



Retroreflective sensor RL80-54/25/31/115 SET

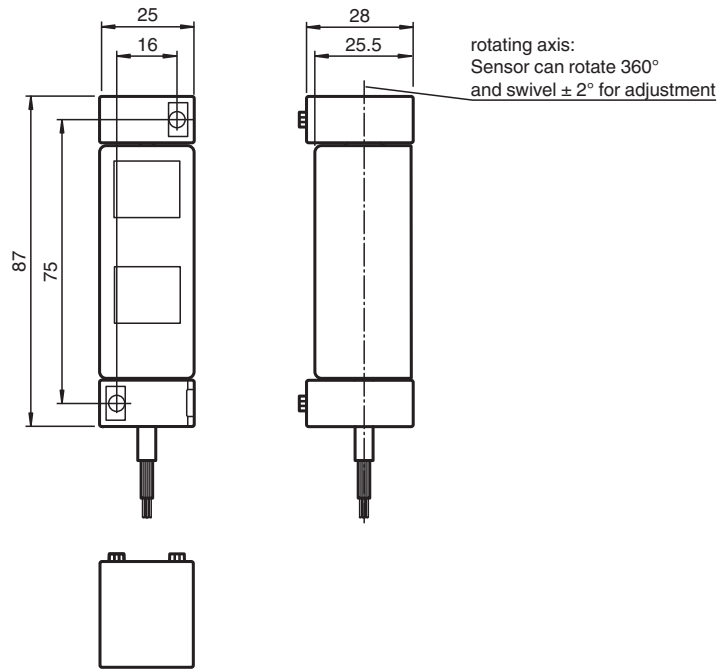


- Retroreflective sensor with polarization filter and foreground suppression for suppressing reflective objects
- Relay output
- Supplied with reflector

Retroreflective sensor with polarization filter



Dimensions



Technical Data

General specifications

| | |
|----------------------------|--------------------------------------|
| Effective detection range | REF-H88x25 0 ... 6 m |
| Reflector distance | REF-H88x25 2.6 ... 10 m |
| Threshold detection range | REF-H88x25 10 m |
| Reference target | REF-H88x25 |
| Light source | LED |
| Light type | modulated visible red light , 640 nm |
| Diameter of the light spot | approx. 200 mm at a distance of 6 m |

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

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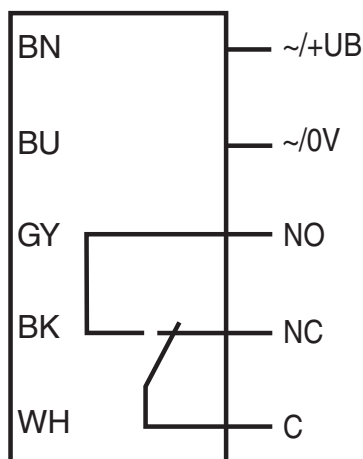
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Technical Data

| | | |
|---|----------------|--|
| Opening angle | | 3 ° |
| Ambient light limit | | EN 60947-5-2 10000 Lux |
| Functional safety related parameters | | |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Indicators/operating means | | |
| Function indicator | | LED yellow |
| Electrical specifications | | |
| Operating voltage | U _B | 12 ... 24 V AC/DC |
| Ripple | | 10 % |
| No-load supply current | I ₀ | ≤ 40 mA |
| Time delay before availability | t _v | < 300 ms |
| Output | | |
| Switching type | | light-on |
| Signal output | | Relay, 1 alternator Relay energized: Light beam is not interrupted |
| Switching voltage | | max. 50 V AC ; 60 V DC |
| Switching current | | max. 1 A |
| Switching power | | max: 30 W ; 60 VA |
| Response time | | Light beam unobstructed to light beam interrupted: 10 ms Light beam interrupted to light beam unobstructed: 80 ms |
| Conformity | | |
| Product standard | | EN 60947-5-2 |
| Approvals and certificates | | |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Ambient temperature | | -30 ... 60 °C (-22 ... 140 °F) |
| Storage temperature | | -40 ... 70 °C (-40 ... 158 °F) |
| Mechanical specifications | | |
| Degree of protection | | IP65 |
| Connection | | 2-meter PVC cable |
| Material | | |
| Housing | | Polycarbonate |
| Optical face | | PMMA |
| Mass | | approx. 155 g |

