



Model Number

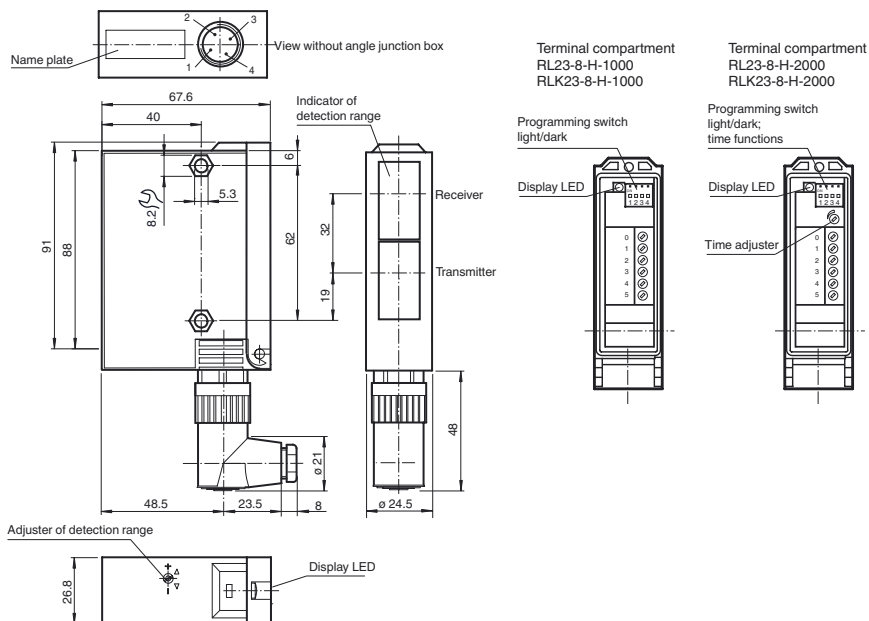
RL23-8-H-1000-IR/47/74b

Background suppression sensor
with 4-pin, M18 x 1 plastic connector

Features

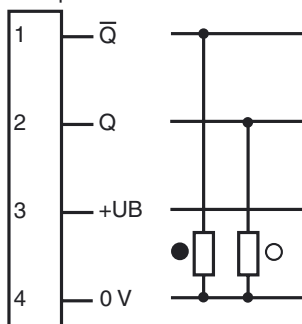
- Adjustable background suppression
- Infrared light
- Sturdy plastic housing
- Optical surface made of scratch-resistant glass

Dimensions



Electrical connection

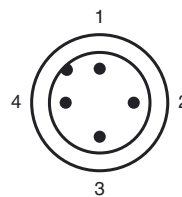
Option: /47/74b



○ = Light on
● = Dark on

● = Dark on

Pinout



Technical data

General specifications

Detection range	50 ... 1000 mm
Detection range min.	50 ... 150 mm
Detection range max.	50 ... 1000 mm
Light source	IREd
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

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 70 Hz
Response time	5 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	Connector M18 x 1, 4-pin with unwired angled cable socket
Material	
Housing	Terluran GV15
Optical face	glass
Mass	180 g

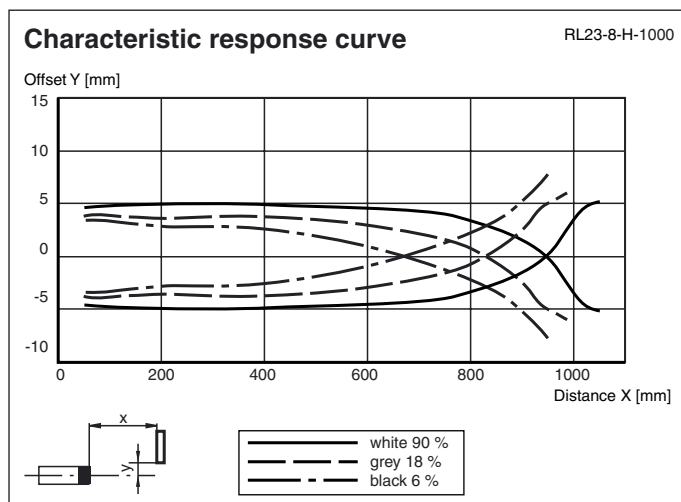
Compliance with standards and directives

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

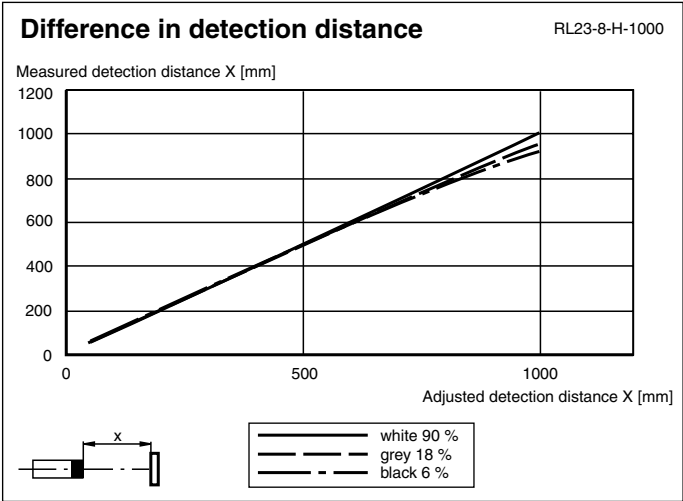
OMH-22

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