



## Background suppression sensor ML17-8-H-50-RT/115b/136

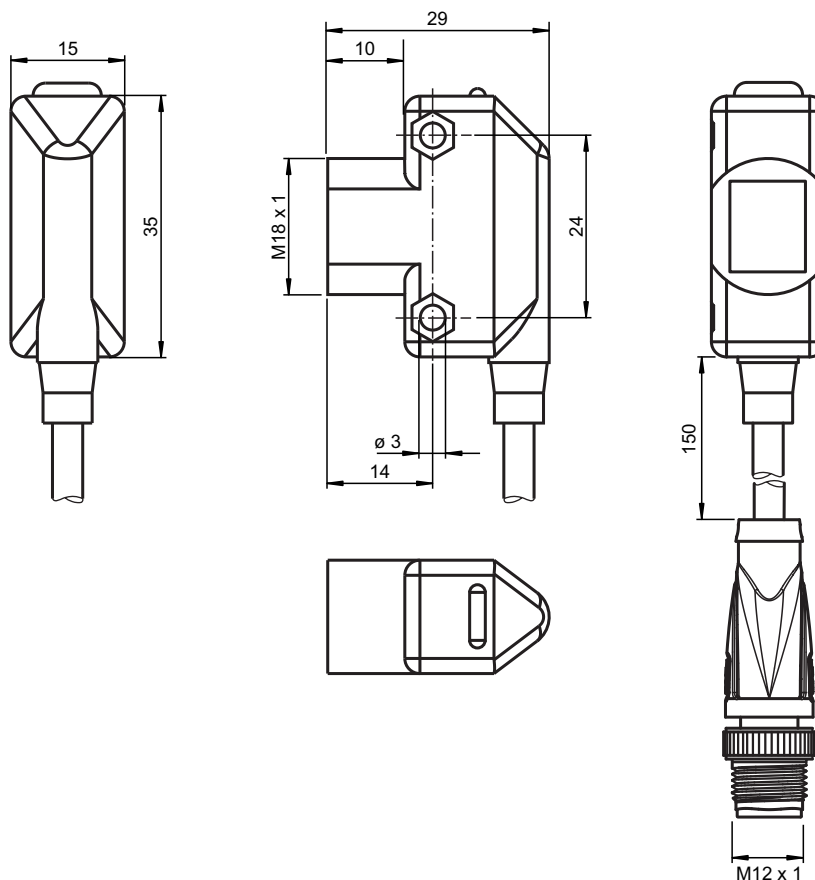


- Compact, versatile housing
- 360° high visibility LEDs
- Very low color sensitivity
- Front mounting with M18-threads or side mounting holes
- Sturdy, waterproof plastic housing
- Tamper-proof version with no adjustments

Background suppression sensor



### Dimensions



### Technical Data

#### General specifications

|                        |                                 |
|------------------------|---------------------------------|
| Detection range        | 10 ... 50 mm                    |
| Background suppression | starts from 65 mm               |
| Reference target       | standard black, 100 mm x 100 mm |
| Light source           | LED                             |

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

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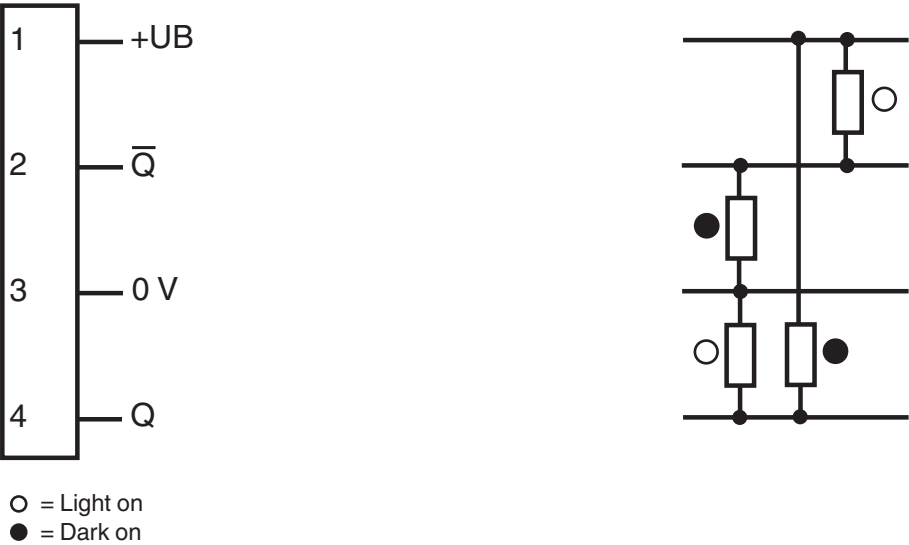
**PEPPERL+FUCHS**

