



Background suppression sensor MLV41-8-HV-60-IR-5360

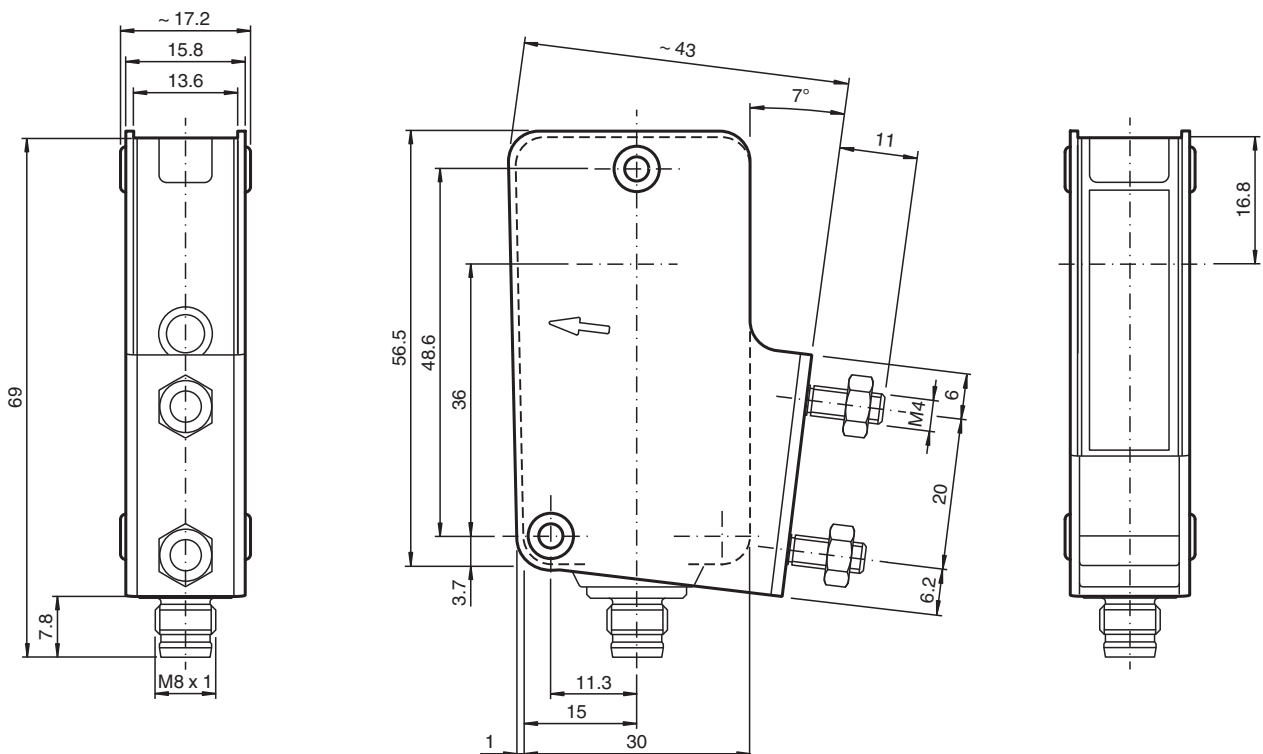


- Special device for paper web break control and printing machinery
- Sensing range 20 mm ... 60 mm
- Light scanner with foreground suppression 0 mm ... 15 mm and background suppression beyond 70 mm
- Minimal black-white difference
- Sturdy aluminum housing
- Degree of protection IP67

Background suppression sensor



Dimensions



Technical Data

General specifications

Foreground suppression	0 ... 15 mm
Detection range	on black (6 %): 20 ... 60 mm fixed

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

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Technical Data

Detection range min.		20 ... 60 mm
Detection range max.		16 ... 70 mm
Background suppression		starts from 70 mm
Light source		IRED
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
Opening angle		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
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
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
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

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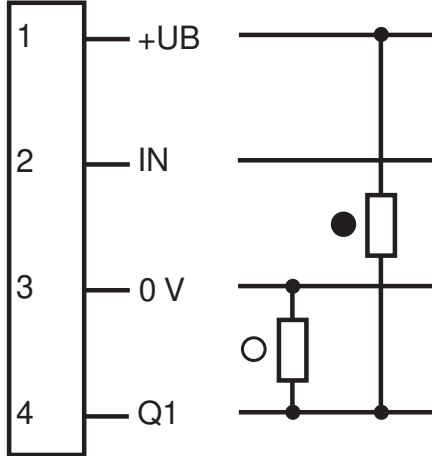
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Technical Data

Mass	50 g
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Connection Assignment

Option:



- = 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)

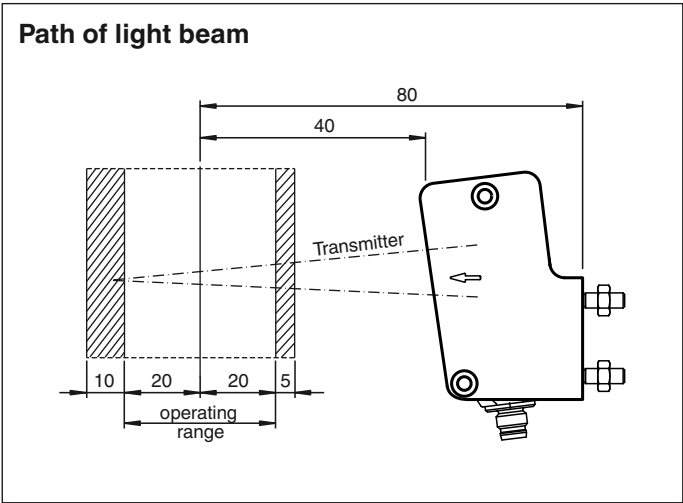
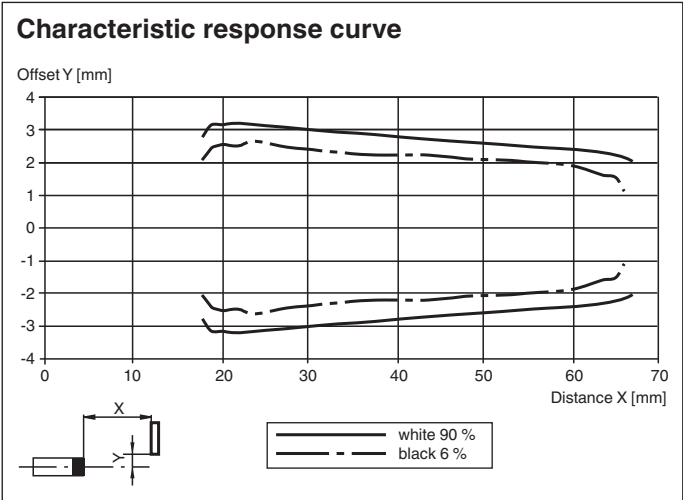
Assembly



1	Operating display	green
2	Signal display	yellow
4	Receiver	
5	Emitter	

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Characteristic Curve



Accessories

	OMH-MLV41-8-HV-U	Mounting bracket
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