



# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

OCD-D2C1B-0016-C100-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	16 bit
Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ ( $\leq 13$ bit)
Code	Binary

### Environmental Specifications

Protection Class (Shaft)	IP65
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	Aluminum
Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Clamp, $\varnothing$ 58 mm (C)
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 20 mm
Shaft Diameter	$\varnothing$ 10 mm (0.39")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime (10 <sup>8</sup> revolutions with Fa/Fr)	430 (20 N / 40 N), 150 (40 N / 60 N), 100 (40 N / 80 N), 55 (40 N / 110 N)
Rotor Inertia	$\leq 30$ gcm <sup>2</sup> [ $\leq 0.17$ oz-in <sup>2</sup> ]
Friction Torque	$\leq 3$ Ncm @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 12000$ 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	69,5 mm (2.74")
Weight	465 g (1.03 lb)



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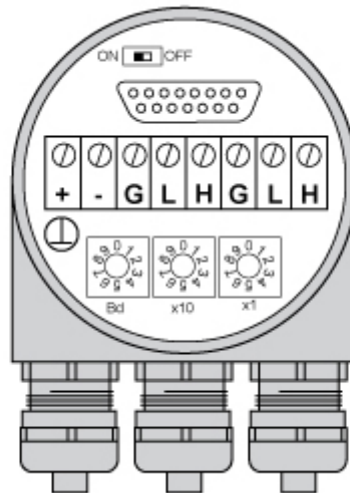
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### Electrical Connection

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	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](#)



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### Accessories

#### Couplings

- Coupling Disc Type-10-12
- Coupling Bellow Type-10-10
- Coupling Bellow Type-06-10
- Coupling Bellow Type-08-10
- Coupling Bellow Type-10-12
- Coupling Bellow Type-10-(1/4")
- Coupling Bellow Type-10-(3/8")
- Coupling Jaw Type-06-10
- Coupling Jaw Type-08-10
- Coupling Jaw Type-10-12
- Coupling Jaw Type-10-(1/4")
- Coupling Jaw Type-10-(3/8")
- Coupling Jaw Type-10-10
- Coupling Disc Type-06-10
- Coupling Disc Type-10-10

#### More

#### Adapter Flanges

- Mounting Bracket for Clamping Flange w/ fixtures
- L Mounting Bracket w/ screws
- Mounting Bracket Spring Loaded f. Clamping Flange
- Clamping Rings
- Clamp Disc w/ Eccentric Hole-4pcs
- Clamp Disc w/ Centred Hole-4pcs

### Contact

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