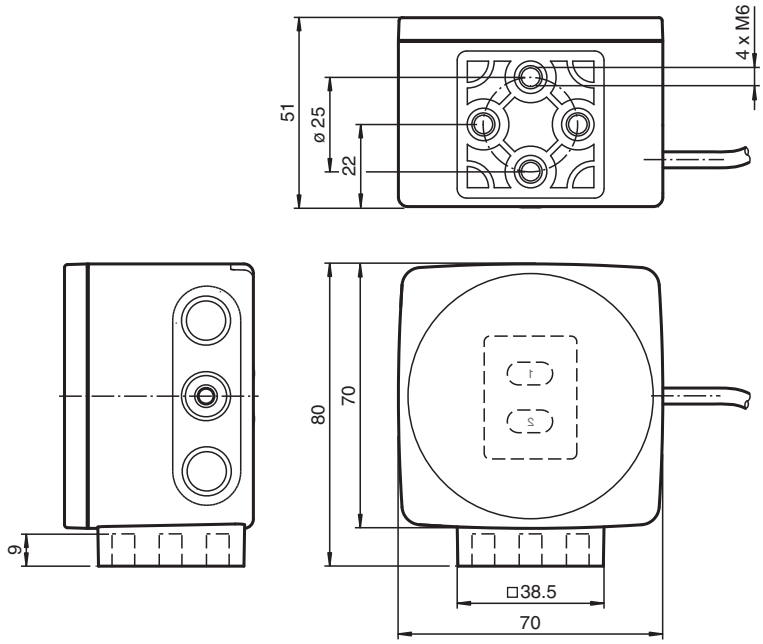
Optical reading head

PGV100R-F200-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

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		40 s^{-1}
Latency		50 ms
Read distance		100 mm
Depth of focus		± 30 mm
Reading field		120 mm x 80 mm
Resolution		0.1 mm

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Technical Data

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
Functional safety related parameters		
MTTF		71 a
$MTTF_d$		142 a
MTBF		71 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
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		
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		
Connection type		Open cable end
Housing width		70 mm
Housing height		70 mm
Housing depth		50 mm
Degree of protection		IP40
Material		
Housing		PC/ABS
Cable		PVC
Cable		
Sheath diameter		5.8 mm
Strain relief		60 N
Length	L	1.5 m
Mass		approx. 200 g
Factory settings		

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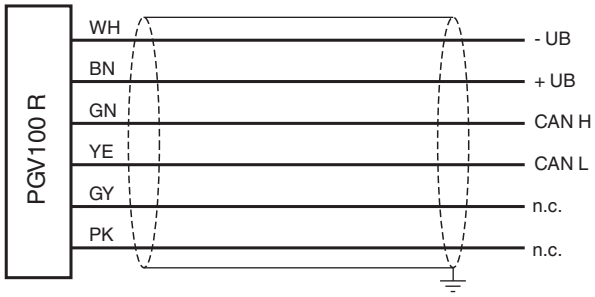
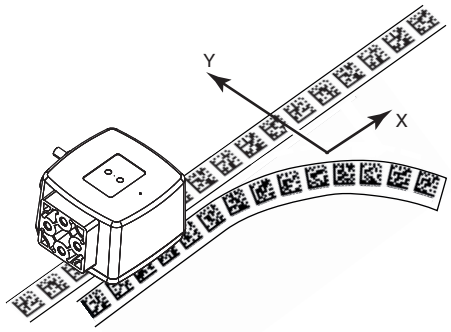
Technical Data

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

Connection



Function Principle



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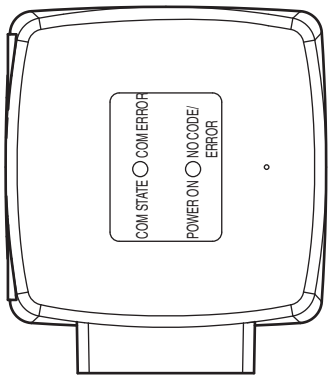
Function Principle



Matching System Components

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

Accessories

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

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