



# Thru-beam sensor receiver

## MV17/115b/136



- Receiver
- Compact, versatile housing
- 360° high visibility LEDs
- 4-in-1 output (push-pull)
- Pigtail quick disconnect
- M12 male connector

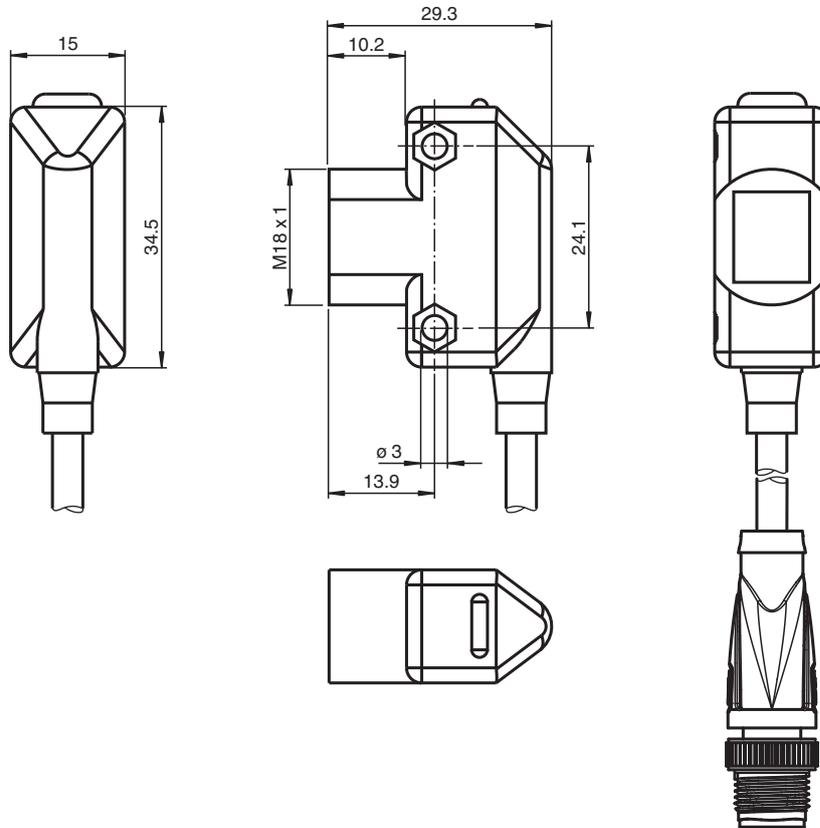
Thru-beam sensor receiver, small design, infrared, light-on/dark-on switching, push-pull output, cable with M12 plug



### Function

The ML17 sensor family offers diverse connection and installation options, which means that it can adapt to the most varied automation tasks. In addition to the usual fitting method using M4 screws, these sensors can also be installed by means of M18 threaded insert. All devices are equipped with a green Power On display and a yellow function display. These displays are arranged in such a way that they are clearly visible from different directions.

### Dimensions



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

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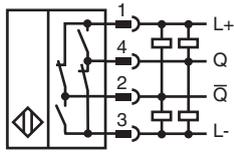
**PF** PEPPERL+FUCHS

## Technical Data

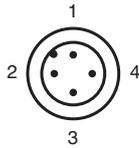
System components		
Emitter		MD17/115b
Receiver		MV17/115b/136
General specifications		
Effective detection range		0 ... 15 m
Threshold detection range		20 m
Reference target		emitter
Light source		IRED
Light type		Infrared LED
Ambient light limit		≤ 10000 Lux
Indicators/operating means		
Operation indicator		LED green
Function indicator		LED yellow, lights up with receiver lit
Electrical specifications		
Operating voltage	$U_B$	10 ... 30 V DC , class 2
Ripple		max. 10 %
No-load supply current	$I_o$	< 25 mA
Operating current	$I_B$	100 mA max per output
Time delay before availability	$t_v$	≤ 200 ms
Output		
Switching type		light/dark on
Signal output		2 push-pull (4 in 1) outputs, short-circuit protected, reverse polarity protected, overvoltage protected
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Voltage drop	$U_d$	≤ 2 V DC
Switching frequency	$f$	150 Hz
Response time		≤ 3 ms
Conformity		
Product standard		EN 60947-5-2 IEC 60947-5-2
Approvals and certificates		
CE conformity		CE
EAC conformity		TR CU 020/2011
UL approval		cULus
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-20 ... 55 °C (-4 ... 131 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Mechanical specifications		
Housing width		15 mm
Housing height		34.5 mm
Degree of protection		IP67
Connection		150 mm cable with M12 connector, 4-pin
Material		
Housing		ABS
Optical face		Acrylic
Mass		23 g

