



LINARIX Linear Sensor

LU0-ACP05-0413-5G90-PRM

POSITAL
FRABA



General Data

General Data

Supply Voltage	8 - 32 VDC
Turn On Time	<500 ms
Operating Temperature	-20 °C (-4 °F) - +80 °C (+176 °F)
Weight	1455 g (3.21 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	5.00 m (16.40')
Length per Revolution	315 mm
Wire Material	Coated Polyamide Stainless Steel
Wire Diameter	1.00 mm
Encoder Housing Material	Steel
Draw Wire Housing Material	Aluminum
Max. Speed of Wire Displacement	2.0 m / s
Max. Wire Acceleration	5.0 g
Max. Extension Force	16.0 N
Min. Retraction Force	4.0 N

Data Sheet

Printed at 11-09-2019 08:09

POSITAL

FRABA



Actuation Lifetime	0.5 mio Cycles
Wire Mounting	Eyelet
Max. Wire Exit Angle	$\pm 3^\circ$

Sensor Data

Technology	Magnetic ($\leq 0.09^\circ$)
Accuracy	± 0.02 % FSO
Repeatability	± 0.002 % FSO
Resolution [Encoder - Singleturn]	13 bit
Resolution [Encoder - Multiturn]	4 bit
Approx. Linear Resolution	38.5 μm
Output Code	Analog Current 4 - 20 mA

Interface

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

Outputs

Outputs

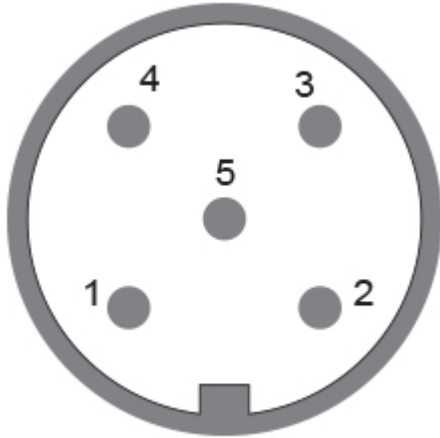
Electrical Data

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 $^\circ\text{C}$

Electrical Connection

Connection Orientation	Radial
Connection Orientation (w.r.t Draw Wire)	Radial 9
Connector	M12, Male, 5 pin, a coded

Product Life Cycle



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

10m PUR Cable, 5pin, A-Coded, f

2m PUR Cable, 5pin, A-Coded, f

5m PUR Cable, 5pin, A-Coded, f

10m PUR Cable, 5pin, A-Coded, f

M12, 5pin A-Coded, Female

More

Displays

AP22-D0 Analog Display (4 dig. o/p)

DiMod-A Analog Display



Contact



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.