



Background suppression sensor

RL29-8-H-1200-RT/115/136

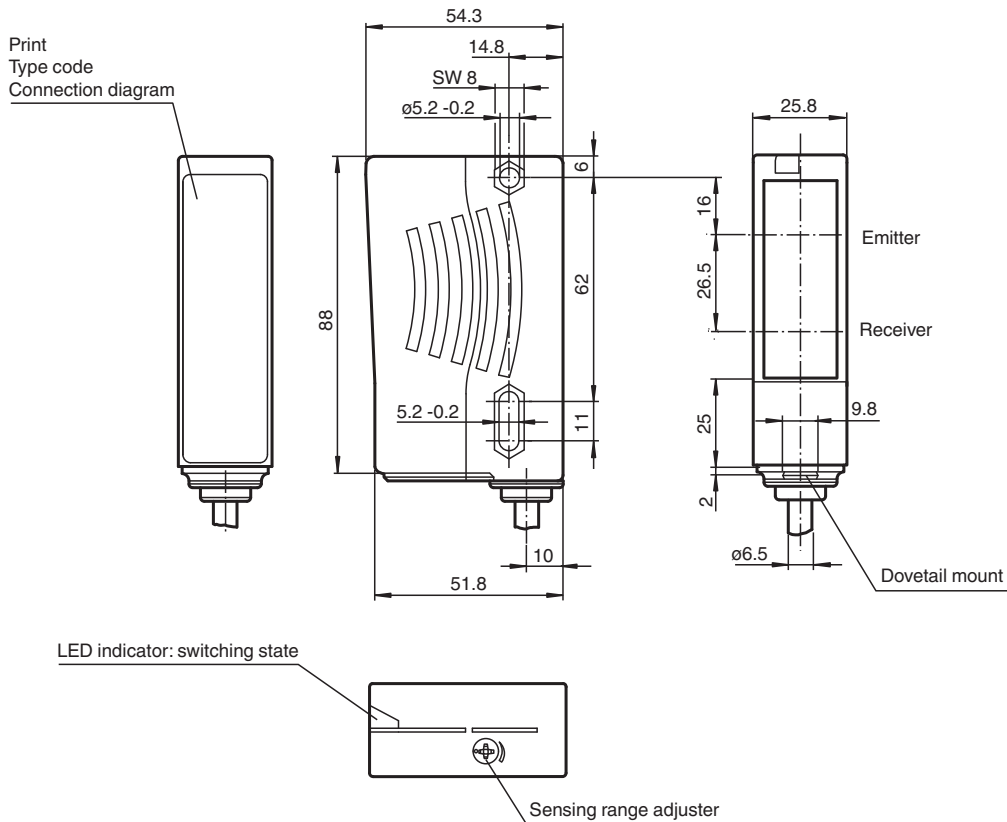


- Highly visible LED
- Good alignability due to red transmission LED
- Minimal black-white difference
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Background suppression sensor



Dimensions



Release date: 2023-03-28 Date of issue: 2023-03-28 Filename: 194387_eng.pdf

Technical Data

General specifications

Detection range	30 ... 1200 mm , adjustable
Detection range min.	20 ... 200 mm

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

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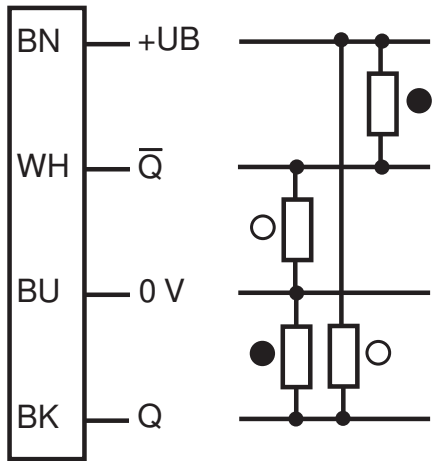
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Technical Data

