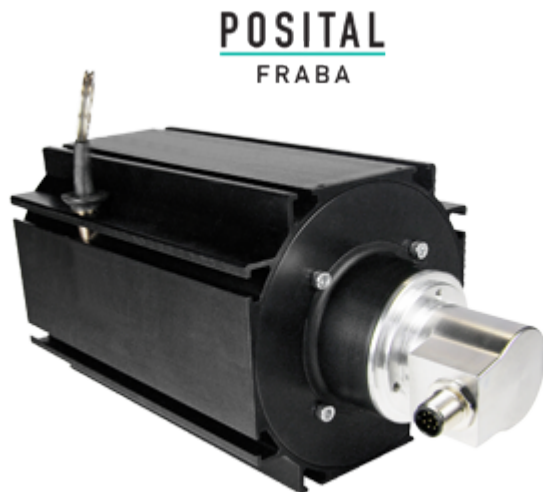



LINARIX Linear Sensor
LU0-S101B-1213-FR00-PRQ

General Data
General Data

| | |
|----------------------------|-----------------------------------|
| Supply Voltage | 4.5 - 30 VDC |
| Power Consumption | ≤ 1.0 W |
| Turn On Time | < 1 s |
| Operating Temperature | -20 °C (-4 °F) - +80 °C (+176 °F) |
| Weight | 3715 g (8.19 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 |

Data Sheet

Printed at 4-11-2021 15:11



| | |
|-----------------------|--|
| Min. Retraction Force | 8.0 N |
| Actuation Lifetime | 0.5 mio Cycles (Estimated based on ideal conditions) |
| Wire Mounting | Eyelet |
| Max. Wire Exit Angle | $\pm 3^\circ$ |

Sensor Data

| | |
|-----------------------------------|--------------------------------|
| Technology | Magnetic ($\leq 0.09^\circ$) |
| 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 | SSI with Preset |
| Manual Functions | Preset + complement via cable or connector |
| Cycle Time Interface | ≥ 25 μs |

Outputs

| | |
|-----------------------------|-------------------------|
| Output Driver | RS422 |
| Current Consumption | Typical 50 mA |
| Clock Input | RS 422, via Optocoupler |
| Clock frequency | 100 kHz - 2 MHz |
| Reverse Polarity Protection | Yes |
| Short Circuit Protection | Yes |
| MTTF | 350 years @ 40 °C |

Electrical Connection

| | |
|--|---------------------------|
| Connection Orientation | Radial |
| Connection Orientation (w.r.t Draw Wire) | Radial 0 / Axial |
| Connector | M12, Male, 8 pin, a coded |

Product Life Cycle

| | |
|--------------------|-------------|
| Product Life Cycle | Established |
|--------------------|-------------|



Connection Plan

| SIGNAL | PIN NUMBER |
|--------------|-------------------|
| Power Supply | 2 |
| GND | 1 |
| Data+ | 5 |
| Data- | 6 |
| Clock+ | 3 |
| Clock- | 4 |
| Preset | 7 |
| DIR | 8 |
| Shielding | Connector Housing |

Connector-View on Encoder
Rotation Clockwise (seen on shaft)

Dimensional Drawing

[2D Drawing](#)

Accessories

Connectors & Cables

10m PUR Cable, 8pin, A-Coded, f
 POS M12 8pin-A Female+5m PUR Cable
 POS M12 8pin-A Female+2m PUR Cable
 POS M12 8pin-A Female+10m PUR Cable
 M12, 8pin A-Coded, Female

More

Data Sheet

Printed at 4-11-2021 15:11



Displays

AP21-00 SSI Display

AP21-DA SSI Display (4 dig. + analog o/p)

DiMod-P SSI Display

Configuration/Programming Tools

SSI2USB Adapter DB15 (VA01)

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

Sold & Serviced By:



Canadian and International Sales

ELECTROMATE

877-737-8698

sales@electromate.com

www.electromate.com

U.S. Sales

SERVO2GO.com

877-378-0240

sales@servo2go.com

www.servo2go.com

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.