



Model Number

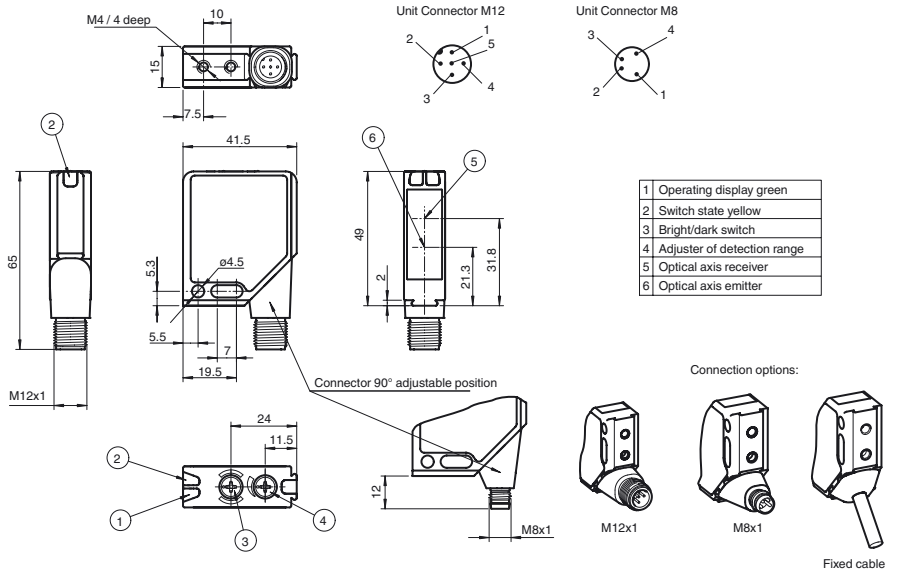
MLV12-8-H-250-RT/65b/124/128

Background suppression sensor with metal connector M12; 5-pin, 90° convertible

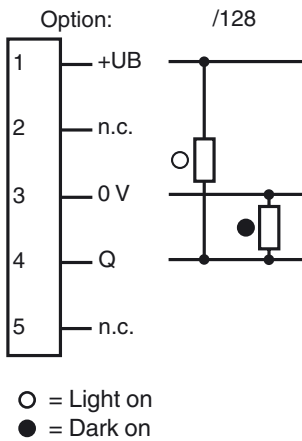
Features

- Reliable detection of all surfaces, independent of color and structure
- Minimal black-white difference
- Ultra bright LEDs for power on and switching state
- Flashing power on LED in case of short-circuit
- Powerful push-pull output
- Not sensitive to ambient light, even with switched energy saving lamps
- Multiple device installation possible, no mutual interference (no cross-talk)
- Protection class II

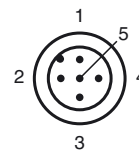
Dimensions



Electrical connection



Pinout



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

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Technical data**General specifications**

| | |
|-----------------------------------|--------------------------------------|
| Detection range | 20 ... 250 mm , adjustable |
| Detection range min. | 20 ... 50 mm |
| Detection range max. | 20 ... 250 mm |
| Adjustment range | 50 ... 250 mm |
| Light source | LED |
| Light type | modulated visible red light , 660 nm |
| Black/White difference (6 %/90 %) | 10 % at 250 mm |
| Diameter of the light spot | 8 mm at Tw 250 mm |
| Angle of divergence | 1.5 ° |
| Ambient light limit | |
| Continuous light | 30000 Lux |
| Modulated light | 5000 Lux |

Functional safety related parameters

| | |
|--------------------------------|-------|
| MTTF _d | 650 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Indicators/operating means

| | |
|---------------------|---|
| Operation indicator | LED green, flashes in case of short-circuit |
| Function indicator | 2 LEDs yellow ON: object inside the scanning range OFF: object outside the scanning range |
| Control elements | potentiometer for light/dark, detection range adjustment |

Electrical specifications

| | | |
|------------------------|----------------|----------------|
| Operating voltage | U _B | 10 ... 30 V DC |
| Ripple | | max. 10 % |
| No-load supply current | I ₀ | ≤ 55 mA |

