



**Model Number**

**RLK28-55/31/116**

Retroreflective sensor  
with terminal compartment

**Features**

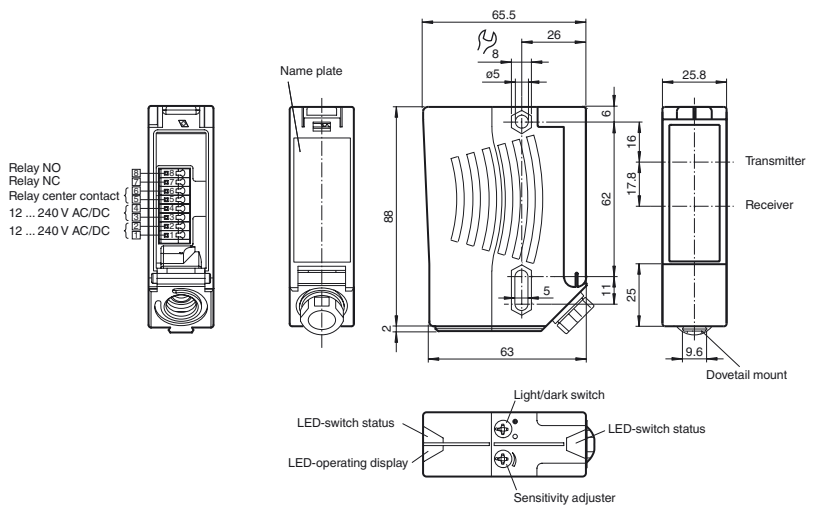
- Universal series with highly versatile fields of use
- Resistant against noise: reliable operation under all conditions
- Version with red light
- Version with relay output

**Product information**

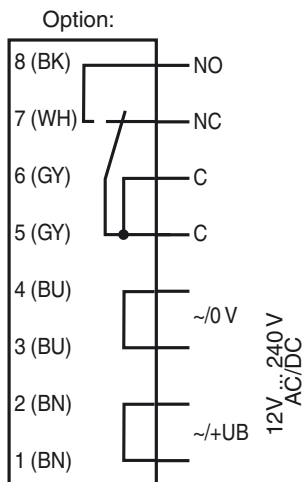
The series 28 family of sensors can be universally used. It has a large range of models that allows it to be integrated into any automation environment. The sensors are contained in sturdy water resistant plastic housings with multiple fastening options and scratch resistant optical cover. Features such as a timer function, and functions including a light/dark switch, sensitivity adjuster and highly visible status LEDs make for less effort on the part of the user and streamline installation, setup and operation. Just about any task associated with positioning, moving, conveying and monitoring can be accomplished with these sensors.

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**Dimensions**



**Electrical connection**



**Technical data****General specifications**

|                            |                                      |
|----------------------------|--------------------------------------|
| Effective detection range  | 0 ... 17 m                           |
| Reflector distance         | 0.05 ... 17 m                        |
| Threshold detection range  | 21 m                                 |
| Reference target           | H85-2 reflector                      |
| Light source               | LED                                  |
| Light type                 | modulated visible red light          |
| Polarization filter        | yes                                  |
| Diameter of the light spot | approx. 290 mm at a distance of 17 m |
| Angle of divergence        | emitter 1.2°<br>receiver 2°          |
| Ambient light limit        | 80000 Lux                            |

**Functional safety related parameters**

|                                |       |
|--------------------------------|-------|
| MTTF <sub>d</sub>              | 600 a |
| Mission Time (T <sub>M</sub> ) | 20 a  |
| Diagnostic Coverage (DC)       | 0 %   |

**Indicators/operating means**

|                     |  |
|---------------------|--|
| Operation indicator | LED green  |
| Function indicator  | 2 LEDs yellow, light up when light beam is free, flash when falling short of the stability control, off when light beam is interrupted |
| Control elements    | sensitivity adjustment (Adjustment to < 25% of the effective operating range) , Light-on/dark-on changeover switch                     |

**Electrical specifications**

|                   |                |                    |
|-------------------|----------------|--------------------|
| Operating voltage | U <sub>B</sub> | 12 ... 240 V AC/DC |
| Power consumption | P <sub>0</sub> | ≤ 3.5 VA           |

