



Optical reading head

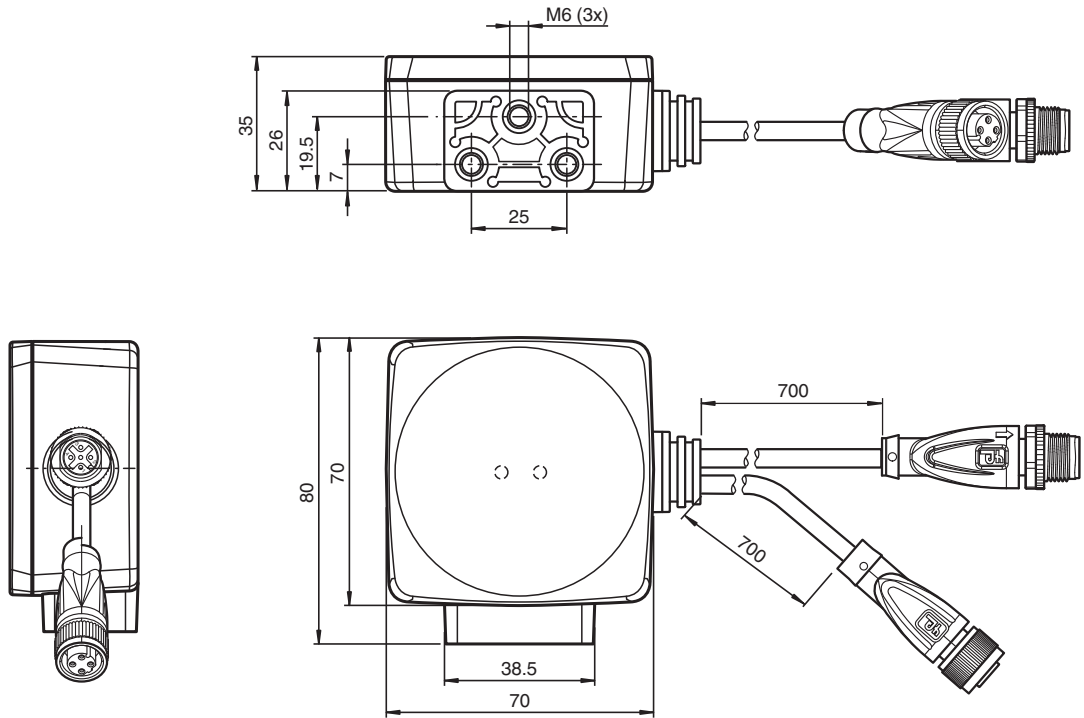
PGV100RS-F213-B12-0.7M-V1

- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- TCP/IP protocol over ethernet
- Non-contact positioning on Data Matrix code tape
- Visible red light
- Fixed cable
- Timestamp of the image capture
- Synchronization option

Read head for incident light positioning system



Dimensions



Technical Data

General specifications

| | | |
|------------------|---|--------------------------------|
| Passage speed | v | ≤ 8 m/s |
| Measuring length | | max. 10000 m |
| Light type | | Integrated LED lightning (red) |
| Scan rate | | 100 s ⁻¹ |
| Latency | | 20 ms |
| Read distance | | 100 mm |
| Depth of focus | | ± 30 mm |
| Reading field | | 120 mm x 80 mm |
| Resolution | | 0.2 mm |

