



Background suppression sensor RLK23-8-H-2000-IR/31/104/116

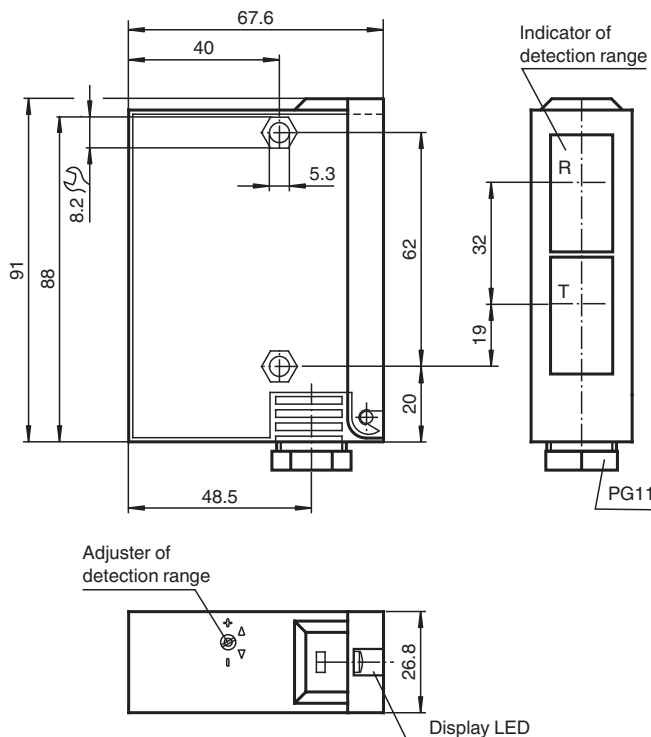


- Adjustable background suppression
- Infrared light
- Timer function
- Sturdy plastic housing
- Optical surface made of scratch-resistant glass
- Protected against mutual interference (no cross-talk)

Background suppression sensor



Dimensions

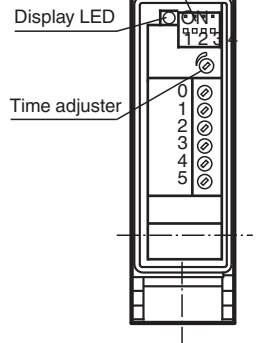
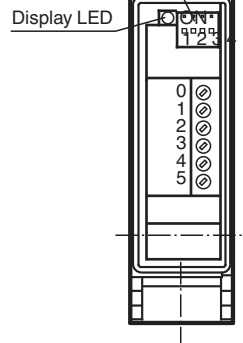


Terminal compartment
RL23-8-H-1000
RLK23-8-H-1000

Terminal compartment
RL23-8-H-2000
RLK23-8-H-2000

Programming
switch light/dark

Programming
switch light/dark;
time functions



Technical Data

General specifications

Detection range	50 ... 2000 mm
Detection range min.	50 ... 150 mm

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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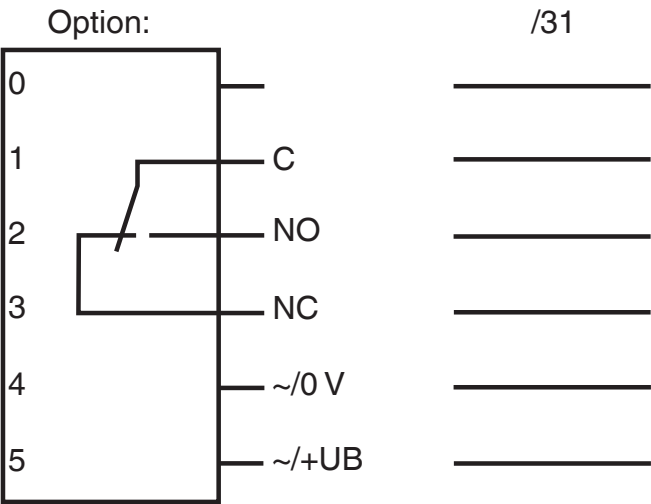
PEPPERL+FUCHS

