



Background suppression sensor RL29-8-H-1200-RT/115b/136

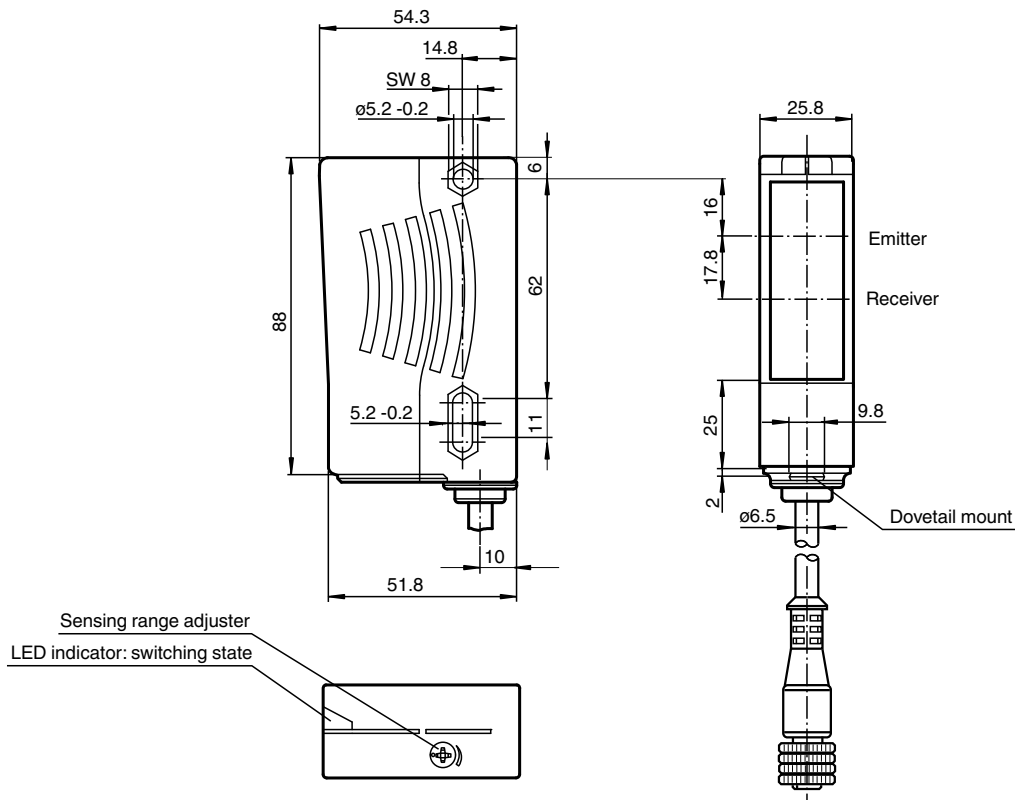


- Highly visible LED
- Good alignability due to red transmission LED
- Minimal black-white difference
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Background suppression sensor



Dimensions



Technical Data

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

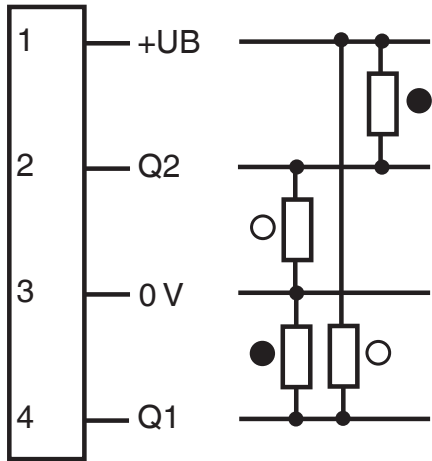
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Technical Data

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		with 0.2 m fixed cable and 4-pin, M12 connector
Material		
Housing		Plastic ABS
Optical face		plastic
Mass		90 g

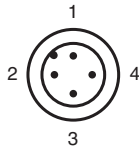
Connection Assignment

Option:



○ = Light on
 ● = Dark on

Connection Assignment

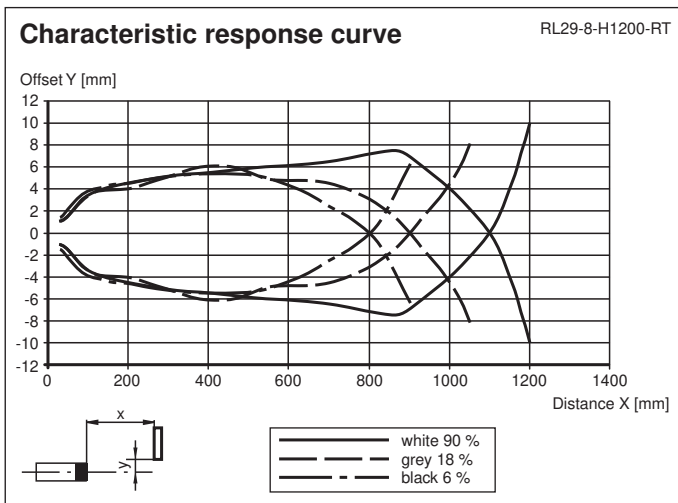


Wire colors in accordance with EN 60947-5-2

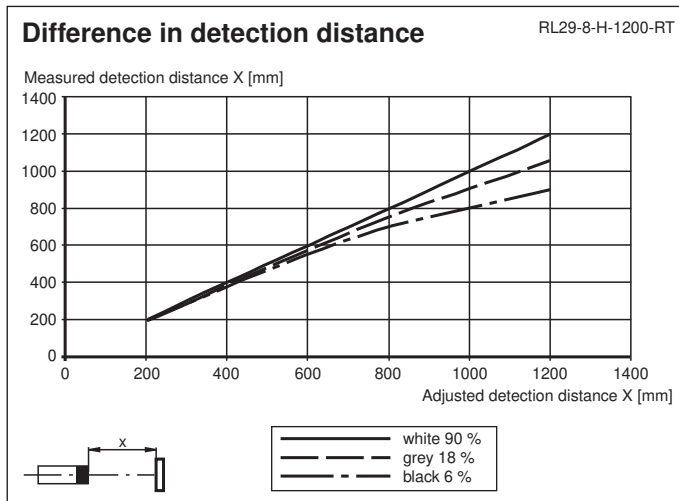
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Characteristic Curve






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Characteristic Curve



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