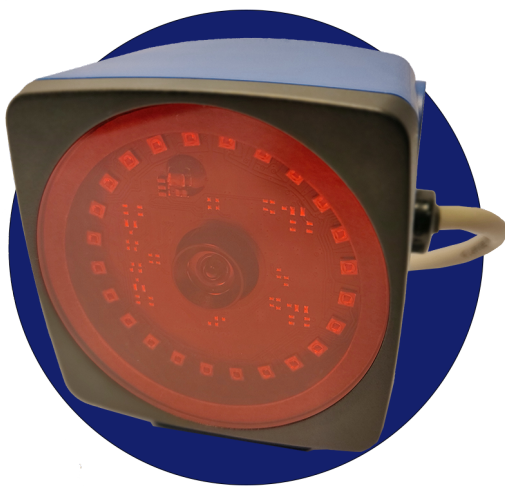


PGV 100R

Precision on sub-millimetre level

A high resolution matrix code reader for outstanding navigation of AGVs and bots. The PGV100R (Position Guided Vision) sensor is equipped with a high-intensity red illuminating light source combined with high-resolution camera technology, which enables reliable and precise measurements with great repeat accuracy and short response times.

The PGV sensor navigation uses data matrix codes (position markers) placed on the floor, allowing precise navigation in open environments where wall-mounted navigation is prevented. The PGV sensor is flexibly placed underneath the AGV in parallel to the floor and reads the location of the position markers while driving over them.



Features

- Non-contact positioning, no wearing parts and maintenance-free
- Fixed cable 1.5 m for easy installation
- CANopen interface
- CAN termination switchable in software
- Support for all NDC8 wheel configuration types: steer/drive, quad and multi-wheeler
- Support for all NDC8 curve types
- Support for automatic and semi-automatic operation modes
- Future proof to support future a variety of position markers and code tapes

Order information	
PGV100R (Incl. 1.5 m cable)	18459-01
PGV Mounting bracket (incl. 4x screw/washer)	PGV Mount
Position markers	Pepperl+Fuchs PGV85-CT4, order at pepperl-fuchs.com
Protective laminate	Pepperl+Fuchs PGV25M-CD160-CLEAR, order at pepperl-fuchs.com

Technical Data	
Supply voltage, nominal	24 V
Supply voltage, min/max	15/30 V
Power consumption	Max. 3 W (≤ 200 mA)

Technical Data	
Passage speed	≤ 8 m/s (3 m/s NDC8)
Measuring range	max. 10 000 m
Read distance / Depth of focus	100 mm / ± 30 mm
Reading field	120 mm x 80 mm
Resolution / Accuracy	0.1 mm / ± 0.2 mm
Ambient light limit	100 000 Lux
Illumination	Multiple red LEDs, eye safe
Communication	1 x CAN (galvanic isolation)
Connection	1.5 m cable, open ends

Ambient Condition	
Temperature, operation	0 to 60 °C, -20 to 60 °C (non condensing; prevent icing on the lens)
Temperature, storage	-40 to 85 °C
Relative humidity, operation	90%, non condensing
Relative humidity, storage	90%
Vibration class, Shock resistance	EN 60068-2-6:2008, EN 60068-2-27:2009
Protection class	IP40

Dimensions	
Width x Height x Depth	70 x 70 x 50 mm
Weight	0.2 Kg

Cable wires	
Wire	Signal
White	GND 0V
Brown	24V DC
Green	CAN H
Yellow	CAN L

