



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

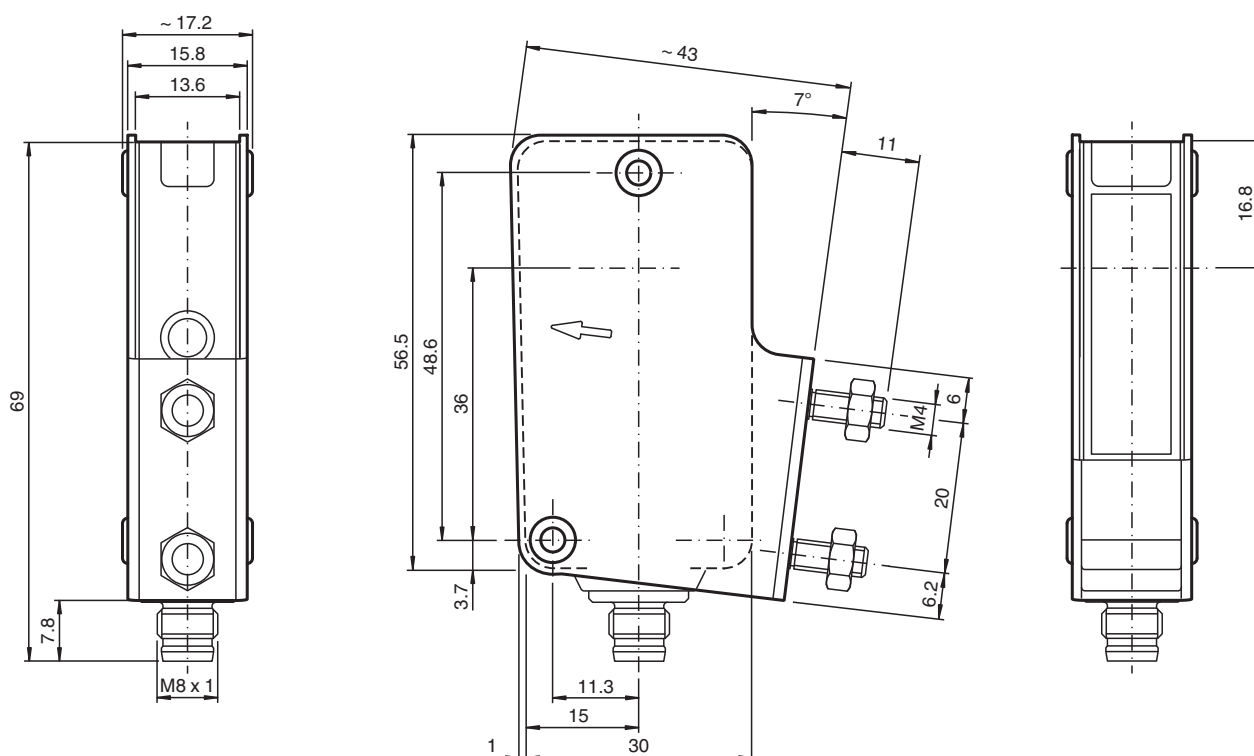


- Special device for paper web break control and printing machinery
- Sensing range 20 mm ... 60 mm
- Light scanner with foreground suppression 0 mm ... 15 mm and background suppression beyond 70 mm
- Minimal black-white difference
- Sturdy aluminum housing
- Degree of protection IP67

Background suppression sensor



Dimensions



Technical Data

General specifications

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

Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 242756_eng.pdf

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

PEPPERL+FUCHS

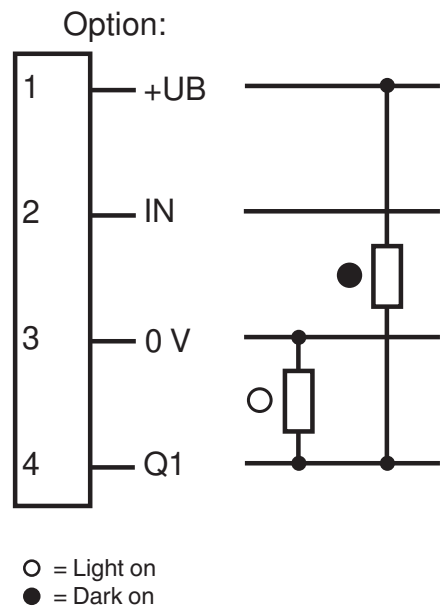
Technical Data

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

Technical Data

Mass	50 g
------	------

Connection Assignment



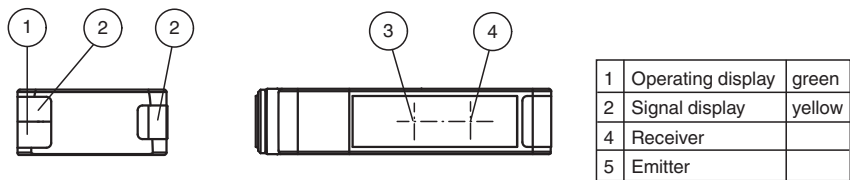
Connection Assignment



Wire colors in accordance with EN 60947-5-2

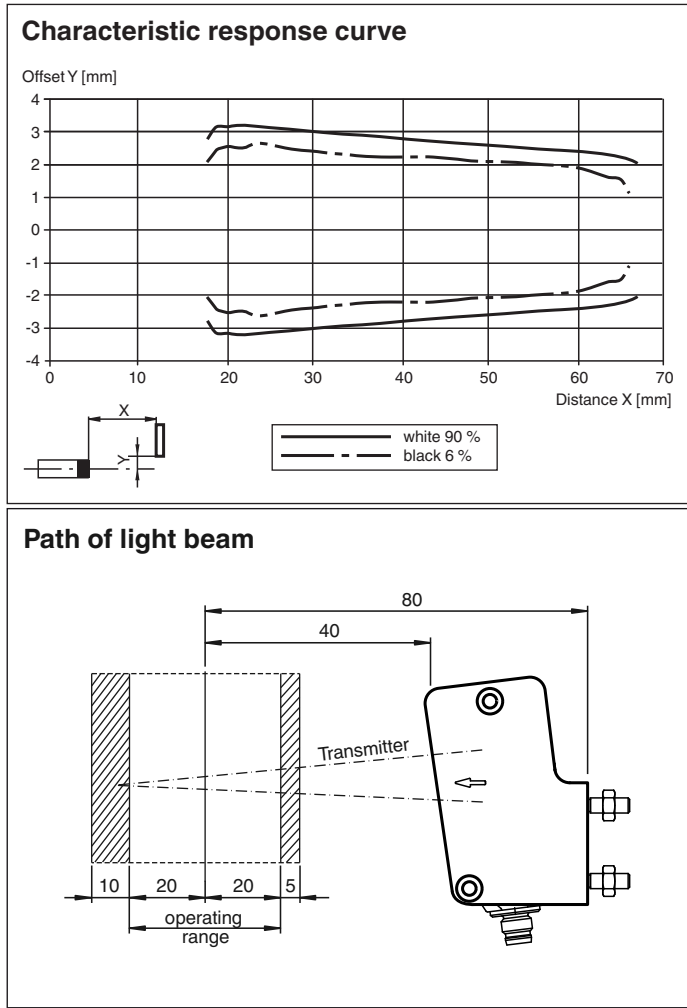
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Assembly



Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 242756_eng.pdf

Characteristic Curve



Accessories

	OMH-MLV41-8-HV-U	Mounting bracket
---	-------------------------	------------------