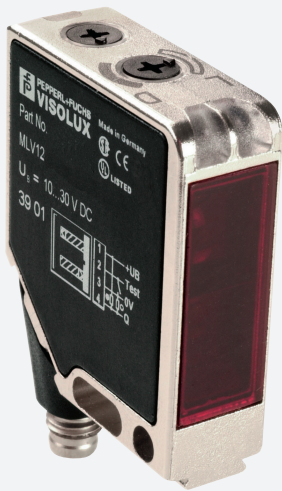
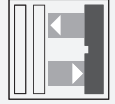


Triangulation sensor (BGE)

MLV12-8-HW-RT/47/65b/95

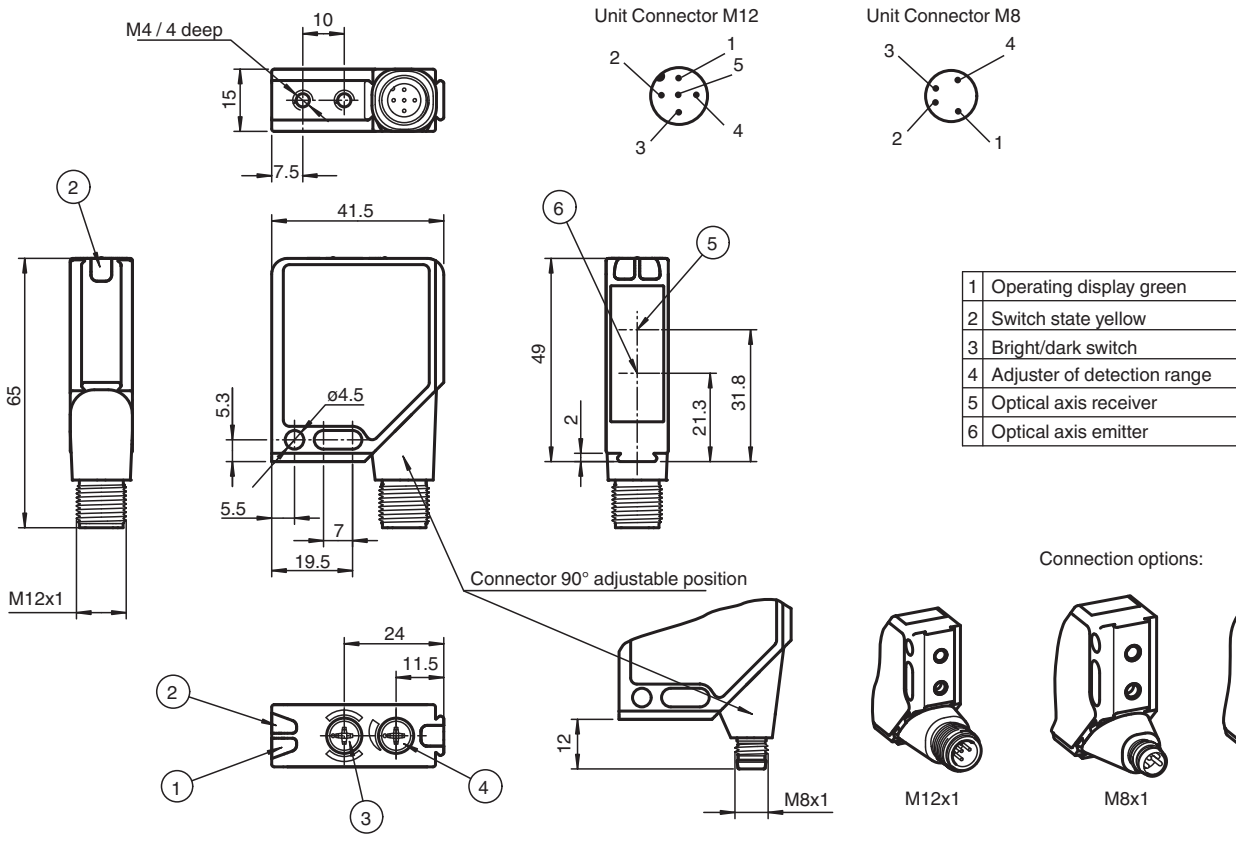


- Series of sensors in a widely used standard housing
- Reliable detection of all surfaces, independent of color and structure
- Minimal black-white difference
- High level of stability thanks to the metal housing frame
- Resistant against noise: reliable operation under all conditions

