


**LINARIX Linear Sensor**
**LU0-CA01B-1213-3F00-PRM**
**POSITAL**  
FRABA

**General Data**
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Supply Voltage	9 - 30 VDC
Power Consumption	≤ 1.2 W
Operating Temperature	-20 °C (-4 °F) - +80 °C (+176 °F)
Weight	1055 g (2.33 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
Min. Retraction Force	5.5 N

Data Sheet

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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	$\pm 0.02$ % FSO
Repeatability	$\pm 0.003$ % FSO
Resolution [Encoder - Singleturn]	13 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	31.7 $\mu\text{m}$
Output Code	Binary

### Interface

Communication Interface	CANopen
Profile	DS-406
Programming Functions	Resolution, preset, 2 limit switches, 8 CAMS, baud rate, CAN-Identifier, bootloader, transmission modes: polled, cyclic, sync
Transmission Rate	min. 20 kBaud, max. 1 MBaud
Cycle Time Interface	$\geq 1$ ms

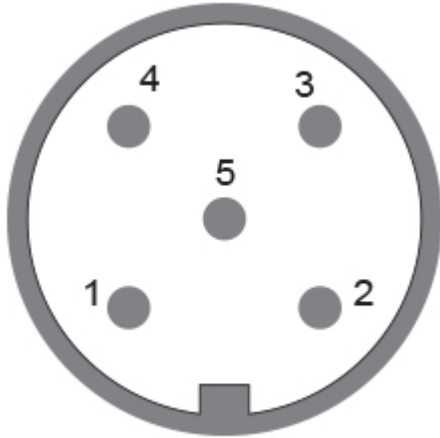
### Outputs

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


**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 &amp; 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](#)



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