



LINARIX Linear Sensor

LUO-C901B-1213-6E00-PRM





General Data

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| Supply Voltage | 9 – 30 VDC |
|----------------------------|-----------------------------------|
| Power Consumption | ≤ 1.2 W |
| Turn On Time | <500 ms |
| Operating Temperature | -20 °C (-4 °F) - +80 °C (+176 °F) |
| Weight | 955 g (2.11 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 | 6.00 m (19.69') |
|---------------------------------|--------------------|
| Length per Revolution | 200 mm |
| Wire Material | Stainless Steel |
| Wire Diameter | 0.60 mm |
| Encoder Housing Material | Steel |
| Draw Wire Housing Material | Aluminum / plastic |
| Max. Speed of Wire Displacement | 3 m/s |
| Max. Wire Acceleration | 2.4 g |
| Max. Extension Force | 8.0 N |
| | |

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| Min. Retraction Force | 3.0 N |
|-----------------------|---------------|
| Actuation Lifetime | Not Available |
| Wire Mounting | M6 Thread |
| Max. Wire Exit Angle | ±10° |

Sensor Data

| Technology | Magnetic (≤ 0.09°) |
|-----------------------------------|--------------------|
| Accuracy | ±0.006 % FSO |
| Repeatability | ±0.003 % FSO |
| Resolution [Encoder - Singleturn] | 13 bit |
| Resolution [Encoder - Multiturn] | 12 bit |
| Approx. Linear Resolution | 24.4 μm |
| 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 | ≥ 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 | 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

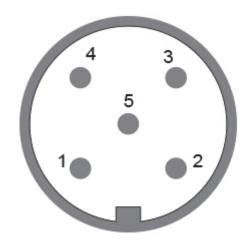
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Product Life Cycle

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

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Got questions? Need an individual solution? We are here to help!

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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.