



Model Number

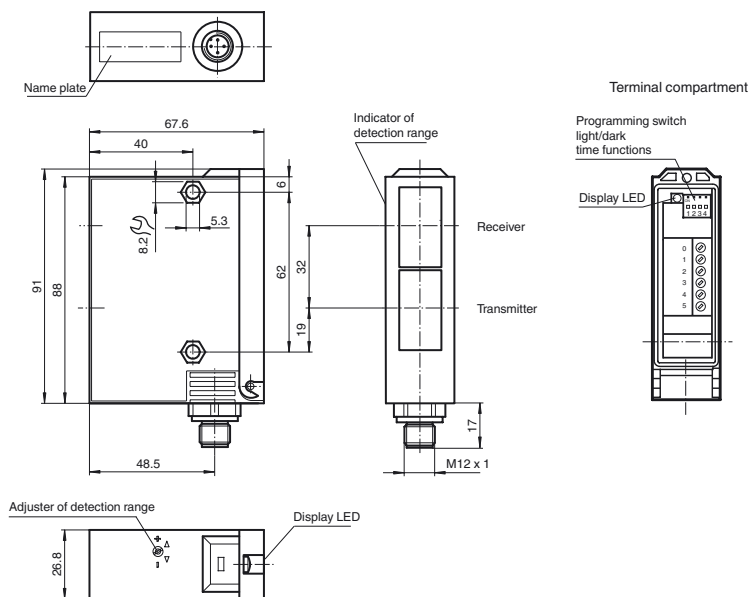
RL23-8-H-500-RT/47/92/104

Background suppression sensor
with M12, 4-pin metal connector

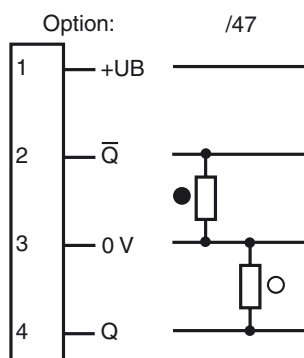
Features

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

Dimensions

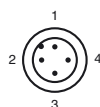


Electrical connection



○ = Light on
● = Dark on

Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

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 indicator	LED yellow, lights up with receiver lit
Control elements	Programming switch for light/dark switching
Control elements	Sensing 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	2 PNP, complementary, 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

Conformity

Product standard	EN 60947-5-2
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Ambient conditions

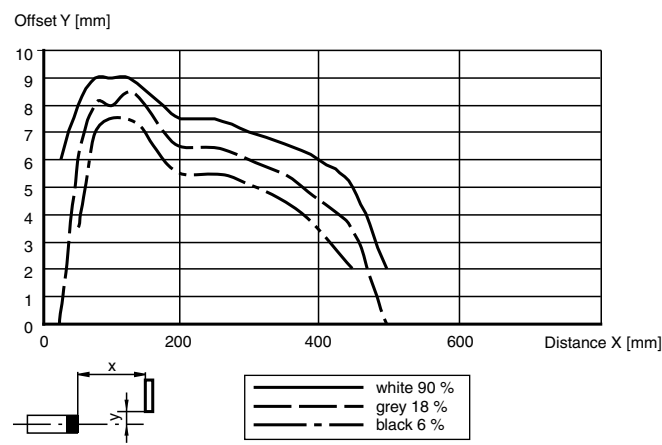
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)

Mechanical specifications

Housing width	26.8 mm
Housing height	91 mm
Housing depth	67.6 mm
Degree of protection	IP65
Connection	4-pin, M12 x 1 connector
Material	
Housing	Terluran® GV15
Optical face	glass
Mass	180 g

Approvals and certificates

UL approval	cULus
CCC approval	CCC approval / marking not required for products rated ≤36 V

Curves/Diagrams**Characteristic response curve****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

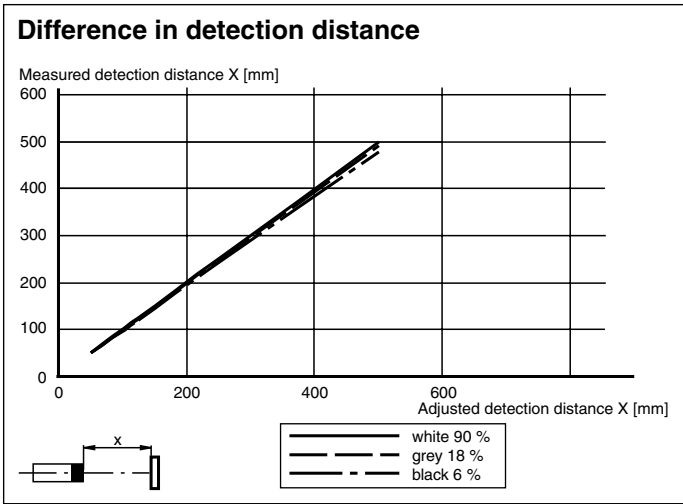
OMH-22

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 1 2 3 4	Dark on
ON 1 2 3 4	Light on