



Model Number

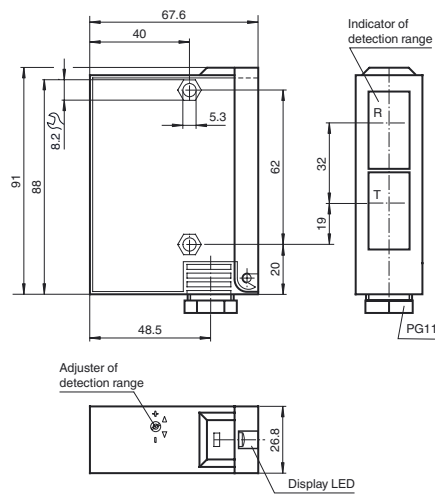
RLK23-8-H-2000-IR/31/116

Background suppression sensor
with terminal compartment

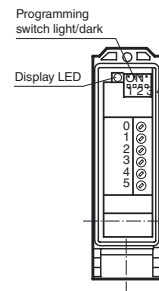
Features

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

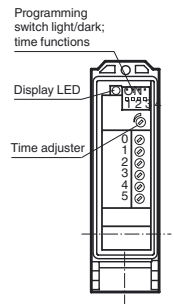
Dimensions



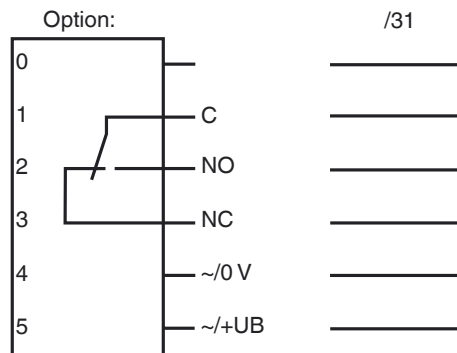
Terminal compartment
RLK23-8-H-1000
RLK23-8-H-1000



Terminal compartment
RLK23-8-H-2000
RLK23-8-H-2000



Electrical connection



Technical data

General specifications

Detection range	50 ... 2000 mm
Detection range min.	50 ... 150 mm
Detection range max.	50 ... 3000 mm
Light source	IREd
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 indicator	LED yellow, lights up with receiver lit
Control elements	Programming switch for light/dark switching
Control elements	Detection range adjuster
Control elements	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	f25 Hz
Response time	20 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

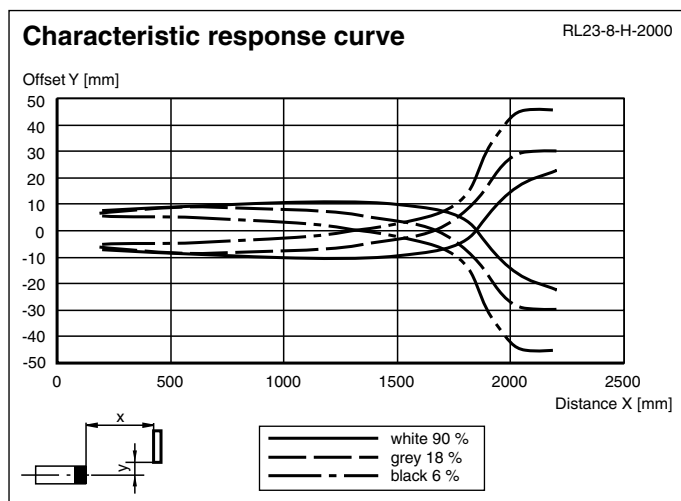
Compliance with standards and directives

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

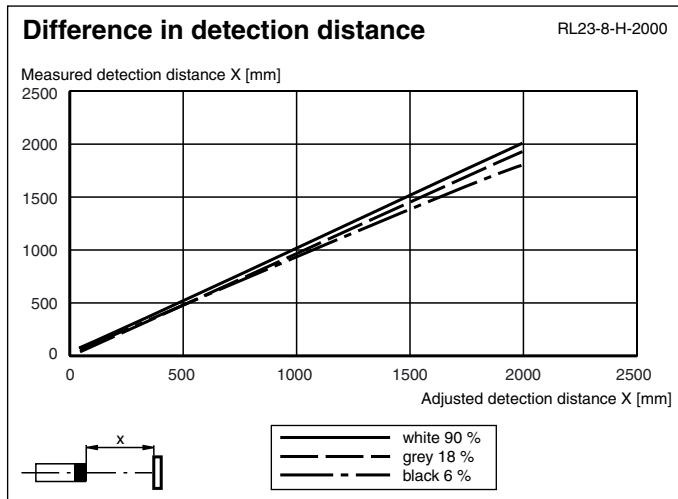
OMH-22

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 OFF
ON ON delay	Light		ON OFF
ON OFF delay	Light		ON OFF
ON one shot	Light		ON OFF
	Dark		ON 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