



**Model Number**

**ML300-8-1200-IR/25/95/127**

Diffuse mode sensor  
with M8, 4-pin metal connector

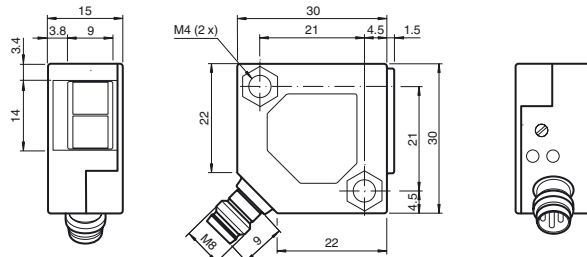
**Features**

- Miniature design
- Easy to use
- Infrared light
- High operating range
- 45° connector

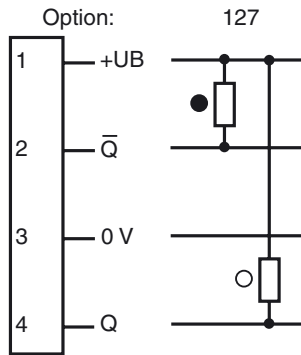
**Product information**

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.

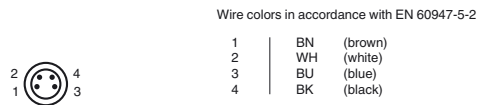
**Dimensions**



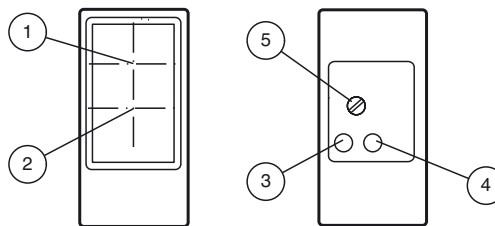
**Electrical connection**



**Pinout**



**Indicators/operating means**



1	Receiver	
2	Emitter	
3	Switching state	yellow
4	Stability control	green
5	Sensing range adjuster	

Release date: 2019-11-26 15:42 Date of issue: 2019-11-26 238225\_eng.xml

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

**Technical data****General specifications**

Detection range	0 ... 1200 mm , adjustable
Adjustment range	250 ... 1200 mm
Reference target	standard white 200 mm x 200 mm
Light source	IREDD
Light type	modulated infrared light , 880 nm
Diameter of the light spot	approx. 160 mm at a distance of 1200 mm
Angle of divergence	approx. 8 °
Ambient light limit	
Continuous light	10000 Lux
Modulated light	5000 Lux
Accessories provided	Mounting bracket OMH-ML300-01 Screwdriver

**Indicators/operating means**

Function indicator	LED yellow: lights up when output is active LED green: Sufficient stability control
Control elements	Sensing range adjuster

**Electrical specifications**

Operating voltage	$U_B$	10 ... 30 V DC
Ripple		max. 20 %
No-load supply current	$I_0$	max. 20 mA

**Output**

Switching type	light on / dark on	
Signal output	2 NPN outputs, complementary, short-circuit proof, reverse-polarity protection, open collector	
Switching voltage	max. 30 V DC	
Switching current	max. 0.1 A	
Voltage drop	$U_d$	$\leq 2$ V DC
Switching frequency	$f$	1000 Hz
Response time		0.5 ms

**Conformity**

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	IP67
Connection	M8 x 1 connector, 4-pin
Material	
Housing	PBT
Optical face	glass pane
Connector	metal
Mass	18 g

**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 $\leq 36$ V
--------------	--

**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**

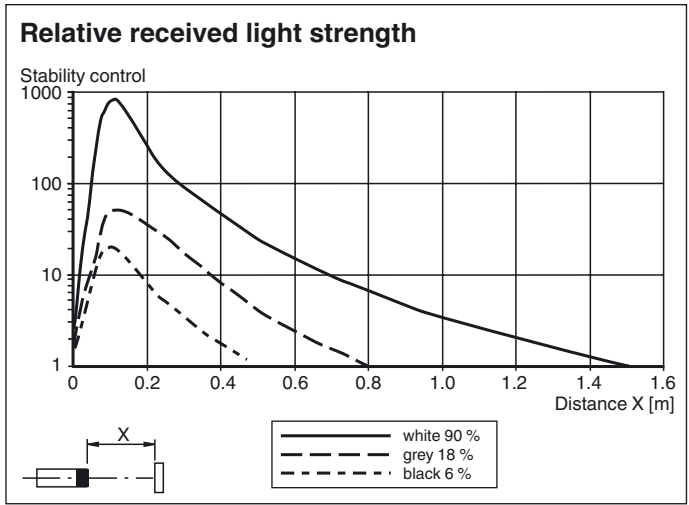
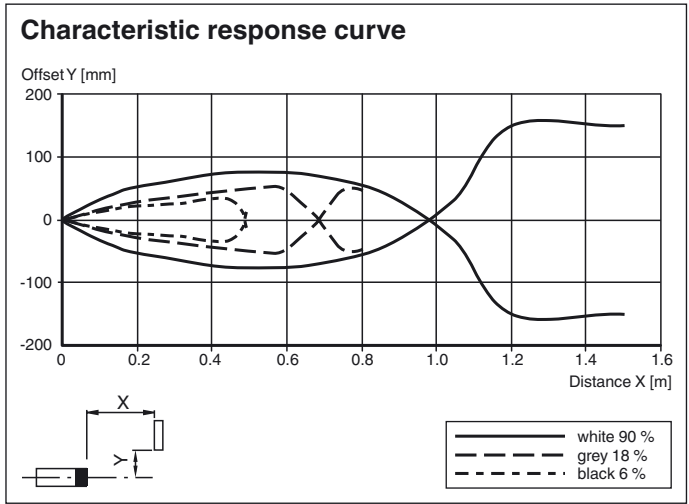
Female cordset single-ended, M8, 4-pin, PUR cable

**V31-GM-2M-PUR**

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

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

Curves/Diagrams



Release date: 2019-11-26 15:42 Date of issue: 2019-11-26 238225\_eng.xml

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