Model Number

MD17/MV17/115b/136

Thru-beam sensor

with fixed cable and M12 connector, 4-pin

Features

- Compact series in universal housing for standard applications
- Miniature design
- Front mounting with M18-threads or side mounting holes
- 360° high visibility LEDs
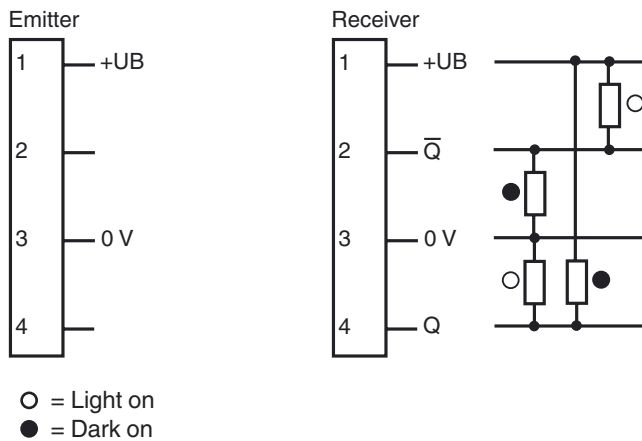- Time-saving mounting with quick clamp system

Product information

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

Electrical connection

Emitter

1	+UB
2	
3	0 V
4	

Receiver

1	+UB
2	$\overline{Q}$
3	0 V
4	Q
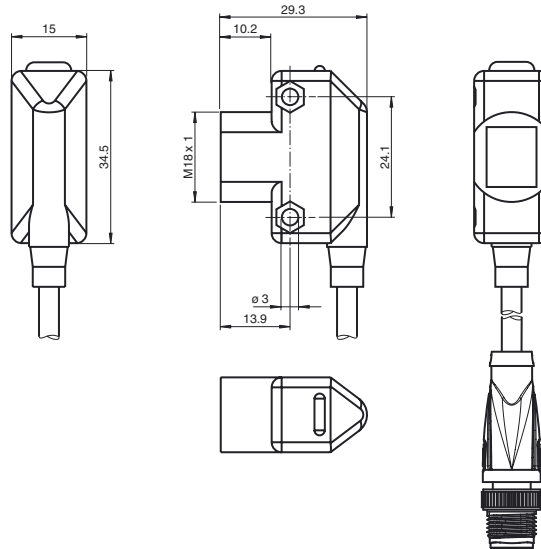
○ = Light on
● = Dark on

Pinout
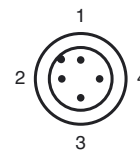
Indicators/operating means
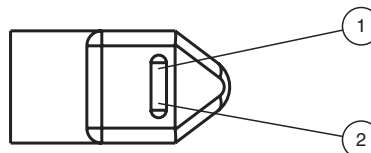
| 1 | Signal display | yellow |
| 2 | Operating display | green |

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Technical data

System components

Emitter	MD17/115b
Receiver	MV17/115b/136

General specifications

Effective detection range	0 ... 15 m
Threshold detection range	20 m
Light source	IRED
Light type	modulated infrared light , 950 nm
Ambient light limit	≤ 10000 Lux

Indicators/operating means

Operating display	LED green
Function display	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_0	< 25 mA
Operating current		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

Ambient conditions

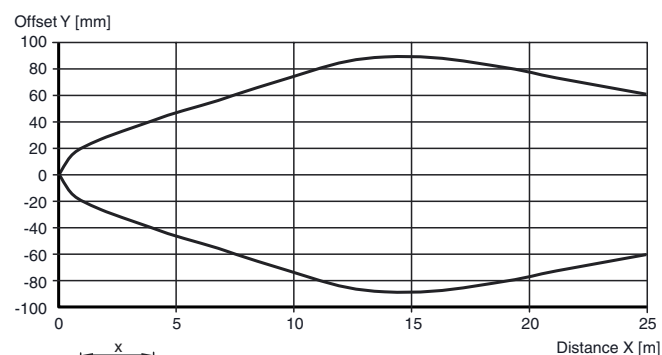|	
Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)

Mechanical specifications

Protection degree	IP67
Connection	150 mm PVC cable with 4-pin, M12 connector
Material	
Housing	ABS
Optical face	Acrylic
Mass	approx. 46 g (emitter and receiver)

Compliance with standards and directives

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007
Standards	EN 50178, UL 508

Approvals and certificates

UL approval	cULus
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-ML17-EZ
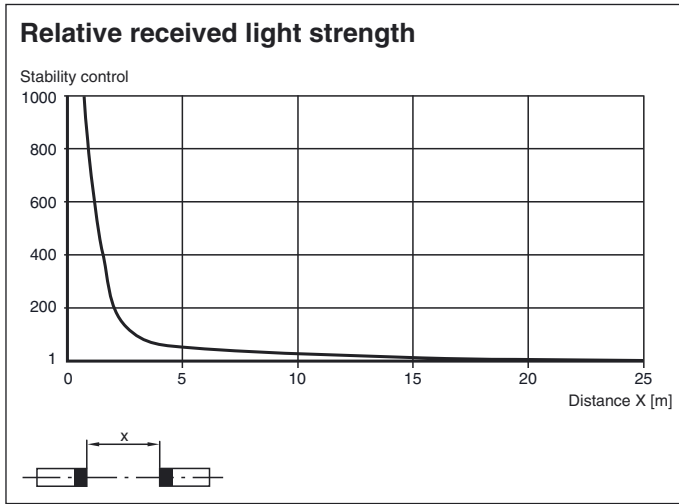Mounting bracket

OMH-ML17
Mounting bracket

OMH-ML17-1
Mounting bracket

V1-G-2M-PUR
Cable socket, M12, 4-pin, PUR cable

V1-W-2M-PUR
Cable socket, M12, 4-pin, PUR cable

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

Curves/Diagrams

Characteristic response curve

Offset Y [mm] / Distance X [m]

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Relative received light strength

Stability control

Subject to modifications without notice

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