



# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

### OCD-D2C1B-0012-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	$\geq 10$ 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
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#### Electrical Data

Supply Voltage	10 - 30 VDC
Current Consumption	$\leq 230$ mA @ 10 V DC, $\leq 100$ mA @ 24 V DC
Power Consumption	$\leq 2.5$ 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

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MTTF	13.5 years @ 40 °C
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### Sensor

Technology	Optical
Resolution Singleturn	12 bit
Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ ( $\leq 13$ 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, $\varnothing$ 58 mm (B)
Flange Material	Stainless steel V2A (1.4305; 303)
Shaft Type	Blind Hollow, Depth = 30 mm
Shaft Diameter	$\varnothing$ 12 mm (0.47")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Rotor Inertia	$\leq 30$ gcm <sup>2</sup> [ $\leq 0.17$ oz-in <sup>2</sup> ]
Friction Torque	$\leq 5$ Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000$ 1/min
Shock Resistance	$\leq 100$ 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	$\leq 10$ g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	89 mm (3.50")
Weight	1040 g (2.29 lb)
Maximum Axial / Radial Misalignment	Static $\pm 0.3$ mm / $\pm 0.5$ mm; Dynamic $\pm 0.1$ mm / $\pm 0.2$ mm

### Electrical Connection

Connection Orientation	Radial
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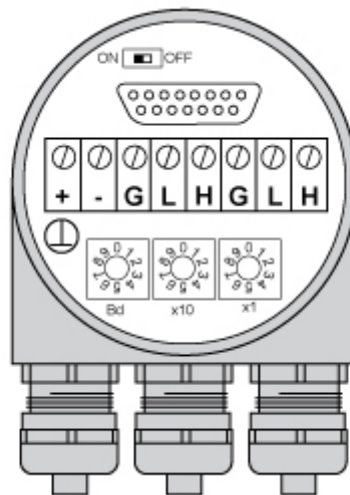
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Connection Type 3 x Cable Gland

### Product Life Cycle

Product Life Cycle Established

Approval CE



### Connection Plan

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

Connector-View on Encoder

### Dimensional Drawing

[2D Drawing](#)

### Accessories

Clamping Rings

Clamping Ring B15-VA

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## Contact

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