



Model Number

ML8-54-F/115b/136

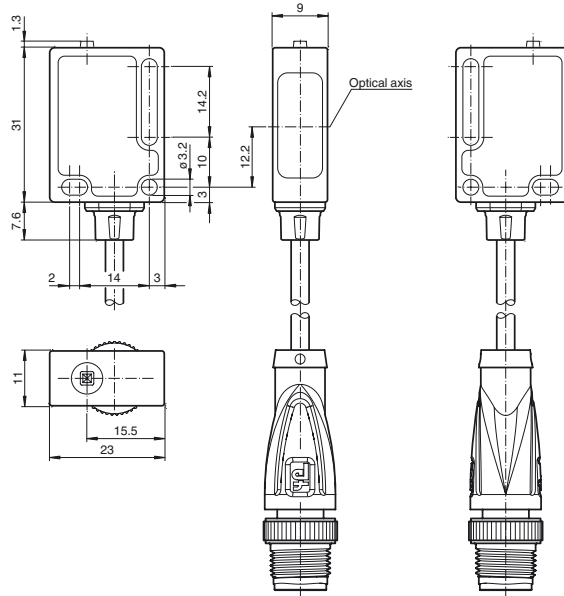
Retroreflective sensor

300 mm fixed cable with M12 x 1, 4-pin connector

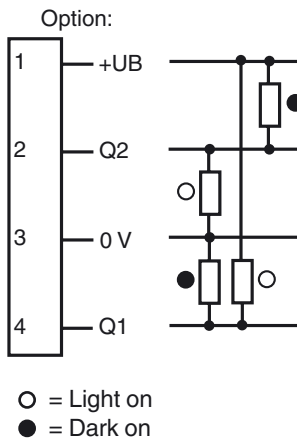
Features

- Miniature design
- Coaxial optical system
- Usable up to detection range 0
- High accuracy for precise positioning operations
- Flexible mounting possibilities due to slotted hole

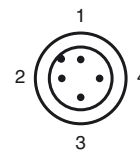
Dimensions



Electrical connection



Pinout



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Technical data**General specifications**

Effective detection range	0 ... 5.7 m
Reflector distance	0 ... 5.7 m
Threshold detection range	7.6 m
Reference target	H85-2 reflector
Light source	LED
Light type	modulated visible red light , 660 nm
Angle deviation	max. $\pm 1^\circ$
Diameter of the light spot	approx. 40 mm at detection range 1 m
Angle of divergence	1.7 °
Ambient light limit	40000 Lux

Functional safety related parameters

MTTF _d	980 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Function display	LED, yellow switching state Stability control
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Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I ₀	< 20 mA at 24 V DC

Output

Switching type	light on	
Signal output	2 Push-pull outputs, complementary, short-circuit proof, reverse polarity protected	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Switching frequency	f	1 kHz
Response time		500 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	fixed cable 300 mm with M12 x 1 connector , 4-pin
Material	
Housing	PC (glass-fiber-reinforced Makrolon)
Optical face	PMMA
Mass	30 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 ≤ 50 V AC with pollution degree 1-2 according to IEC 60664-1 functional insulation acc. to DIN EN 50178
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

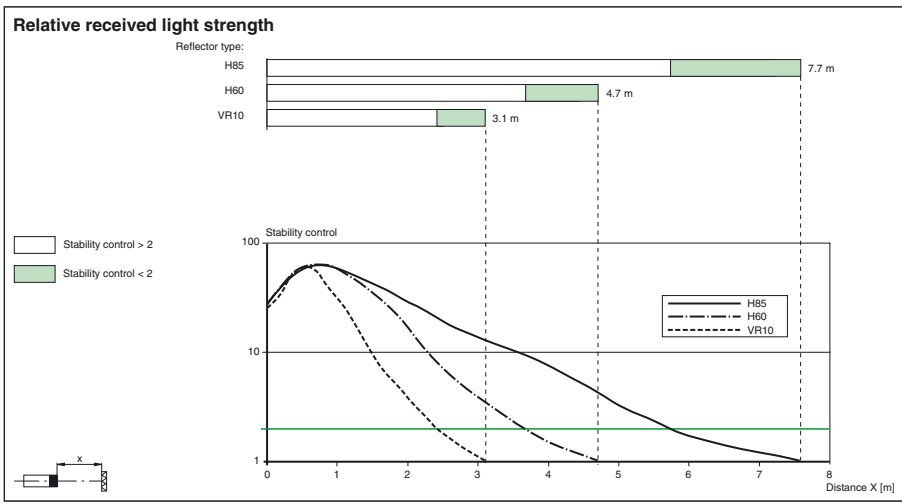
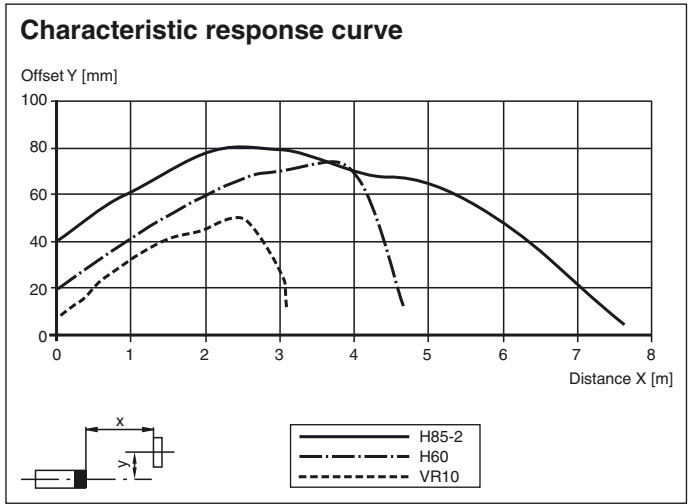
Mounting bracket

OMH-ML7-03

Fixing plate

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

Curves/Diagrams



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