



Model Number

ML300-8-100-RT/79a/95/122

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

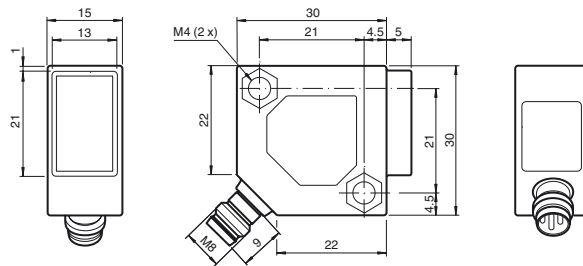
Features

- Distance measurement using object
- Miniature design
- Easy to use
- Visible red light
- Analog output 0 V ... 10 V/4 mA ... 20 mA
- 45° connector

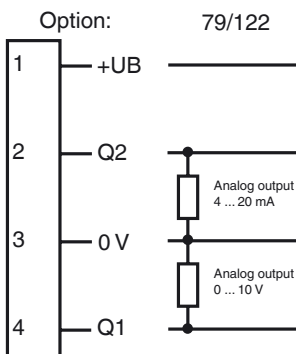
Product information

The ML300 series has a robust miniature housing and all the standard functional principles. Of particular note are the sensors with analog output, which return a value proportional to the distance. The 45° plug/cable connection ensures flexible mounting. An LED indicates a weak signal, e.g. due to dirt.

Dimensions



Electrical connection



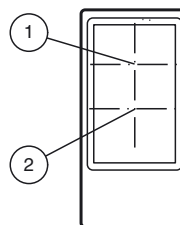
Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Indicators/operating means



1	Receiver
2	Emitter

Technical data

General specifications

Detection range	10 ... 100 mm
Reference target	standard white, 100 mm x 100 mm
Light source	LED
Light type	modulated visible red light , 660 nm
Diameter of the light spot	approx. 6 mm at a distance of 100 mm
Angle of divergence	approx. 3.5 °
Ambient light limit	
Continuous light	10000 Lux
Modulated light	5000 Lux
Accessories provided	Mounting bracket OMH-ML300-01

Electrical specifications

Operating voltage	U_B	15 ... 30 V DC
Ripple		max. 20 %
No-load supply current	I_0	max. 25 mA

Output

Measurement output	Analog output: 0 ... 10 V , 10 mA Analog output: 4 ... 20 mA , max. load: 0.5 kOhm (+UB=15 V), 1.2 kOhm (+UB=30 V)
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Conformity

Product standard	EN 60947-5-2
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Ambient conditions

Ambient temperature	-25 ... 55 °C (-13 ... 131 °F)
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Mechanical specifications

Housing width	30 mm
Housing height	30 mm
Housing depth	15 mm
Degree of protection	IP67
Connection	M8 x 1 connector, 4-pin
Material	
Housing	PBT
Optical face	glass pane
Connector	metal
Mass	18 g
Mounting	Mounting accessories included

Compliance with standards and directives

Standard conformity	
Shock and impact resistance	EN 60947-5-7 30 g, 11 ms, all axes
Vibration resistance	EN 60947-5-7, 10-55 Hz/1.5 mm amplitude, all axes

Approvals and certificates

CCC approval	CCC approval / marking not required for products rated ≤36 V
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Accessories

OMH-ML300-01

Bracket for mounting ML300 series sensors

OMH-ML300-02

Bracket for mounting ML300 series sensors on a 35 mm DIN rail

V31-GM-2M-PVC

Female cordset single-ended, M8, 4-pin, PVC cable

V31-WM-2M-PVC

Female cordset single-ended, M8, 4-pin, PVC cable

V31-WM-2M-PUR

Female cordset single-ended, M8, 4-pin, PUR cable

V31-GM-2M-PUR

Female cordset single-ended, M8, 4-pin, PUR cable

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

Difference in detection distance

