



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

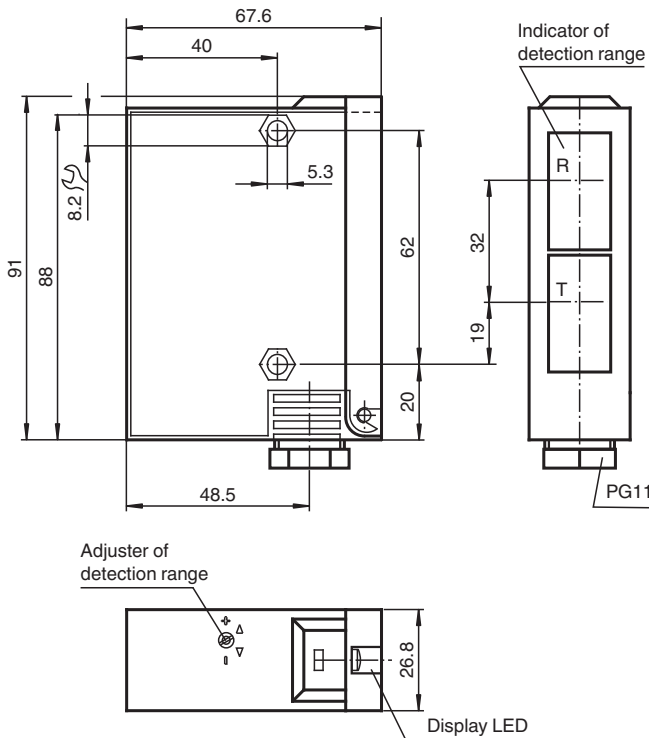


- Adjustable background suppression
- Infrared light
- Timer function
- Sturdy plastic housing
- Optical surface made of scratch-resistant glass

Background suppression sensor

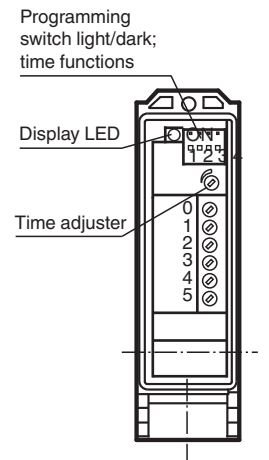
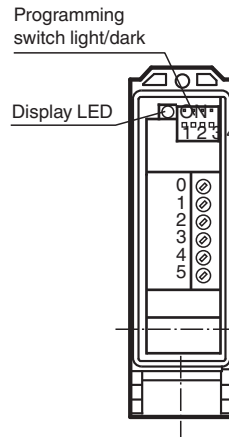


