



Model Number

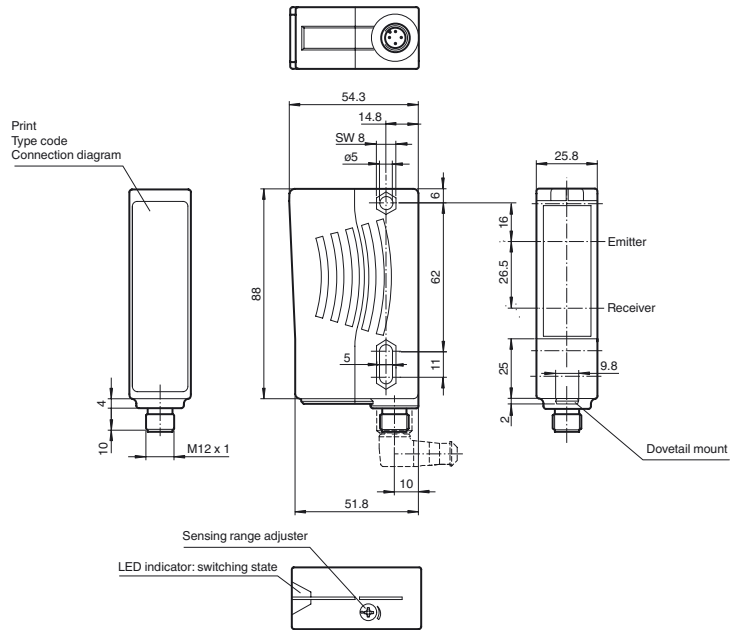
RL29-8-2000/59/73c/136

Diffuse mode sensor
with 4-pin, M12 x 1 plastic connector

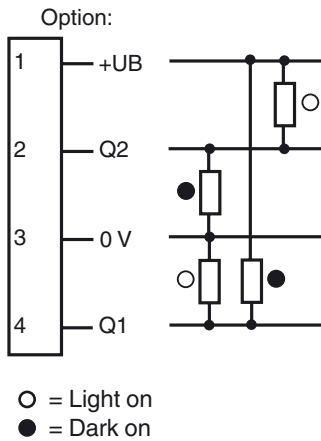
Features

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

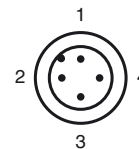
Dimensions



Electrical connection



Pinout



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Subject to modifications without notice

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Technical data**General specifications**

Detection range	20 ... 2000 mm , adjustable
Detection range min.	20 ... 200 mm
Detection range max.	20 ... 2000 mm
Light source	LED 660 nm
Light type	modulated visible red light
Black/White difference (6 %/90 %)	< 40 %
Approvals	CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)
Diameter of the light spot	approx. 25 mm at a distance of 2000 mm
Angle of divergence	Emitter: 1.2 ° , Receiver: 2 °
Ambient light limit	50000 Lux

Functional safety related parameters

MTTF _d	1982.2 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Function display	LED yellow: switching state
Controls	Detection 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

Ambient conditions

Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)

Mechanical specifications

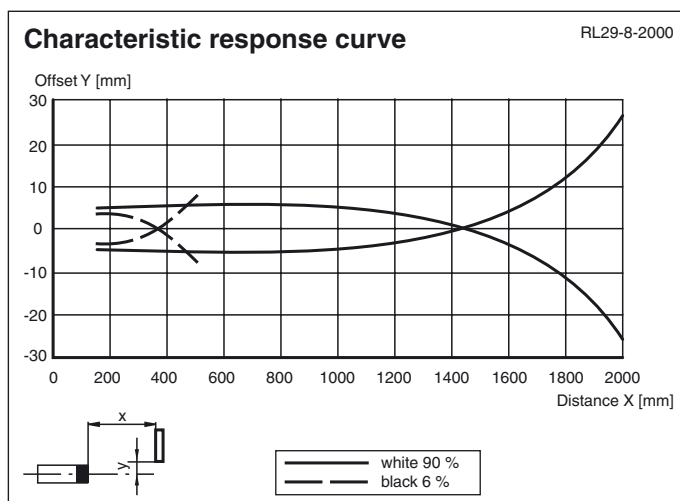
Protection degree	IP65
Connection	Plastic connector M12 x 1, 4-pin
Material	
Housing	Plastic ABS
Optical face	plastic
Mass	70 g

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 60947-5-2:2007

Approvals and certificates

UL approval	cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

Curves/Diagrams**Accessories****OMH-05**

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

OMH-07

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

OMH-21

Mounting bracket

OMH-22

Mounting bracket

OMH-MLV11-K

dove tail mounting clamp

OMH-RLK29-HW

Mounting bracket for rear wall mounting

OMH-RL28-C

Weld slag cover model

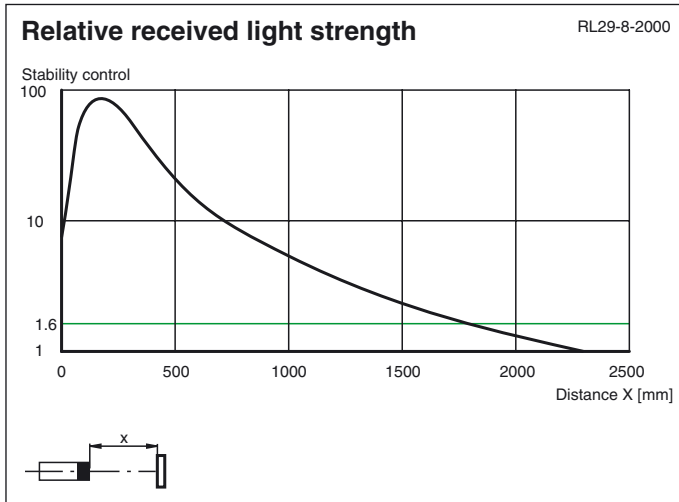
V1-G-2M-PUR

Cable socket, M12, 4-pin, PUR cable

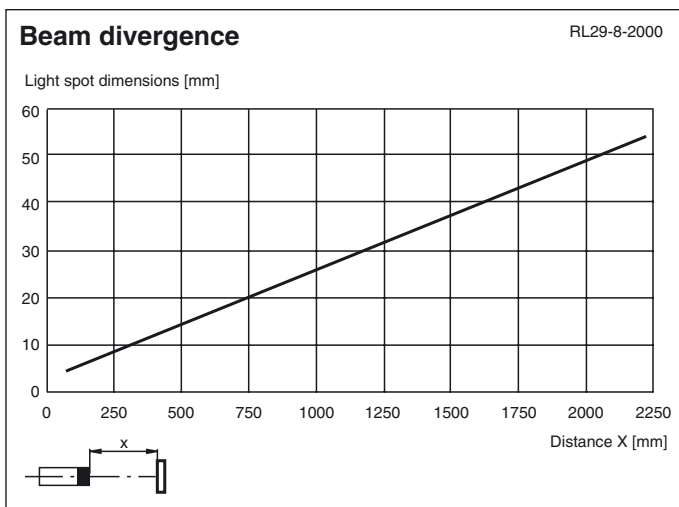
V1-W-2M-PUR

Cable socket, M12, 4-pin, PUR cable

Other suitable accessories can be found at www.pepperl-fuchs.com



Curves/Diagrams



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