

# 

#### **Model Number**

# MD17/MV17/136/143

Thru-beam sensor with 4-pin, M8 x 1 connector

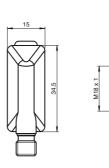
#### **Features**

- 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

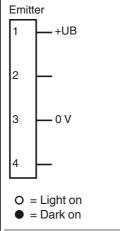


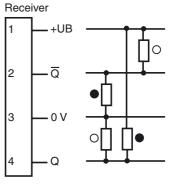




10.2

# **Electrical connection**

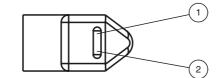




# Pinout



#### Indicators/operating means



1	Signal display	yellow
2	Operating display	green

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# Technical data

rechnical data		
System components		
Emitter		MD17/143
Receiver		MV17/136/143
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 <sub>B</sub>	10 30 V DC , class 2
Ripple		max. 10 % < 25 mA
No-load supply current	I <sub>0</sub>	
Operating current		100 mA max per output
Time delay before availability	t <sub>v</sub>	≤ 200 ms
Output		
Switching type		light/dark on
Signal output		2 push-pull (4 in 1)outputs, short-circuit protected, reverse pola- rity protected, overvoltage protected
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Voltage drop	U <sub>d</sub>	≤ 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		M8 x 1 connector, 4-pin
Material		
Housing		ABS
Optical face		Acrylic
Mass		approx. 17 g (emitter and receiver)
Compliance with standards and c ves	lirecti-	
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 $\leq$ 36 V do not bear a CCC marking because they do not require approval.
Curves/Diagrams		

Characteristic response curve Offset Y [mm] 100 80 60 40 20 0 -20 -40 -60 -80 -100 5 10 15 20 0 25 Distance X [m] > —— ·

MD17/MV17/136/143

OMH-ML17-EZ Mounting bracket
OMH-ML17 Mounting bracket
OMH-ML17-1 Mounting bracket
V31-WM-2M-PUR 4-pin, M8 socket, PUR cable
V31-GM-2M-PUR 4-pin, M8 socket, PUR cable
Other suitable accessories can be found at www.pepperl-fuchs.com

Accessories

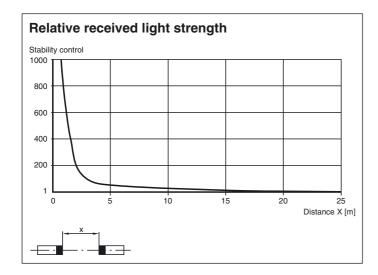
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