



## Stationary read device

### OPC120W-F200-R2



- Reads 1-D and 2-D codes at high speeds of up to 6 m/s at 30 readings/s
- High depth of focus
- Code quality index output
- Logo comparison
- Presence detection

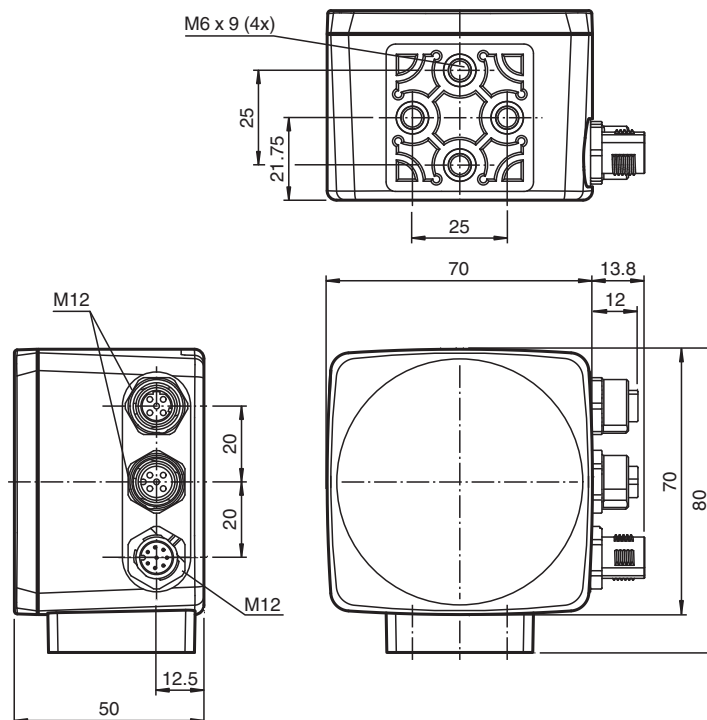
Optical Print Inspector, reads all common 1-D and 2-D codes, detects logos, Ethernet, RS 232, speeds of up to 6 m/s



### 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 1D and 2D codes at high speeds, at varying intervals, with reflective surfaces, with overly long barcodes or performing diverse detection tasks — with the Optical Print Inspector, you always have the right Vision Sensor at your disposal.

### Dimensions



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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

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## Technical Data

General specifications		
Light type		Integrated LED lightning (white)
Symbologies		Data Matrix, Code 39, Code 128, Int 2 of 5, EAN13, Pharmacode
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 30 Hz
Target velocity		triggered max. 6 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		
MTTF <sub>d</sub>		40.5 a
Mission Time (T <sub>M</sub> )		8 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green: Ready for operation
LED indication		for good/poor reading
Electrical specifications		
Operating voltage	U <sub>B</sub>	24 V DC ± 15% , PELV
No-load supply current	I <sub>0</sub>	max. 250 mA
Power consumption	P <sub>0</sub>	6 W
Interface		
Interface type		serial , RS 232
Transfer rate		max. 115.2 kBit/s
Cable length		max. 30 m
Interface 1		
Interface type		Ethernet
Protocol		TCP/IP
Transfer rate		100 MBit/s
Cable length		max. 30 m
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		
Number/Type		GOOD, BAD, Matchcode
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		

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<b>Standard conformity</b>	
Noise immunity	EN 61326-1
Emitted interference	EN 61000-6-4
Degree of protection	EN 60529
Laser class	IEC 60825-1:2007
<b>Approvals and certificates</b>	
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
<b>Ambient conditions</b>	
Ambient temperature	0 ... 45 °C (32 ... 113 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)
<b>Mechanical specifications</b>	
Degree of protection	IP67
Connection	8-pin, M12x1 connector, standard (supply+IO) , 5-pin, M12x1 socket, standard (RS 232) , 4-pin, M12x1 socket, standard (LAN)
<b>Material</b>	
Housing	PC/ABS
Installation	4 x M6 threading
Mass	approx. 160 g

## Connection

### RS 232



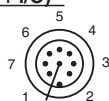
Pin	Signal
1	+UB
2	TX RS232
3	GND
4	RX RS232
5	NC

### LAN



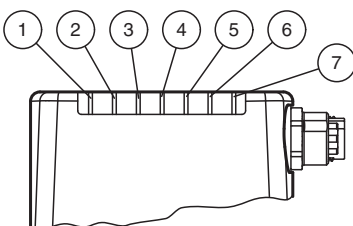
Pin	Signal
1	TX+ Ethernet
2	RX+ Ethernet
3	TX- Ethernet
4	RX- Ethernet

