



LINARIX Linear Sensor

LU0-CA01B-1213-3F00-PAM



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	1020 g (2.25 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

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Actuation Lifetime	3.0 mio Cycles
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	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	≥ 1 ms

Outputs

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

Electrical Connection

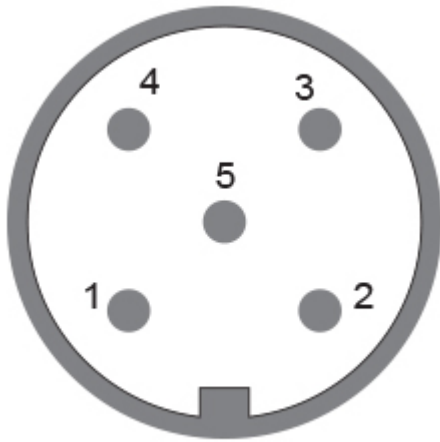
Connection Orientation	Axial
Connection Orientation (w.r.t Draw Wire)	Radial 0 / Axial
Connection Type	Cable / Connector
Connector	M12, Male, 5 pin, a coded

Product Life Cycle

Product Life Cycle	Established
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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

10m PUR Cable, 5pin, A-Coded, f

2m PUR Cable, 5pin, A-Coded, f

5m PUR Cable, 5pin, A-Coded, f

10m PUR Cable, 5pin, A-Coded, f

M12, 5pin A-Coded, Female

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.