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**Connection**



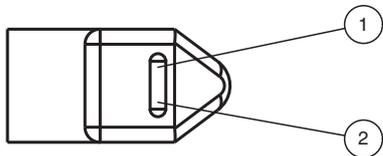
**Connection Assignment**



Wire colors in accordance with EN 60947-5-2

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

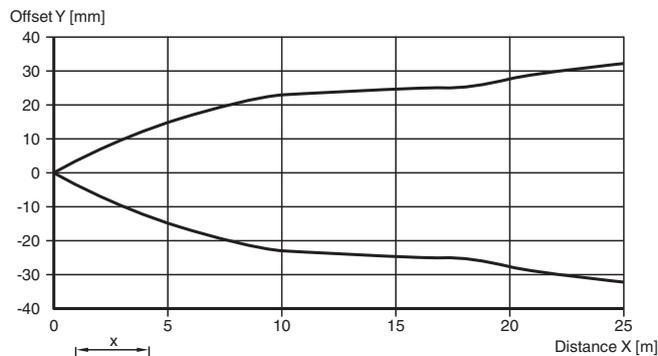
**Indication**



1	Signal display	yellow
2	Operating display	green

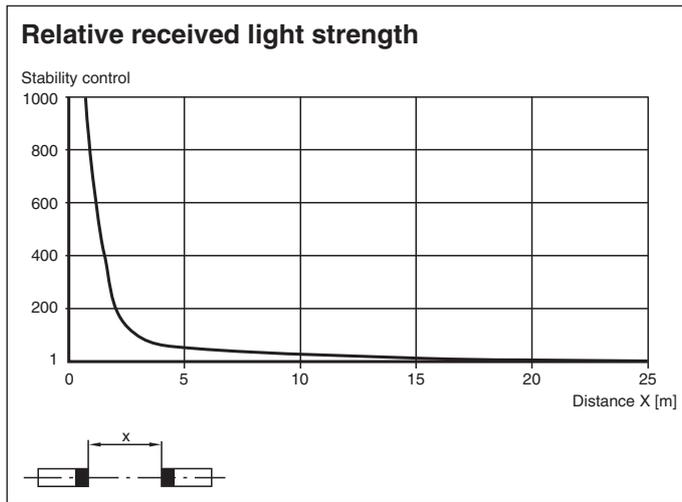
**Characteristic Curve**

**Characteristic response curve**



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## Characteristic Curve



## Matching System Components

	<b>MD17/115b</b>	Thru-beam sensor transmitter, small design, infrared light, 20 m range, cable with M12 plug
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## Accessories

	<b>OMH-ML17</b>	Mounting bracket
	<b>OMH-ML17-1</b>	Mounting bracket
	<b>V1-G-BK2M-PUR-U</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant
	<b>V1-W-BK2M-PUR-U</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant
	<b>V1-G-BK5M-PUR-U</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant
	<b>V1-W-BK5M-PUR-U</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant

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## Additional Information

### 4-in-1 Output

The 4-in-1 output automatically detects the connected load, so the output either sources or sinks current depending on the load. The light on/dark on switch on the housing selects normally open or normally closed mode. A single sensor can operate as NPN normally open, NPN normally closed, PNP normally open, or PNP normally closed.

