



LINARIX Linear Sensor

LD0-EEA1B-1213-5G00-PRM

POSITAL FRABA



General Data

General Data	
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	1555 g (3.43 lb)
Protection Class (Encoder)	IP64 / IP65
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2

Mechanical Data

5.00 m (16.40')	
315 mm	
Coated Polyamide Stainless Steel	
1.00 mm	
Steel	
Aluminum	
2.0 m / s	
5.0 g	
16.0 N	

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Min. Retraction Force	4.0 N
Actuation Lifetime	0.5 mio Cycles (Estimated based on ideal conditions)
Wire Mounting	Eyelet
Max. Wire Exit Angle	±3°
Sensor Data	
Technology	Optical ($\leq 0.02^{\circ}$)
Accuracy	±0.02 % FSO
Repeatability	±0.002 % FSO
Resolution [Encoder - Singleturn]	13 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	38.5 μm
Output Code	Binary
Interface	
Communication Interface	EtherNet/IP
Profile	CIP (Common Industrial Protocol)
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 °C
Electrical Connection	
Connection Orientation	Radial
Connection Orientation (w.r.t Draw Wire)	Radial 0 / Axial
Connector 1	M12, Female, 4 pin, d coded
Connector 2	M12, Male, 4 pin, a coded
Connector 3	M12, Female, 4 pin, d coded

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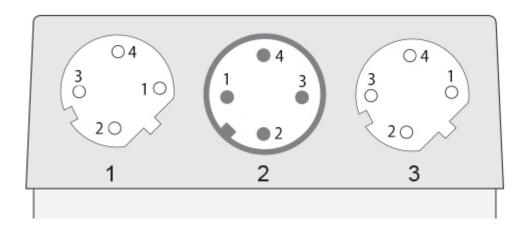




Product Life Cycle

Product Life Cycle

Established



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 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 2m PVC Cable, 4pin, D-Coded, m

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POS M12 5pin-A Female+5m PUR Cable POS M12 5pin-A Female+2m PUR Cable POS M12 5pin-A Female+10m PUR Cable M12, 4pin D-Coded, Male M12, 5pin A-Coded, Female 5m PUR Cable, 4pin, D-Coded, m More

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.