Dimensions M4 (2 x) 6.5 4.5

# CE

# **Model Number**

# ML300-55-2m-RT/59/98/103

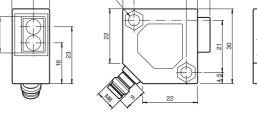
Retroreflective sensor with 3-pin, M8 x 1 connector

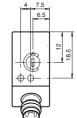
### **Features**

- Miniature design ٠
- Easy to use •
- Visible red light •
- 45° connector •

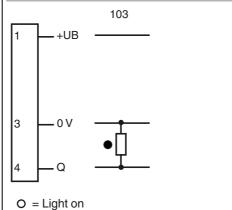
# **Product information**

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.





## **Electrical connection**



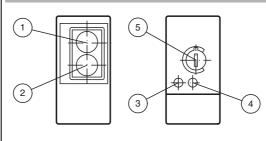
• = Dark on

#### Pinout





# Indicators/operating means



1	Receiver	
2	Emitter	
3	Switching state	yellow
4	Stability control	green
5	Sensitivity adjustment	

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	Accessories	
02m 0.022m	OMH-ML300-01 Bracket for mounting ML300 series sensors	
3.5 m H85-2 reflector LED modulated visible red light , 660 nm	<b>OMH-ML300-02</b> Bracket for mounting ML300 series sensors on a 35 mm DIN rail	
yes approx. 200 mm at 2 m approx. 6 °	V3-GM-2M-PVC Female cordset single-ended, M8, 3-pin, PVC cable V3-WM-2M-PVC Female cordset single-ended, M8, 3-pin, PVC cable	
10000 Lux 5000 Lux		
LED yellow: lights up when output is active LED green: Sufficient stability control sensitivity adjustment	<b>V3-WM-2M-PUR</b> Female cordset single-ended, M8, 3-pin, PUR cable	
10 30 V DC max. 10 % max. 20 mA	<b>REF-H85-2</b> Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes	
dark on 1 PNP output, short-circuit protected, reverse polarity protected, open collector max. 30 V DC	<b>REF-C110-2</b> Reflector, round ø 84 mm, central mounting hole	
max. 0.1 A ≤ 2 V DC 1000 Hz 0.5 ms	<b>REF-H50</b> Reflector, rectangular 51 mm x 61 mm, mounting holes, fixing strap	
EN 60947-5-2	<b>REF-H60-2</b> Reflector with mounting holes	
-25 55 °C (-13 131 °F) 30 mm	<b>REF-VR10-2</b> Reflector, rectangular 60 mm x 19 mm, mounting holes	
30 mm 15 mm IP65 M8 x 1 connector, 3-pin	<b>OFR-100/100</b> Reflective tape 100 mm x 100 mm	
ABS plastic metal 18 g	Other suitable accessories can be found at www.pepperl-fuchs.com	
EN 60947-5-7 30 g, 11 ms, all axes EN 60947-5-7, 10-55 Hz/1.5 mm amplitude, all axes		
CCC approval / marking not required for products rated ≤36 V		

Technical data		
General specifications		
Effective detection range		0 2 m
Reflector distance		0.02 2 m
Threshold detection range		3.5 m
Reference target		H85-2 reflector
Light source		LED
Light type		modulated visible red light
Polarization filter		yes
Diameter of the light spot		approx. 200 mm at 2 m
Angle of divergence		approx. 6 °
Ambient light limit		
Continuous light		10000 Lux
Modulated light		5000 Lux
Indicators/operating means		
Function indicator		LED yellow: lights up when LED green: Sufficient stab
Control elements		sensitivity adjustment
Electrical specifications		
Operating voltage	UB	10 30 V DC
Ripple		max. 10 %
No-load supply current	I <sub>0</sub>	max. 20 mA
Output		
Switching type		dark on
Signal output		1 PNP output, short-circuit open collector
Switching voltage		max. 30 V DC
Switching current		max. 0.1 A
Voltage drop	Ud	≤ 2 V DC
Switching frequency	f	1000 Hz
Response time		0.5 ms
Conformity		EN 00047 E 0
Product standard		EN 60947-5-2
Ambient conditions		
Ambient temperature		-25 55 °C (-13 131 °F
Mechanical specifications		
Housing width		30 mm
Housing height		30 mm
Housing depth		15 mm
Degree of protection Connection		IP65
		M8 x 1 connector, 3-pin
Material		ADC
Housing		ABS
Optical face Connector		plastic metal
Mass		18 g
		log
Compliance with standards and directives		
Standard conformity		EN 60047 5 7 00 - 41
Shock and impact resistance Vibration resistance		EN 60947-5-7 30 g, 11 ms
VIDIATION RESISTANCE		EN 60947-5-7, 10-55 Hz/1

# Approvals and certificates

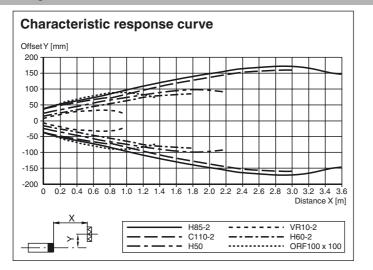
CCC approval

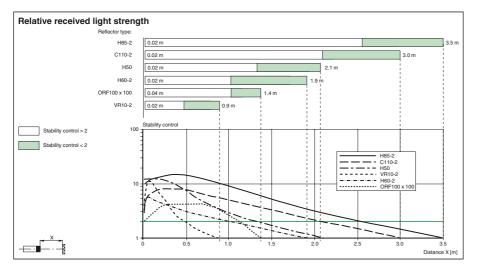
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# **Curves/Diagrams**





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