



# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

### OCD-D2C1B-1216-S06S-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 |
|---------------|---|

#### 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 |
|------|--------------------|

### Sensor

|                       |   |
|-----------------------|---|
| Technology            | Optical   |
| Resolution Singleturn | 16 bit  |
| Resolution Multiturn  | 12 bit  |
| Multiturn Technology  | Mechanical Gearing (no Battery)                                       |
| 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   | Aluminum   |
| Housing Material  | Steel  |
| Housing Coating   | Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spay resistance) |
| Flange Type   | Synchro, $\varnothing$ 58 mm (S)   |
| Flange Material   | Aluminum   |
| Shaft Type  | Solid, Length = 10 mm  |
| Shaft Diameter  | $\varnothing$ 6 mm (0.24")   |
| Shaft Material  | Stainless Steel V2A (1.4305, 303)  |
| Max. Shaft Load   | Axial 40 N, Radial 110 N   |
| Minimum Mechanical Lifetime<br>( $10^8$ revolutions with Fa/Fr) | 400 (20 N / 40 N)  |
| Rotor Inertia   | $\leq 30 \text{ gcm}^2$ [ $\leq 0.17 \text{ oz-in}^2$ ]  |
| Friction Torque   | $\leq 5 \text{ Ncm}$ @ 20 °C, (7.1 oz-in @ 68 °F)  |
| Max. Permissible Mechanical Speed                               | $\leq 3000 \text{ 1/min}$  |
| Shock Resistance  | $\leq 100 \text{ g}$ (half sine 6 ms, EN 60068-2-27)   |
| Permanent Shock Resistance                                      | $\leq 10 \text{ g}$ (half sine 16 ms, EN 60068-2-29)   |
| Vibration Resistance  | $\leq 10 \text{ g}$ (10 Hz - 1000 Hz, EN 60068-2-6)  |
| Length  | 84,5 mm (3.33")  |

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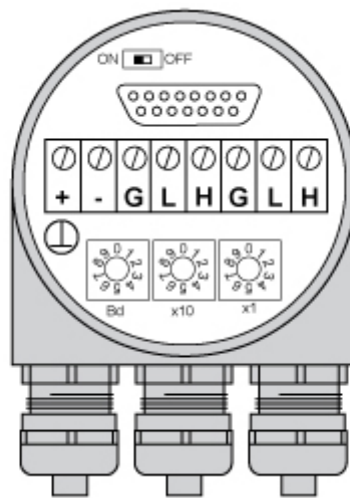
Weight 465 g (1.03 lb)

### 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          | L          |

Connector-View on Encoder  
**Dimensional Drawing**

[2D Drawing](#)

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### Accessories

#### Couplings

Coupling Bellow Type-06-06

Coupling Bellow Type-06-10

Coupling Bellow Type-06-08

Coupling Bellow Type-06-(3/8")

Coupling Bellow Type-06-(1/4")

Coupling Jaw Type-06-06

Coupling Jaw Type-06-10

Coupling Jaw Type-06-08

Coupling Jaw Type-06-12

Coupling Jaw Type-06-(1/4")

Coupling Jaw Type-06-(3/8")

Coupling Disc Type-06-06

Coupling Disc Type-06-10

More

Adapter Flanges

Mounting Bracket for Synchro Flange w/ fixtures

Clamping Rings

Clamp Disc w/ Eccentric Hole-4pcs

Clamp Disc w/ Centred Hole-4pcs

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