



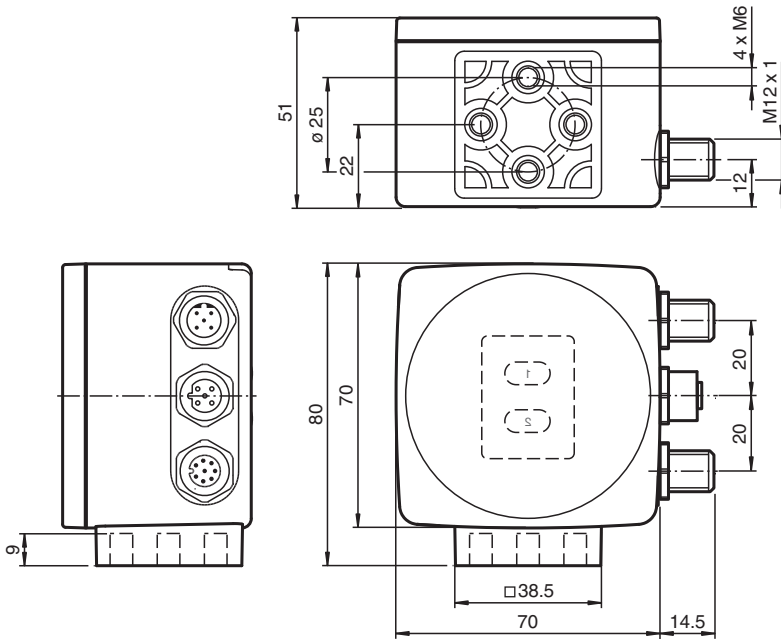
# Optical reading head PGV150I-F200-B16-V15

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

Read head for incident light positioning system



## Dimensions



## Technical Data

### General specifications

Passage speed	v	≤ 8 m/s
Measuring range		max. 10000 m
Light type		Integrated LED lightning , infrared
Scan rate		40 s <sup>-1</sup>
Latency		50 ms
Read distance		150 mm
Depth of focus		± 30 mm
Reading field		170 mm x 105 mm
Ambient light limit		100000 Lux
Accuracy		± 0.2 mm

### Nominal ratings

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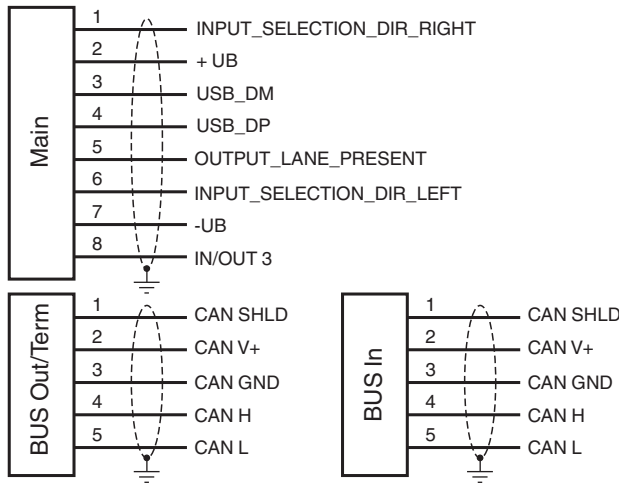
## Technical Data

<b>Camera</b>			
Type	CMOS , Global shutter		
<b>Processor</b>			
Clock pulse frequency	600 MHz		
Speed of computation	4800 MIPS		
Digital resolution	32 Bit		
<b>Functional safety related parameters</b>			
MTTF <sub>d</sub>	83 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	CANopen , galvanically isolated		
Data output code	binary code		
Transfer rate	max. 1 MBit/s		
<b>Interface 2</b>			
Interface type	USB Service		
<b>Input</b>			
Input type	1 funtion 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 , programmable , short-circuit protected		
Switching voltage	Operating voltage		
Switching current	150 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!)		
Relative humidity	90 % , noncondensing		
<b>Mechanical specifications</b>			
Connection type	8-pin, M12x1 connector, standard (supply+IO) 5-pin, M12x1 socket, A-coded (bus out/termination) 5-pin, M12x1 connector, A-coded (bus in)		
Degree of protection	IP67		
<b>Material</b>			
Housing	PC/ABS		
Mass	approx. 200 g		
Dimensions			
Height	70 mm		

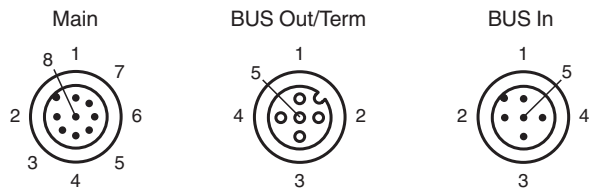
## Technical Data

Width	70 mm
Depth	50 mm
<b>Factory settings</b>	
X resolution (protocol)	1 mm
Y resolution (protocol)	1 mm
Speed resolution (protocol)	0.1 m/s
Angle resolution	0.1 °
Baud rate	500 kBit/s
Extrapolation	On
Read head address	3

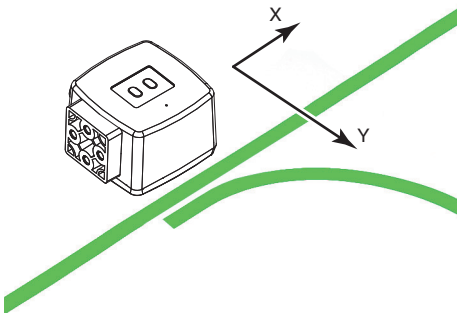
## Connection



## Connection Assignment



## Function Principle



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## Function Principle

