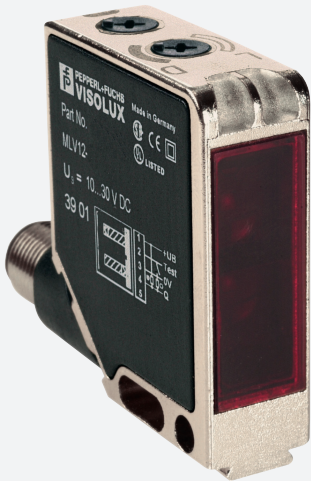


# Background suppression sensor MLV12-8-H-250-RT/47/65b/92/134

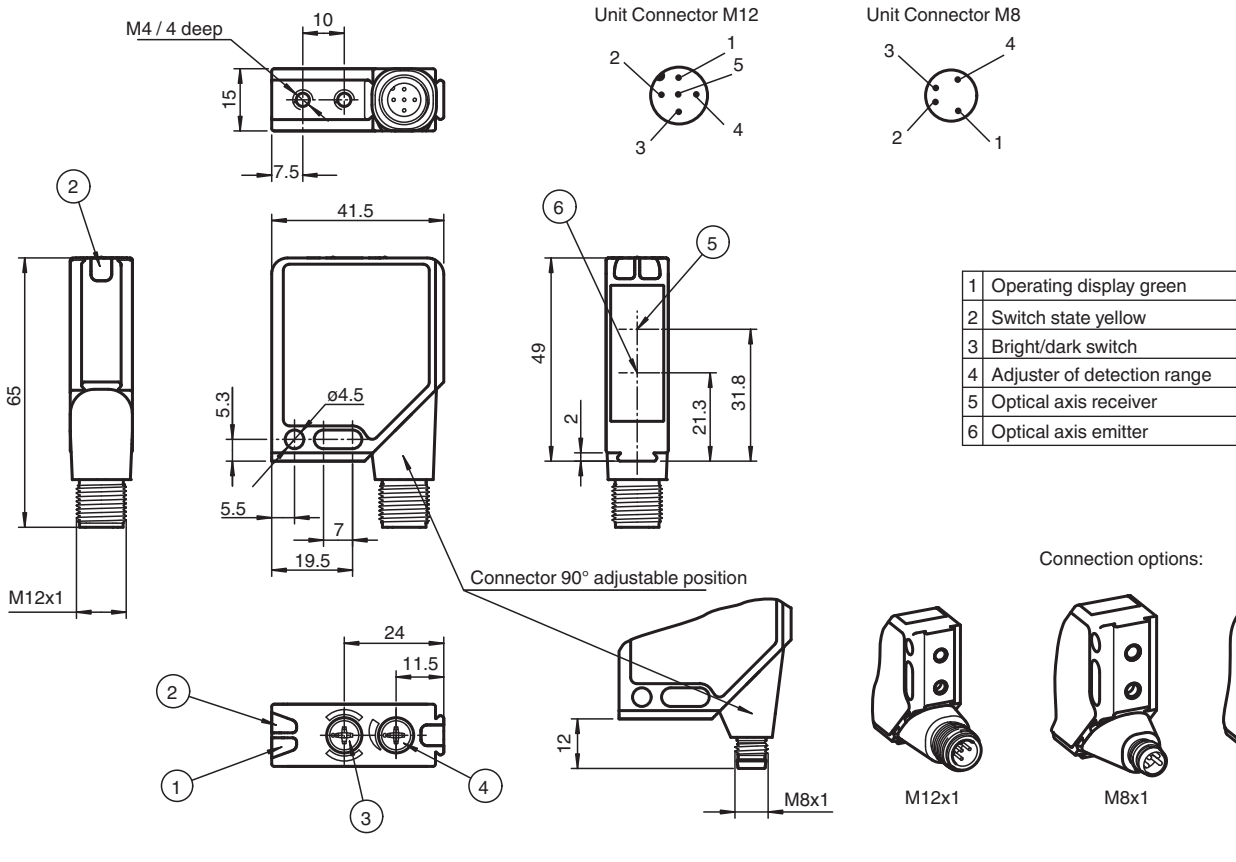


- Reliable detection of all surfaces, independent of color and structure
- Minimal black-white difference
- Ultra bright LEDs for power on and switching state
- Flashing power on LED in case of short-circuit
- Not sensitive to ambient light, even with switched energy saving lamps
- Multiple device installation possible, no mutual interference (no cross-talk)
- Scratch resistant mineral glass lens
- Protection class II

Triangulation sensor with background suppression in a widely used standard housing, red light, 250 mm detection range, electrically adjustable, glass panel, light/dark on, two PNP outputs, M12 plug