**Output**

|                     |                               |       |
|---------------------|-------------------------------|-------|
| Switching type      | light/dark on switchable      |       |
| Signal output       | Relay, 1 alternator           |       |
| Switching voltage   | max. 250 V AC/DC              |       |
| Switching current   | max. 2 A                      |       |
| Switching power     | DC: max. 50 W AC: max. 500 VA |       |
| Switching frequency | f                             | 25 Hz |
| Response time       | 20 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           | terminal compartment with 8 spring-loaded terminals for wire cross section 0.5 ... 1.5 mm <sup>2</sup> , Insulation stripping 7.5 ... 8.5 mm , M16 x 1.5 cable gland |
| Material             |  |
| Housing              | Plastic ABS  |
| Optical face         | Plastic pane   |
| Mass                 | 112 g  |

**Compliance with standards and directives**

|                                  |   |
|----------------------------------|---|
| Directive conformity             |   |
| Low Voltage Directive 2006/95/EC | EN 60947-5-2:2007+A1:2012                                 |
| EMC Directive 2004/108/EC        | EN 60947-5-2:2007+A1:2012                                 |
| Standard conformity              |   |
| Product standard                 | EN 60947-5-2:2007+A1:2012<br>IEC 60947-5-2:2007 + A1:2012 |
| Standards                        | UL 60947-5-2: 2014<br>EN 62471:2008                       |

**Approvals and certificates**

|                  |  |
|------------------|--|
| EAC conformity   | TR CU 020/2011<br>TR CU 004/2011   |
| Protection class | II, rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1<br>Caution!<br>The protection class 2 is only valid when the terminal compartment is closed.   |
| UL approval      | E87056 , cULus Listed <b>Caution:</b> This equipment is considered as open-type equipment. It must be mounted within an enclosure, that is suitably designed for protection against internal fire and personal injury resulting from accessibility to live parts according UL 508. |
| CCC approval     | Certified by China Compulsory Certification (CCC)  |

**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-MLV11-K**

dove tail mounting clamp

**OMH-RLK29**

Mounting bracket

**OMH-RLK29-HW**

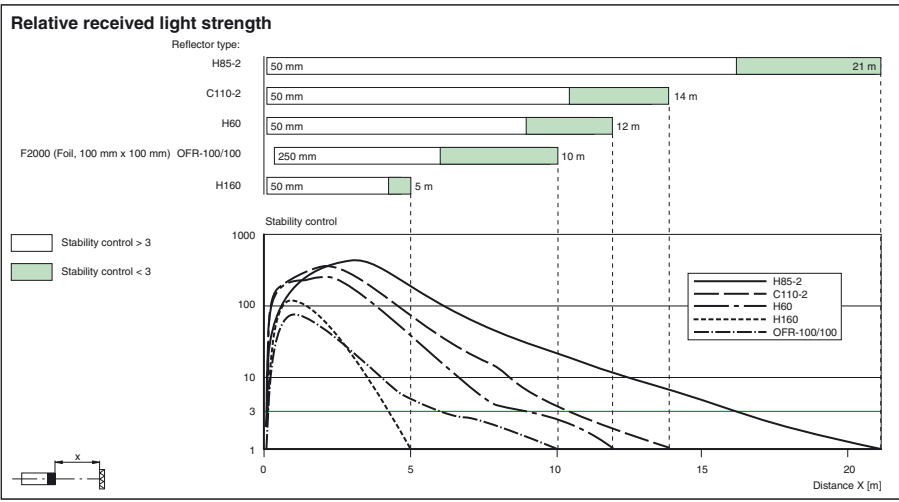
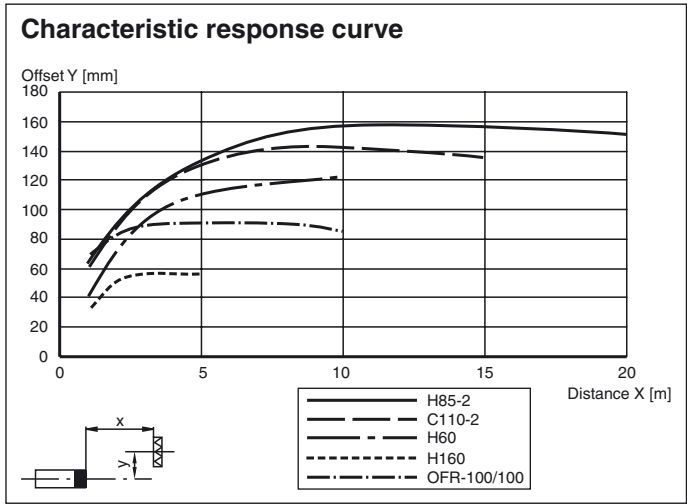
Mounting bracket for rear wall mounting

**OMH-RL28-C**

Weld slag cover model

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

Curves/Diagrams



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