



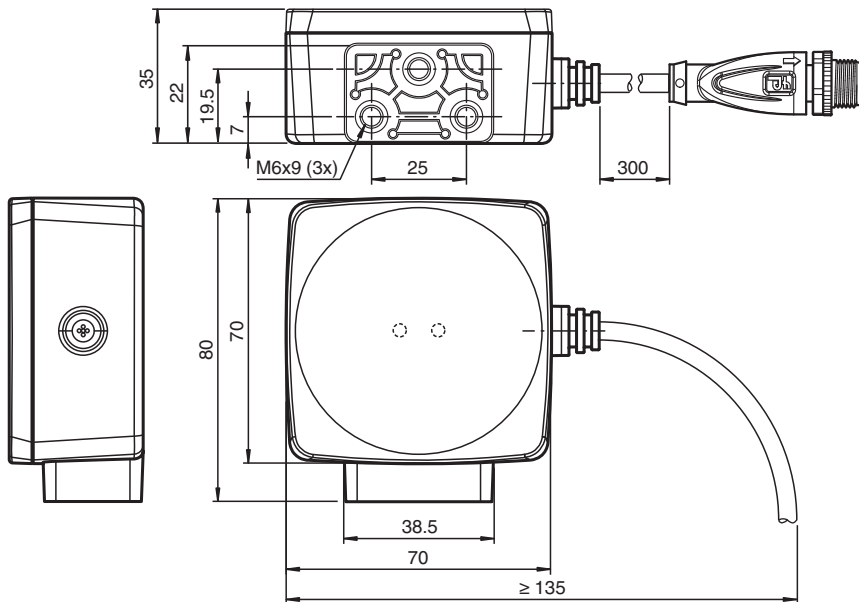
Optical reading head PXV100Q-F213-IO-0.3M-V15

- Traverse distance up to 100 km
- IO-Link interface
- Mechanically rugged: no wearing parts, long operating life, maintenance-free
- Non-contact positioning on Data Matrix code tape
- High resolution and precise positioning, especially for facilities with curves and switch points as well as inclines and declines.
- Output of code quality

Read head for incident light positioning system



Dimensions



Technical Data

General specifications

Passage speed	v	≤ 12.5 m/s
Maximum track length		max. 100000 m
Light type		Integrated LED lightning (red)
Evaluation frequency		40 s ⁻¹
Latency		50 ms
Read distance (z)		100 mm
Reading tolerance in z-direction		± 30 mm
Field of view		120 mm x 80 mm (for z = 100 mm)
Reading tolerance in y-direction		± 30 mm (for z = 100 mm)
Ambient light limit		100000 Lux
Accuracy x-position		± 0.2 mm (for z = 100 mm)
Accuracy y-position		± 0.2 mm (for z = 100 mm)

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

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Technical Data

Angle accuracy		± 1 ° (for z = 100 mm)
Nominal ratings		
Camera		
Type		CMOS , Global shutter
Functional safety related parameters		
MTTF _d		135 a
Indicators/operating means		
LED indication		2 LEDs (communication, status)
Electrical specifications		
Operating voltage	U _B	18 ... 30 V DC , PELV
No-load supply current	I ₀	max. 200 mA
Power consumption	P ₀	3 W (at no-load)
Interface		
Interface type		IO-Link
IO-Link revision		1.1.5
Device profile		Identification and Diagnosis - I&D Firmware update
Process data		Position data (x, y) , z-distance , angle , speed (bi-directional) , status data , frame counter , quality index , warning , event marker number , number of detected codes
SIO mode support		no
Compatible master port type		Class A
Input		
Number		0 ... 2 , programmable
Input type		0 level: unswitched or -UB ... +7 V1 level: +13 V ... +UB
Input impedance		≥ 30 kΩ
Output		
Number		0 ... 2 , programmable
Output type		Push/pull , PNP , NPN , programmable
Switching voltage		Operating voltage
Switching current		100 mA each output
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
Approvals and certificates		
CE conformity		CE
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) (non-condensing; prevent icing on the lens!)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		90 % , non-condensing
Mechanical specifications		
Connection type		5-pin, M12 x 1 connector
Degree of protection		IP54
Material		
Housing		PC/ABS
Cable		PVC
Cable		
Sheath diameter		4.8 mm

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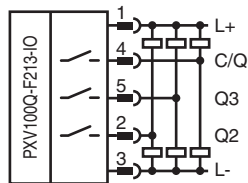
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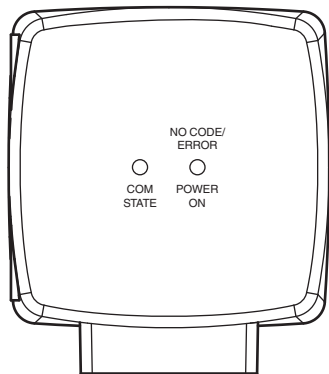
Technical Data

Bending radius		48 mm
Strain relief		60 N
Length	L	0.3 m
Mass		approx. 125 g
Dimensions		
Height		80 mm
Width		70 mm
Depth		35 mm
Factory settings		
Orientation		0 ° / 180 °
Resolution x-position		1 mm
Resolution y-position		1 mm
Angle resolution		0.1 °
Speed resolution		0.01 m/s
Input data source		Protocol
X-offset		0 mm
Angle offset		0 °
Behaviour in case of missing x-position data		Substitute value 0
Behaviour in case of missing y-position data		Substitute value 0
Behaviour in case of missing angle data		Substitute value 0
Behaviour in case of missing speed data		Substitute value 0
Extrapolation		Linear extrapolation
Marker position		Event marker instead of code tape
Q2		No function , high impedance
Q3		No function , high impedance

Connection Assignment



Indication



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