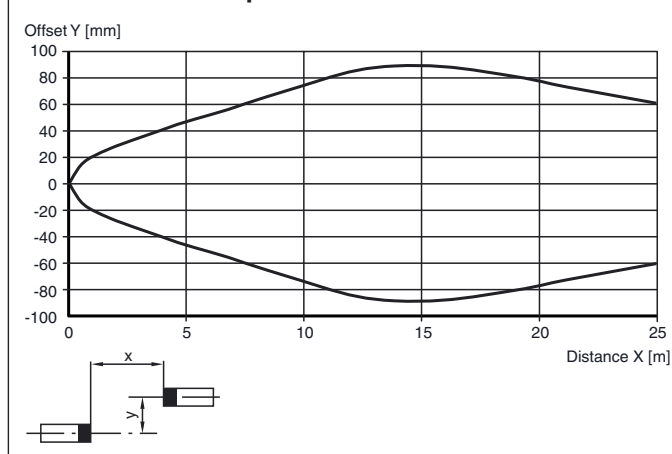
| | |
|-------------------|-------------------------------------|
| Protection degree | IP67 |
| Connection | M8 x 1 connector, 4-pin |
| Material | |
| Housing | ABS |
| Optical face | Acrylic |
| Mass | approx. 17 g (emitter and receiver) |

Compliance with standards and directives

| | |
|---------------------|---|
| Standard conformity | |
| Product standard | EN 60947-5-2:2007 IEC 60947-5-2:2007 |
| Standards | EN 50178, UL 508 |

Approvals and certificates

| | |
|--------------|--|
| UL approval | cULus |
| CCC approval | Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval. |

Curves/Diagrams**Characteristic response curve****Accessories**

OMH-ML17-EZ
Mounting bracket

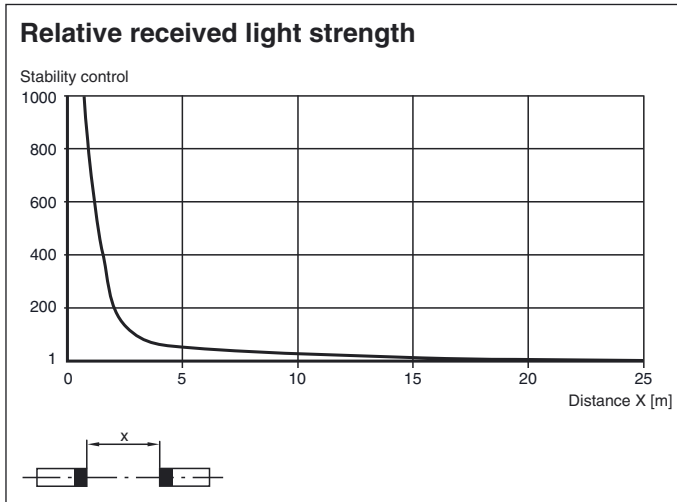
OMH-ML17
Mounting bracket

OMH-ML17-1
Mounting bracket

V31-WM-2M-PUR
4-pin, M8 socket, PUR cable

V31-GM-2M-PUR
4-pin, M8 socket, PUR cable

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



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Subject to modifications without notice

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