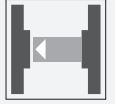


# Thru-beam sensor

## ML300-P-6m-RT/25/103/115



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

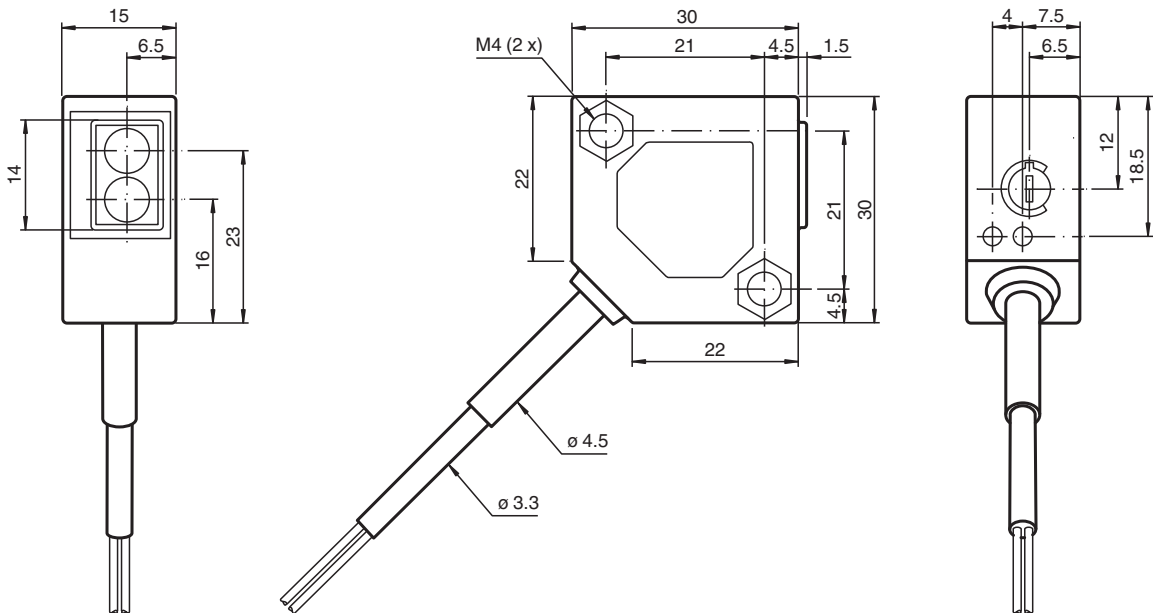
Thru-beam sensor



### Function

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



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

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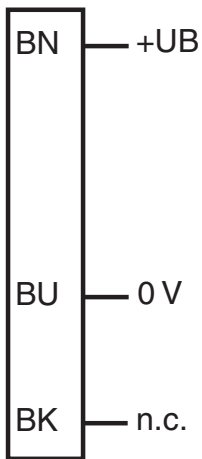
**PF** PEPPERL+FUCHS

## Technical Data

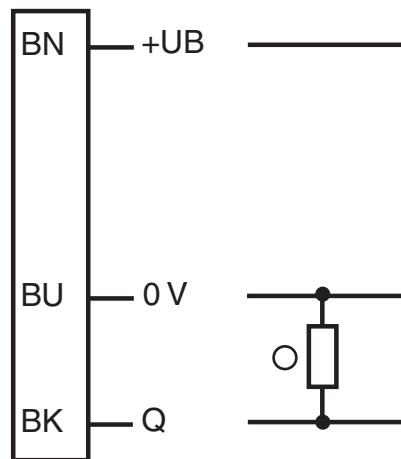
<b>System components</b>		
Emitter		ML300-T-6m-RT/115
Receiver		ML300-R-6m-RT/25/103/115
<b>General specifications</b>		
Effective detection range		0 ... 6 m
Threshold detection range		8 m
Light source		LED
Light type		modulated visible red light 660 nm
Diameter of the light spot		approx. 500 mm at 6 m
Opening angle		approx. 5 °
Ambient light limit		
Continuous light		10000 Lux
Modulated light		5000 Lux
<b>Indicators/operating means</b>		
Function indicator		LED yellow: lights up when output is active LED green: Sufficient stability control
Control elements		sensitivity adjustment
<b>Electrical specifications</b>		
Operating voltage	$U_B$	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	$I_0$	Emitter: ≤ 20 mA Receiver: ≤ 20 mA
<b>Output</b>		
Switching type		light-on
Signal output		1 PNP output, short-circuit protected, reverse polarity protected, 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
<b>Conformity</b>		
Product standard		EN 60947-5-2
<b>Compliance with standards and directives</b>		
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
<b>Approvals and certificates</b>		
UL approval		no
CCC approval		CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 55 °C (-13 ... 131 °F)
<b>Mechanical specifications</b>		
Housing width		30 mm
Housing height		30 mm
Housing depth		15 mm
Degree of protection		IP65
Connection		2 m fixed cable
Material		
Housing		ABS
Optical face		plastic
Cable		PVC
Mass		150 g (emitter and receiver)

