



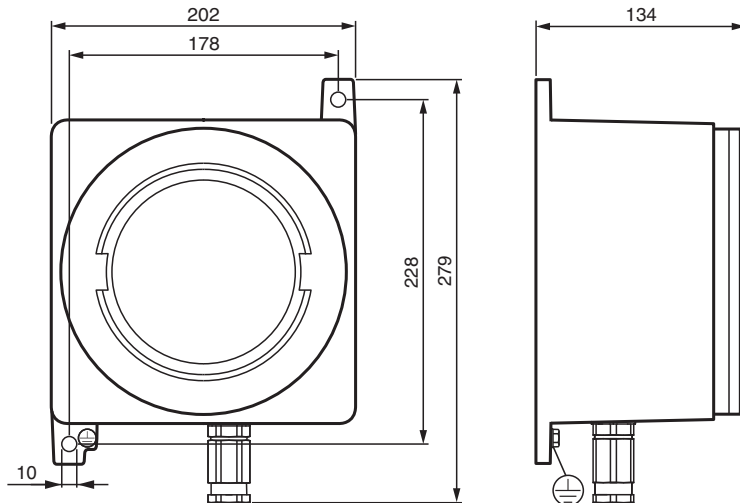
Optical reading head PXV100S-F200-SSI-Ex

- Explosion protection for use in Zone 1, Zone 2, Zone 21 and Zone 22
- SSI 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 | | 100 s ⁻¹ |
| Read distance | | 90mm (from outer housing window) |
| Depth of focus | | + 20 mm / - 40 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 |
| Digital resolution | | 32 Bit |

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

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PEPPERL+FUCHS

Technical Data

| | | |
|---|----------------|--|
| Functional safety related parameters | | |
| MTTF _d | | 87 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 1 | | |
| Interface type | | SSI interface |
| Data output code | | Gray code, binary code , programmable |
| Monoflop time | | 10 μs |
| Clock frequency | | 100 ... 1000 kHz |
| Query cycle time | | ≥ 3 ms |
| Pause time | tp | ≥ 20 μs |
| Double check possible | | when tp ≤ 10 μs |
| Interface 2 | | |
| Interface type | | USB Service (serial comport) |
| Protocol | | 8E1 |
| Transfer rate | | 38.4 ... 460.8 kBit/s |
| Input | | |
| Input type | | 1 to 3 functional inputs , programmable |
| Input impedance | | ≥ 27 kΩ |
| Output | | |
| Output type | | 1 to 2 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-PXV100S-F200-SSI-V1 |
| 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 |
| 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 |

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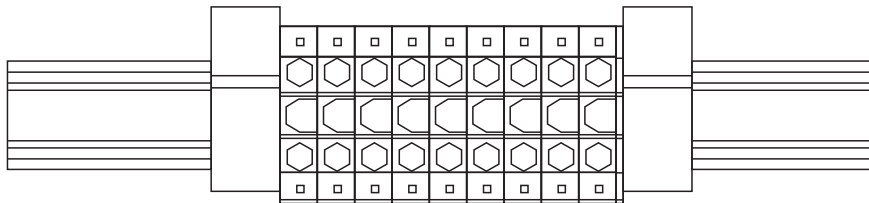
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PEPPERL+FUCHS

Technical Data

| | |
|------------|------------------------------|
| Mass | approx. 7 kg |
| Dimensions | |
| Height | 279 mm |
| Width | 202 mm |
| Depth | 134 mm |
| Grounding | M6 external grounding points |

Connection Assignment



- 1: OUT 2 / IN 2
- 2: +UB
- 3: Data+
- 4: Data-
- 5: CLK+
- 6: CLK-
- 7: GND
- 8: OUT 3 / IN 3
- SHIELD