



Model Number

ML8-55-3242/25/103/138/143

Retroreflective sensor
with 4-pin, M8 x 1 connector

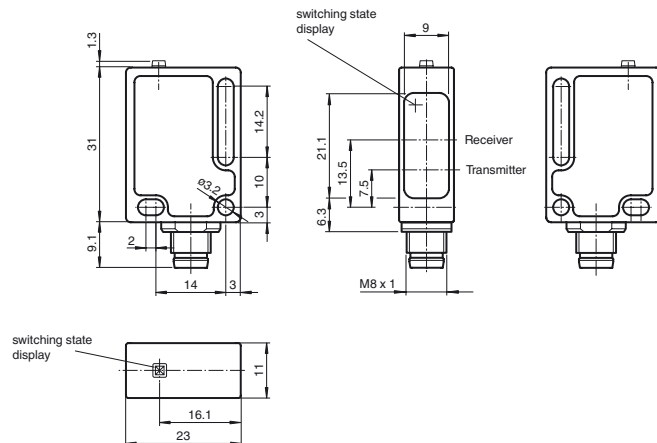
Features

- 2-way LED indicator for switch status
- Flexible mounting possibilities due to slotted hole
- Waterproof, protection degree IP67
- Protection class II

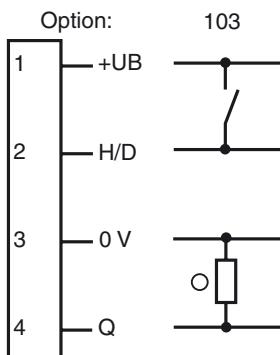
Product information

Small, robust and reliable, the ML8 series of miniature sensors is particularly suitable for non-contact detection of objects in confined spaces. The LED indicator is located behind the lens and provides reliable information on the sensor's operating status. The LED is always visible, even if the sensor is completely embedded. Flexible mounting options and fixed preset detection ranges simplify setup and operation.

Dimensions



Electrical connection

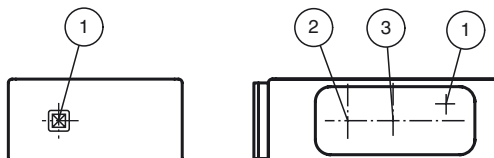


- = Light on
- = Dark on

Pinout



Indicators/operating means



1	Switching state	yellow
2	Emitter	
3	Receiver	

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Subject to modifications without notice

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Technical data**General specifications**

Effective detection range	0 ... 4 m
Reflector distance	0.05 ... 4 m
Threshold detection range	4.5 m
Reference target	H85-2 reflector
Light source	LED
Light type	modulated visible red light
Diameter of the light spot	approx. 180 mm at a distance of 3.5 m
Angle of divergence	approx. 3 °
Ambient light limit	40000 Lux
MTBF	280000 h

Functional safety related parameters

MTTF _d	2340 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Function display	LED yellow, lights up when light beam is free, flashes when falling short of the stability control
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Electrical specifications

Operating voltage	U _B	10 ... 30 V DC , class 2
Ripple		max. 10 %
No-load supply current	I ₀	< 20 mA

Input

Function input	Light/Dark switch
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Output

Switching type	light on	
Signal output	1 PNP output, short-circuit protected, reverse polarity protected, open collector	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Voltage drop	U _d	≤ 1.5 V DC
Response time		250 μs

Ambient conditions

Ambient temperature	-30 ... 60 °C (-22 ... 140 °F)
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)

Mechanical specifications

Protection degree	IP67
Connection	M8 x 1 connector, 4-pin
Material	
Housing	PC (glass-fiber-reinforced Makrolon)
Optical face	PMMA
Connector	plastic
Mass	approx. 10 g

Compliance with standards and directives

Directive conformity	EMC Directive 2004/108/EC
Standard conformity	
Product standard	EN 60947-5-2:2007
Protection degree	EN 60529
Standards	EN 50178, UL 508

Approvals and certificates

Protection class	II, rated voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval	cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

Accessories**Montagekit OMH-ML7-01**

Mounting set consisting of bracket OMH-ML-01 sheet ONH-ML7-03, and fastening material

Montagekit OMH-ML7-02

Mounting set consisting of bracket OMH-ML-02 sheet ONH-ML7-03, and fastening material

OMH-ML7-01

Mounting bracket

OMH-ML7-02

Mounting bracket

OMH-ML7-03

Fixing plate

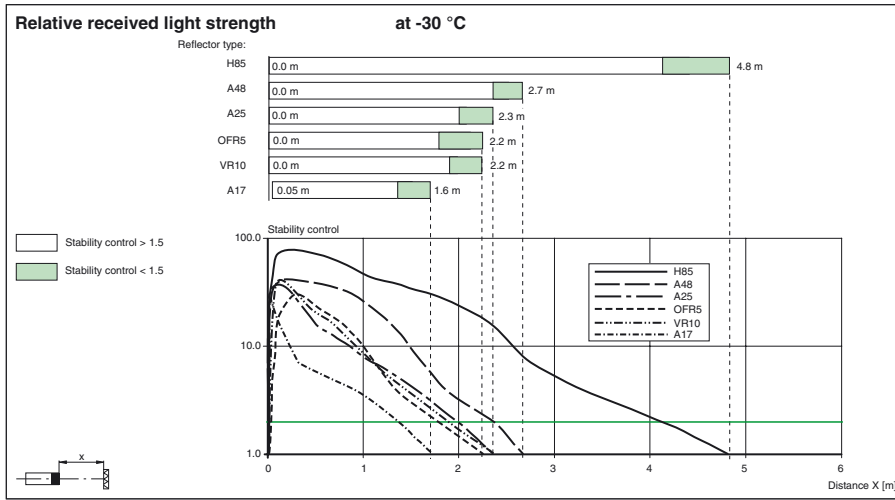
V31-WM-2M-PUR

4-pin, M8 socket, PUR cable

V31-GM-2M-PUR

4-pin, M8 socket, PUR cable

Other suitable accessories can be found at www.pepperl-fuchs.com



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