



IXARC Incremental Encoder

OCD-INS00-XXXXX-115W-2RW



The picture is for presentation purposes only. Please refer to the detailed technical drawing at the end of the page.

Interface

Interface	Incremental
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Outputs

Output Driver	RS 422 (TTL)
Output Incremental	A, /A, B, /B, Z, /Z
Quadrature Phasing	90° ± 4.5° electrical

Electrical Data

Supply Voltage	4.5 - 5.5 VDC
Current Consumption	Typical 40mA @ 24V (no load)
Power Consumption	≤ 1.2 W
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2

Sensor

Technology	Optical
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Data Sheet

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POSITAL

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Accuracy (INL)	±0.002°
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Environmental Specifications

Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-40 °C fixed (-40 °F), -30 °C flexible (-22 °F) - +80 °C (+176 °F)
Humidity	98% RH, no condensation

Mechanical Data

Mechanical Data

Housing Material	Stainless Steel V4A (1.4404, 316 L)
Housing Coating	No Coating
Flange Type	Clamp, ø 115 mm
Flange Material	Stainless steel V4A (1.4404, 316 L)
Shaft Type	Solid, Length = 27 mm, with Key Way
Shaft Diameter	ø 11 mm (0.43")
Shaft Material	Stainless Steel V4A (1.4404, 316L)
Max. Shaft Load	Axial 250 N, Radial 350 N
Rotor Inertia	≤ 200 gcm ² [≤ 1 oz-in ²]
Friction Torque	≤ 5 Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 8000 1/min
Shock Resistance	≤ 200 g (half sine 11 ms, EN 60068-2-27)
Vibration Resistance	≤ 20 g (20 Hz - 2000 Hz, EN 60068-2-6)
Length	81,5 mm (3.21")
Weight	3600 g (7.94 lb)
Minimum Mechanical Lifetime (10 ⁸ revolutions with Fa/Fr)	30 (250N/350N)

Electrical Connection

Connection Orientation	Radial
Cable Length	2 m [79"]
Wire Cross Section	0.25 mm ² / AWG 24
Material / Type	PUR / PU
Cable Diameter	5.2 mm (0.2 in)
Minimum Bend Radius	30 mm (1.18 in) fixed, 60 mm (2.36 in) flexing



Certification

Product Life Cycle

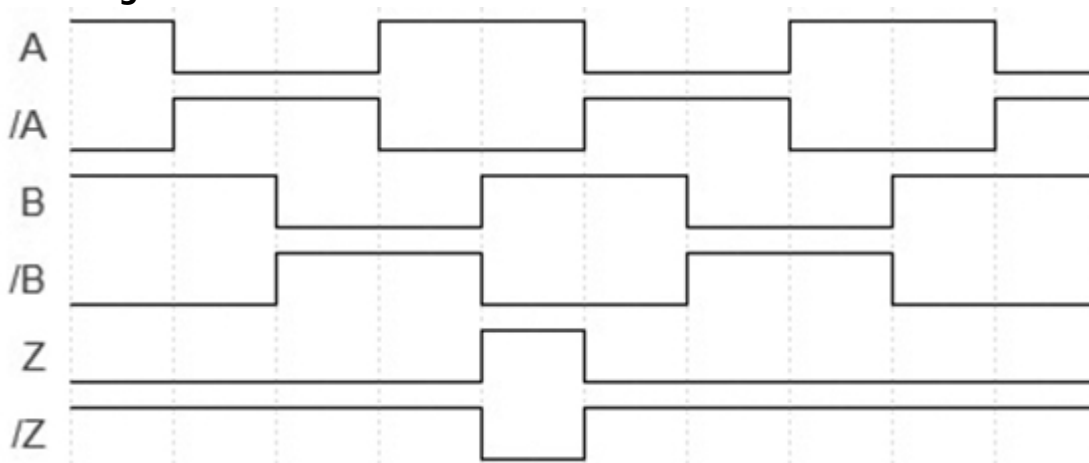
Product Life Cycle Established

Connection Plan

SIGNAL	CABLE COLOR
A	Green
/A	Yellow
B	Gray
/B	Pink
Z	Blue
/Z	Red
Power Supply	Brown
GND	White
Shielding	Shield

Connector-View on Encoder

Pulse Diagram



Rotation Clockwise (seen on shaft)

Dimensional Drawing

[2D Drawing](#)



Contact



Contact Us

The picture and drawing are for general presentation purposes only. Please refer to the "Download" section for detailed technical drawings. All dimension in [inch] mm. © FRABA B.V., All rights reserved. We do not assume responsibility for technical inaccuracies or omissions. Specifications are subject to change without notice.