



CE

Model Number

ML300-55-2m-RT/59/103/115

Retroreflective sensor
with 2 m fixed cable

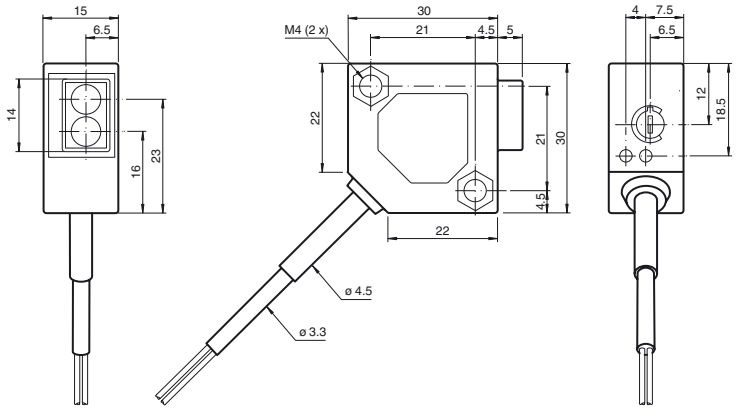
Features

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

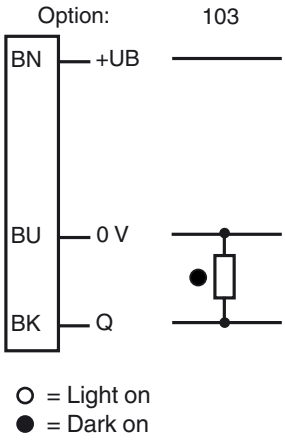
Product information

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

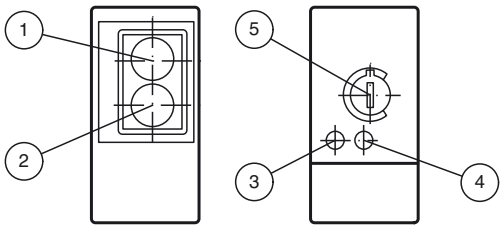


Electrical connection



○ = Light on
● = Dark on

Indicators/operating means



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

Release date: 2011-12-20 15:55 Date of issue: 2012-01-09 238185_eng.xml

Subject to modifications without notice
Copyright Pepperl+Fuchs

Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776-4411 fa-info@pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS SENSING YOUR NEEDS

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 , 660 nm
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 display		LED yellow: lights up when output is active LEDgreen: Sufficient stability control
Controls		sensitivity adjustment
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I_0	max. 20 mA
Output		
Switching type		dark on
Signal output		1 PNP output, short-circuit protected, protected from reverse polarity, open collector
Switching voltage		max. 30 V DC
Switching current		max. 0.1 A
Voltage drop	U_d	≤ 2 V DC
Switching frequency	f	1000 Hz
Response time		0.5 ms
Ambient conditions		
Ambient temperature		-25 ... 55 °C (-13 ... 131 °F)
Mechanical specifications		
Protection degree		IP65
Connection		2 m fixed cable
Material		
Housing		ABS
Optical face		plastic
Cable		PVC
Mass		75 g
Compliance with standards and directives		
Directive conformity		
EMC Directive 2004/108/EC		EN 60947-5-2:2007
Standard conformity		
Product standard		EN 60947-5-2:2007 IEC 60947-5-2:2007
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		
UL approval		no
CCC approval		Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

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

REF-H85-2
Reflector, rectangular 84.5 mm x 84.5 mm, mounting holes

REF-C110-2
Reflector, round ø 84 mm, central mounting hole

REF-H50
Reflector, rectangular 51 mm x 51 mm, mounting holes, fixing strap

REF-H60-2
Reflector with mounting holes

REF-VR10-2
Reflector, rectangular 60 mm x 19 mm, mounting holes

OFR-100/100
Reflective tape 100 mm x 100 mm

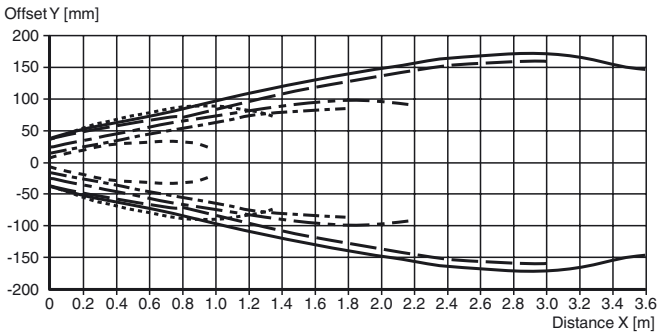
Other suitable accessories can be found at www.pepperl-fuchs.com

Release date: 2011-12-20 15:55 Date of issue: 2012-01-09 238185_eng.xml

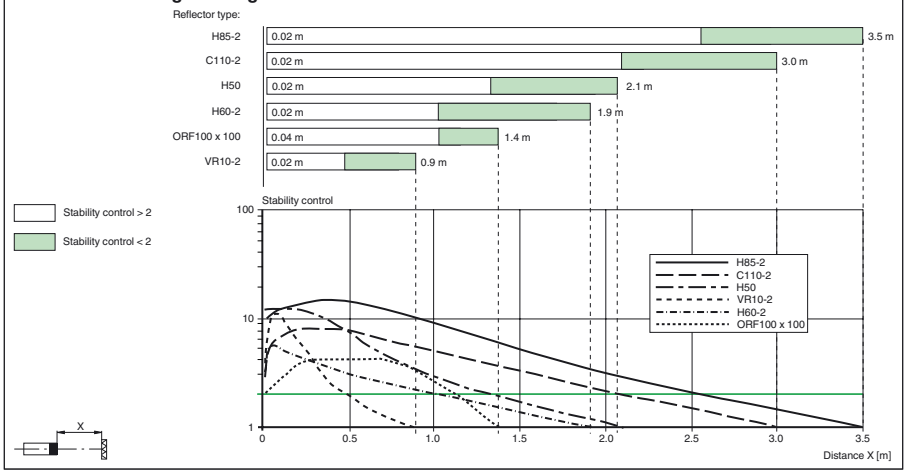
Subject to modifications without notice
Copyright Pepperl+Fuchs
Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776-4411 fa-info@pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
PEPPERL+FUCHS SENSING YOUR NEEDS

Curves/Diagrams

Characteristic response curve



Relative received light strength



Release date: 2011-12-20 15:55 Date of issue: 2012-01-09 238185_eng.xml