



LINARIX Linear Sensor

LD0-CAA1B-1212-2S30-H1B

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General Data

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Supply Voltage	10 - 30 VDC
Power Consumption	≤ 2.5 W
Turn On Time	< 1 s
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Weight	650 g (1.43 lb)
Protection Class (Encoder)	IP64 / IP65
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2

Mechanical Data

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

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Min. Retraction Force	1.0 N
Actuation Lifetime	1.0 mio Cycles
Wire Mounting	Wireclip

Sensor Data

Technology	Optical ($\leq 0.02^\circ$)
Accuracy	± 0.10 % FSO
Repeatability	± 0.04 % FSO
Resolution [Encoder - Singleturn]	12 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	36.8 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
Manual Functions	Address selector switch 0-99 and terminal resistor (with connection cap)
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	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
MTTF	13.5 years @ 40 °C

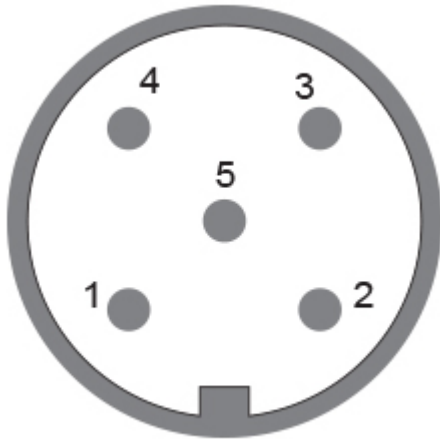
Electrical Connection

Connection Orientation	Radial
Connection Orientation (w.r.t Draw Wire)	Radial 3
Connection Type	1 x M12 Connector
Connector	M12, Male, 5 pin, a coded



Product Life Cycle

Product Life Cycle	New
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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

M12, 5pin A-Coded, Female

[More](#)



Contact



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.