



Model Number

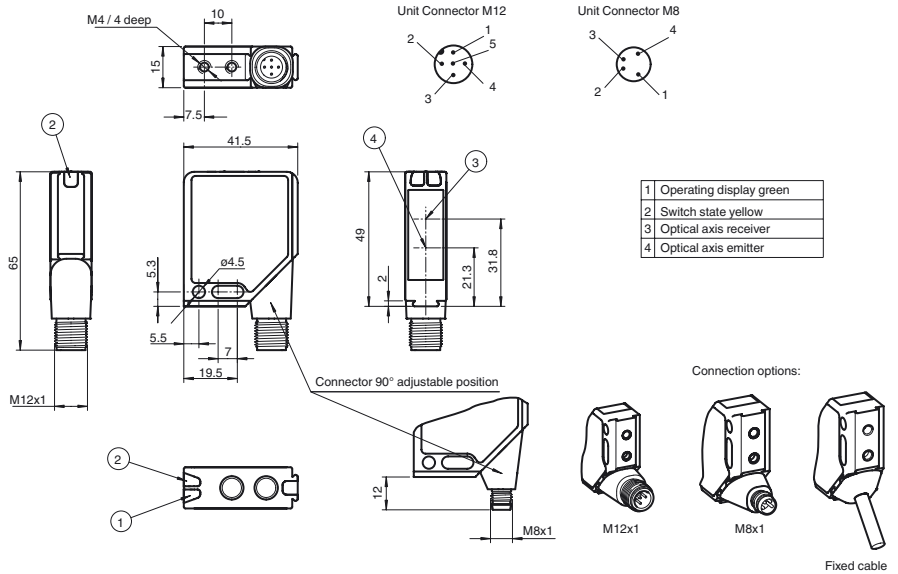
MLV12-8-H-250-RT-2961/115/128

Background suppression sensor with fixed cable

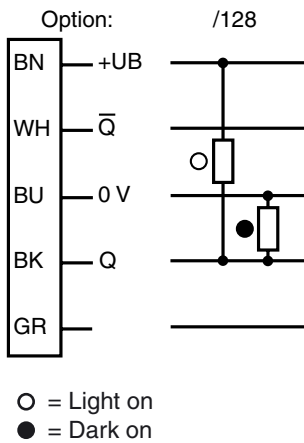
Features

- Not sensitive to ambient light, even with switched energy saving lamps
- 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
- Powerful push-pull output
- Multiple device installation possible, no mutual interference
- Protection class II

Dimensions



Electrical connection



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Technical data**General specifications**

Detection range	on white (90 %): ... 190 mm , fixed
Detection range min.	20 ... mm
Light source	LED
Light type	modulated visible red light , 660 nm
Black/White difference (6 %/90 %)	20 % at 190 mm
Diameter of the light spot	6 mm at 190 mm
Angle of divergence	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

Operating display	LED green, flashes in case of short-circuit
Function display	2 LEDs yellow ON: object inside the scanning range OFF: object outside the scanning range

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I ₀	≤ 45 mA

Output

Switching type	light/dark on	
Signal output	1 push-pull output, short-circuit protected, reverse polarity protected, 0.2 A / 30 V DC	
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

Ambient conditions

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

Mechanical specifications

Protection degree	IP67
Connection	fixed cable 4000 mm 3-pin with AMP socket
Material	
Housing	Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC
Optical face	Plastic pane
Mass	60 g

Compliance with standards and directives

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007
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

Protection class	II, rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval	cULus
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