### (24 V DC + I/O)



Pin	Signal
1	IN Trigger
2	+UB
3	OUT Good
4	OUT Bad
5	IN 1
6	IN Encoder A
7	GND
8	OUT Matchcode

## Assembly

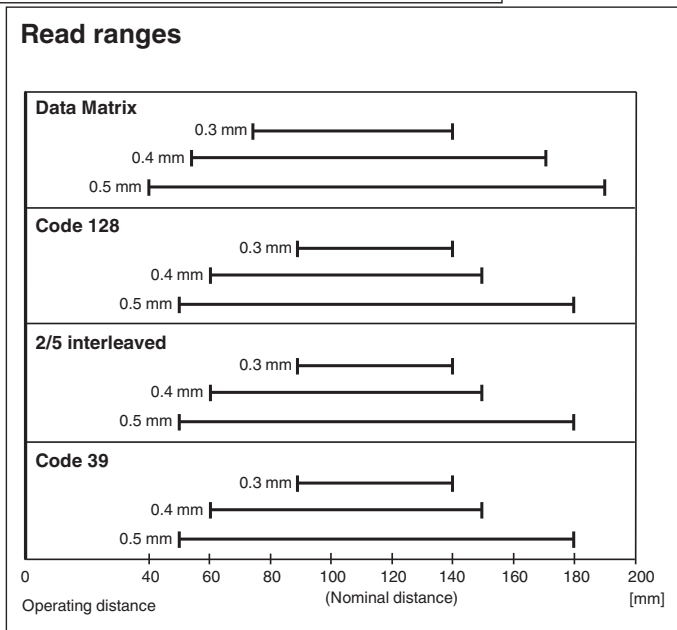
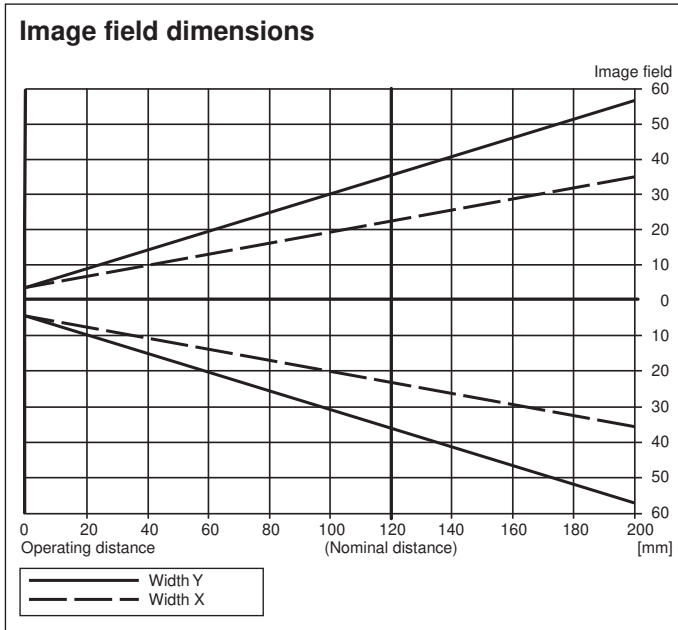


1	LED DIAG2	yellow
2	LED DIAG1	yellow
3	LED POWER	green
4	LED READY	yellow
5	LED BAD	yellow
6	LED GOOD	yellow
7	LED TRIGGER	yellow






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**Characteristic Curve**



**Accessories**

	<b>V19-G-2M-PUR-ABG</b>	Female cordset single-ended M12 straight A-coded, 8-pin, PUR cable grey, shielded
	<b>V15S-G-5M-PUR-ABG</b>	Male cordset single-ended M12 straight A-coded, 5-pin, PUR cable grey, shielded
	<b>V1SD-G-2M-PUR-ABG-V45-G</b>	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e
	<b>V19-G-ABG-PG9</b>	Female connector M12 straight A-coded 8-pin, for cable diameter 5 - 8 mm, shielded, field-attachable
	<b>PCV-MB1</b>	Mounting bracket for PCV* read head

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## Accessories



**V19-G-0,2M-YOPC-0,2M-  
V1S/V31-G**

Y connection cable M12 socket straight A-coded 8-pin to M12 plug / M8 socket straight A-coded 4-pin,  
3x PUR cable grey, shielded