Output

| | | |
|---------------------|---|------------|
| Switching type | light/dark on switchable | |
| Signal output | 1 push-pull (4 in 1) output, short-circuit protected, reverse polarity protected, 0.2 A / 30 V DC | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 0.2 A | |
| Voltage drop | U _d | ≤ 2.5 V DC |
| Switching frequency | f | 1000 Hz |
| Response time | | 0.5 ms |

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -40 ... 60 °C (-40 ... 140 °F) |
| Storage temperature | -40 ... 75 °C (-40 ... 167 °F) |

Mechanical specifications

| | |
|----------------------|---|
| Degree of protection | IP67 |
| Connection | Metal connector, M12, 5-pin, 90° rotatable |
| Material | |
| Housing | Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC |
| Optical face | Plastic pane |
| Mass | 60 g |

Compliance with standards and directives

| | |
|-----------------------------|--|
| Standard conformity | |
| Product standard | EN 60947-5-2:2007 IEC 60947-5-2:2007 |
| Shock and impact resistance | IEC / EN 60068. half-sine, 40 g in each X, Y and Z directions |
| Vibration resistance | IEC / EN 60068-2-6. Sinus. 10 -150 Hz, 5 g in each X, Y and Z directions |

Approvals and certificates

| | |
|------------------|---|
| Protection class | II, rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1 |
| UL approval | cULus |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |

Accessories**OMH-MLV12-HWG**

Mounting bracket for series MLV12 sensors

OMH-MLV12-HWK

Mounting bracket for series MLV12 sensors

OMH-K01

dove tail mounting clamp

OMH-K02

dove tail mounting clamp

OMH-K03

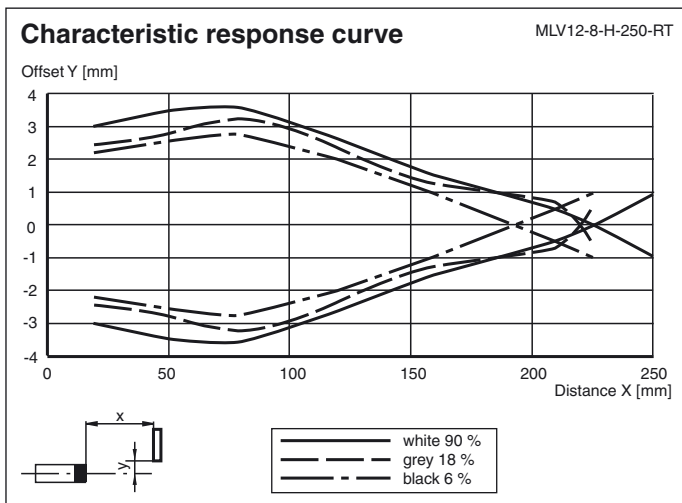
dove tail mounting clamp

OMH-06

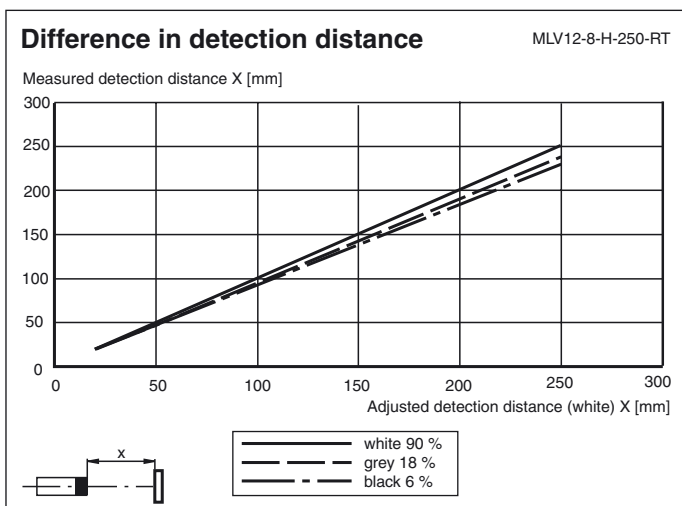
Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

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

Curves/Diagrams



Curves/Diagrams



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