



Background suppression sensor

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

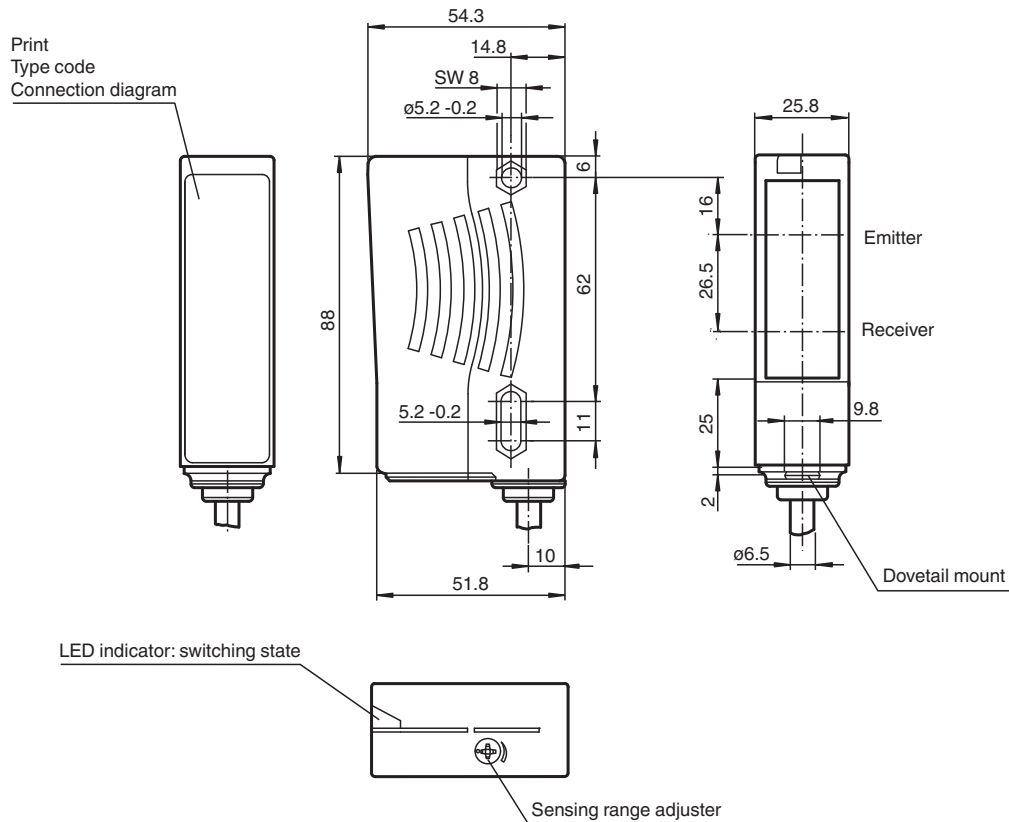


- Highly visible LED
- Good alignability due to red transmission LED
- Minimal black-white difference
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Background suppression sensor



Dimensions



Technical Data

General specifications

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

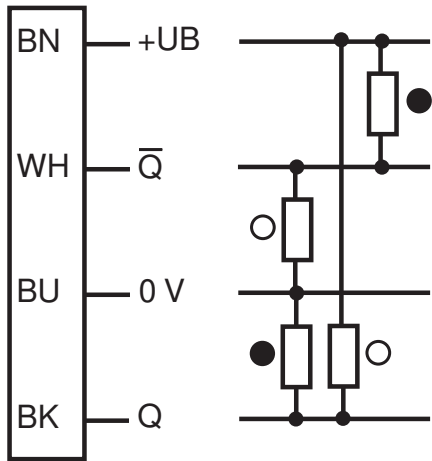
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Technical Data

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		2500 mm fixed cable
Material		
Housing		Plastic ABS
Optical face		plastic
Mass		180 g

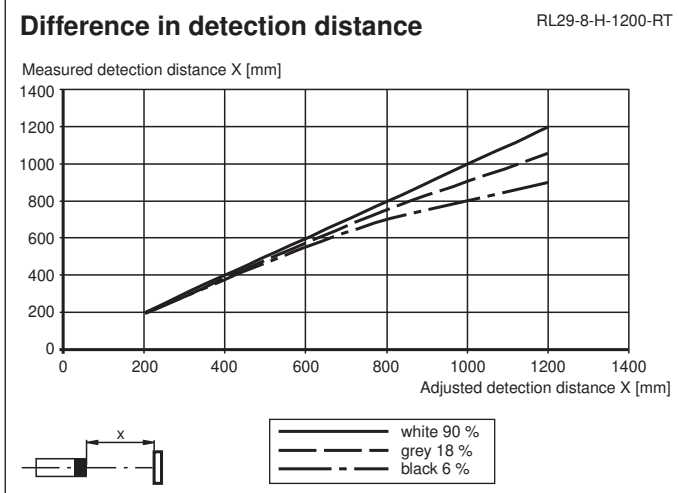
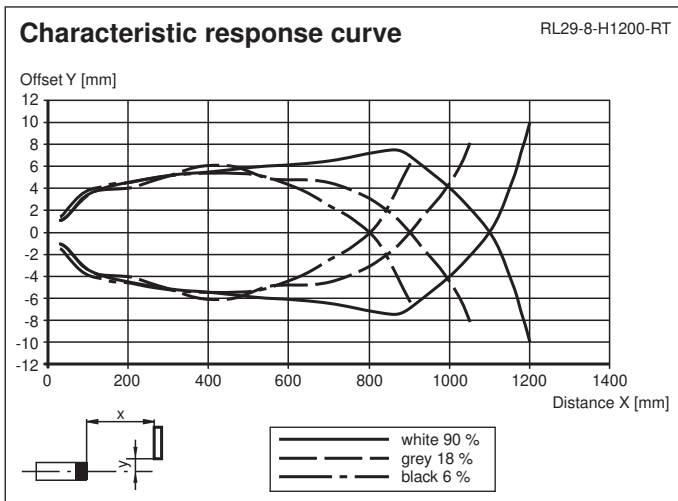
Connection Assignment

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