Dimensions



Model Number

MLV12-54-LAS/92/120

Retroreflective sensor with 4-pin M12 connector, 90° adjustable position

Features

- Series of sensors in a widely used standard housing
- Visible red light, pulsed LASER light ٠
- Precision: high degree of repeatability • thanks to small light spot
- Objects can be reliably detected down ٠ to 0 mm: no blind zone
- Resistant against noise: reliable ope-• ration under all conditions
- High level of stability thanks to the me-٠ tal housing frame



Electrical connection





Pinout



Indicators/operating means



Pepperl+Fuchs Group www.pepperl-fuchs.com

Refer to "General Notes Relating to Pepperl+Fuchs Product Information" USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com

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Technical data			Accessories		
General specifications			OMH-MIV12-HWG		
Effective detection range		0 15 m	Mounting brocket for carios MIV/12 con		
Reflector distance		0 15 m	Mounting bracket for series MLV 12 seri-		
Threshold detection range		21 m	3013		
Reference target		MH82 reflector	OMH-MLV12-HWK		
Light source		laser diode	Mounting bracket for series MLV12 sen-		
Light type		modulated visible red light	sors		
Laser nominal ratings			3013		
Note		LASER LIGHT , DO NOT STARE INTO BEAM	OMH-K01		
Laser class		1	dove tail mounting clamp		
Wave length		650 nm	3.4		
Beam divergence		< 1.5 mrad	OMH-K02		
Pulse length		1.8 μs	dove tail mounting clamp		
Repetition rate		17.86 kHz			
max. pulse energy		6.7 nJ	OMH-K03		
Diameter of the light spot		approx. 5 mm x 12 mm at 15 m detection range	dove tail mounting clamp		
Angle of divergence		0.02 °			
Ambient light limit			Mounting aid for round stool g 10 mm or		
Continuous light		50000 Lux	sheet 1.5 mm 3 mm		
Modulated light		5000 Lux			
Functional safety related paran	neters		OMH-06		
MTTFd		930 a	Mounting aid for round stool g 10 mm or		
Mission Time (T _M)		10 a	sheet 1.5 mm 3 mm		
Diagnostic Coverage (DC)		0 %			
Indicators/operating means			BEE-MH82		
Operating display		LED green, flashes in case of short-circuit	Reflector with Micro-structure, rectangu-		
Eunction display		21 FDs vellow light up when light beam is free flash when falling	lar 82 mm x 60 mm, mounting holes		
i anonon alophay		short of the stability control, off when light beam is interrupted			
Controls		rotary switch for light/dark, sensitivity adjuster	BEF-MH50		
Electrical specifications			Reflector with Micro-structure rectangu-		
Operating voltage	Up	10 30 V DC	lar 50.9 mm x 50.9 mm, mounting holes, fixing strap		
Ripple	- D	max. 10 %			
No-load supply current	lo	max. 40 mA			
Output			REF-MH78		
Switching type		light/dark on switchable	Reflector with Micro-structure hexagonal		
Signal output		2 PNP outputs complementary short-circuit protected reverse	78 mm x 61 mm, mounting holes REF-MH20 Reflector with Micro-structure, rectangu- lar 32 mm x 20 mm, mounting holes REF-MA21		
elgilai ealpat		polarity protected, open collector			
Switching voltage		max. 30 V DC			
Switching current		max. 0.1 A			
Voltage drop	Ud	≤ 2.5 V DC			
Switching frequency	f	2500 Hz			
Response time		0.2 ms			
Ambient conditions			Reflector with Micro-structure, round ø 21 mm, self-adhesive		
Ambient temperature		-10 50 °C (14 122 °F)			
Storage temperature		-20 65 °C (-4 149 °F)	,		
Mechanical specifications			Other suitable accessories can be found at		
Protection degree		IP67	www.pepperl-fuchs.com		
Connection		4-pin M12 metal connector 90° rotatable			
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	d directi				
ves					
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			
Laser class		directions IEC 60825-1:2007 Complies with 21 CFR 1040.10 and 1040.11 event for deviations pursuant to Laser Notice No. 50, dated			
		June 24, 2007			
Approvals and certificates					
Protection class		II, rated voltage \leq 300 V AC with pollution degree 1-2 according to IEC 60664-1			
UL approval		cULus Listed, Type 1 enclosure			
CCC approval		CCC approval / marking not required for products rated ≤36 V			

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Curves/Diagrams



Laser notice laser class 1

- The irradiation can lead to irritation especially in a dark environment. Do not point at people!
- Maintenance and repairs should only be carried out by authorized service personnel!
- Attach the device so that the warning is clearly visible and readable.
- The warning accompanies the device and should be attached in immediate proximity to the device.
- Caution Use of controls or adjustments or performance of procedures other than those specified herein may result in hazard-٠ ous radiation exposure.

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