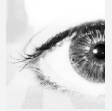




Stationary read device

OPC120P-F201-B17



- Reading on highly reflective surfaces with new polarization filter
- PROFINET interface with integrated switch
- Reads Data Matrix codes at high speeds of up to 10 m/s at 50 readings/s

Optical Print Inspector, reading of Data Matrix codes, PROFINET, speeds up to 10 m/sec, polarization filter

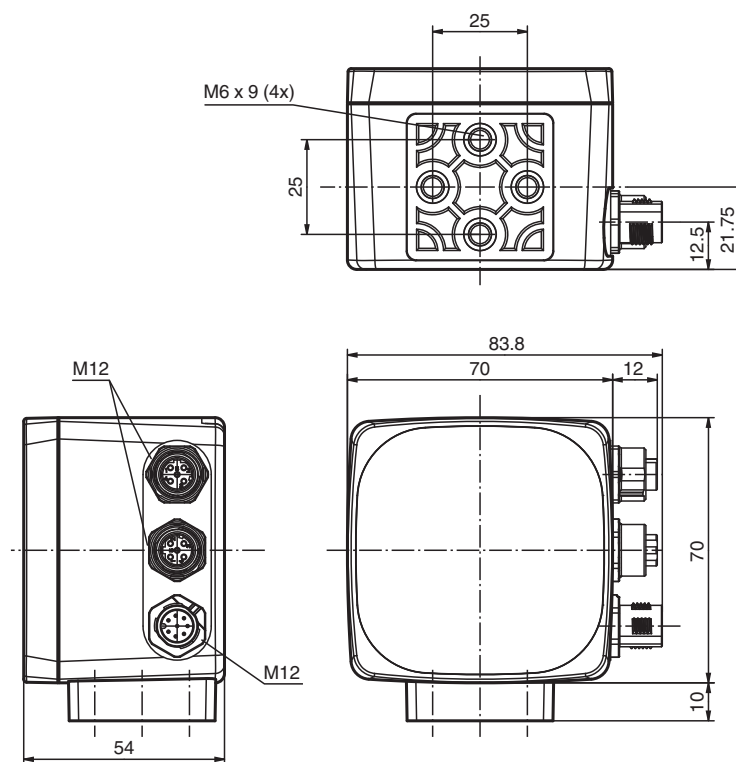


Function

With the Optical Print Inspector, Pepperl+Fuchs provides the solution to code reading and detection tasks in the field of printing, paper, and packaging.

Whether reading 1-D and 2-D codes at high speeds, reading reliably on reflective surfaces and at varying intervals, or performing various detection tasks — with the Optical Print Inspector, you always have the right Vision Sensor close at hand.

Dimensions



Technical Data

General specifications

Light type	Integrated LED lightning (white)
Polarization filter	yes
Symbologies	Data Matrix
Read distance	70 ... 180 mm Nominal distance: 120 mm
Reading field	Minimum read field: 28 mm x 45 mm Read field at nominal distance: 45 mm x 70 mm Maximum read field: 65 mm x 105 mm
Modul size	Minimum module size: 0.2 mm
Evaluation frequency	up to 50 Hz
Target velocity	triggered max. 10 m/s
Data Matrix	
Symbol size	rectangular up to 144 x 144 modules rectangular up to 16 x 48 modules
Data format	ASCII, C40, Text, X12, Edifact, Base 256 , all according to ISO 646
Orientation	omnidirectional

Nominal ratings

Camera	
Type	CMOS , Global shutter
Number of pixels	752 x 480 pixels
Gray scale	256
Image recording	real-time , Program-controlled or triggered externally

Functional safety related parameters

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

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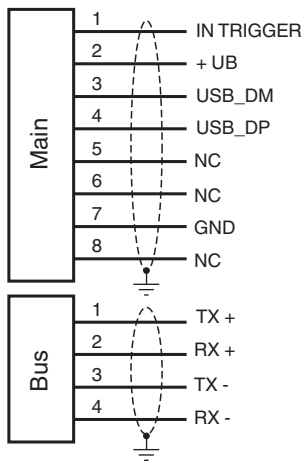
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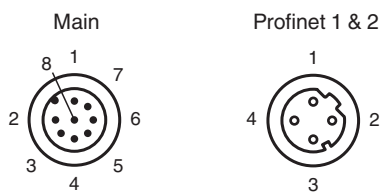
Technical Data

