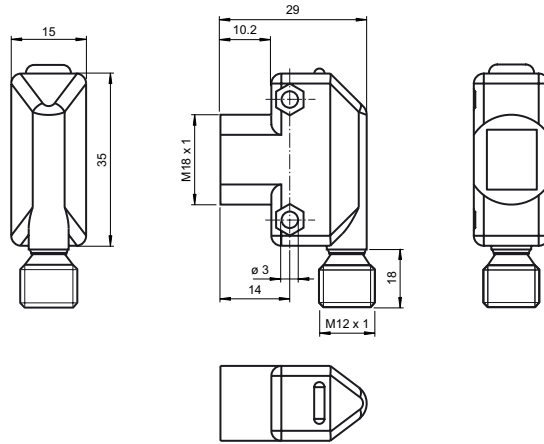## Dimensions

Model Number

ML17-8-H-50-RT/73/136

Background suppression sensor
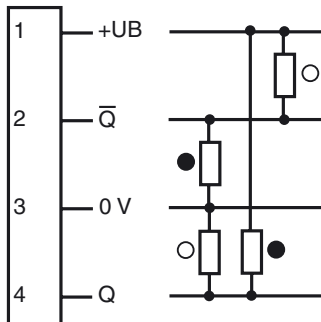with 4-pin, M12 x 1 connector

Features

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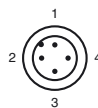- Tamper-proof version with no adjustments

Electrical connection

1	+UB
2	$\overline{Q}$
3	0 V
4	Q

○ = Light on
● = Dark on

Pinout

Wire colors in accordance with EN 60947-5-2

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

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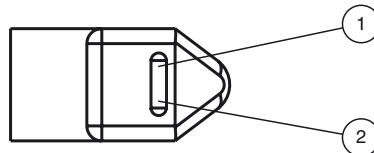
1	Signal display	yellow
2	Operating display	green

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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
Light type	modulated visible red light , 640 nm
Black/White difference (6 %/90 %)	$\leq$ 10 %
Diameter of the light spot	$\leq$ 3 mm at 50 mm
Angle of divergence	$\leq$ 4 °
Ambient light limit	$\leq$ 40000 Lux

Indicators/operating means

Operation indicator	green LED , solid : Power on
	green LED , flashing: Short circuit/overload indication
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_0	< 30 mA
Time delay before availability	t_v	$\leq$ 100 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	$\leq$ 2.5 V DC
Switching frequency	f	500 Hz
Response time		$\leq$ 1 ms

Conformity

|	
Product standard	EN 60947-5-2

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	4-pin , M12 x 1 connector
Material	
Housing	ABS
Optical face	Acrylic
Mass	approx. 9 g

Approvals and certificates

UL approval	cULus
CCC approval	CCC approval / marking not required for products rated $\leq$36 V

Curves/Diagrams

Characteristic response curve
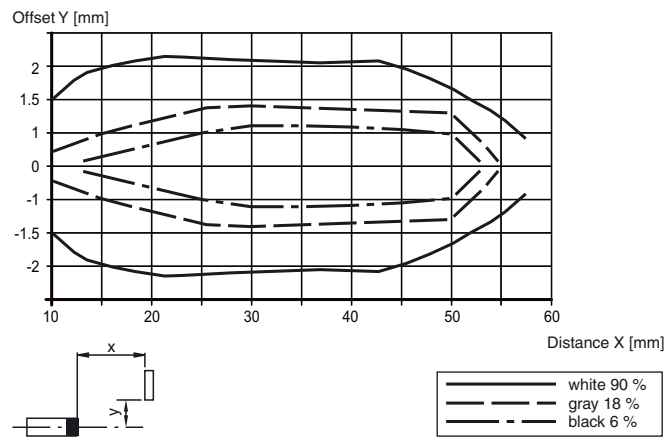
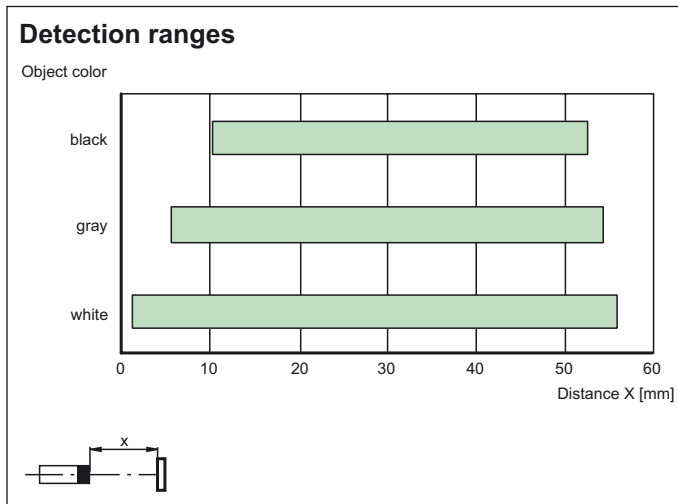## Accessories

OMH-ML17-EZ
Mounting bracket

OMH-ML17
Mounting bracket

OMH-ML17-1
Mounting bracket

V1-G-2M-PUR
Female cordset, M12, 4-pin, PUR cable

V1-W-2M-PUR
Female cordset, M12, 4-pin, PUR cable

Additional accessories can be found in the Internet.

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

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Detection ranges

Object color

Bar chart showing detection range by object color:
- black: approximately 10 to 53 mm
- gray: approximately 6 to 54 mm
- white: approximately 1 to 56 mm

X-axis: Distance X [mm], scale 0 to 60.

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

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