



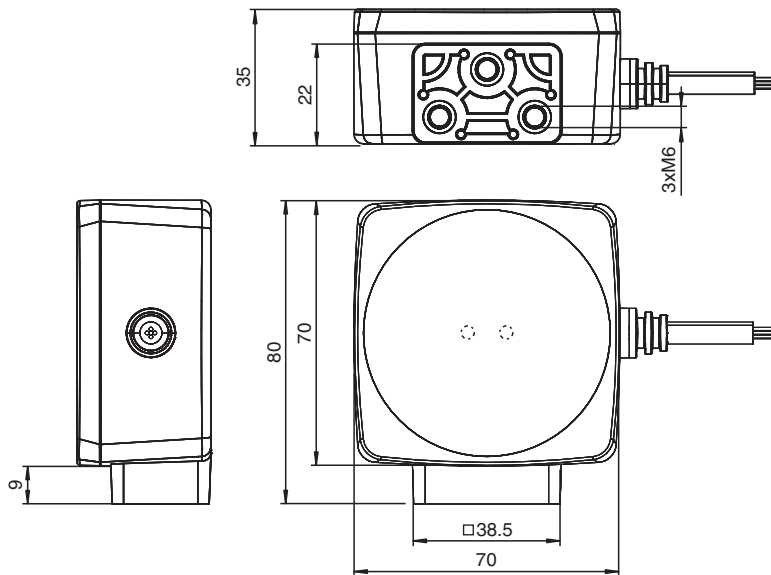
Optical reading head PGV100R-F213-B16-1.5M

- 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 length		max. 10000 m
Light type		Integrated LED lightning (red)
Scan rate		40 s ⁻¹
Latency		50 ms
Read distance		100 mm
Depth of focus		± 30 mm
Reading field		120 mm x 80 mm

Release date: 2024-12-20 Date of issue: 2024-12-20 Filename: 70122726-100000_eng.pdf

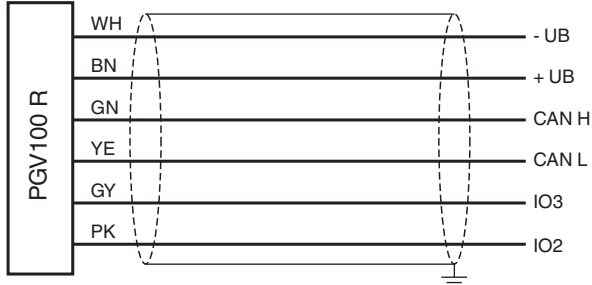
Technical Data

Resolution	0.1 mm	
Ambient light limit	100000 Lux	
Accuracy	± 0.2 mm	
Nominal ratings		
Camera		
Type	CMOS , Global shutter	
Processor		
Clock pulse frequency	600 MHz	
Speed of computation	4800 MIPS	
Digital resolution	32 Bit	
Functional safety related parameters		
MTTF _d	144 a	
MTBF	72 a	
Mission Time (T _M)	20 a	
Diagnostic Coverage (DC)	0 %	
Indicators/operating means		
LED indication	2 LEDs	
Electrical specifications		
Operating voltage	U _B	15 ... 30 V DC , PELV
No-load supply current	I ₀	max. 200 mA
Power consumption	P ₀	3 W
Interface		
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	
Output		
Output type	2 switch outputs, programmable , Push/pull , PNP , NPN	
Switching voltage	Operating voltage	
Switching current	100 mA	
Conformity		
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	
Standard conformity		
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	
Approvals and certificates		
CE conformity	CE	
UKCA conformity	UKCA	
UL approval	cULus Listed, Class 2 Power Source, Type 1 enclosure	
CCC approval	CCC approval / marking not required for products rated ≤36 V	
Ambient conditions		
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	
Mechanical specifications		

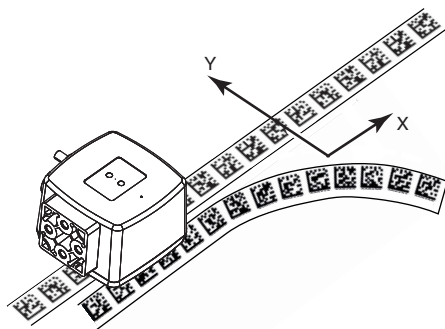
Technical Data

Connection type	Open cable end	
Degree of protection	IP54	
Material		
Housing	PC/ABS	
Cable	PVC	
Cable		
Sheath diameter	5.8 mm	
Strain relief	60 N	
Length	L	1.4 m
Mass	approx. 200 g	
Dimensions		
Height	70 mm	
Width	70 mm	
Depth	35 mm	
Factory settings		
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

