

# Optical reading head

## PGV100RS-F213-B16-1.5M

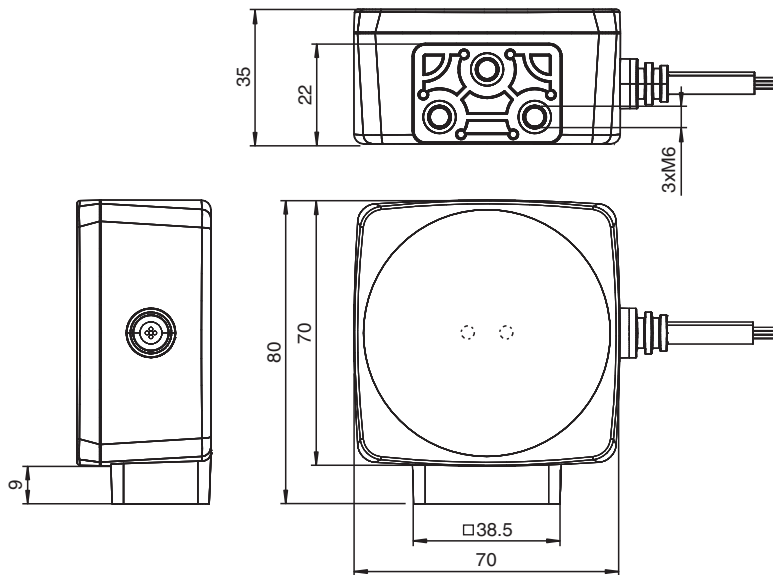


- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- CANopen interface
- Non-contact positioning on Data Matrix code tape
- Noncontact positioning with Data Matrix TAGs
- Reading of Data Matrix control codes
- Visible red light
- Fixed cable
- Terminating resistor, switchable
- 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 range		max. 10000 m
Light type		Integrated LED lightning (red)
Scan rate		100 s <sup>-1</sup>
Latency		20 ms
Read distance		100 mm
Depth of focus		± 30 mm
Reading field		120 mm x 80 mm

Release date: 2022-10-25 Date of issue: 2022-10-25 Filename: 70122726-100002\_eng.pdf

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

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## Technical Data

Resolution		0.2 mm
Ambient light limit		100000 Lux
Accuracy		± 0.4 mm
<b>Nominal ratings</b>		
Camera		
Type		CMOS , Global shutter
Processor		
Clock pulse frequency		600 MHz
Speed of computation		4800 MIPS
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		144 a
MTBF		72 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Indicators/operating means</b>		
LED indication		2 LEDs
<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		CANopen , Switchable terminal resistor
Data output code		binary code
Transfer rate		max. 1 MBit/s
Termination		Switchable terminal resistor
Dielectric strength		± 16 V
<b>Output</b>		
Output type		2 switch outputs, programmable , Push/pull , PNP , NPN
Switching voltage		Operating voltage
Switching current		100 mA
<b>Standard conformity</b>		
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
<b>Approvals and certificates</b>		
CE conformity		CE
UKCA conformity		UKCA
UL approval		cULus Listed, General Purpose, 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		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		90 % , noncondensing
<b>Mechanical specifications</b>		
Connection type		Open cable end
Housing width		70 mm
Housing height		70 mm
Housing depth		35 mm
Degree of protection		IP54
Material		
Housing		PC/ABS

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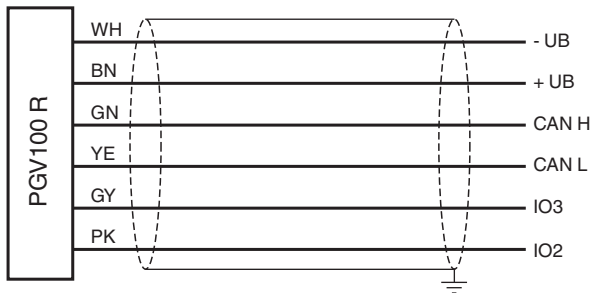
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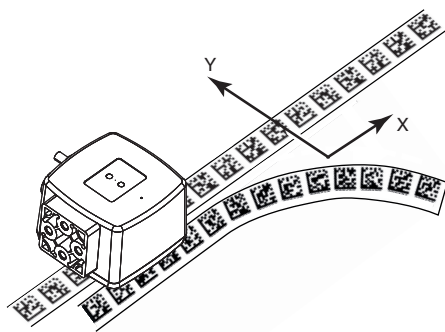
### Technical Data

Cable		PVC
Cable		
Sheath diameter		5.8 mm
Strain relief		60 N
Length	L	1.4 m
Mass		approx. 200 g
<b>Factory settings</b>		
X resolution (protocol)		0.1 mm
Y resolution (protocol)		0.1 mm
Angle resolution		0.1 °
Baud rate		500 kBit/s
Terminating resistor		On
Read head address		8
Function input/output 2		Sync out , Push/pull
Function input/output 3		not connected

### Connection

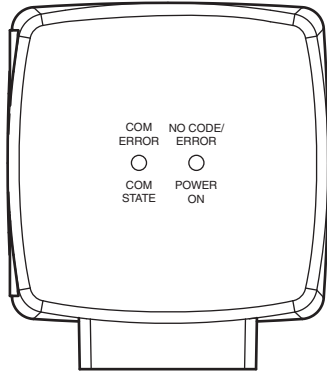


### Function Principle



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## Function Principle



## Matching System Components

	<b>PGV*-CA25-*</b>	Data Matrix code tape
	<b>PGV85-CT4</b>	Data Matrix tag for PGV system
	<b>PGV*-CC25-*</b>	Control code tape für PGV System

## Accessories

	<b>PCV-MB1</b>	Mounting bracket for PCV* read head
	<b>PCV-AG100</b>	Alignment guide for PCV100-* read head
	<b>PGV25M-CD100-CLEAR</b>	Protective laminate for PGV code tape
	<b>PGV25M-CD160-CLEAR</b>	Protective laminate for PGV code tape

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