Technical Data

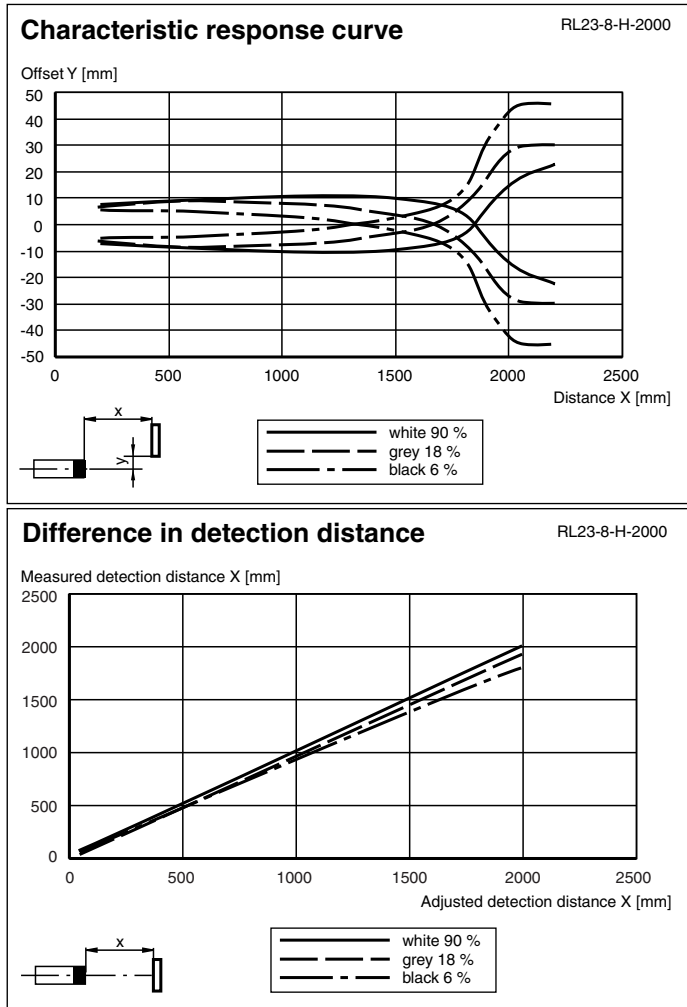
Detection range max.		50 ... 3000 mm
Light source		IREd
Light type		modulated infrared light
Black-white difference (6 %/90 %)		< 20 %
Diameter of the light spot		50 mm at 2000 mm sensor range
Opening angle		1.5 °
Ambient light limit		5000 Lux
Functional safety related parameters		
MTTF _d		850 a
Mission 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		Sensing range adjuster
Control elements		Time adjuster
Electrical specifications		
Operating voltage	U _B	12 ... 240 V AC/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
Conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
UL approval		cULus
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-20 ... 75 °C (-4 ... 167 °F)
Mechanical specifications		
Degree of protection		IP65
Connection		terminal compartment
Material		
Housing		Terluran® GV15
Optical face		glass
Mass		180 g
Dimensions		
Height		91 mm
Width		26.8 mm
Depth		67.6 mm

Release date: 2024-02-01 Date of issue: 2024-02-02 Filename: 419482_eng.pdf

Connection Assignment

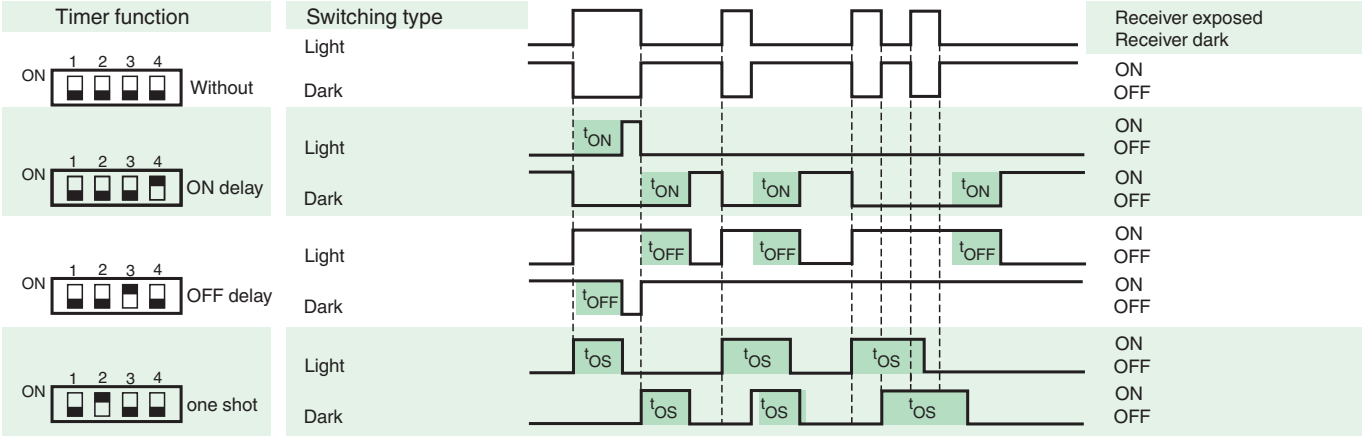


Characteristic Curve



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Timer functions



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-on/dark-on changeover switch

ON 	Dark on
ON 	Light on