# POSITAL FRABA

# IXARC Absolute Rotary Encoder

# OCD-D2C1B-1213-B12V-H3P



#### Interface

Interface	DeviceNet
Profile	CIP (Common Industrial Protocol)
Manual Functions	Address selector switch 0-99 and terminal resistor (with connection cap)
Transmission Rate	150 kBaud, 250 kBaud, 500 kBaud
Interface Cycle Time	≥ 10 ms
Programming Functions	Resolution, preset, complement, transmission mode: polled mode, cyclic mode, sync mode

# Outputs

Output Driver	Transceiver (ISO 11898), Galvanically Isolated by
	Opto-Couplers

#### **Electrical Data**

Supply Voltage	10 - 30 VDC
Current Consumption	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
Power Consumption	≤ 2.5 W
Start-Up Time	< 1 s
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
	Data Sheet

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#### MTTF

13.5 years @ 40 °C

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#### Sensor

Technology	Optical
Resolution Singleturn	13 bit
Resolution Multiturn	12 bit
Multiturn Technology	Mechanical Gearing (no Battery)
Accuracy (INL)	±0.0220° (14 - 16 bit), ±0.0439° (≤13 bit)
Code	Binary

## **Environmental Specifications**

Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Storage Temperature	-40 °C (-40 °F) – +85 °C (+185 °F)
Humidity	98% RH, no condensation

#### **Mechanical Data**

Connection Cap Material	Stainless Steel V2A (1.4305; 303)
Housing Material	Stainless Steel V2A (1.4305, 303)
Housing Coating	No Coating
Flange Type	Blind Hollow, ø 58 mm (B)
Flange Material	Stainless steel V2A (1.4305; 303)
Shaft Type	Blind Hollow, Depth = $30 \text{ mm}$
Shaft Diameter	ø 12 mm (0.47")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Rotor Inertia	≤ 30 gcm² [≤ 0.17 oz-in²]
Friction Torque	≤ 5 Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 3000 1/min
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq$ 10 g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	≤ 10 g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	100 mm (3.94")
Weight	1060 g (2.34 lb)
Maximum Axial / Radial Misalignment	Static $\pm$ 0.3 mm / $\pm$ 0.5 mm; Dynamic $\pm$ 0.1 mm / $\pm$ 0.2 mm

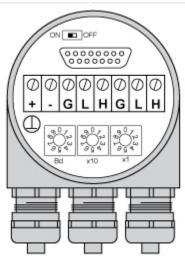
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#### **Electrical Connection**

Connection Orientation	Radial
Connection Type	3 x Cable Gland

### Product Life Cycle

Product Life Cycle	Established
Approval	CE



#### **Connection Plan**

SIGNAL	PIN NUMBER
Power Supply	+
GND	-
CAN High	Н
CAN Low	L
CAN GND	G
CAN High	Н
CAN Low	L
CAN GND	G
GND	L

Connector-View on Encoder **Dimensional Drawing** 

## 2D Drawing

# POSITAL FRABA

#### Accessories

Clamping Rings Clamping Ring B15-VA

Contact

# Sold & Serviced By:





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.

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