



### IXARC Absolute Rotary Encoder

**OCD-CAA1B-0016-B10A-PA9**



#### Interface

|                       |   |
|-----------------------|---|
| Interface             | CANopen   |
| Profile               | DS-406  |
| Programming Functions | Resolution, preset, 2 limit switches, 8 CAMS, baud rate, CAN-Identifier, bootloader, transmission modes: polled, cyclic, sync |
| Manual Functions      | Address selector switch 0-99 and terminal resistor (with connection cap)  |
| 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>   |

#### 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               | $< 250$ ms                                       |
| Reverse Polarity Protection | Yes  |

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|                           |                    |
|---------------------------|--------------------|
| Short Circuit Protection  | Yes                |
| EMC: Emitted Interference | DIN EN 61000-6-4   |
| EMC: Noise Immunity       | DIN EN 61000-6-2   |
| MTTF                      | 13.5 years @ 40 °C |

### 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) | IP54                               |
| 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, $\varnothing$ 58 mm (B)                          |
| Flange Material                   | Aluminum   |
| Shaft Type                        | Blind Hollow, Depth = 30 mm                                    |
| Shaft Diameter                    | $\varnothing$ 10 mm (0.39")                                    |
| 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                   | $\leq 3$ 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                            | 60,2 mm (2.37")  |
| Weight                            | 295 g (0.65 lb)  |

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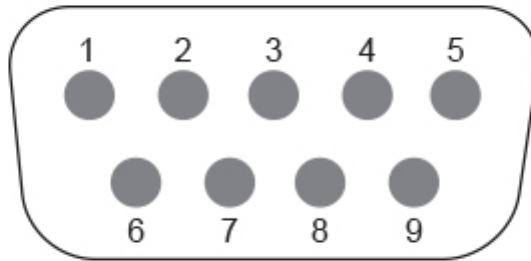


### Electrical Connection

|                        |                         |
|------------------------|-------------------------|
| Connection Orientation | Axial                   |
| Connection Type        | Cable / Connector       |
| Connector              | Connector#D-Sub (9 pin) |

### Certification

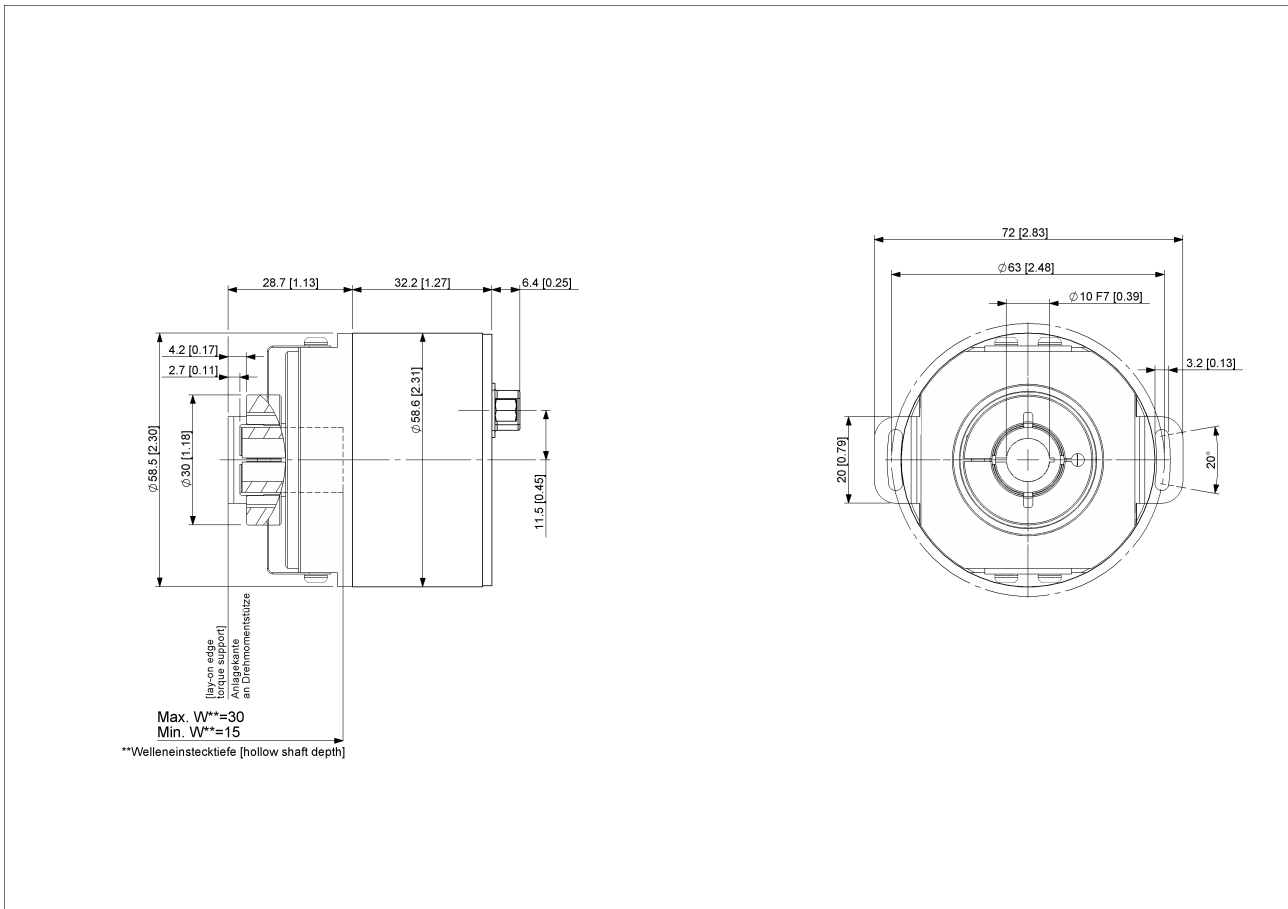
|                    |             |
|--------------------|-------------|
| Approval           | CE          |
| Product Life Cycle | Established |



### Connection Plan

| SIGNAL       | PIN NUMBER |
|--------------|------------|
| Power Supply | 9          |
| GND          | 6          |
| CAN High     | 7          |
| CAN Low      | 2          |
| CAN GND      | 3          |

Connector-View on Encoder



### [2D Drawing](#)

### Accessories

Clamping Ring B15

### Contact



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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.

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Specifications are subject to change without notice.