



LINARIX Linear Sensor

LD0-EEA1B-1213-FR00-PRM



General Data

General Data

| Supply Voltage | 10 - 30 VDC |
|----------------------------|-----------------------------------|
| Power Consumption | ≤ 2.5 W |
| Turn On Time | < 1 s |
| Operating Temperature | -20 °C (-4 °F) - +80 °C (+176 °F) |
| Weight | 3855 g (8.50 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 | 15.00 m (49.21') |
|---------------------------------|----------------------------------|
| Length per Revolution | 315 mm |
| Wire Material | Coated Polyamide Stainless Steel |
| Wire Diameter | 1.00 mm |
| Encoder Housing Material | Steel |
| Draw Wire Housing Material | Aluminum |
| Max. Speed of Wire Displacement | 2.0 m / s |
| Max. Wire Acceleration | 3.0 g |
| Max. Extension Force | 25.0 N |
| | |

Sold & Serviced By:









| Min. Retraction Force | 8.0 N |
|-----------------------|--|
| Actuation Lifetime | 0.5 mio Cycles (Estimated based on ideal conditions) |
| Wire Mounting | Eyelet |
| Max. Wire Exit Angle | ±3° |

Sensor Data

| Technology | Optical (≤ 0.02°) |
|-----------------------------------|-------------------|
| Accuracy | ±0.01 % FSO |
| Repeatability | ±0.001 % FSO |
| Resolution [Encoder - Singleturn] | 13 bit |
| Resolution [Encoder - Multiturn] | 12 bit |
| Approx. Linear Resolution | 38.5 μm |
| Output Code | Binary |
| | |

Interface

| Communication Interface | EtherNet/IP |
|-------------------------|---|
| Profile | CIP (Common Industrial Protocol) |
| Diagnostics | Memory |
| Programming Functions | Resolution, time base and filter for velocity, preset, counting direction, IP-Address |
| Transmission Rate | 10 / 100 Mbit |
| Cycle Time Interface | ≥ 1 ms |

Outputs

| Output Driver | Ethernet |
|-----------------------------|--|
| Current Consumption | ≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC |
| Reverse Polarity Protection | Yes |
| Short Circuit Protection | Yes |
| MTTF | 65 years @ 40 °C |

Electrical Connection

| Connection Orientation | Radial |
|--|-----------------------------|
| Connection Orientation (w.r.t Draw Wire) | Radial 0 / Axial |
| Connector 1 | M12, Female, 4 pin, d coded |
| Connector 2 | M12, Male, 4 pin, a coded |
| Connector 3 | M12, Female, 4 pin, d coded |

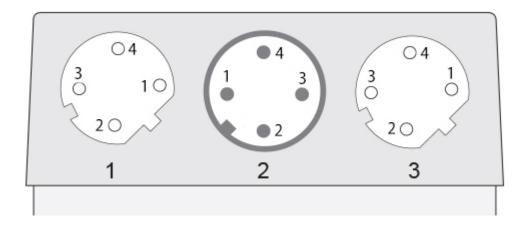
Data Sheet
Printed at 4-11-2021 15:11





Product Life Cycle

| Product Life Cycle | Established | |
|--------------------|---------------|--|
| FIDUUCE LIFE CYCIE | LStabilisticu | |



Connection Plan

| SIGNAL | CONNECTOR | PIN NUMBER |
|---------------|-------------|------------|
| Tx+ | Connector 1 | 1 |
| Rx+ | Connector 1 | 2 |
| Tx- | Connector 1 | 3 |
| Rx- | Connector 1 | 4 |
| Power Supply | Connector 2 | 1 |
| Not Connected | Connector 2 | 2 |
| GND | Connector 2 | 3 |
| Not Connected | Connector 2 | 4 |
| Tx+ | Connector 3 | 1 |
| Rx+ | Connector 3 | 2 |
| Tx- | Connector 3 | 3 |
| Rx- | Connector 3 | 4 |

Connector-View on Encoder

Dimensional Drawing

2D Drawing

Accessories

Connectors & Cables 2m PUR Cable, 4pin, D-Coded, m M12, 4pin A-Coded, Female 10m PUR Cable, 4pin, D-Coded, m 10m PVC Cable, 4pin, D-Coded, m 2m PVC Cable, 4pin, D-Coded, m 5m PVC Cable, 4pin, D-Coded, m

Data Sheet
Printed at 4-11-2021 15:11





POS M12 5pin-A Female+5m PUR Cable POS M12 5pin-A Female+2m PUR Cable POS M12 5pin-A Female+10m PUR Cable M12, 4pin D-Coded, Male M12, 5pin A-Coded, Female 5m PUR Cable, 4pin, D-Coded, m More

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

Sold & Serviced By:



sales@electromate.com www.electromate.com



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.

Data Sheet Printed at 4-11-2021 15:11