**Connection Assignment**

**Transmitter**



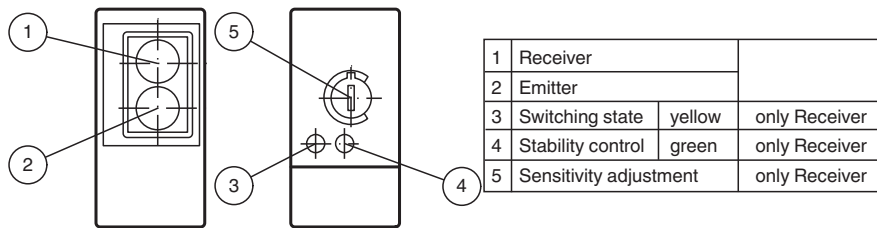
**Receiver**



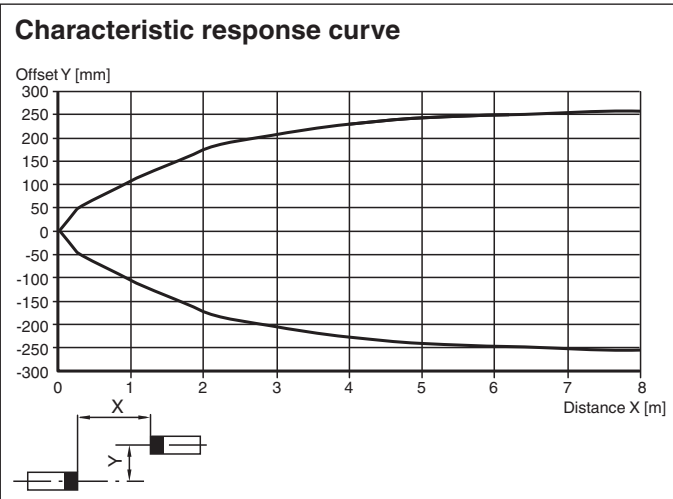
103

○ = Light on  
● = Dark on

**Assembly**



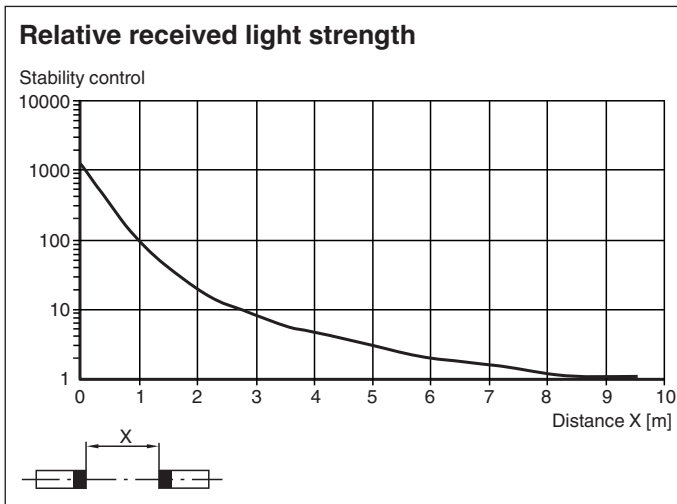
**Characteristic Curve**



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## Characteristic Curve



## Accessories

	<p><b>OMH-ML300-01</b></p>	<p>Bracket for mounting ML300 series sensors</p>
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