



## Background suppression sensor ML17-8-H-50-RT/115a/136

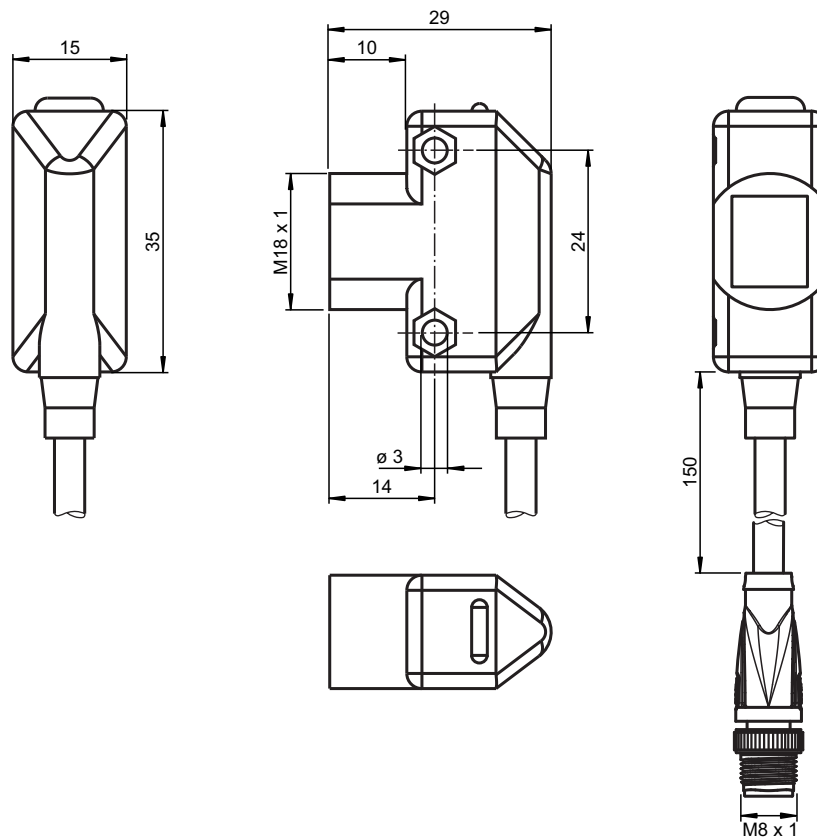


- Compact, versatile housing
- 360° high visibility LEDs
- Very low color sensitivity
- Front mounting with M18-threads or side mounting holes
- Sturdy, waterproof plastic housing
- Tamper-proof version with no adjustments

Background suppression sensor



### Dimensions



### Technical Data

#### General specifications

Detection range	10 ... 50 mm
Background suppression	starts from 65 mm
Reference target	standard black, 100 mm x 100 mm
Light source	LED

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

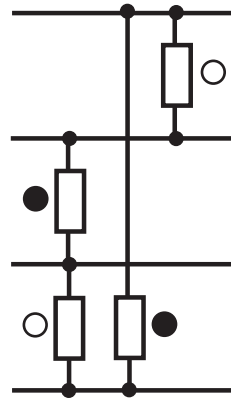
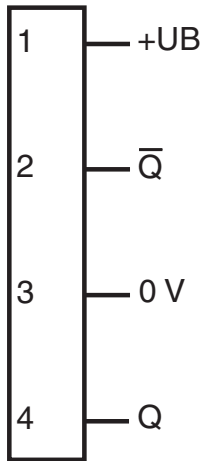
**PF** PEPPERL+FUCHS