Detection range max.	30 ... 1200 mm	
Background suppression	max. + 10 % of the upper limit of the detection range	
Light source	LED 660 nm	
Light type	modulated visible red light	
Black-white difference (6 %/90 %)	< 35 % at 1200 mm sensor range	
Diameter of the light spot	approx. 25 mm at a distance of 1200 mm	
Opening angle	Emitter: 1.2 ° , Receiver: 2 °	
Ambient light limit	50000 Lux	
Functional safety related parameters		
MTTF _d	720 a	
Mission Time (T _M)	20 a	
Diagnostic Coverage (DC)	0 %	
Indicators/operating means		
Function indicator	LED yellow: switching state	
Control elements	Sensing range adjuster	
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC , class 2
Ripple	10 %	
No-load supply current	I ₀	≤ 40 mA
Output		
Switching type	light-on	
Signal output	2 push-pull (4 in 1) outputs, short-circuit protected, reverse polarity protected	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Switching frequency	f	125 Hz
Response time	4 ms	
Conformity		
Product standard	EN 60947-5-2	
Approvals and certificates		
Protection class	II, rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1	
UL approval	E87056 , cULus Listed , class 2 power supply , type rating 1	
Ambient conditions		
Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)	
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)	
Mechanical specifications		
Housing width	25.8 mm	
Housing height	88 mm	
Housing depth	54.3 mm	
Degree of protection	IP65	
Connection	2500 mm fixed cable	
Material		
Housing	Plastic ABS	
Optical face	plastic	
Mass	180 g	

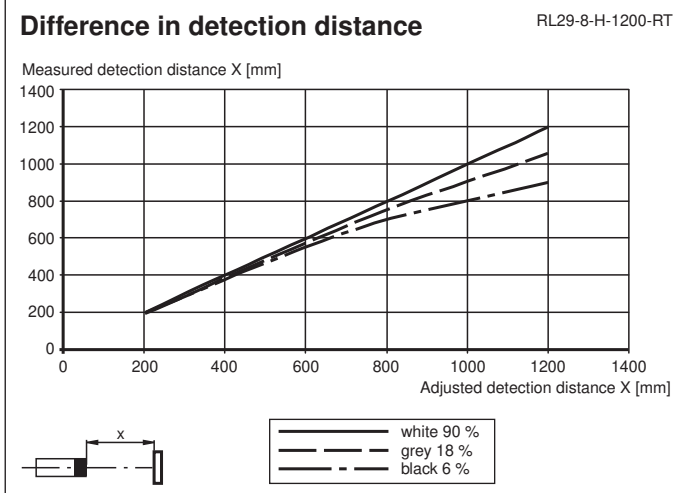
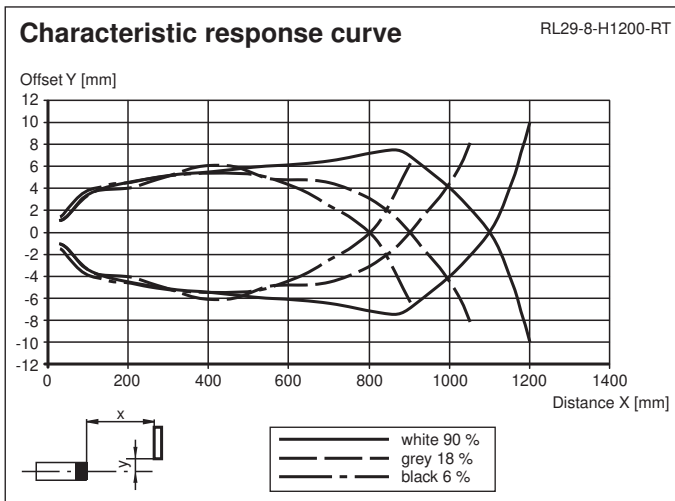
Connection Assignment

Option:



- = Light on
- = Dark on






Characteristic Curve



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Accessories

	OMH-05	Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm
	OMH-21	Mounting bracket: mounting aid for sensors in the RL* series
	OMH-22	Mounting aid for RL* series
	OMH-RLK29-HW	Mounting bracket for rear wall mounting
	OMH-RL28-C	Weld slag cover model