



Model Number

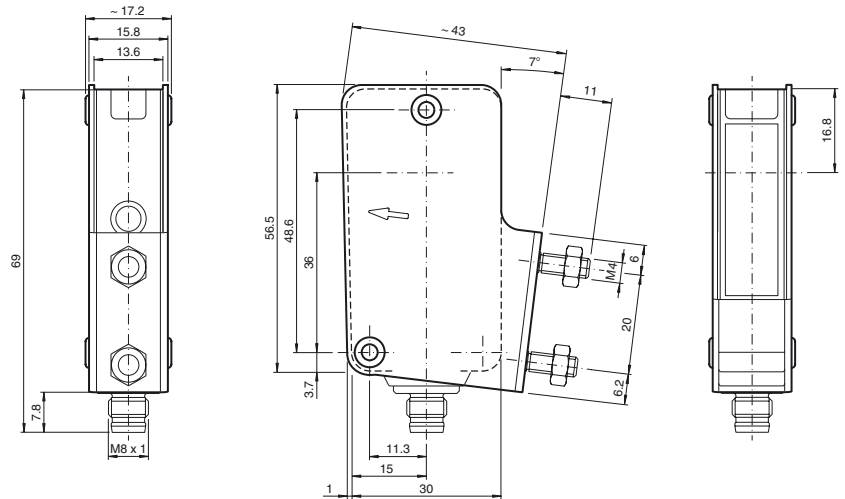
MLV41-8-HV-60-IR-5360

Background suppression sensor with 4-pin, M8 x 1 connector

Features

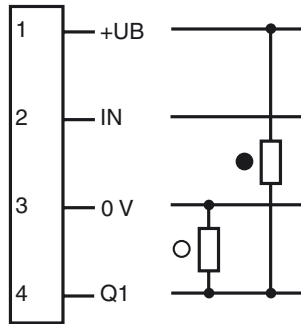
- Special device for paper web break control and printing machinery
- Sensing range 20 mm ... 60 mm
- Light scanner with foreground suppression 0 mm ... 15 mm and background suppression beyond 70 mm
- Minimal black-white difference
- Sturdy aluminum housing
- Degree of protection IP67

Dimensions



Electrical connection

Option:



- = Light on
- = Dark on

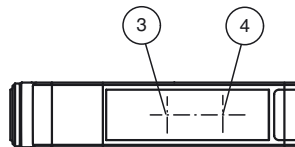
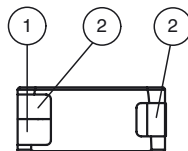
Pinout

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	Operating display	green
2	Signal display	yellow
4	Receiver	
5	Emitter	

Release date: 2019-11-27 14:12 Date of issue: 2019-11-27 242756_eng.xml

Technical data**General specifications**

Foreground suppression	0 ... 15 mm
Detection range	on black (6 %): 20 ... 60 mm fixed
Detection range min.	20 ... 60 mm
Detection range max.	16 ... 70 mm
Background suppression	starts from 70 mm
Light source	IREDD
Light type	modulated infrared light , 880 nm
Polarization filter	no
Black/White difference (6 %/90 %)	< 1 % at 60 mm
Diameter of the light spot	max. 6 mm at a distance of 70 mm
Angle of divergence	approx. 4 °
Ambient light limit	50000 Lux

Functional safety related parameters

MTTF _d	1260 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operation indicator	LED green, statically lit Power on , Undervoltage indicator: Green LED, pulsing (approx. 0.8 Hz) , short-circuit : LED green flashing (approx. 4 Hz)
Function indicator	2 LEDs yellow ON: object inside the scanning range OFF: object outside the scanning range

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I ₀	max. 25 mA

Input

Control input	- When the input is open: Sensor operates - the output is reset on a positive edge - the output is set at high level when an object is located in the detection range - there is no sensor function at low level, the output signal is stored until the next positive edge
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Output

Signal output	1 push-pull (4 in 1) output, short-circuit protected, reverse polarity protected	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Voltage drop	U _d	≤ 2.5 V DC
Switching frequency	f	250 Hz
Response time		2 ms

Conformity

Product standard	EN 60947-5-2
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Ambient conditions

Ambient temperature	0 ... 70 °C (32 ... 158 °F)
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)

Mechanical specifications

Housing width	31 mm
Housing height	56.5 mm
Housing depth	13.6 mm
Degree of protection	IP67
Connection	M8 x 1 connector, 4-pin
Material	
Housing	Aluminum , Delta-Seal coated
Optical face	glass pane
Connector	metal
Mass	50 g

Approvals and certificates

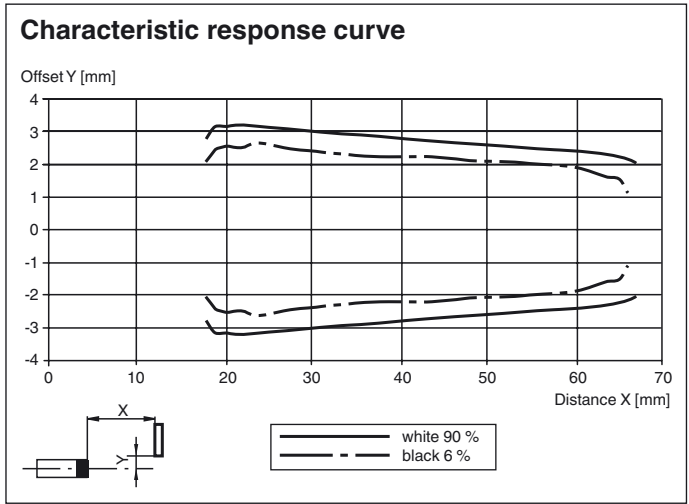
UL approval	cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)
CCC approval	CCC approval / marking not required for products rated ≤36 V

Accessories**OMH-MLV41-8-HV-U**

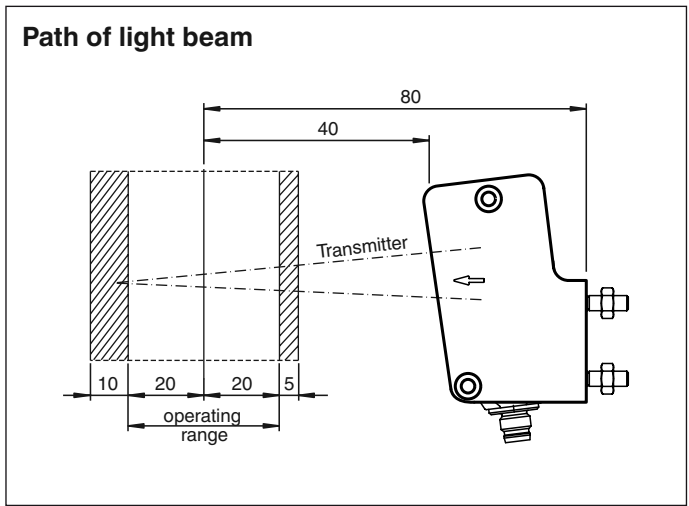
Mounting bracket

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

Curves/Diagrams



Curves/Diagrams



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