



## LINARIX Linear Sensor

**LU0-C901B-1213-2S00-PRM**



**POSITAL**  
FRABA

### General Data

#### General Data

Supply Voltage	9 - 30 VDC
Power Consumption	$\leq 1.2$ W
Turn On Time	<500 ms
Operating Temperature	-20 °C (-4 °F) - +80 °C (+176 °F)
Weight	455 g (1.00 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	2.40 m (7.87')
Length per Revolution	150.8 mm
Wire Material	Coated Polyamide Stainless Steel
Wire Diameter	0.45 mm
Encoder Housing Material	Steel
Draw Wire Housing Material	Plastic
Max. Speed of Wire Displacement	1.0 m / s
Max. Wire Acceleration	5.0 g
Max. Extension Force	7.0 N

Data Sheet

Printed at 4-11-2021 15:11



Min. Retraction Force	1.0 N
Actuation Lifetime	1.0 mio Cycles (Estimated based on ideal conditions)
Wire Mounting	Wireclip
Max. Wire Exit Angle	$\pm 3^\circ$

### Sensor Data

Technology	Magnetic ( $\leq 0.09^\circ$ )
Accuracy	$\pm 0.10$ % FSO
Repeatability	$\pm 0.04$ % FSO
Resolution [Encoder - Singleturn]	13 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	18.4 $\mu\text{m}$
Output Code	Binary

### Interface

Communication Interface	SAE J1939
Profile	J1939 specific
Programming Functions	Resolution, preset, direction, node ID, baud rate
Manual Functions	Programmable
Transmission Rate	min. 20 kBaud, max. 1 MBaud
Cycle Time Interface	$\geq 1$ ms

### Outputs

Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Coupl
Current Consumption	$\leq 70$ mA @ 10 V DC, $\leq 50$ mA @ 24 V DC
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
MTTF	240 years @ 40 °C

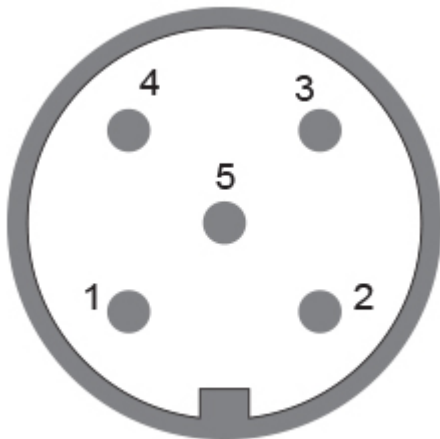
### Electrical Connection

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



## Product Life Cycle

Product Life Cycle	New
--------------------	-----



## Connection Plan

SIGNAL	PIN NUMBER
Power Supply	2
GND	3
CAN High	4
CAN Low	5
CAN GND	1

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

Data Sheet

Printed at 4-11-2021 15:11



**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](mailto:sales@electromate.com)

[www.electromate.com](http://www.electromate.com)

U.S. Sales

**SERVO2GO.com**

**877-378-0240**

[sales@servo2go.com](mailto:sales@servo2go.com)

[www.servo2go.com](http://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.

Data Sheet

Printed at 4-11-2021 15:11