



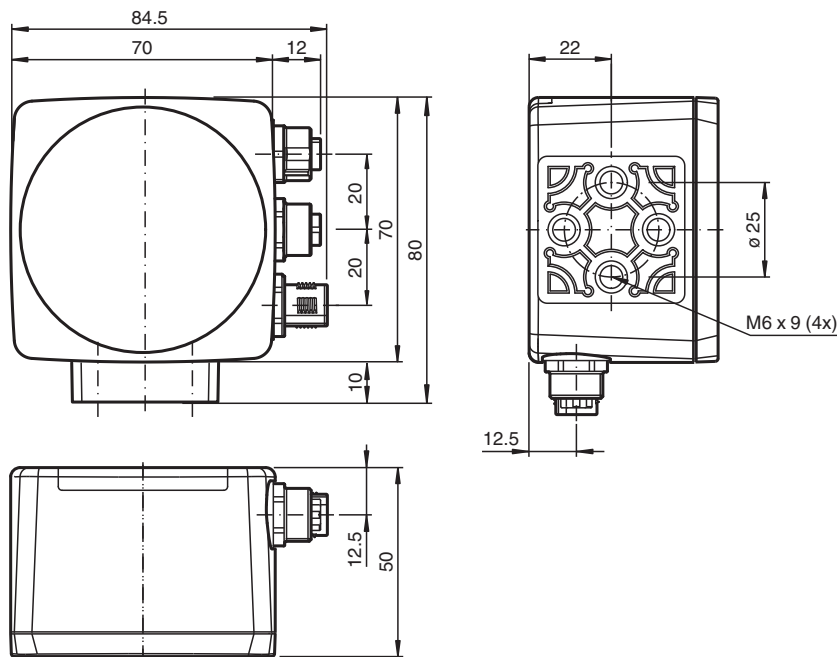
Optical reading head PGV100IQ-F200-B21-V1D

- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- Non-contact positioning on Data Matrix code tape
- Noncontact positioning with Data Matrix TAGs
- Reading of Data Matrix control codes
- Infrared light
- EtherCAT interface
- Output of code quality

Read head for incident light positioning system



Dimensions



Technical Data

General specifications

Passage speed	v	≤ 8 m/s
Measuring length		max. 100000 m
Light type		Integrated LED lightning , infrared
Scan rate		40 s ⁻¹
Latency		50 ms
Read distance		100 mm
Depth of focus		± 20 mm
Reading field		120 mm x 80 mm
Ambient light limit		100000 Lux
Accuracy		± 0.2 mm

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

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PEPPERL+FUCHS

Technical Data

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		82 a
Mission Time (T _M)		10 a
Diagnostic Coverage (DC)		0 %

Indicators/operating means

LED indication		7 LEDs (communication, alignment aid, status information)
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Electrical specifications

Operating voltage	U _B	24 V DC ± 15% , PELV
No-load supply current	I ₀	max. 400 mA
Power consumption	P ₀	6 W

Interface

Interface type		100 BASE-TX
Protocol		EtherCAT®
Transfer rate		100 MBit/s

Input

Input type		1 function input 0-level: -U _B or unwired 1-level: +8 V ... +U _B , programmable
Input impedance		≥ 27 kΩ

Output

Output type		1 to 3 switch outputs , PNP , programmable , short-circuit protected
Switching voltage		Operating voltage
Switching current		100 mA each output

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

Approvals and certificates

CE conformity		CE
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		-20 ... 85 °C (-4 ... 185 °F)
Relative humidity		90 % , noncondensing

Mechanical specifications

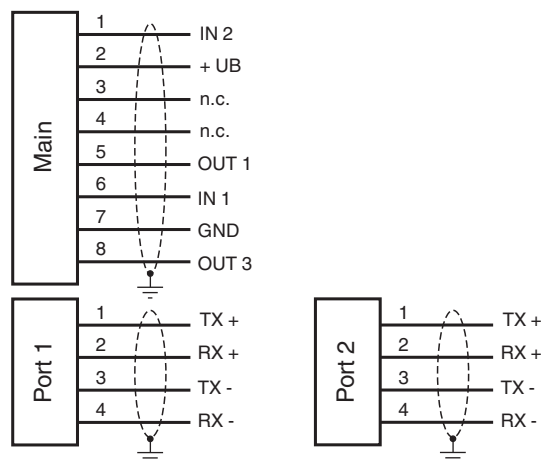
Connection type		8-pin, M12x1 connector, standard (supply+IO) 4-pin, M12x1 socket, D-coded (LAN) 4-pin, M12x1 socket, D-coded (LAN)
Degree of protection		IP67
Material		
Housing		PC/ABS
Mass		approx. 200 g
Dimensions		
Height		70 mm

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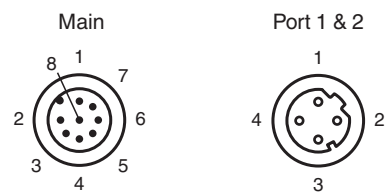
Technical Data

Width	70 mm
Depth	50 mm
Factory settings	
X resolution (protocol)	0.1 mm
Y resolution (protocol)	0.1 mm
Speed resolution (protocol)	0.1 m/s
Angle resolution	0.1 °
Extrapolation	On

Connection



Connection Assignment



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Indication

