



### Model Number

**ML17-54/136/143**

Retroreflective sensor  
with 4-pin, M8 x 1 connector

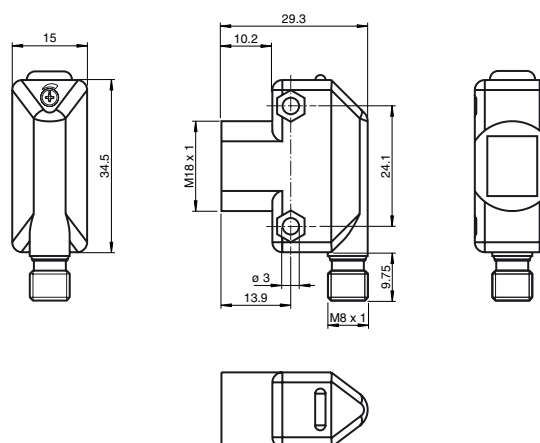
### Features

- 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
- Version with polarized filters detect shiny objects

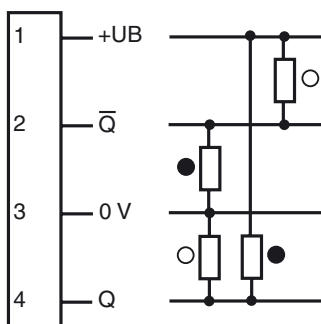
### Product information

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

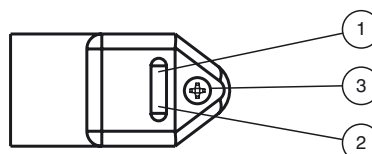


○ = Light on  
● = Dark on

### Pinout



### Indicators/operating means



1	Signal display	yellow
2	Operating display	green
3	Sensitivity adjustment	

**Technical data****General specifications**

Effective detection range	0 ... 3.5 m
Reflector distance	50 ... 3500 mm
Threshold detection range	5 m
Reference target	FE-RR1 reflector
Light source	LED
Light type	modulated visible red light , 626 nm
Ambient light limit	≤ 10000 Lux

**Indicators/operating means**

Operating display	LED green
Function display	LED yellow, lights up with receiver lit
Controls	sensitivity adjustment

**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 <sub>d</sub>	≤ 2 V DC
Switching frequency	f	500 Hz
Response time	≤ 1 ms	

**Ambient conditions**

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

**Mechanical specifications**

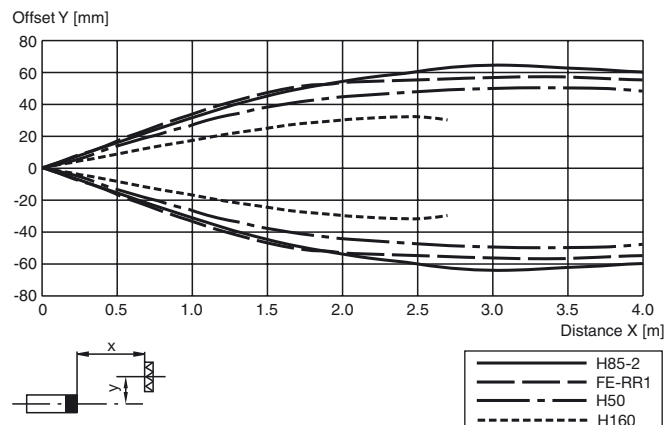
Protection degree	IP67
Connection	M8 x 1 connector, 4-pin
Material	
Housing	ABS
Optical face	Acrylic
Mass	approx. 8.5 g

**Compliance with standards and directives**

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

**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.

**Curves/Diagrams****Characteristic response curve****Accessories**

**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](http://www.pepperl-fuchs.com)

