

Background suppression sensor RL29-8-H-1200-RT/59/73c/136

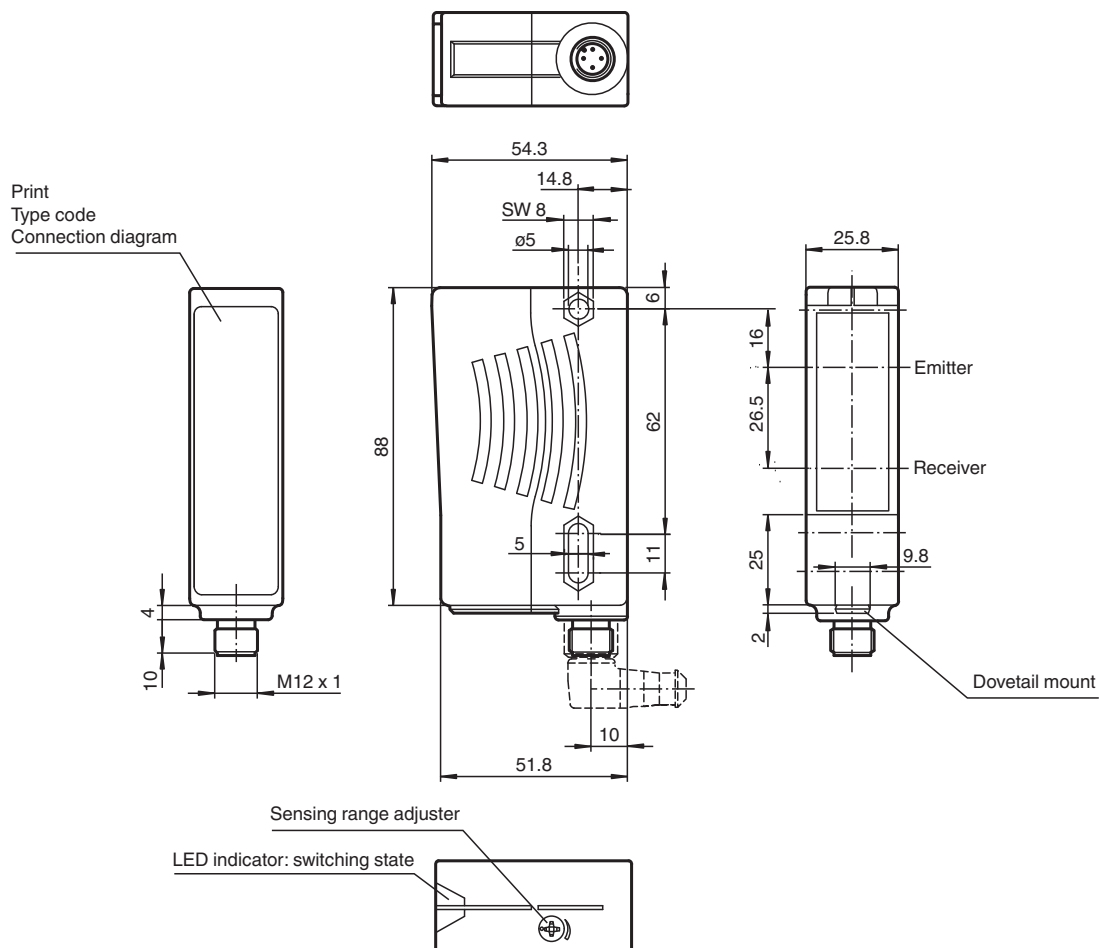


- Highly visible LED
- Good alignability due to red transmission LED
- Minimal black-white difference
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Background suppression sensor



Dimensions



Technical Data

General specifications

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

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

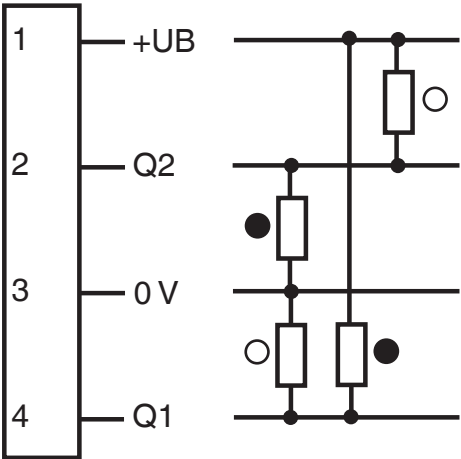
PEPPERL+FUCHS

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	dark-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	
EAC conformity	TR CU 020/2011
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	Plastic connector M12 x 1, 4-pin
Material	
Housing	Plastic ABS
Optical face	plastic
Mass	70 g

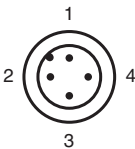
Connection Assignment

Option:



○ = Light on
● = Dark on

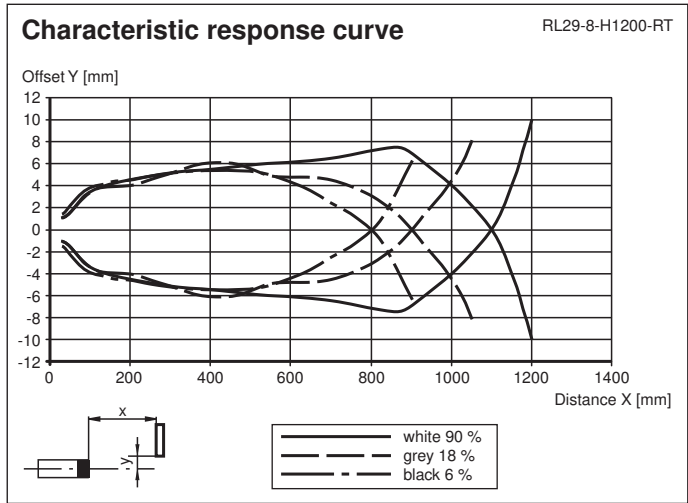
Connection Assignment



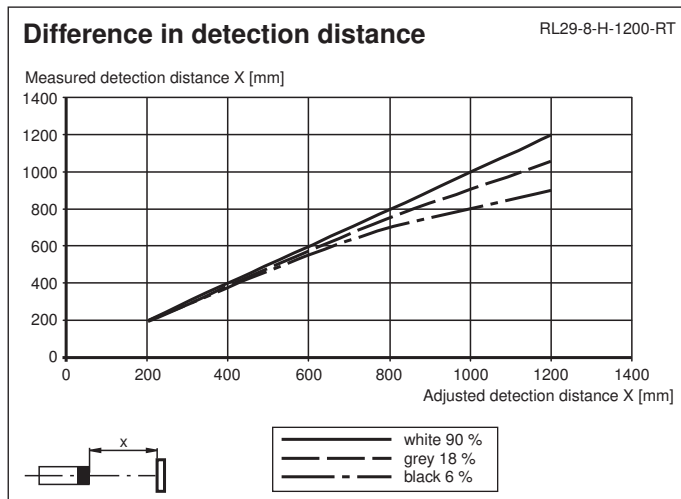
Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Characteristic Curve



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Accessories

	OMH-05	Mounting aid for round steel $\varnothing$ 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
	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey