

Thru-beam sensor receiver

MV17/73/136



- Compact, versatile housing
- 360° high visibility LEDs
- 4-in-1 output (push-pull)
- M12 male connector



Function

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.

Application

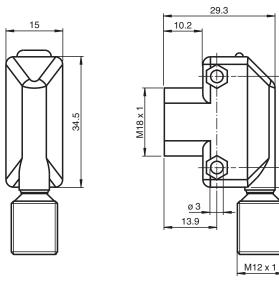
- Presence monitoring
- Target sensors
- Congestion monitoring
- Track loading
- Completeness checks

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

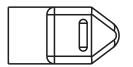
Dimensions

24.1

18





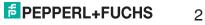


| Technical Data | | |
|--------------------------------|----------------|--|
| System components | | |
| Emitter | | MD17/73 |
| Receiver | | MV17/73/136 |
| General specifications | | |
| Effective detection range | | 0 15 m |
| Threshold detection range | | 20 m |
| Reference target | | emitter |
| Light source | | IRED |
| Light type | | Infrared LED |
| Ambient light limit | | ≤ 10000 Lux |
| Indicators/operating means | | |
| Operation indicator | | LED green |
| Function indicator | | LED yellow, lights up with receiver lit |
| Electrical specifications | | |
| Operating voltage | UB | 10 30 V DC , class 2 |
| Ripple | | max. 10 % |
| No-load supply current | I ₀ | < 25 mA |
| Operating current | I_B | 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 |

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

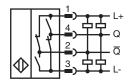
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| Technical Data | | |
|----------------------------|----------------|--|
| | | |
| Switching current | | max. 100 mA |
| Voltage drop | U _d | ≤2 V DC |
| Switching frequency | f | 150 Hz |
| Response time | | \leq 3 ms |
| Conformity | | |
| Product standard | | EN 60947-5-2 IEC 60947-5-2 |
| Approvals and certificates | | |
| CE conformity | | CE |
| EAC conformity | | TR CU 020/2011 |
| UL approval | | cULus |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Ambient temperature | | -20 55 °C (-4 131 °F) |
| Storage temperature | | -20 70 °C (-4 158 °F) |
| Mechanical specifications | | |
| Housing width | | 15 mm |
| Housing height | | 34.5 mm |
| Degree of protection | | IP67 |
| Connection | | M12 x 1 connector , 4-pin |
| Material | | |
| Housing | | ABS |
| Optical face | | Acrylic |
| Mass | | approx. 9 g |
| | | |

Connection



Connection Assignment

| 1 |
|-------|
| 2 (4 |
| 3 |

Wire colors in accordance with EN 60947-5-2

| 1 | BN | (brown) |
|---|----|---------|
| 2 | WH | (white) |
| 3 | BU | (blue) |
| 4 | BK | (black) |

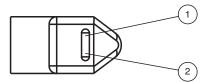
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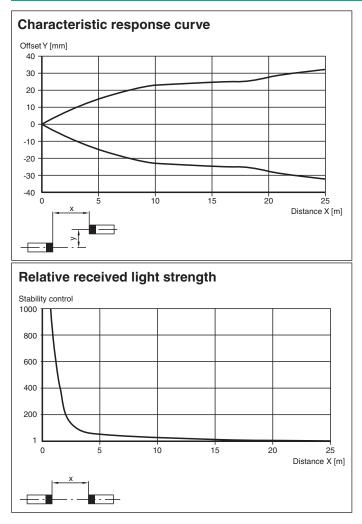
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Indication



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

Characteristic Curve



Matching System Components

| 6 | MD17/73 | Thru-beam sensor emitter |
|---|---------|--------------------------|

Accessories

| OMH-ML17 | Mounting bracket |
|------------|------------------|
| OMH-ML17-1 | Mounting bracket |

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

Thru-beam sensor receiver

| Accessories | | | |
|--------------|-----------------|---|--|
| \mathbf{i} | V1-G-BK2M-PUR-U | Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant | |
| | V1-W-BK2M-PUR-U | Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant | |
| \sum | V1-G-BK5M-PUR-U | Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant | |
| | V1-W-BK5M-PUR-U | Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant | |

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4-in-1 Output

The 4-in-1 output automatically detects the connected load, so the output either sources or sinks current depending on the load. The light on/dark on switch on the housing selects normally open or normally closed mode. A single sensor can operate as NPN normally open, NPN normally closed, PNP normally open, or PNP normally closed.



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