







Model Number

ML100-8-W-200-RT/95/103

Diffuse mode sensor with 4-pin, M8 x 1 connector

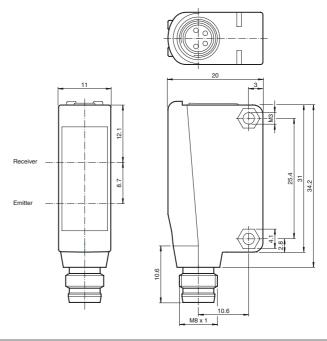
Features

- Miniature design
- Easy to use
- Very bright, highly visible light spot
- Full metal thread mounting
- Highly visible LEDs for Power ON and switching state
- Not sensitive to ambient light

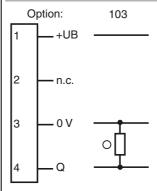
Product information

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

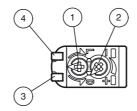


- O = Light on
- = Dark on

Pinout



Indicators/operating means



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

Technical data		
General specifications		
Detection range		0 200 mm
Adjustment range		15 200 mm
Reference target		standard white, 200 mm x 200 mm
Light source		LED
Light type		modulated visible red light
Diameter of the light spot		approx. 170 mm at a distance of 200 mm
Optical face		frontal
Ambient light limit		EN 60947-5-2
Functional safety related param	neters	
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 up with receiver lit
Control elements		sensitivity adjustment
Control elements		Light/Dark switch
Electrical specifications		Light Dail Official
Operating voltage	U_{R}	10 30 V DC , class 2
Ripple	ΟB	max. 10 %
• •		< 20 mA
No-load supply current	I ₀	< 20 IIIA
Output		2.1.71
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	1000 Hz
Response time		0.5 ms
Ambient conditions		
Ambient temperature		-30 60 °C (-22 140 °F)
Storage temperature		-40 70 °C (-40 158 °F)
Mechanical specifications		
Protection degree		IP67
Connection		Male connector M8 x 1 , 4-pin
Material		
Housing		PC (Polycarbonate)
Optical face		PMMA
Mass		approx. 10 g
Compliance with standards and ves	directi	!-
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
		OF 111 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Accessories

OMH-ML100-01

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

V31-GM-2M-PUR

Female cordset, M8, 4-pin, PUR cable

V31-WM-2M-PUR

Female cordset, M8, 4-pin, PUR cable

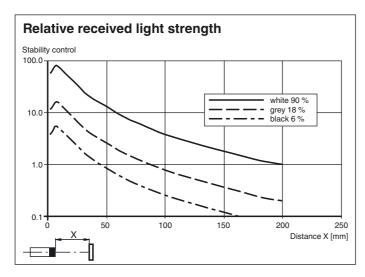
Other suitable accessories can be found at www.pepperl-fuchs.com

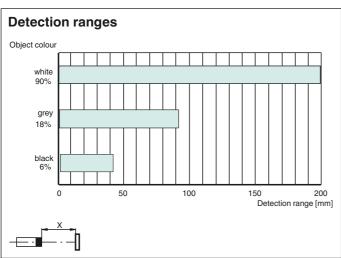
EPPERL+FUCHS

CE, cULus Listed 57M3 (Only in association with UL Class 2

power supply; Type 1 enclosure)

Approvals





www.pepperl-fuchs.com