



**Technical data****General specifications**

Detection range	30 ... 1200 mm , adjustable
Detection range min.	20 ... 200 mm
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
Angle of divergence	Emitter: 1.2 ° , Receiver: 2 °
Ambient light limit	50000 Lux

**Functional safety related parameters**

MTTF <sub>d</sub>	720 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 , class 2
Ripple		10 %
No-load supply current	I <sub>0</sub>	≤ 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**

Degree of protection	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 + A1:2012
Standard conformity	
Product standard	EN 60947-5-2:2007 + A1:2012 IEC 60947-5-2:2007 + A1:2012
Standards	UL 60947-5-2: 2014 EN 62471:2008

**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

**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**

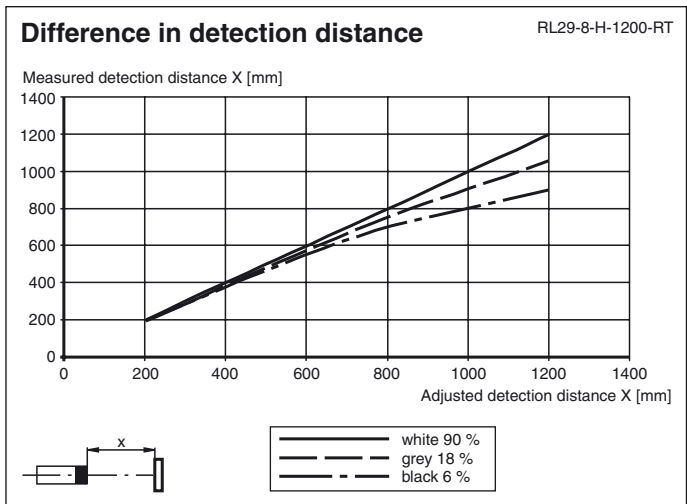
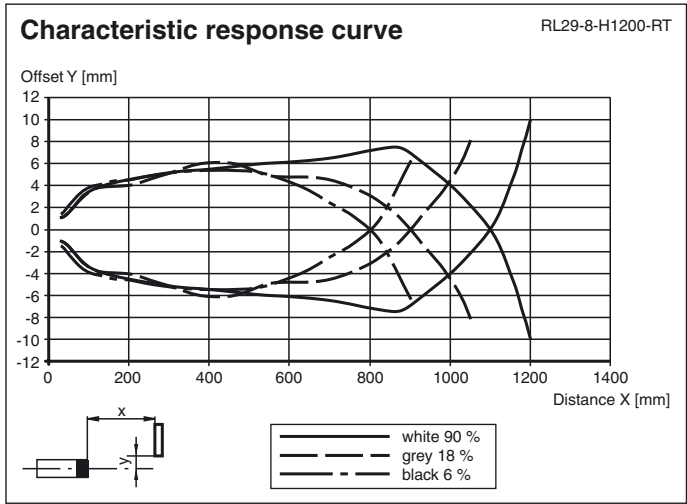
Female cordset, M12, 4-pin, PUR cable

**V1-W-2M-PUR**

Female cordset, M12, 4-pin, PUR cable

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

Curves/Diagrams



Release date: 2015-10-28 14:38 Date of issue: 2015-10-28 801768\_eng.xml

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 4411  
fa-info@de.pepperl-fuchs.com

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