



Model Number

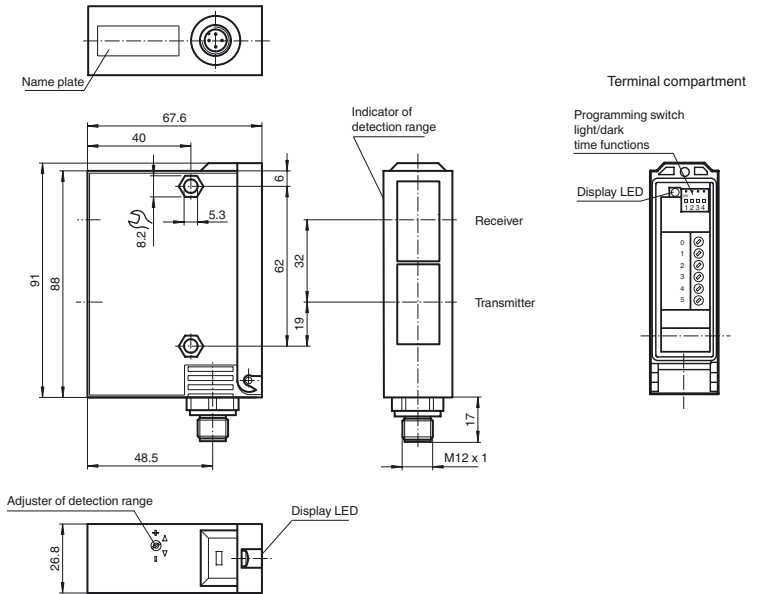
RL23-8-H-500-RT/49/92

Background suppression sensor
with 4-pin, M12 x 1 connector

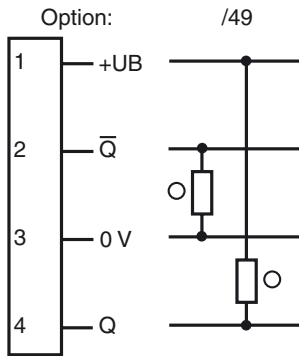
Features

- Adjustable background suppression
- Visible red light
- Sturdy plastic housing
- Optical surface made of scratch-resistant glass

Dimensions

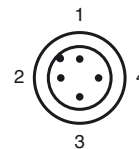


Electrical connection



- = Light on
- = Dark on

Pinout



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Subject to modifications without notice

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Technical data**General specifications**

| | |
|-----------------------------------|------------------------------|
| Detection range | 50 ... 500 mm |
| Detection range min. | 50 ... 150 mm |
| Detection range max. | 50 ... 500 mm |
| Light source | LED |
| Light type | modulated visible red light |
| Black/White difference (6 %/90 %) | < 5 % |
| Diameter of the light spot | 12 mm at 500 mm sensor range |
| Angle of divergence | 1.5 ° |
| Ambient light limit | 12000 Lux |

Functional safety related parameters

| | |
|--------------------------------|-------|
| MTTF _d | 540 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 60 % |

Indicators/operating means

| | |
|------------------|---|
| Function display | LED yellow, lights up with receiver lit |
| Controls | Programming switch for light/dark switching |
| Controls | Detection range adjuster |

Electrical specifications

| | | |
|------------------------|----------------|----------------|
| Operating voltage | U _B | 10 ... 30 V DC |
| Ripple | | 10 % |
| No-load supply current | I ₀ | 100 mA |

Output

| | | |
|---------------------|---|-------|
| Switching type | light/dark on | |
| Signal output | 1 PNP and 1 NPN short-circuit protected, reverse polarity protected | |
| Switching voltage | 30 V DC | |
| Switching current | max. 200 mA | |
| Switching frequency | f | 70 Hz |
| Response time | | 5 ms |

Ambient conditions

| | |
|---------------------|-------------------------------|
| Ambient temperature | -20 ... 60 °C (-4 ... 140 °F) |
| Storage temperature | -20 ... 75 °C (-4 ... 167 °F) |

Mechanical specifications

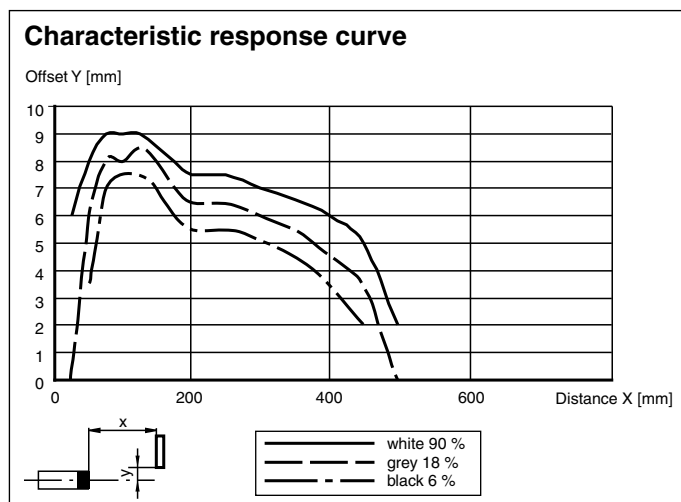
| | |
|-------------------|--------------------------|
| Protection degree | IP65 |
| Connection | connector M12 x 1, 4-pin |
| Material | |
| Housing | Terluran GV15 |
| Optical face | glass |
| Mass | 180 g |

Compliance with standards and directives

| | |
|---------------------|---|
| Standard conformity | |
| Product standard | EN 60947-5-2:2007 IEC 60947-5-2:2007 |

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**Accessories****OMH-05**

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

OMH-07

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

OMH-21

Mounting bracket

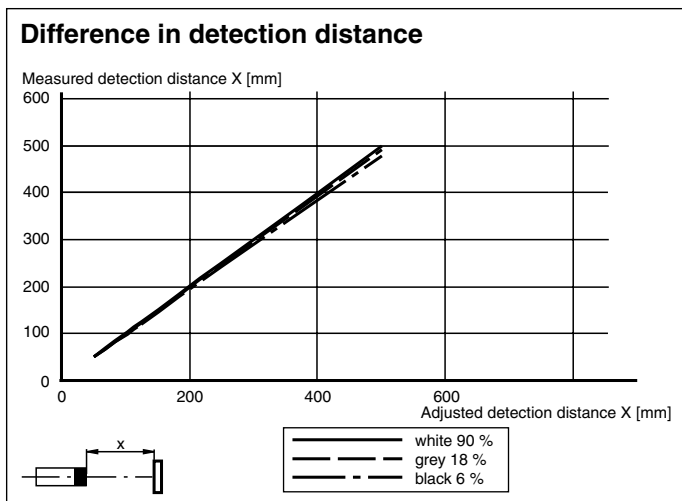
OMH-22

Mounting bracket

OMH-RLK29-HW

Mounting bracket for rear wall mounting

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



Light/Dark switch

| | |
|----|----------|
| ON | Dark on |
| ON | Light on |

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