Connection Assignment

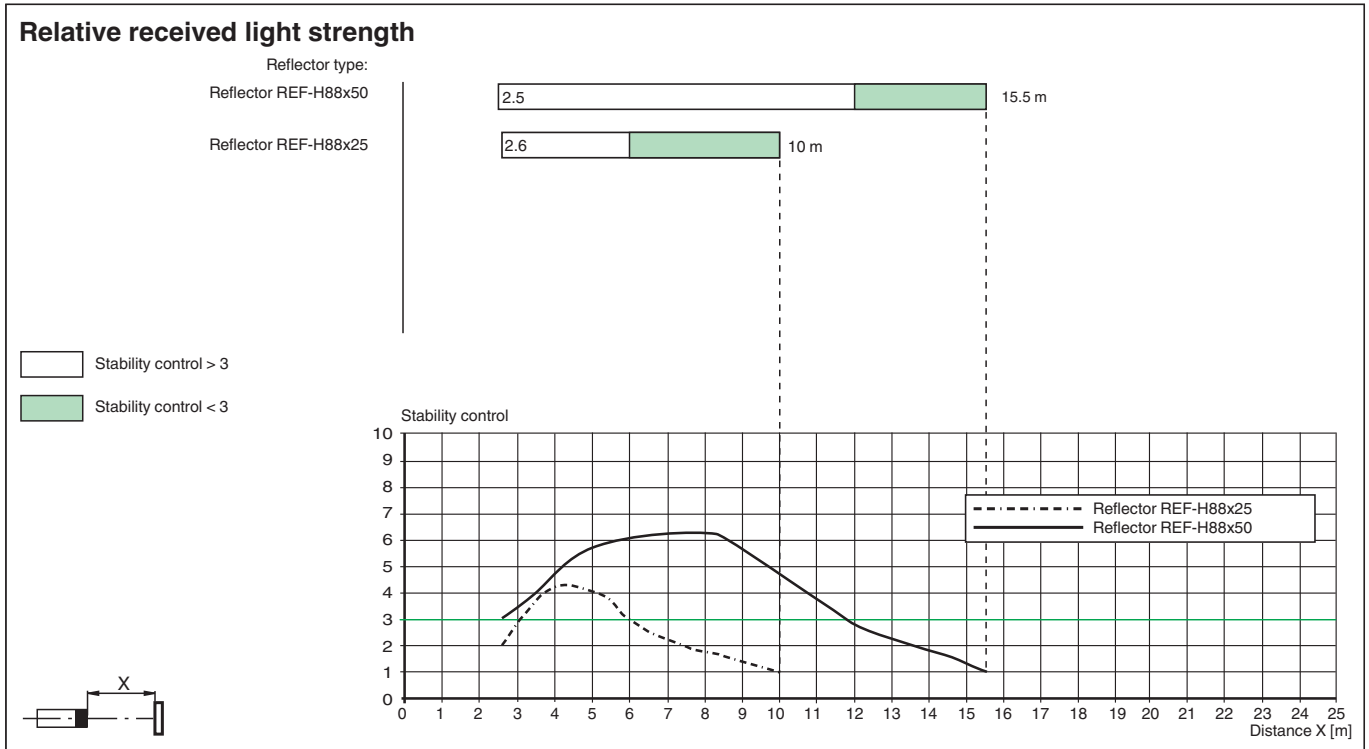


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Indication

| LED yellow | Operating reserve (OR) | Description |
|---|------------------------|--|
| < 15 min after power up (set-up) | | |
| OFF | OR > 3 | Light beam free, sensor ideal aligned or positioned for longest operating time |
| flashes 2 Hz | 1 < OR < 3 | Sensor not properly aligned, sensor or reflector dirty |
| ON | OR < 1 | Sensor misaligned or light beam interrupted |
| > 15 min after power up (operating) | | |
| OFF | OR > 1.5 | Light beam free |
| flashes 4 Hz | 1 < OR < 1.5 | Sensor or reflector dirty |
| ON | OR < 1 | Light beam interrupted |

Characteristic Curve



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