LINARIX Linear Sensor

LU0-AC005-0413-2P00-PAM

General Data	
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Supply Voltage	8 – 32 VDC
Turn On Time	<500 ms
Operating Temperature	-20 °C (-4 °F) - +80 °C (+176 °F)
Weight	420 g (0.93 lb)
Protection Class (Encoder)	IP64 / IP65
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
Mechanical Data	
Max. Measurement Length	1.90 m (6.23')
Length per Revolution	150 mm
Wire Material	Coated Polyamide Stainless Steel
Wire Diameter	0.45 mm
Encoder Housing Material	Steel
Draw Wire Housing Material	Aluminum
Max. Speed of Wire Displacement	2.0 m / s
Max. Wire Acceleration	12.0 g
Max. Extension Force	5.0 N
Min. Retraction Force	3.5 N

Actuation Lifetime	1.0 mio Cycles (Estimated based on ideal conditions)
Wire Mounting	Eyelet
Max. Wire Exit Angle	±3°

Sensor Data

Technology	Magnetic (≤ 0.09°)
Accuracy	±0.02 % FSO
Repeatability	±0.006 % FSO
Resolution [Encoder - Singleturn]	13 bit
Resolution [Encoder - Multiturn]	4 bit
Approx. Linear Resolution	18.3 µm
Output Code	Analog Current 4 – 20 mA
Resolution of Output	Max. 13 bits over entire measuring range (Fractional Turns - Resolution decreases less than 13 bits when measuring range is less than 90 degrees)
Multiturn Range	16 turn (default setting). User can use the scaling functionality to measure up to 65536 turns.

Interface

Communication Interface	Analog Current
Manual Functions	Start and End point via Cable or Connector

Outputs

Outputs

Electrical Data

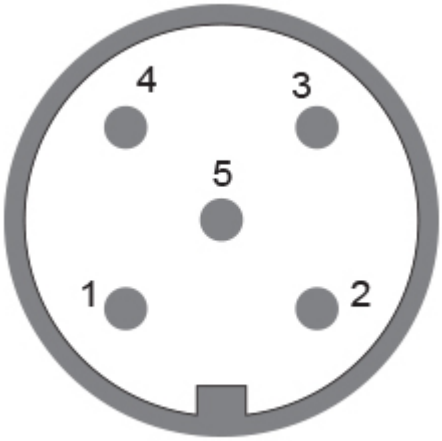
Current Consumption	Typical 20 mA @24 V (no load)
Max Load Resistance	500 Ω
Analog Accuracy	@ 20 mA = ±20 µA (with an ideal power supply)
Settling Time	32 ms (from min value to max value jump)
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
MTTF	240.8 years @ 40 °C

Electrical Connection

Connection Orientation	Axial
Connection Orientation (w.r.t Draw Wire)	Radial 0 / Axial
Connector	M12, Male, 5 pin, a coded

Product Life Cycle

Product Life Cycle	Established



Connection Plan

SIGNAL	CONNECTOR	PIN NUMBER
Power Supply	Connector 1	2
GND	Connector 1	3
Analog Output	Connector 1	1
Set1/Direction	Connector 1	5
Set2/Zero Set	Connector 1	4

Connector-View on Encoder

Dimensional Drawing

2D Drawing

Accessories

Connectors & Cables
POS M12 5pin-A Female+5m PUR Cable
POS M12 5pin-A Female+2m PUR Cable
POS M12 5pin-A Female+10m PUR Cable
10m PUR Cable, 5pin, A-Coded, f IP69K
M12, 5pin A-Coded, Female
More
Displays
AP22-D0 Analog Display (4 dig. o/p)

Got questions? Need an individual solution? We are here to help!

Contact Us

All dimension in [inch] mm. Encoder dimensions may vary depending on electrical interface and connector. This drawing and the information contained is for general presentation purposes only. Please refer to the "Download" section for detailed technical drawings.© FRABA B.V., All rights reserved. We do not assume responsibility for technical inaccuracies or omissions. Specifications are subject to change without notice.