



Model Number

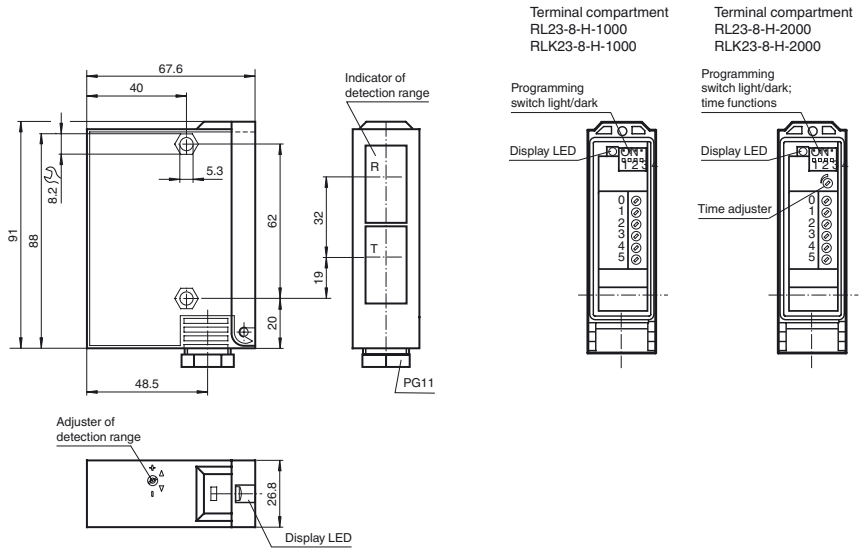
RL23-8-H-1000-IR/104/116/125

Background suppression sensor with terminal compartment

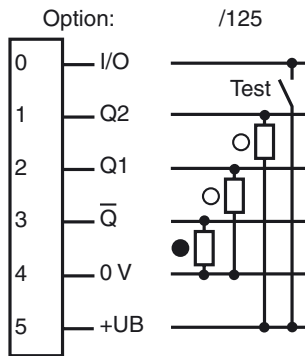
Features

- Adjustable background suppression
- Infrared light
- Sturdy plastic housing
- Optical surface made of scratch-resistant glass
- Protected against mutual interference

Dimensions



Electrical connection



- = Light on
- = Dark on

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Technical data**General specifications**

Detection range	50 ... 1000 mm
Detection range min.	50 ... 150 mm
Detection range max.	50 ... 1000 mm
Light source	IREL
Light type	modulated infrared light
Black/White difference (6 %/90 %)	< 10 %
Diameter of the light spot	25 mm at 1000 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

Input

Test input	emitter deactivation at +U _B
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Output

Switching type	light/dark on	
Signal output	2 PNP, complementary, 1 NPN short-circuit protected, reverse polarity protected	
Switching voltage	30 V DC	
Switching current	max. 200 mA	
Switching frequency	f	10 Hz
Response time		50 ms

Ambient conditions

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

Mechanical specifications

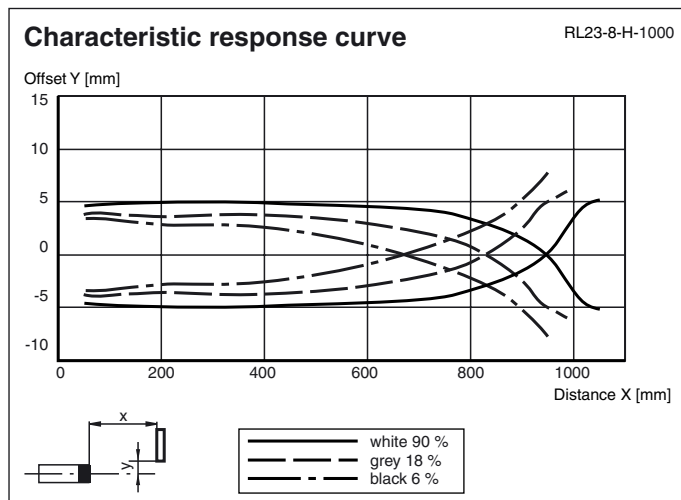
Protection degree	IP65
Connection	terminal compartment
Material	
Housing	Terluran GV15
Optical face	glass
Mass	180 g

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	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

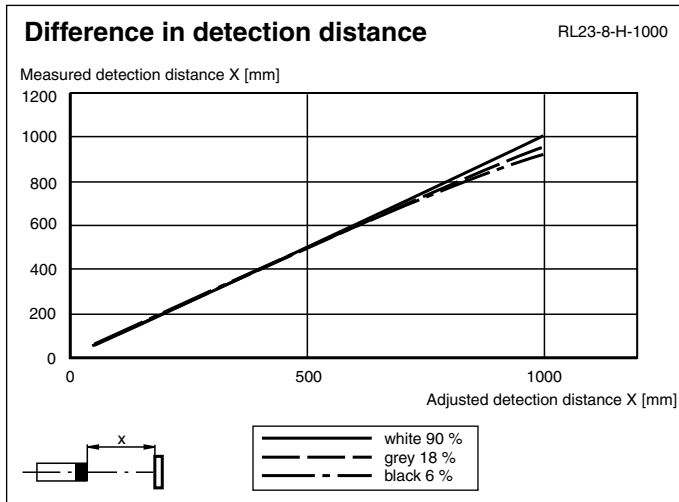
OMH-22

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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