



Model Number

ML100-8-HGU-100-RT/103/115/162

Convergent mode sensor
with 2 m fixed cable

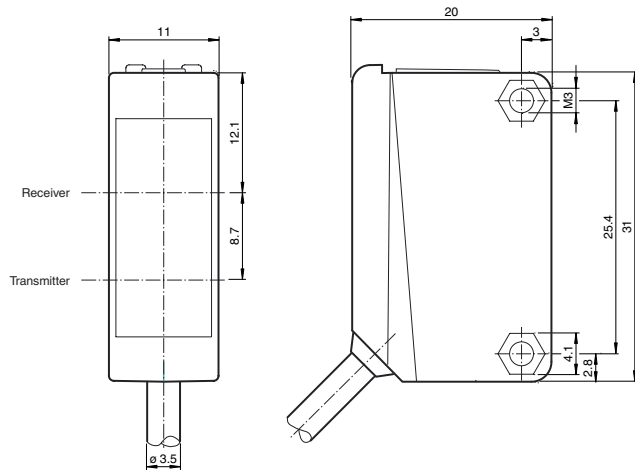
Features

- Miniature design
- Diffuse mode sensor with long, narrow light spot
- Easy to use
- Very bright, highly visible light spot
- Full metal thread mounting

Product information

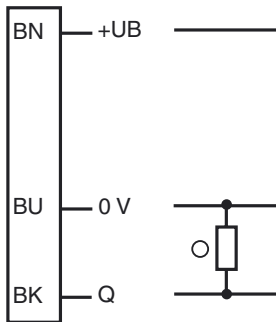
The ML100 series is characterized by its miniature housing with integral, all-metal threaded bushings. All versions are equipped with a visible red transmitter LED. This greatly simplifies installation and commissioning. The switching states are easily visible from all directions thanks to the highly visible LEDs.

Dimensions



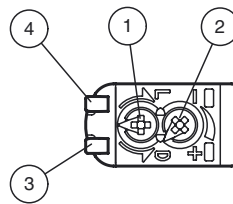
Electrical connection

Option: 103



- = Light on
- = Dark on

Indicators/operating means



1	Light-Dark-switching	
2	Sensitivity adjuster	
3	Signal display	yellow
4	Operating display	green

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Technical data

General specifications

Detection range	10 ... 100 mm
Adjustment range	30 ... 100 mm
Reference target	standard black, 100 mm x 100 mm
Light source	LED
Light type	modulated visible red light
Polarization filter	no
Diameter of the light spot	approx. 6 mm x 60 mm at 100 mm
Angle of divergence	Emitter: 3.5 ° vertical ; 30 ° horizontal
Optical face	frontal
Ambient light limit	EN 60947-5-2

Functional safety related parameters

MTTF _d	860 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operation indicator	LED green: power on
Function indicator	LED yellow: lights when object is detected
Control elements	Detection range adjuster
Control elements	Light/Dark switch

Electrical specifications

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

Output

Switching type	light/dark on, switchable	
Signal output	1 PNP output, short-circuit protected, reverse polarity protected, open collector	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA , resistive load	
Voltage drop	U _d	≤ 1.5 V DC
Switching frequency	f	500 Hz
Response time		1 ms

Ambient conditions

Ambient temperature	-30 ... 60 °C (-22 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Degree of protection	IP67
Connection	2 m fixed cable
Material	
Housing	PC (Polycarbonate)
Optical face	PMMA
Mass	approx. 50 g
Cable length	2 m

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 60947-5-2
Standard conformity	
Standards	UL 508

Approvals and certificates

UL approval	cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval	CCC approval / marking not required for products rated ≤36 V
Approvals	CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)

Accessories

OMH-ML100-01

Mounting bracket

OMH-ML100-02

Mounting bracket

OMH-ML100-03

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

OMH-ML100-04

Mounting bracket

OMH-ML100-05

Mounting bracket

OMH-F10-ML100

Mounting aid for ML100 series

OMH-10

Mounting aid

OMH-ML100-S1

Mounting bracket

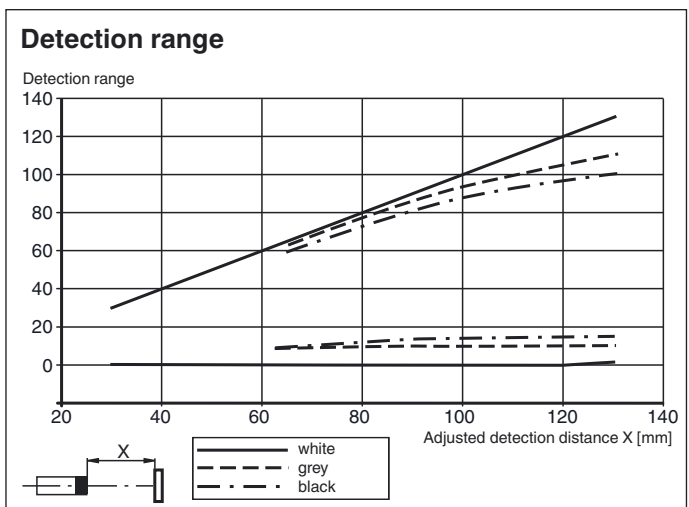
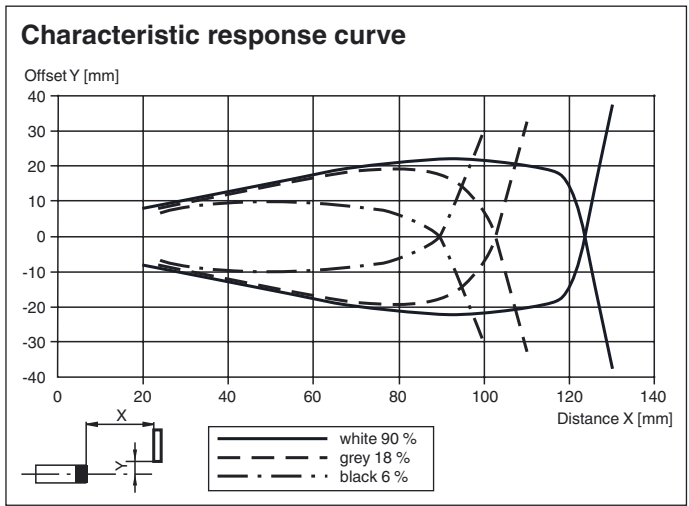
OMH-ML100-08

Mounting aid

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

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Curves/Diagrams



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

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