



LINARIX Linear Sensor

LU0-S101G-1212-5G60-2RW

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General Data

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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	1565 g (3.45 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	5.00 m (16.40')
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	5.0 g
Max. Extension Force	16.0 N

Data Sheet

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Min. Retraction Force	4.0 N
Actuation Lifetime	0.5 mio Cycles
Wire Mounting	Eyelet

Sensor Data

Technology	Magnetic ($\leq 0.09^\circ$)
Accuracy	± 0.02 % FSO
Repeatability	± 0.002 % FSO
Resolution [Encoder - Singleturn]	12 bit
Resolution [Encoder - Multiturn]	12 bit
Approx. Linear Resolution	76.9 μm
Output Code	Gray

Interface

Communication Interface	SSI with Preset
Programming Functions	Absolute: Resolution, Revolution, Code, 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 6
Cable Length	2 m [79"]
Wire Cross Section	0.14 mm ² / AWG 26
Material / Type	PVC
Cable Diameter	6 mm (0.24 in)
Minimum Bend Radius	46 mm (1.81") fixed, 61 mm (2.4") flexing

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Product Life Cycle

Product Life Cycle	Established
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Connection Plan

SIGNAL	CABLE COLOR
Power Supply	Brown
GND	White
Data+	Gray
Data-	Pink
Clock+	Green
Clock-	Yellow
Preset	Blue
DIR	Red
Shielding	Shield

Dimensional Drawing

[2D Drawing](#)

Accessories

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)

Contact



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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.