MTTF _d		40.5 a
Mission Time (T _M)		8 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
LED indicator		7 LEDs (communication, alignment aid, status information)
Electrical specifications		
Operating voltage	U _B	24 V DC ± 15% , PELV
No-load supply current	I ₀	max. 300 mA
Power consumption	P ₀	6 W
Interface		
Interface type		100 BASE-TX
Protocol		PROFINET IO Real-Time (RT) Conformance class A
Transfer rate		100 MBit/s
Interface 2		
Interface type		USB Service
Input		
Input voltage		to be applied externally 24 V ± 15% PELV
Number/Type		Trigger
Input current		approx. 10 mA at 24 V DC
Switching threshold		low: < 10 V, high: > 15 V
Cable length		max. 30 m
Output		
Switching type		PNP
Switching voltage		to be applied externally 24 V ± 15 % PELV
Switching current		100 mA each output
Cable length		max. 30 m
Compliance with standards and directives		
Standard conformity		
Noise immunity		EN 61326-1:2006
Emitted interference		EN 61000-6-4:2007/A1:2011
Degree of protection		EN 60529
Laser class		IEC 60825-1:2007
Approvals and certificates		
UL approval		cULus Listed, General Purpose, Class 2 Power Source, Type 1 enclosure
CCC approval		CCC approval / marking not required for products rated ≤36 V
Approvals		CE
Ambient conditions		
Ambient temperature		0 ... 45 °C (32 ... 113 °F)
Storage temperature		-20 ... 85 °C (-4 ... 185 °F)
Relative humidity		90 % , noncondensing
Mechanical specifications		
Degree of protection		IP65
Connection		8-pin, M12x1 connector, standard (supply+IO) , 4-pin, M12x1 socket, D-coded (LAN) , 4-pin, M12x1 socket, D-coded (LAN)
Material		
Housing		PC/ABS
Optical face		Plastic pane
Installation		4 x M6 threading
Mass		approx. 200 g

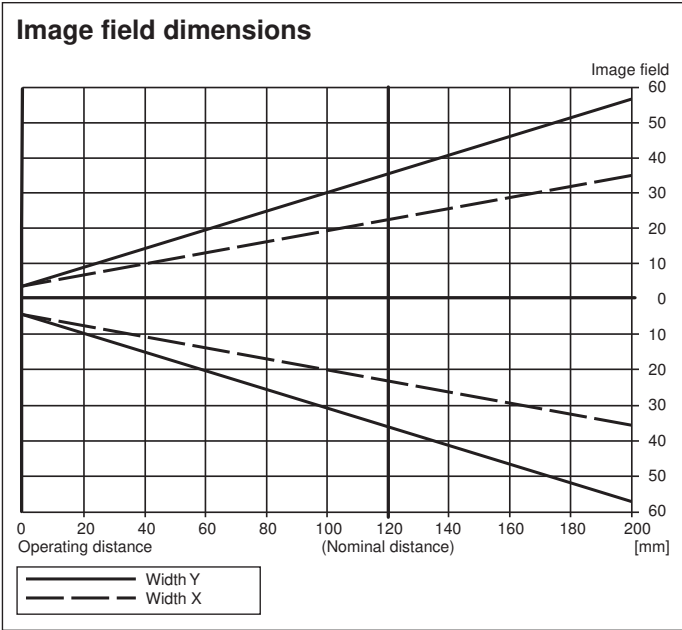
Connection



Connection Assignment

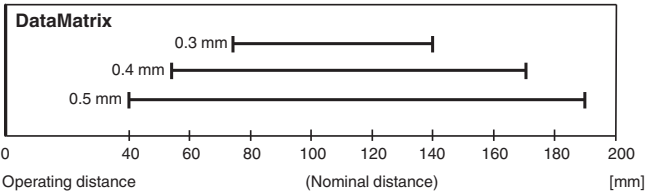


Characteristic Curve



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Read ranges



Accessories

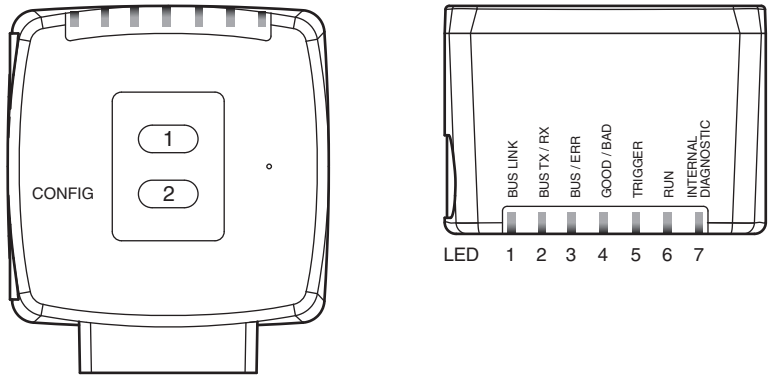
	V19-G-2M-PUR-ABG	Female cordset, M12, 8-pin, shielded, PUR cable
	V1SD-G-2M-PUR-ABG-V45-G	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e
	V1SD-G-2M-PUR-ABG-V45X-G	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e
	V19-G-ABG-PG9	Female connector, M12, 8-pin, shielded, field attachable
	V19-G-0,2M-YOPC-0,2M-V1S/V31-G	Y connection cable

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Indication

Indicators/Controls

The Optical Print Inspector is equipped with seven indicator LEDs for carrying out visual function checks and rapid diagnostics. In addition, the device is fitted with two buttons on the back of the unit.



LED	Color	Label	Description
1	Green	BUS Link	PROFINET connection activated
2	Yellow	BUS TX / RX	PROFINET data transfer
3	Red	BUS / ERR	PROFINET communication error
4	Green/red	GOOD / BAD	Reading successful/failed
5	Yellow	TRIGGER	Trigger sensor triggered
6	Yellow	RUN	Device ready for operation
7	Red/yellow/green	INTERNAL DIAGNOSTICS	Diagnostic message

Accessories

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

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