Dimensions



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

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



Technical Data

General specifications

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

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

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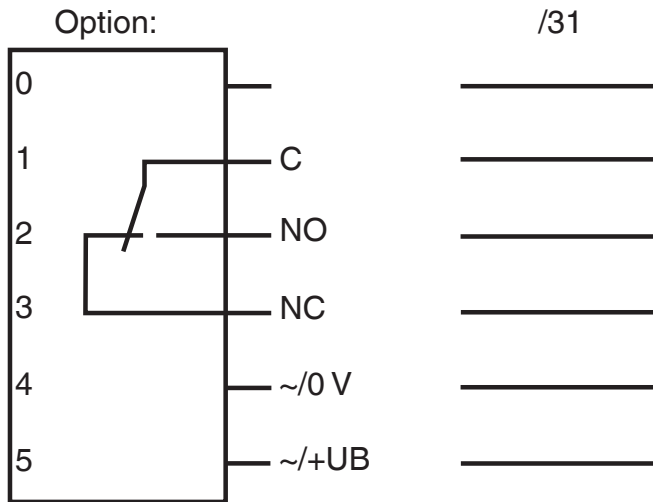
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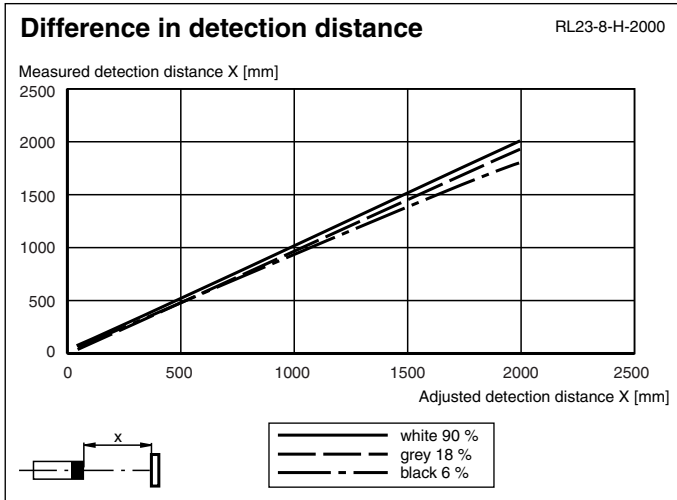
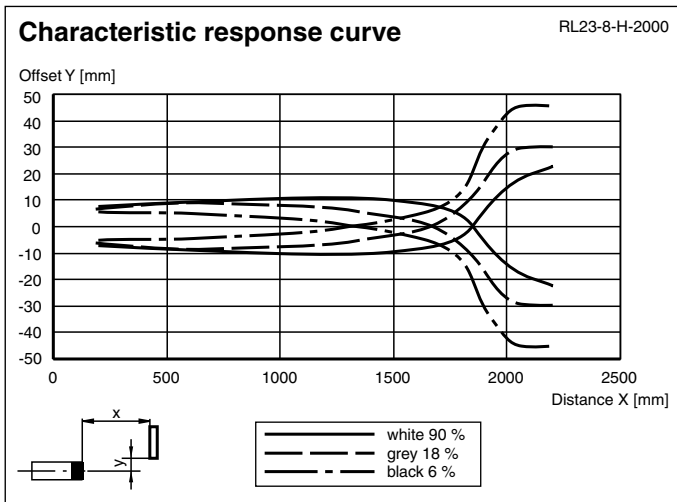
Technical Data

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	25 Hz
Response time	20 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	

Connection Assignment



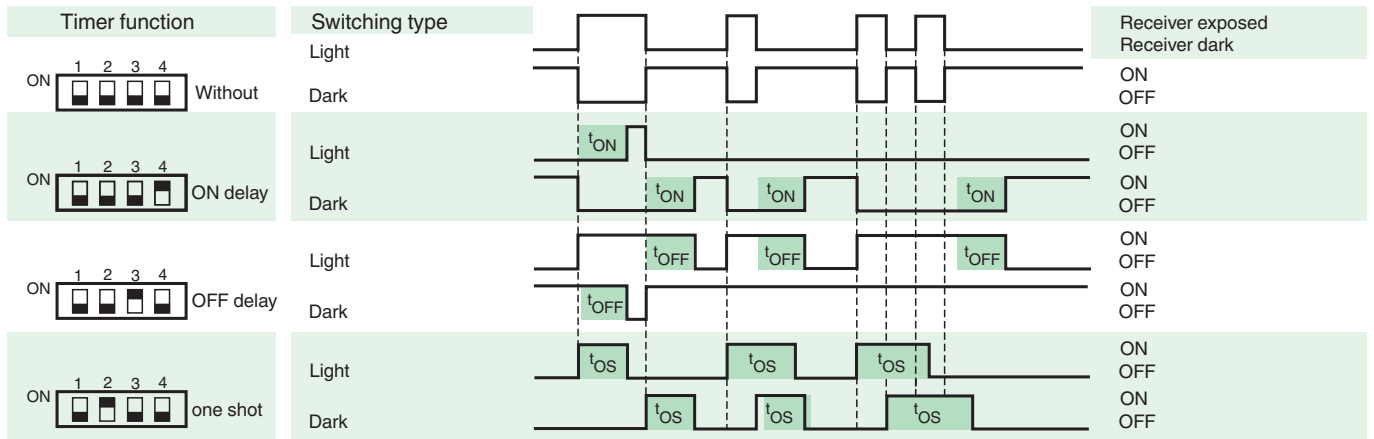
Characteristic Curve



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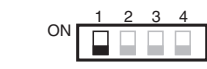
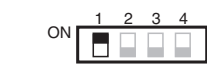
Timer functions



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

	Dark on
	Light on