## Technical Data

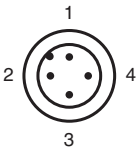
|                                   |                                      |                                                                                                          |
|-----------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------|
| Light type                        | modulated visible red light , 640 nm |                                                                                                          |
| Black/White difference (6 %/90 %) |                                      | ≤ 10 %                                                                                                   |
| Diameter of the light spot        |                                      | ≤ 3 mm at 50 mm                                                                                          |
| Angle of divergence               |                                      | ≤ 4 °                                                                                                    |
| Ambient light limit               |                                      | ≤ 40000 Lux                                                                                              |
| <b>Indicators/operating means</b> |                                      |                                                                                                          |
| Operation indicator               |                                      | green LED , solid : Power on<br>green LED , flashing: Short circuit/overload indication                  |
| Function indicator                |                                      | LED yellow, lights up with receiver lit                                                                  |
| <b>Electrical specifications</b>  |                                      |                                                                                                          |
| Operating voltage                 | U <sub>B</sub>                       | 10 ... 30 V DC , class 2                                                                                 |
| Ripple                            |                                      | max. 10 %                                                                                                |
| No-load supply current            | I <sub>0</sub>                       | < 30 mA                                                                                                  |
| Time delay before availability    | t <sub>v</sub>                       | ≤ 100 ms                                                                                                 |
| <b>Output</b>                     |                                      |                                                                                                          |
| 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 <sub>d</sub>                       | ≤ 2.5 V DC                                                                                               |
| Switching frequency               | f                                    | 500 Hz                                                                                                   |
| Response time                     |                                      | ≤ 1 ms                                                                                                   |
| <b>Conformity</b>                 |                                      |                                                                                                          |
| Product standard                  |                                      | EN 60947-5-2                                                                                             |
| <b>Approvals and certificates</b> |                                      |                                                                                                          |
| UL approval                       |                                      | cULus                                                                                                    |
| CCC approval                      |                                      | CCC approval / marking not required for products rated ≤36 V                                             |
| <b>Ambient conditions</b>         |                                      |                                                                                                          |
| Ambient temperature               |                                      | -20 ... 55 °C (-4 ... 131 °F)                                                                            |
| Storage temperature               |                                      | -20 ... 70 °C (-4 ... 158 °F)                                                                            |
| <b>Mechanical specifications</b>  |                                      |                                                                                                          |
| Housing width                     |                                      | 15 mm                                                                                                    |
| Housing height                    |                                      | 34.5 mm                                                                                                  |
| Degree of protection              |                                      | IP67                                                                                                     |
| Connection                        |                                      | 150 mm PVC cable with 4-pin, M12 connector                                                               |
| Material                          |                                      |                                                                                                          |
| Housing                           |                                      | ABS                                                                                                      |
| Optical face                      |                                      | Acrylic                                                                                                  |
| Mass                              |                                      | approx. 23 g                                                                                             |

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Connection Assignment



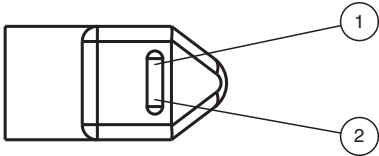
Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

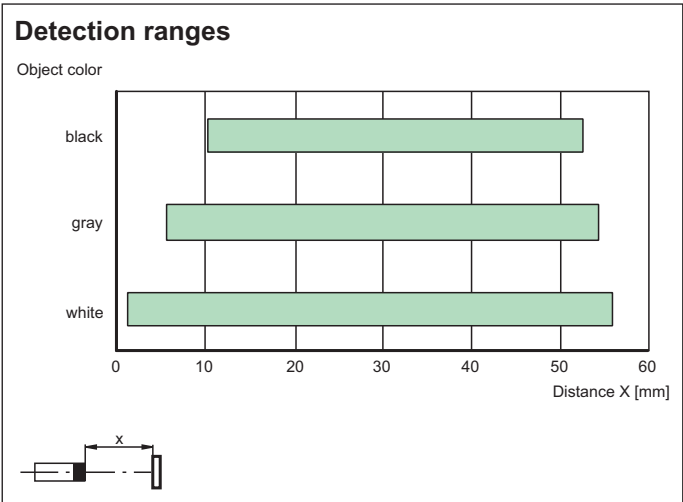
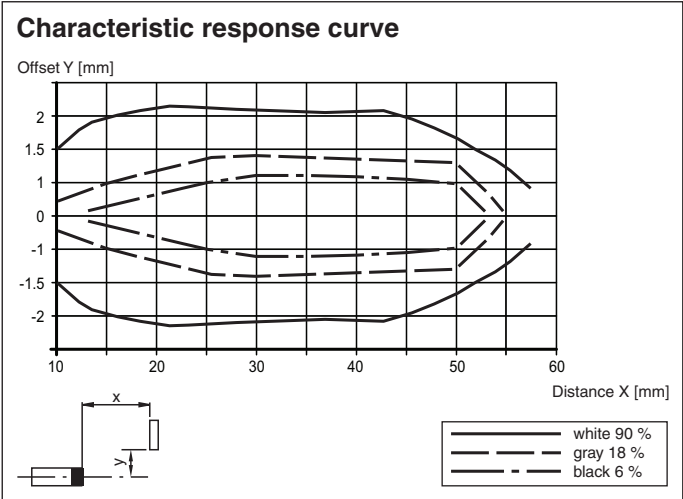
Assembly



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

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Characteristic Curve



Accessories

|                                                                                     |                    |                                       |
|-------------------------------------------------------------------------------------|--------------------|---------------------------------------|
|  | <b>OMH-ML17</b>    | Mounting bracket                      |
|  | <b>OMH-ML17-1</b>  | Mounting bracket                      |
|  | <b>V1-G-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |
|  | <b>V1-W-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |