



**Model Number**

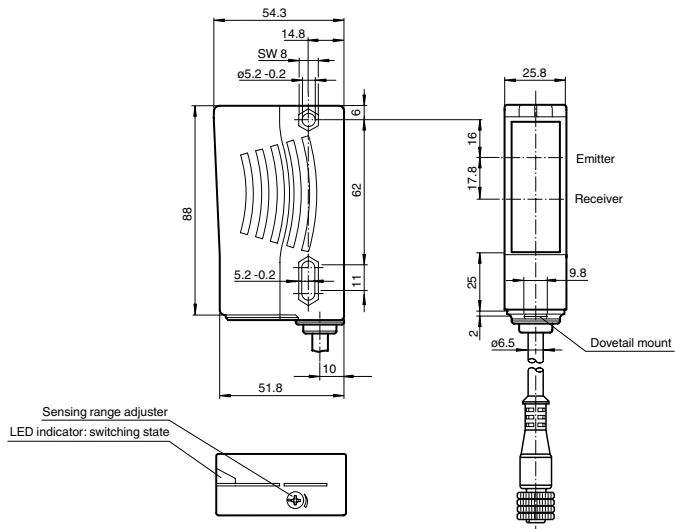
**RL29-8-2000/115b/136**

Diffuse mode sensor  
with 0.2 m fixed cable and 4-pin, M12 connector

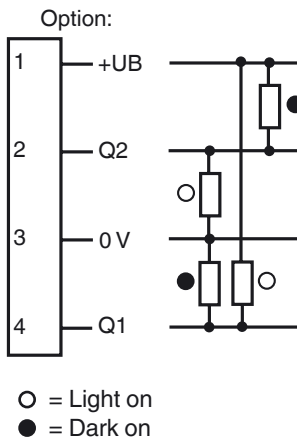
**Features**

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

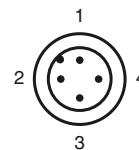
**Dimensions**



**Electrical connection**



**Pinout**



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

Pepperl+Fuchs Group  
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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
Light type	modulated visible red light , 660 nm
Black/White difference (6 %/90 %)	< 40 %
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 <sub>d</sub>	1982.2 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

Function indicator	LED yellow: switching state
Control elements	Detection range adjuster

**Electrical specifications**

Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Ripple		10 %
No-load supply current	I <sub>0</sub>	≤ 40 mA
Protection class		2 , rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1

**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

**Ambient conditions**

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

**Mechanical specifications**

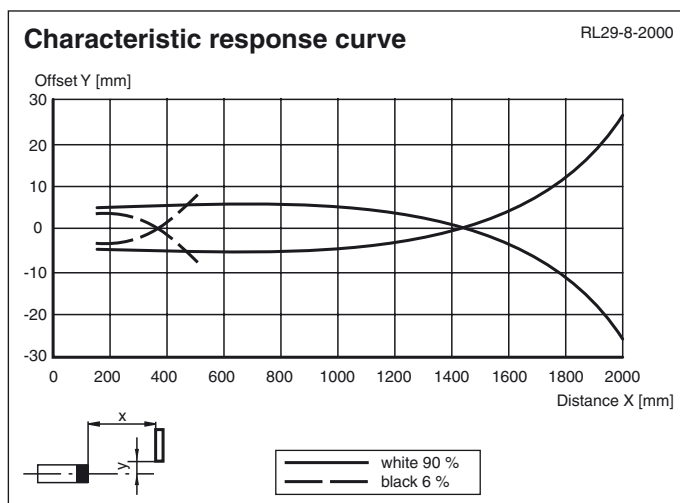
Degree of protection	IP65
Connection	with 0.2 m fixed cable and 4-pin, M12 connector
Material	
Housing	Plastic ABS
Optical face	plastic
Mass	70 g

**Compliance with standards and directives**

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

**Approvals and certificates**

CE conformity	yes
UL approval	cULus
CCC approval	CCC approval / marking not required for products rated ≤36 V

**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

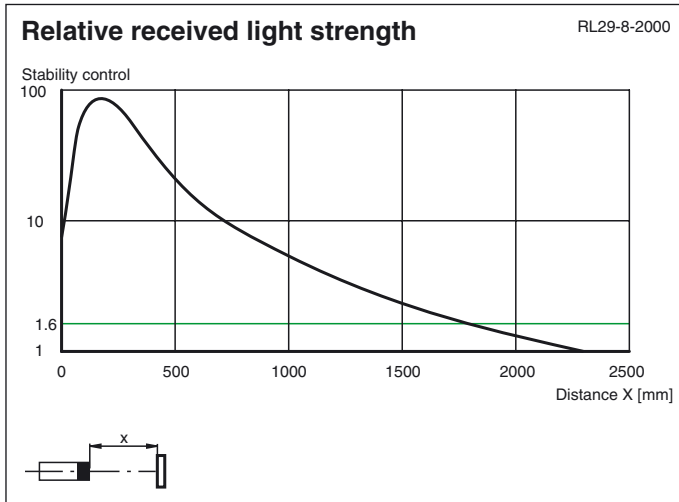
**OMH-RLK29-HW**

Mounting bracket for rear wall mounting

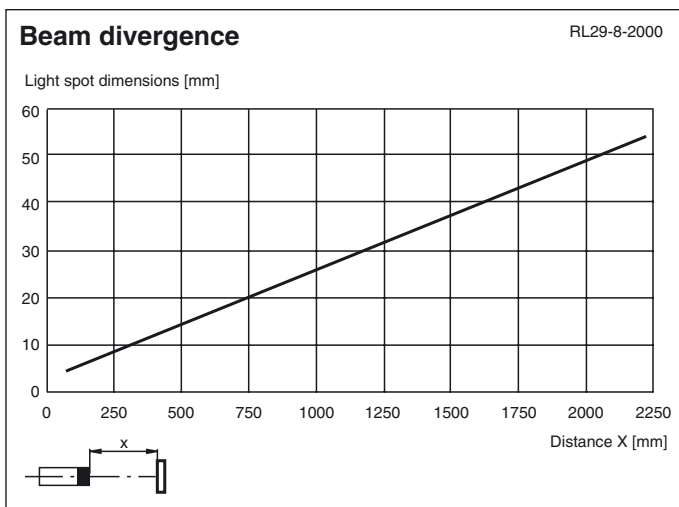
**OMH-RL28-C**

Weld slag cover model

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)



**Curves/Diagrams**



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