



Model Number

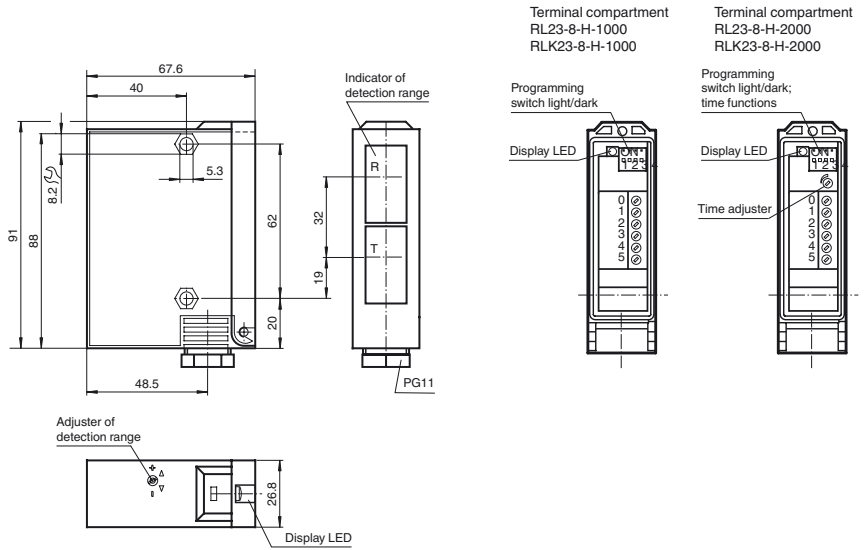
RLK23-8-H-2000-IR/31/104/116

Background suppression sensor with terminal compartment

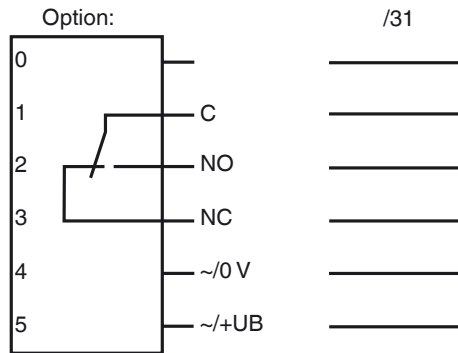
Features

- Adjustable background suppression
- Infrared light
- Timer function
- Sturdy plastic housing
- Optical surface made of scratch-resistant glass
- Protected against mutual interference (no cross-talk)

Dimensions



Electrical connection



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Technical data**General specifications**

| | |
|-----------------------------------|-------------------------------|
| Detection range | 50 ... 2000 mm |
| Detection range min. | 50 ... 150 mm |
| Detection range max. | 50 ... 3000 mm |
| Light source | IREL |
| Light type | modulated infrared light |
| Black/White difference (6 %/90 %) | < 20 % |
| Diameter of the light spot | 50 mm at 2000 mm sensor range |
| Angle of divergence | 1.5 ° |
| Ambient light limit | 5000 Lux |

Functional safety related parameters

| | |
|--------------------------------|-------|
| MTTF _d | 850 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Indicators/operating means

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

Electrical specifications

| | | |
|-------------------|----------------|--|
| Operating voltage | U _B | 12 ... 240 V AC , 10 ... 30 V DC (automatic adaption to +UB) |
| Power consumption | P ₀ | 3 VA |

Output

| | | |
|---------------------|---|-------|
| Switching type | light/dark on | |
| Signal output | 1 relay output, 1 alternator | |
| Switching voltage | max. 240 V AC | |
| Switching current | max. 2 A | |
| Switching frequency | f | 10 Hz |
| Response time | 50 ms | |
| Timer function | ON delay (GAN), OFF delay (GAB), one shot (IAB), programmable, adjustment range 0.1 ...10 s | |

Ambient conditions

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

Mechanical specifications

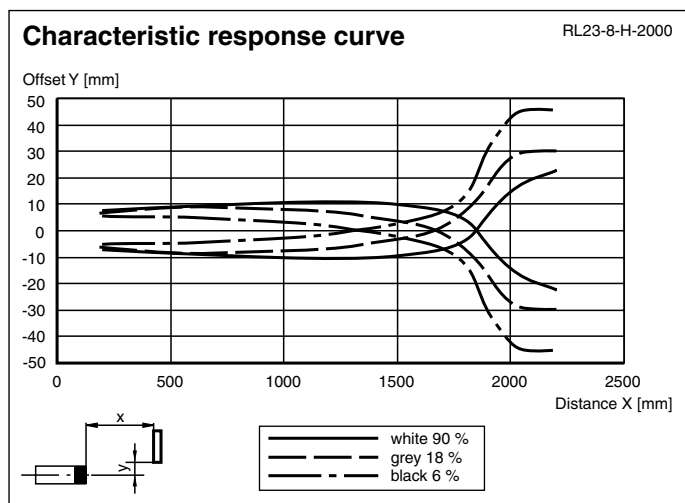
| | |
|-------------------|----------------------|
| Protection degree | IP65 |
| Connection | terminal compartment |
| Material | |
| Housing | Terluran GV15 |
| Optical face | glass |
| Mass | 180 g |

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 | Certified by China Compulsory Certification (CCC) |

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

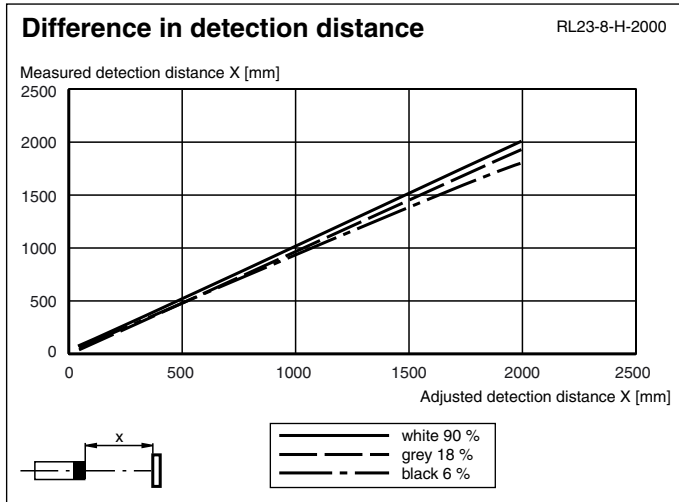
OMH-22

Mounting bracket

OMH-RLK29-HW

Mounting bracket for rear wall mounting

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



Timer functions

| Timer function | Switching type | | Receiver exposed Receiver dark |
|----------------|----------------|--|-----------------------------------|
| ON Without | Light | | ON |
| | Dark | | OFF |
| ON ON delay | Light | | ON |
| | Dark | | OFF |
| ON OFF delay | Light | | ON |
| | Dark | | OFF |
| ON one shot | Light | | ON |
| | Dark | | OFF |

Time t_{ON} , t_{OFF} and t_{OS} are adjustable from 0.1 to 10 seconds.
 The Light-/Dark-Switch (Left, outer switch) is shown in the "Dark ON" position.

| Type | Description | Notes |
|------|-----------------|---|
| -Z | OFF delay timer | Adjustable time interval (0.1 s - 10 s) |
| | one shot timer | |
| | ON delay timer | |

Light/Dark switch

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

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