



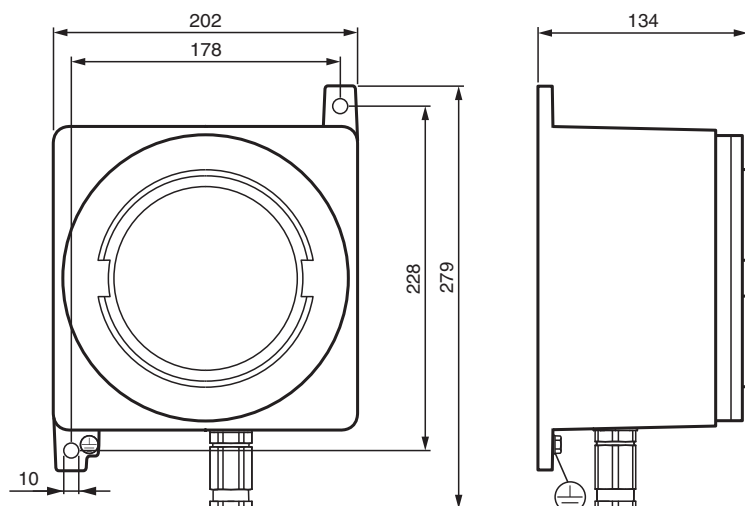
Optical reading head PXV100-F200-R4-V19-Ex

- Explosion protection for use in Zone 1, Zone 2, Zone 21 and Zone 22
- RS-485 interface
- Non-contact positioning on Data Matrix code tape
- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- High resolution and precise positioning, especially for facilities with curves and switch points as well as inclines and declines.
- Travel ranges up to 10 km

Optical reading head for hazardous area



Dimensions



Technical Data

General specifications

Passage speed	v	≤ 8 m/s
Measuring range		max. 10000 m
Light type		Integrated LED lightning (red)
Scan rate		40 s ⁻¹
Read distance		90mm (from outer housing window)
Depth of focus		± 50 mm
Reading field		115 mm x 73 mm
Ambient light limit		100000 Lux
Accuracy		± 0.2 mm

Nominal ratings

Camera	
Type	CMOS , Global shutter
Processor	
Clock pulse frequency	600 MHz
Speed of computation	4800 MIPS

Functional safety related parameters

Release date: 2020-07-16 Date of issue: 2020-07-16 Filename: 70114073_eng.pdf

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

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Technical Data

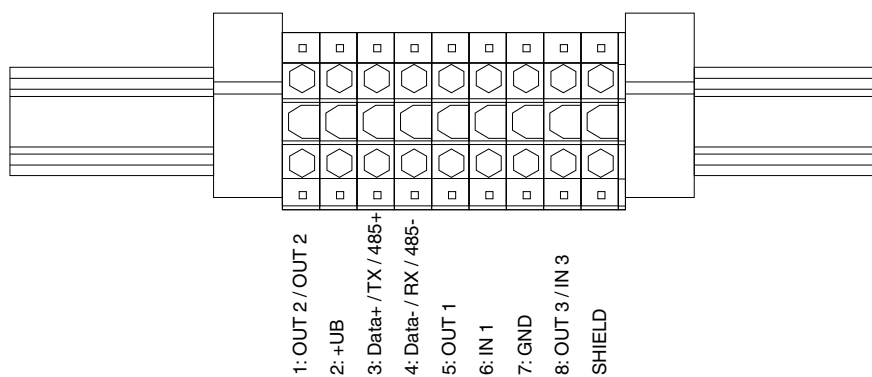
MTTF _d	100 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Indicators/operating means	
LED indication	7 LEDs (communication, alignment aid, status information)
Electrical specifications	
Operating voltage	U _B 15 ... 30 V DC , PELV
No-load supply current	I ₀ max. 200 mA
Power consumption	P ₀ 3 W
Interface	
Interface type	RS 485 interface
Data output code	binary code
Transfer rate	38400 ... 230400 Bit/s
Termination	Switchable terminal resistor
Query cycle time	≥ 10 ms
Interface 2	
Interface type	USB Service
Input	
Input type	1 to 3 functional inputs , programmable
Input impedance	≥ 27 kΩ
Output	
Output type	1 to 3 switch outputs , PNP , programmable , short-circuit protected
Switching voltage	Operating voltage
Switching current	150 mA each output
Standard conformity	
Emitted interference	EN 61000-6-4:2007+A1:2011
Noise immunity	EN 61000-6-2:2005
Approvals and certificates	
IECEX approval	IECEX INE 14.0042X
ATEX approval	INERIS 14 ATEX 0035X Device type: GUBW1.D.OS-PXV100-F200-R4-V19
Marking	Ⓔ II 2 GD Ex db IIC T6 Gb Ex tb IIIC T85°C Db
Ambient conditions	
Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Mechanical specifications	
Connection type	Connection terminals, max. conductor cross-section 2.5 mm ²
Conductor cross section	0.13 ... 2.5 mm ²
Cable gland	3 ... 8.5 mm
Enclosure cover	threaded round cover
Cover fixing	flamepath thread
Cover seal	none, O-ring for IP66/67
Housing width	202 mm
Housing height	279 mm
Housing depth	134 mm
Degree of protection	IP66 (IP66/67 with O-ring)
Material	
Enclosure	aluminum alloy
Glass	thermo-resistant tempered glass
Finish	epoxy coated RAL 7005 (grey)
O-Ring	silicone
Mass	approx. 7 kg
Grounding	M6 external grounding points

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Connection Assignment



Matching system components

	PXV*-CA25-*	Data Matrix code tape
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Accessories

	PCV-USB-RS485-Converter Set	USB to RS 485 interface converter
	PCV-KBL-V19-STR-RS485	Cable unit with power supply for USB / RS-485 interface converter
	Vision Configurator	Operating software for camera-based sensors
	V19S-G-BK5M-PUR-U/ABG	Cable connector, M12, 8-pin, PUR cable, shielded
	V19S-G-BK10M-PUR-U/ABG	Cable connector, M12, 8-pin, PUR cable, shielded
	PXV-CM25-*.-*-SET	Event Marker for PXV system

Accessories

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

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