## Technical Data

Light type	modulated visible red light , 640 nm	
Black-white difference (6 %/90 %)	≤ 10 %	
Diameter of the light spot	≤ 3 mm at 50 mm	
Angle of divergence	≤ 4 °	
Ambient light limit	≤ 40000 Lux	
<b>Indicators/operating means</b>		
Operation indicator	green LED , solid : Power on green LED , flashing: Short circuit/overload indication	
Function indicator	LED yellow, lights up with receiver lit	
<b>Electrical specifications</b>		
Operating voltage	$U_B$	10 ... 30 V DC , class 2
Ripple	max. 10 %	
No-load supply current	$I_0$	< 30 mA
Time delay before availability	$t_v$	≤ 100 ms
<b>Output</b>		
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	$U_d$	≤ 2.5 V DC
Switching frequency	$f$	500 Hz
Response time	≤ 1 ms	
<b>Compliance with standards and directives</b>		
Standard conformity		
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007	
<b>Approvals and certificates</b>		
UL approval	cULus	
<b>Ambient conditions</b>		
Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)	
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)	
<b>Mechanical specifications</b>		
Housing width	15 mm	
Housing height	34.5 mm	
Degree of protection	IP67	
Connection	150 mm PVC cable with 4-pin, M8 connector	
Material		
Housing	ABS	
Optical face	Acrylic	
Mass	approx. 23 g	

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**Connection Assignment**



○ = Light on  
● = Dark on

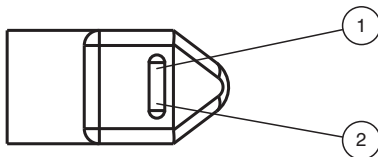
**Connection Assignment**



Wire colors in accordance with EN 60947-5-2

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

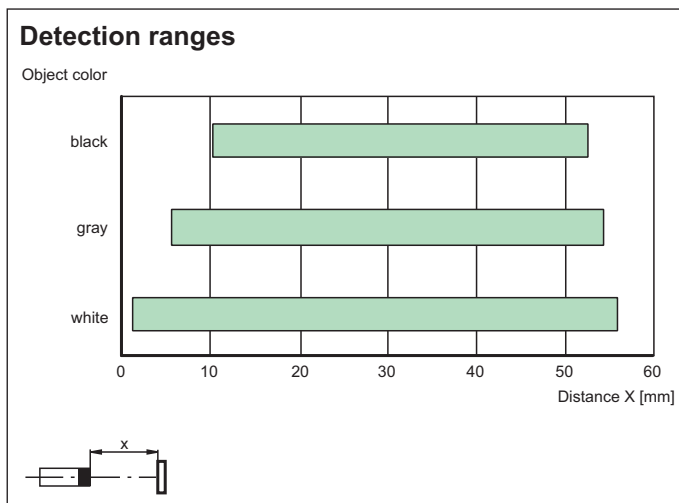
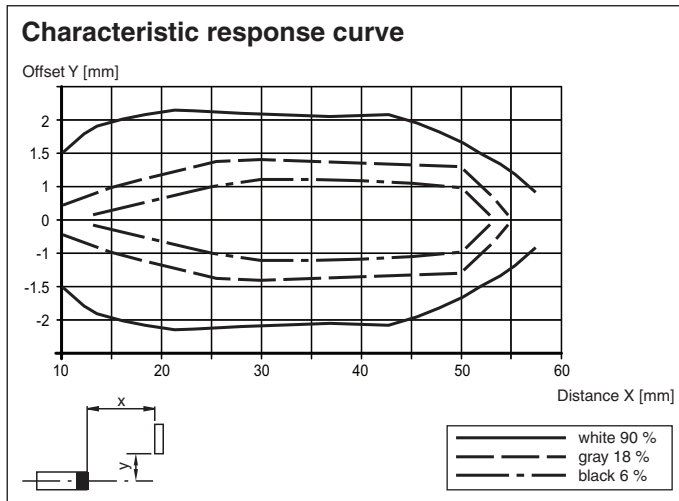
**Assembly**



1	Signal display	yellow
2	Operating display	green

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## Characteristic Curve



## Accessories

	<b>OMH-ML17</b>	Mounting bracket
	<b>OMH-ML17-1</b>	Mounting bracket
	<b>V31-GM-2M-PUR</b>	Female cordset single-ended, M8, 4-pin, PUR cable
	<b>V31-WM-2M-PUR</b>	Female cordset single-ended, M8, 4-pin, PUR cable

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## Accessories

Additional accessories can be found in the Internet.

## 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.

## Application

- Presence monitoring
- Target sensors
- Congestion monitoring
- Track loading
- Completeness checks