



# Optical reading head

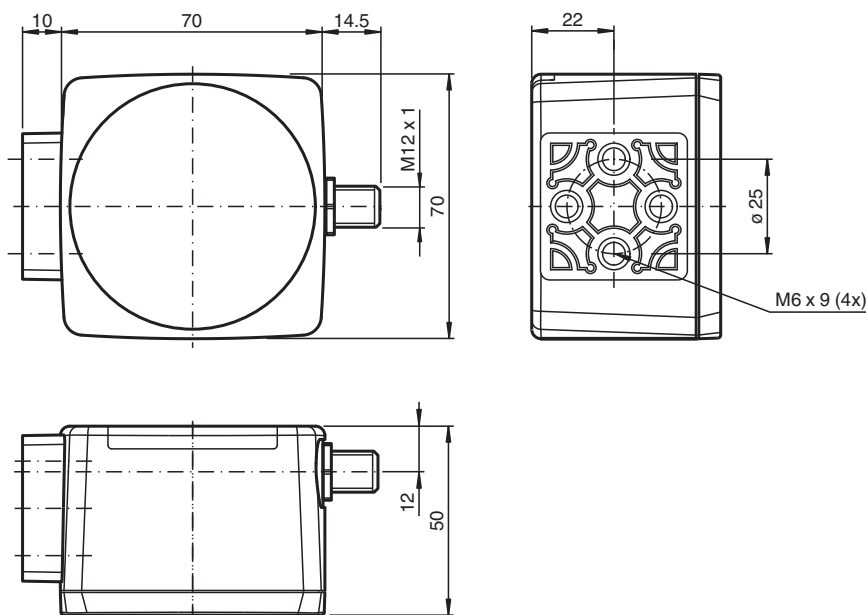
## PGV150I-F200A-R4-V19

- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- RS-485 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

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

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## Technical Data

Accuracy		± 0.2 mm
<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>		81 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>	15 ... 30 V DC , PELV
No-load supply current	I <sub>0</sub>	max. 200 mA
Power consumption	P <sub>0</sub>	3 W
<b>Interface</b>		
Interface type		RS 485 interface
Data output code		binary code
Transfer rate		38400 ... 230400 Bit/s
Termination		Switchable terminal resistor
Query cycle time		≥ 10 ms
<b>Input</b>		
Input type		1 to 3 functional inputs , 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		150 mA each output
<b>Standard conformity</b>		
Emitted interference		EN 61000-6-4:2007+A1:2011
Noise immunity		EN 61000-6-2:2005
Shock resistance		EN 60068-2-27:2009
Vibration resistance		EN 60068-2-6:2008
<b>Approvals and certificates</b>		
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, M12 x 1 connector
Degree of protection		IP67
Material		
Housing		PC/ABS
Mass		approx. 160 g
Dimensions		
Height		70 mm
Width		70 mm
Depth		50 mm

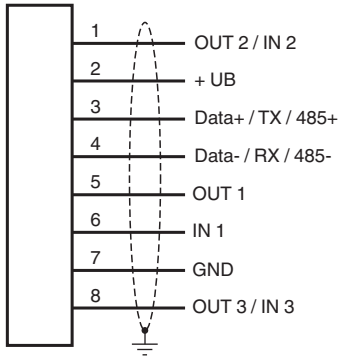
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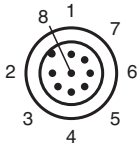
### Factory settings

X resolution (protocol)	1 mm
Y resolution (protocol)	1 mm
Speed resolution (protocol)	0.1 m/s
Angle resolution	1 °
Baud rate	115200 Bit/s
Extrapolation	On
Read head address	0

## Connection

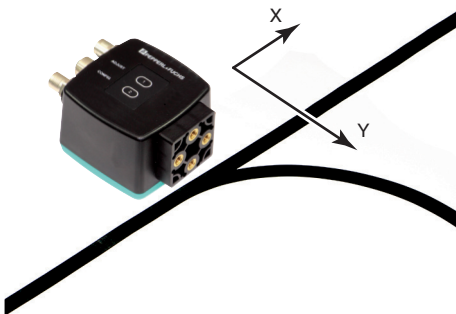


## Connection Assignment



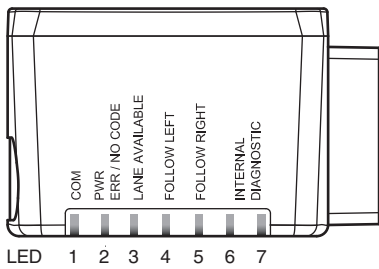
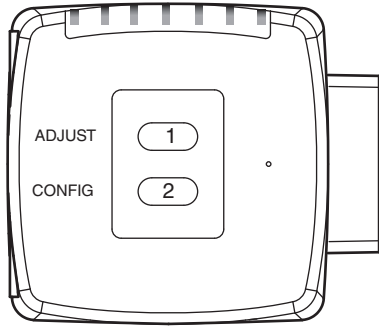
## Characteristic Curve

### Coordinates



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