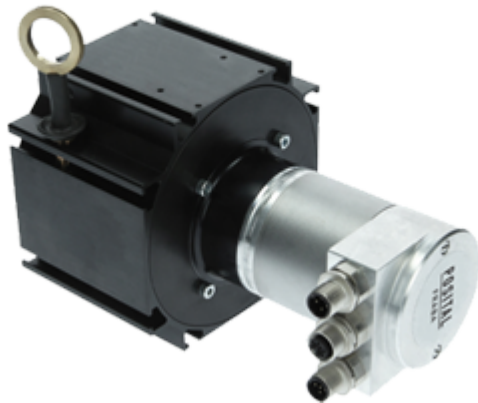



LINARIX Linear Sensor
LU0-EC00B-1213-3F00-PRM
POSITAL
FRABA

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	1145 g (2.52 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	3.00 m (9.84')
Length per Revolution	260 mm
Wire Material	Coated Polyamide Stainless Steel
Wire Diameter	0.80 mm
Encoder Housing Material	Steel
Draw Wire Housing Material	Aluminum
Max. Speed of Wire Displacement	2.0 m / s
Max. Wire Acceleration	7.0 g
Max. Extension Force	9.0 N

Data Sheet

Printed at 4-11-2021 15:11



Min. Retraction Force	5.5 N
Actuation Lifetime	3.0 mio Cycles (Estimated based on ideal conditions)
Wire Mounting	M4 Thread
Max. Wire Exit Angle	$\pm 3^\circ$

Sensor Data

Technology	Magnetic ($\leq 0.09^\circ$)
Accuracy	± 0.02 % FSO
Repeatability	± 0.003 % FSO
Resolution [Encoder - Singleturn]	13 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	31.7 μm
Output Code	Binary

Interface

Communication Interface	Ethercat
Profile	CoE (CANopen over EtherCAT, DS-301+DS-406)
Programming Functions	Resolution, preset, counting direction
Transmission Rate	10 / 100 Mbit
Cycle Time Interface	≥ 80 μs

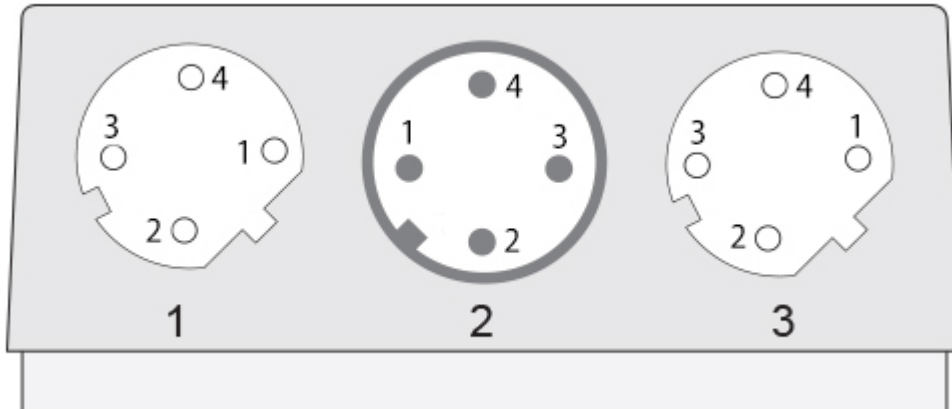
Outputs

Output Driver	Ethernet
Current Consumption	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
Electrical Lifetime	$>10^5$ h

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

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

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

5m PVC Cable, 4pin, D-Coded, m

POS M12 5pin-A Female+5m PUR Cable

Data Sheet

Printed at 4-11-2021 15:11



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!

Sold & Serviced By:



Canadian and International Sales

ELECTROMATE

877-737-8698

sales@electromate.com

www.electromate.com

U.S. Sales

SERVO2GO.com

877-378-0240

sales@servo2go.com

www.servo2go.com

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.