



LINARIX Linear Sensor

LU0-EIB1B-1216-7W30-PRM



General Data

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Supply Voltage	10 - 30 VDC
Power Consumption	≤ 2.5 W
Turn On Time	< 1 s
Operating Temperature	-20 °C (-4 °F) - +80 °C (+176 °F)
Weight	1115 g (2.46 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	7.50 m (24.61')
Length per Revolution	333.3 mm
Wire Material	Coated Polyamide Stainless Steel
Wire Diameter	0.45 mm
Encoder Housing Material	Steel
Draw Wire Housing Material	Plastic
Max. Wire Acceleration	1.5 g
Max. Extension Force	13.0 N
Min. Retraction Force	7.0 N

Data Sheet

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

Sensor Data

Technology	Magnetic ($\leq 0.09^\circ$)
Accuracy	± 0.05 % FSO
Repeatability	± 0.01 % FSO
Resolution [Encoder - Singleturn]	16 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	5.1 μm (theoretical), limited by mechanics
Output Code	Binary

Interface

Communication Interface	Profinet
Profile	Profidrive Profile 4.x, Encoder Profile 4.x
Diagnostics	Memory
Programming Functions	Resolution, time base and filter for velocity, preset, counting direction, IP-Address
Transmission Rate	10 / 100 Mbit
Cycle Time Interface	≥ 1 ms

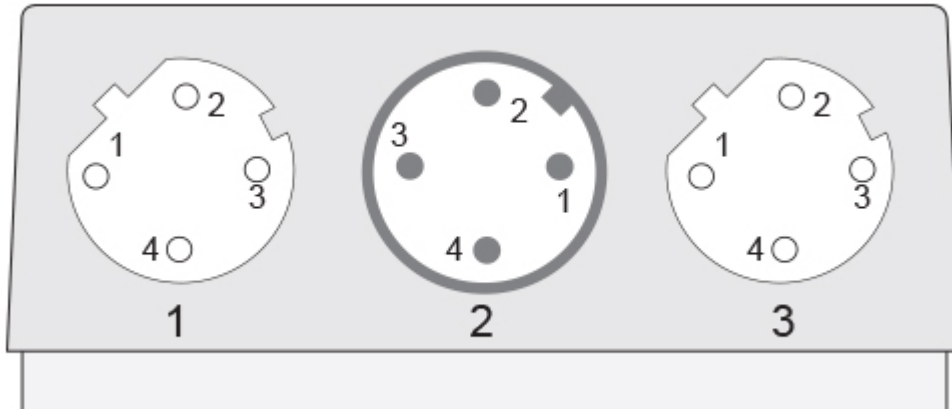
Outputs

Output Driver	Ethernet
Current Consumption	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
MTTF	65 years @ 40 $^\circ\text{C}$

Electrical Connection

Connection Orientation	Radial
Connection Orientation (w.r.t Draw Wire)	Radial 3
Connector 1	M12, Female, 4 pin, d coded
Connector 2	M12, Male, 4 pin, a coded
Connector 3	M12, Female, 4 pin, d coded

Product Life Cycle



Connection Plan

SIGNAL	CONNECTOR	PIN NUMBER
Tx+	Connector 1	1
Rx+	Connector 1	2
Tx-	Connector 1	3
Rx-	Connector 1	4
Power Supply	Connector 2	1
Not Connected	Connector 2	2
GND	Connector 2	3
Not Connected	Connector 2	4
Tx+	Connector 3	1
Rx+	Connector 3	2
Tx-	Connector 3	3
Rx-	Connector 3	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
- 2m PUR Cable, 4pin, D-Coded, m
- M12, 4pin A-Coded, Female
- 10m PUR Cable, 4pin, D-Coded, m
- 10m PVC Cable, 4pin, D-Coded, m

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2m PVC Cable, 4pin, D-Coded, m
5m PVC Cable, 4pin, D-Coded, m
M12, 4pin D-Coded, Male
M12, 5pin A-Coded, Female
5m PUR Cable, 4pin, D-Coded, m
More

Contact



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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.