## Dimensions



Release date: 2022-02-07 Date of issue: 2022-02-07 Filename: 129706\_eng.pdf

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

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## Technical Data

General specifications		
Detection range		20 ... 250 mm , adjustable
Detection range min.		20 ... 50 mm
Detection range max.		20 ... 250 mm
Adjustment range		50 ... 250 mm
Light source		LED
Light type		modulated visible red light , 660 nm
Black-white difference (6 %/90 %)		10 % at 250 mm
Diameter of the light spot		8 mm at Tw 250 mm
Opening angle		1.5 °
Ambient light limit		
Continuous light		30000 Lux
Modulated light		5000 Lux
Functional safety related parameters		
MTTF <sub>d</sub>		650 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green, flashes in case of short-circuit
Function indicator		2 LEDs yellow ON: object inside the scanning range OFF: object outside the scanning range
Control elements		potentiometer for light/dark, detection range adjustment
Electrical specifications		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I <sub>0</sub>	≤ 55 mA
Output		
Switching type		light/dark on switchable
Signal output		2 PNP outputs, complementary, short-circuit protected, reverse polarity protected, open collector
Switching voltage		max. 30 V DC
Switching current		max. 0.2 A
Voltage drop	U <sub>d</sub>	≤ 2.5 V DC
Switching frequency	f	1000 Hz
Response time		0.5 ms
Conformity		
Product standard		EN 60947-5-2
Compliance with standards and directives		
Standard conformity		
Shock and impact resistance		IEC / EN 60068. half-sine, 40 g in each X, Y and Z directions
Vibration resistance		IEC / EN 60068-2-6. Sinus. 10 -150 Hz, 5 g in each X, Y and Z directions
Approvals and certificates		
EAC conformity		TR CU 020/2011
Protection class		II, rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval		cULus
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-40 ... 60 °C (-40 ... 140 °F)
Storage temperature		-40 ... 75 °C (-40 ... 167 °F)
Mechanical specifications		
Housing width		41.5 mm
Housing height		49 mm
Housing depth		15 mm

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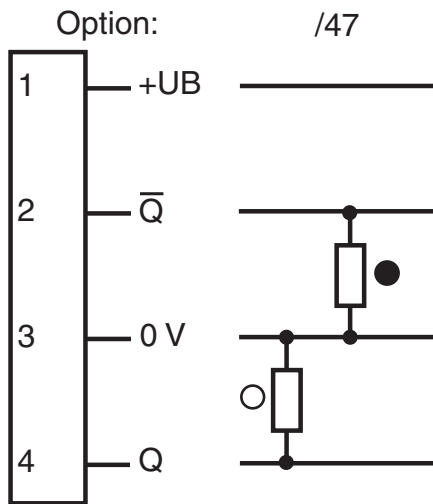
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 **PEPPERL+FUCHS**

## Technical Data

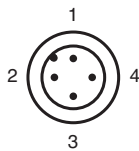
Degree of protection	IP67
Connection	4-pin, M12 metal connector, 90° rotatable
Material	
Housing	Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC
Optical face	Scratch resistant mineral glass lens
Mass	60 g

## Connection



○ = Light on  
● = Dark on

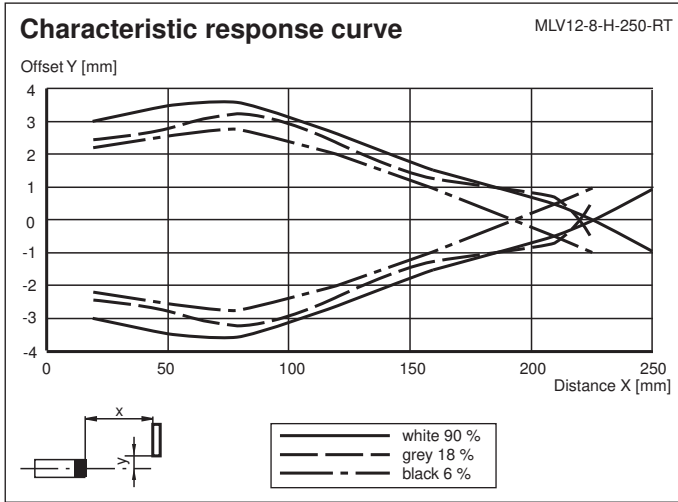
## Connection Assignment



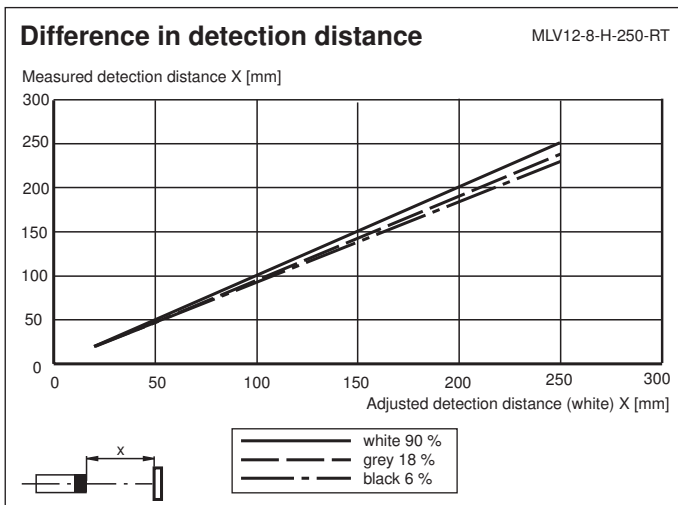
Wire colors in accordance with EN 60947-5-2

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

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## Characteristic Curve



## Accessories

	<b>OMH-MLV12-HWG</b>	Mounting bracket for series MLV12 sensors
	<b>OMH-MLV12-HWK</b>	Mounting bracket for series MLV12 sensors
	<b>OMH-K01</b>	dove tail mounting clamp
	<b>OMH-K02</b>	dove tail mounting clamp
	<b>OMH-K03</b>	dove tail mounting clamp
	<b>OMH-06</b>	Mounting aid for round steel $\varnothing$ 12 mm or sheet 1.5 mm ... 3 mm

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