

# Optical reading head

## PGV40RS-F213-B16-1.5M

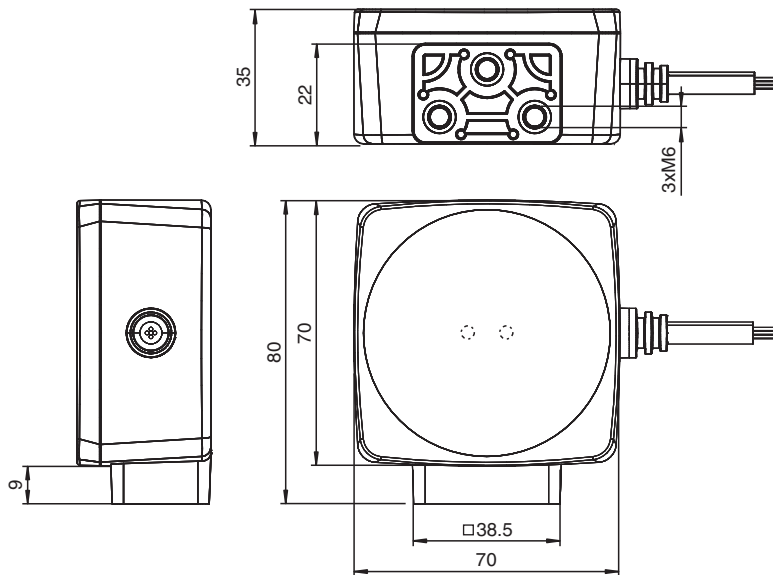


- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- CANopen interface
- Non-contact positioning on Data Matrix code tape
- Noncontact positioning with Data Matrix TAGs
- Reading of Data Matrix control codes
- Visible red light
- Fixed cable
- Terminating resistor, switchable
- 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		40 mm
Depth of focus		+ 25 mm - 15 mm
Reading field		70 mm x 45 mm

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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	
Digital resolution	32 Bit	
<b>Functional safety related parameters</b>		
MTTF	72 a	
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	
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	
Degree of protection	IP54	
Material		
Housing	PC/ABS	
Cable	PVC	
Cable		

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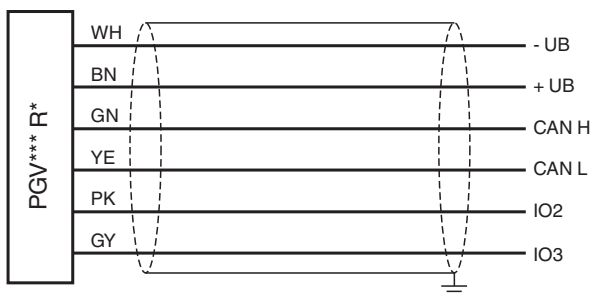
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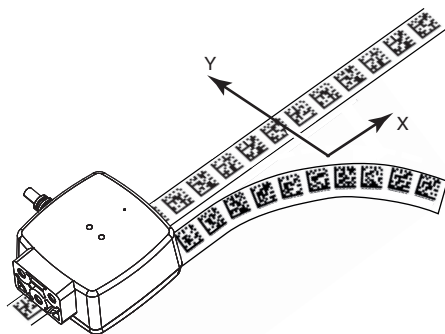
## Technical Data

Sheath diameter		5.8 mm
Strain relief		60 N
Length	L	1.4 m
Mass		approx. 200 g
<b>Dimensions</b>		
Height		70 mm
Width		70 mm
Depth		35 mm
<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

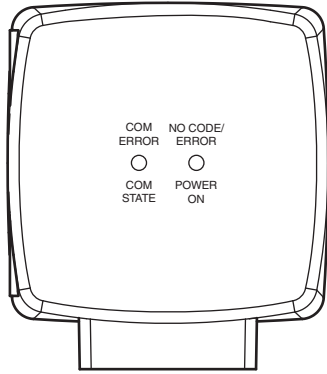
## Connection



## Function Principle



## Function Principle



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