



### Model Number

#### OPC70P-F201-R2-45

Optical Print Inspector, reads all common 1-D and 2-D codes, detects logos, Ethernet, RS 232, speeds of up to 10 m/s; polarization filter

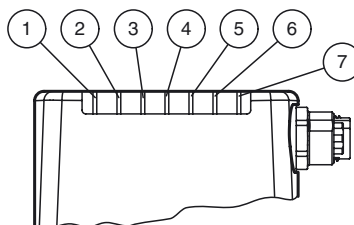
### Features

- Reads 1-D and 2-D codes at high speeds of up to 10 m/s at 100 readings/s
- High depth of focus
- Logo comparison
- Rotary encoder input
- Reliable on reflective surfaces through polarization filter technology
- Presence detection

### 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, with overly long barcodes or performing diverse detection tasks with the Optical Print Inspector, you always have the right Vision Sensor at your disposal.

### Indicating / Operating means



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

### Electrical connection

#### RS 232



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

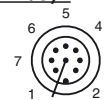
#### LAN



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

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



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

### Technical data

#### General specifications

Light type	Integrated LED lightning (white)
Polarization filter	yes
Symbologies	Data Matrix, Code 39, Code 128, Int 2 of 5, EAN13, Pharmaco
Read distance	45 ... 90 mm Nominal distance: 70 mm
Reading field	Minimum read field: 22 mm x 30 mm Read field at nominal distance: 28 mm x 45 mm Maximum read field: 35 mm x 55 mm
Modul size	Minimum module size: 0.15 mm
Evaluation frequency	up to 100 Hz
Target velocity	triggered ≤ 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
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	40.5 a
Mission Time (T <sub>M</sub> )	8 a
Diagnostic Coverage (DC)	0 %
<b>Indicators/operating means</b>	
Operation indicator	LED green: Ready for operation
LED indicator	for good/poor reading
<b>Electrical specifications</b>	
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
<b>Interface</b>	
Interface type	serial , RS 232
Transfer rate	max. 115.2 kBit/s
Cable length	max. 30 m
<b>Interface 1</b>	
Interface type	Ethernet
Protocol	TCP/IP
Transfer rate	100 MBit/s
Cable length	max. 30 m
<b>Input</b>	
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
<b>Output</b>	
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
<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
<b>Compliance with standards and directives</b>	
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
<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

**Accessories****V19-G-2M-PUR-ABG**

Female cordset, M12, 8-pin, shielded, PUR cable

**V15S-G-5M-PUR-ABG**

Male cordset, M12, 5-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**

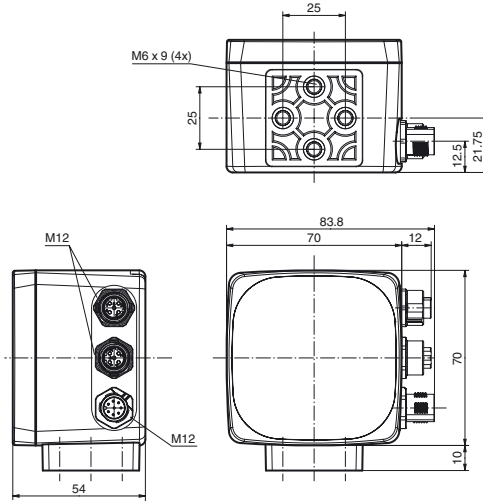
Female connector, M12, 8-pin, shielded, field attachable

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

Y connection cable

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

Dimensions



Release date: 2016-05-04 08:56 Date of issue: 2016-05-04 264852\_eng.xml

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

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