Diffuse mode sensor in a widely used standard housing, background evaluation, red light, 150 mm detection range, electrically adjustable, PNP outputs, M8 plug



Dimensions



Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 121200_eng.pdf

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

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Technical Data

General specifications		
Detection range		50 ... 150 mm , adjustable
Adjustment range		50 ... 150 mm
Light source		LED
Light type		modulated visible red light , 680 nm
Diameter of the light spot		4 mm at Tw 150 mm
Opening angle		1.5 °
Ambient light limit		
Continuous light		30000 Lux
Modulated light		5000 Lux
Functional safety related parameters		
MTTF _d		650 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green, flashes in case of short-circuit
Function indicator		LED yellow ON: sensor detects background
Control elements		potentiometer for light/dark, detection range adjustment
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I ₀	≤ 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 _d	≤ 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
Standards		UL 508
Approvals and certificates		
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
Degree of protection		IP67
Connection		4-pin M8 metal connector, 90° rotatable
Material		
Housing		Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC
Optical face		Plastic pane

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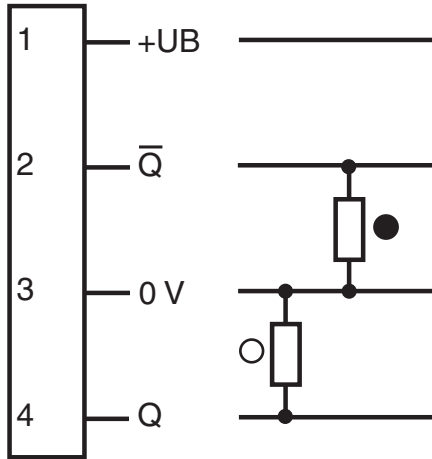
 PEPPERL+FUCHS

Technical Data

Mass	60 g
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Connection Assignment

Option: /47



○ = Light on
● = Dark on

Connection Assignment

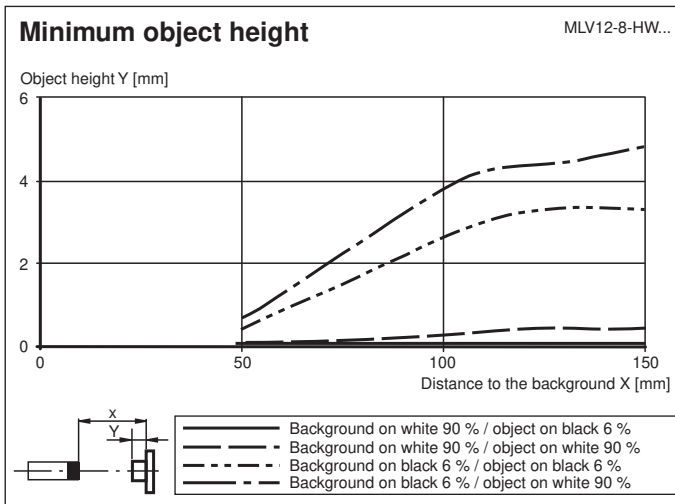


Wire colors in accordance with EN 60947-5-2

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

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Characteristic Curve



Commissioning

1. Mount sensor at a distance of 50 mm to 150 mm to the background.
2. Set the detection range in such a way that the yellow LEDs just switch.
3. Place the object and move between background and sensor. The yellow LEDs must extinguish.

Notes

Preferably the background should be light or white.
Object should move transversely to the sensor.
The background should not vary in height.

Accessories

	OMH-MLV12-HWG	Mounting bracket for series MLV12 sensors
	OMH-MLV12-HWK	Mounting bracket for series MLV12 sensors
	OMH-K01	dove tail mounting clamp
	OMH-K02	dove tail mounting clamp
	OMH-K03	dove tail mounting clamp
	OMH-06	Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm
	V31-WM-2M-PUR	Female cordset single-ended M8 angled A-coded, 4-pin, PUR cable grey
	V31-GM-2M-PUR	Female cordset single-ended M8 straight A-coded, 4-pin, PUR cable grey