

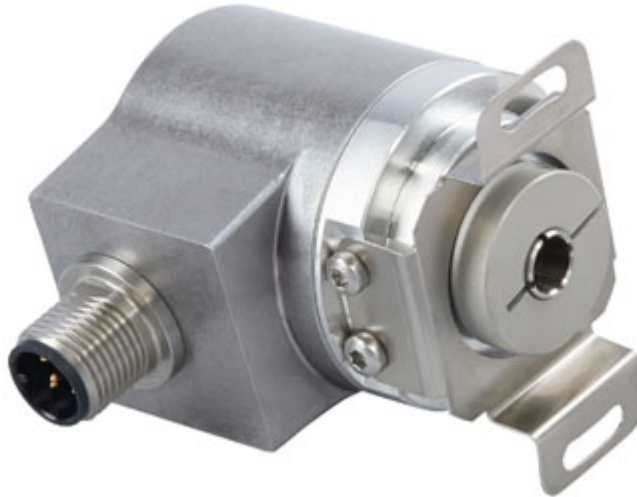


# POSITAL

## FRABA

### IXARC Absolute Rotary Encoder

### UCD-CA01B-0012-VAS0-PRM



#### Interface

|                       |   |
|-----------------------|---|
| Interface             | CANopen   |
| Profile               | DS-406  |
| Features              | Round Axis  |
| Transmission Rate     | min. 20 kBaud, max. 1 MBaud   |
| Interface Cycle Time  | $\geq 1$ ms   |
| Video Manual          | <a href="#">▶ Watch a simple installation video</a>   |
| Programming Functions | Resolution, preset, 2 limit switches, 8 CAMS, baud rate, CAN-Identifier, bootloader, transmission modes: polled, cyclic, sync |

#### Outputs

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

#### Electrical Data

|                             |  |
|-----------------------------|--|
| Supply Voltage              | 9 - 30 VDC                                     |
| Current Consumption         | $\leq 65$ mA @ 10 V DC, $\leq 60$ mA @ 24 V DC |
| Power Consumption           | $\leq 1.2$ 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                               |

Data Sheet

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|      |                   |
|------|-------------------|
| MTTF | 240 years @ 40 °C |
|------|-------------------|

### Sensor

|                       |                                     |
|-----------------------|-------------------------------------|
| Technology            | Magnetic                            |
| Resolution Singleturn | 12 bit                              |
| Accuracy (INL)        | $\pm 0.0878^\circ$ ( $\leq 12$ bit) |
| Code                  | Binary                              |

### Environmental Specifications

|                            |                                    |
|----------------------------|------------------------------------|
| Protection Class (Shaft)   | IP65                               |
| Protection Class (Housing) | IP65                               |
| 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             | None  |
| Housing Material                    | Steel   |
| Housing Coating                     | Cathodic corrosion protection (>720 hrs salt spray resistance)          |
| Flange Type                         | Blind Hollow, $\varnothing$ 36 mm / $\varnothing$ 42 mm                 |
| Flange Material                     | Aluminum  |
| Shaft Type                          | Blind Hollow, Depth = 18 mm   |
| Shaft Diameter                      | $\varnothing$ 10 mm (0.39")   |
| Shaft Material                      | Stainless Steel V2A (1.4305, 303)                                       |
| 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                              | 50,2 mm (1.98")   |
| Weight                              | 180 g (0.40 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 |
|------------------------|--------|



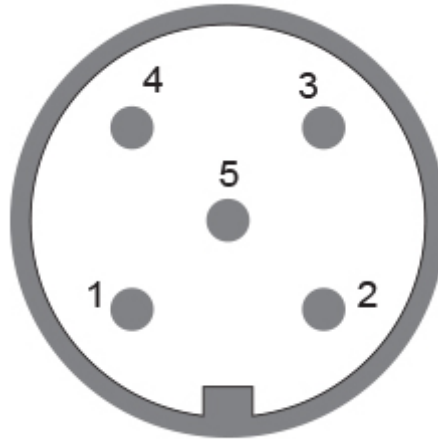
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|                 |                           |
|-----------------|---------------------------|
| Connection Type | Cable / Connector         |
| Connector       | M12, Male, 5 pin, a coded |

### Certification

|                    |             |
|--------------------|-------------|
| Approval           | CE + cULus  |
| Product Life Cycle | Established |



### Connection Plan

| SIGNAL       | PIN NUMBER |
|--------------|------------|
| Power Supply | 2          |
| GND          | 3          |
| CAN High     | 4          |
| CAN Low      | 5          |
| CAN GND      | 1          |

Connector-View on Encoder

### Dimensional Drawing

[2D Drawing](#)

### Accessories

Connectors & Cables

10m PUR Cable, 5pin, A-Coded, f

POS M12 5pin-A Female+5m PUR Cable

POS M12 5pin-A Female+2m PUR Cable

POS M12 5pin-A Female+10m PUR Cable

Data Sheet

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## FRABA

M12, 5pin A-Coded, Female  
More  
Clamping Rings  
Clamping Ring V12

### 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.