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Technical Data

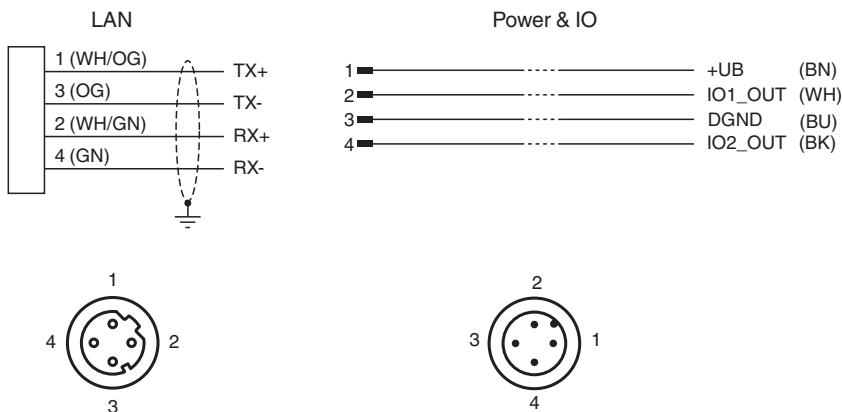
| | | |
|---|----------------|--|
| Ambient light limit | | 100000 Lux |
| Accuracy | | ± 0.4 mm |
| Nominal ratings | | |
| Camera | | |
| Type | | CMOS , Global shutter |
| Processor | | |
| Clock pulse frequency | | 600 MHz |
| Speed of computation | | 4800 MIPS |
| Digital resolution | | 32 Bit |
| Functional safety related parameters | | |
| MTTF _d | | 144 a |
| MTBF | | 72 a |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Indicators/operating means | | |
| LED indication | | 2 LEDs |
| Electrical specifications | | |
| Operating voltage | U _B | 15 ... 30 V DC , PELV |
| No-load supply current | I ₀ | max. 200 mA |
| Power consumption | P ₀ | max. 4.8 W |
| Interface | | |
| Interface type | | Ethernet |
| Protocol | | TCP/IP |
| Transfer rate | | max. 100 MBit/s |
| Dielectric strength | | ± 16 V |
| Output | | |
| Output type | | 2 switch outputs, PNP |
| Switching voltage | | Operating voltage |
| Switching current | | max. 100 mA |
| Output resistance | | 30 kΩ |
| Conformity | | |
| Shock resistance | | EN 60068-2-27:2009 |
| Vibration resistance | | EN 60068-2-6:2008 |
| Emitted interference | | EN 61000-6-4:2007+A1:2011 |
| Noise immunity | | EN 61000-6-2:2005 |
| Photobiological safety | | exempt group according to EN 62471:2008 |
| Standard conformity | | |
| Emitted interference | | EN 61000-6-4:2007+A1:2011 |
| Noise immunity | | EN 61000-6-2:2005+AC:2005 |
| Shock resistance | | EN 60068-2-27:2009 |
| Vibration resistance | | EN 60068-2-6:2008 |
| Approvals and certificates | | |
| CE conformity | | CE |
| UKCA conformity | | UKCA |
| UL approval | | cULus Listed, Class 2 Power Source, Type 1 enclosure |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Operating temperature | | 0 ... 60 °C (32 ... 140 °F) , -20 ... 60 °C (-4 ... 140 °F) (noncondensing; prevent icing on the lens!) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Relative humidity | | 90 % , noncondensing |
| Mechanical specifications | | |
| Connection type | | 1 x fixed cable with free cable end for supply voltage 1 x fixed cable with Ethernet socket, M12 x 1, 4-pin, D-coded |

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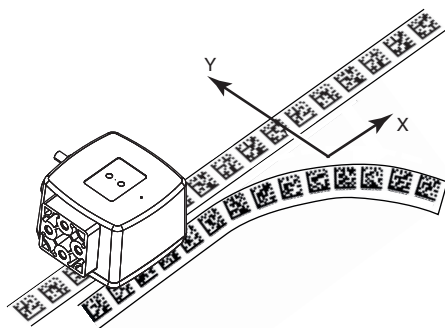
Technical Data

| | | |
|-------------------------|---|-----------------------|
| Degree of protection | | IP54 |
| Material | | |
| Housing | | PC/ABS |
| Cable | | PUR |
| Cable | | |
| Sheath diameter | | 4.8 mm |
| Strain relief | | 60 N |
| Length | L | 0.7 m |
| Mass | | approx. 200 g |
| Dimensions | | |
| Height | | 70 mm |
| Width | | 70 mm |
| Depth | | 35 mm |
| Factory settings | | |
| X resolution (protocol) | | 0.1 mm |
| Y resolution (protocol) | | 0.1 mm |
| Angle resolution | | 0.1 ° |
| Function input/output 2 | | Illumination controll |
| Function input/output 3 | | Sync out |

Connection Assignment

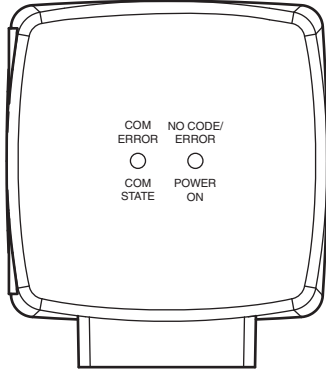


Function Principle



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