



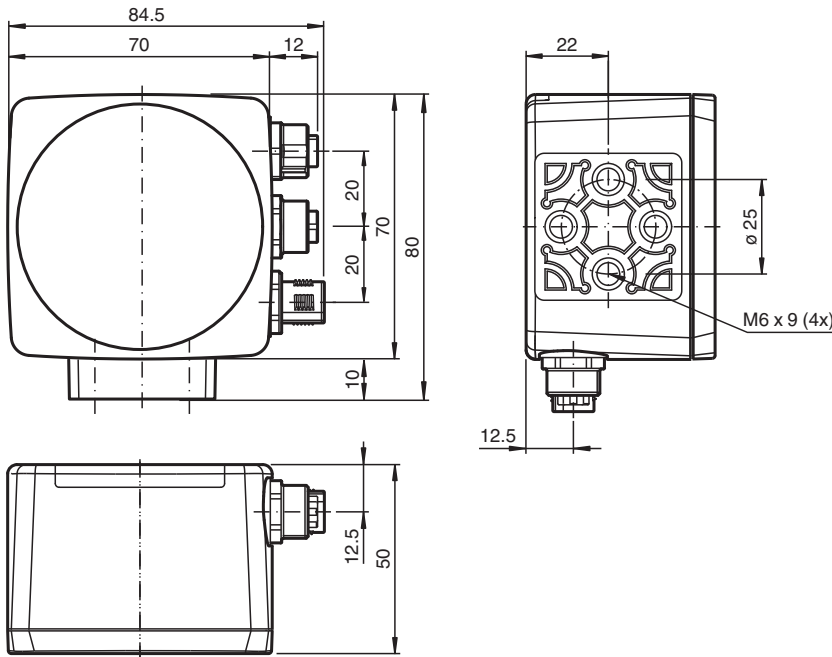
# Optical reading head PGV100IQ-F200-B21-V1D

- 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 <sup>-1</sup>
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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## Technical Data

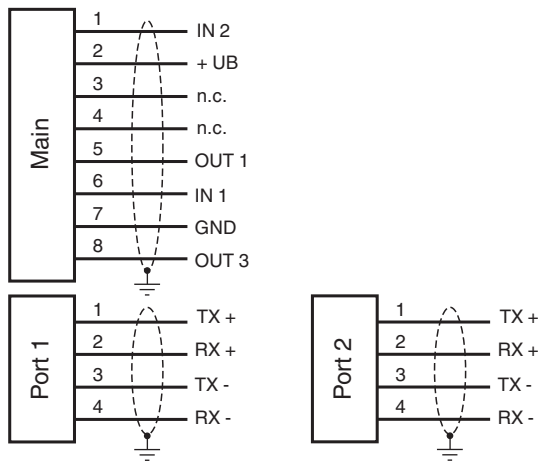
<b>Nominal ratings</b>			
Camera			
Type		CMOS , Global shutter	
Processor			
Clock pulse frequency		600 MHz	
Speed of computation		4800 MIPS	
Digital resolution		32 Bit	
<b>Functional safety related parameters</b>			
MTTF <sub>d</sub>		82 a	
Mission Time (T <sub>M</sub> )		10 a	
Diagnostic Coverage (DC)		0 %	
<b>Indicators/operating means</b>			
LED indication		7 LEDs (communication, alignment aid, status information)	
<b>Electrical specifications</b>			
Operating voltage	U <sub>B</sub>	24 V DC ± 15% , PELV	
No-load supply current	I <sub>0</sub>	max. 400 mA	
Power consumption	P <sub>0</sub>	6 W	
<b>Interface</b>			
Interface type		100 BASE-TX	
Protocol		EtherCAT®	
Transfer rate		100 MBit/s	
<b>Input</b>			
Input type		1 function input 0-level: -U <sub>B</sub> or unwired 1-level: +8 V ... +U <sub>B</sub> , programmable	
Input impedance		≥ 27 kΩ	
<b>Output</b>			
Output type		1 to 3 switch outputs , PNP , programmable , short-circuit protected	
Switching voltage		Operating voltage	
Switching current		100 mA each output	
<b>Conformity</b>			
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	
<b>Approvals and certificates</b>			
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	
<b>Ambient conditions</b>			
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	
<b>Mechanical specifications</b>			
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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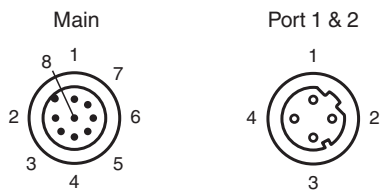
## Technical Data

Width	70 mm
Depth	50 mm
<b>Factory settings</b>	
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



Indication

