



# POSITAL

## FRABA

### LINARIX Linear Sensor

LU0-C901B-1216-2P4A-CRW



#### General Data

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Supply Voltage	9 - 30 VDC
Power Consumption	$\leq 1.2$ W
Turn On Time	<500 ms
Operating Temperature	-30 °C (-22 °F) - +80 °C (+176 °F)
Weight	515 g (1.14 lb)
Protection Class (Encoder)	IP54
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2

##### Mechanical Data

Max. Measurement Length	1.90 m (6.23')
Length per Revolution	150 mm
Wire Material	Coated Polyamide Stainless Steel
Wire Diameter	0.45 mm
Encoder Housing Material	Steel
Draw Wire Housing Material	Aluminum
Max. Speed of Wire Displacement	2.0 m / s
Max. Wire Acceleration	12.0 g
Max. Extension Force	5.0 N

Data Sheet

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Min. Retraction Force	3.5 N
Actuation Lifetime	1.0 mio Cycles
Wire Mounting	Eyelet

### Sensor Data

Technology	Magnetic ( $\leq 0.09^\circ$ )
Accuracy	$\pm 0.02$ % FSO
Repeatability	$\pm 0.006$ % FSO
Resolution [Encoder - Singleturn]	16 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	2.3 $\mu\text{m}$ (theoretical), limited by mechanics
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 4
Connection Type	Cable / Connector
Cable Length	1 m [39"]
Wire Cross Section	0.14 mm <sup>2</sup> / AWG 26
Material / Type	PVC
Cable Diameter	6 mm (0.24 in)



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Minimum Bend Radius	46 mm (1.81") fixed, 61 mm (2.4") flexing
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### Product Life Cycle

Product Life Cycle	New
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### Connection Plan

SIGNAL	CABLE COLOR
Power Supply	Red
GND	Yellow
CAN High	White
CAN Low	Brown
CAN GND	Green

Connector-View on Encoder  
**Dimensional Drawing**

[2D Drawing](#)

### 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.