



### IXARC Absolute Rotary Encoder

OCD-CAA1B-0016-B10S-PRL



#### 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)   | 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           | None  |
| Housing Material                  | Steel   |
| Housing Coating                   | Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h 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                   | $\leq 5$ 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                            | 71,2 mm (2.80")   |
| Weight                            | 305 g (0.67 lb)   |

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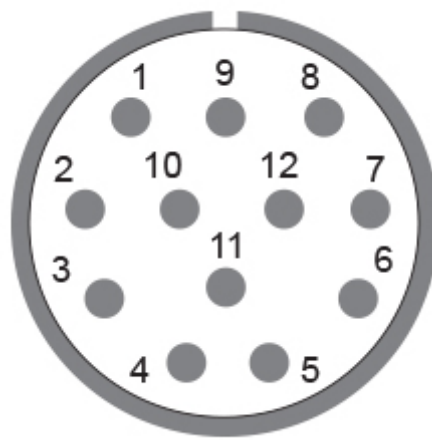


### Electrical Connection

|                        |                               |
|------------------------|-------------------------------|
| Connection Orientation | Radial                        |
| Connection Type        | Cable / Connector             |
| Connector              | M23, Male, 12 pin, CCW / left |

### Certification

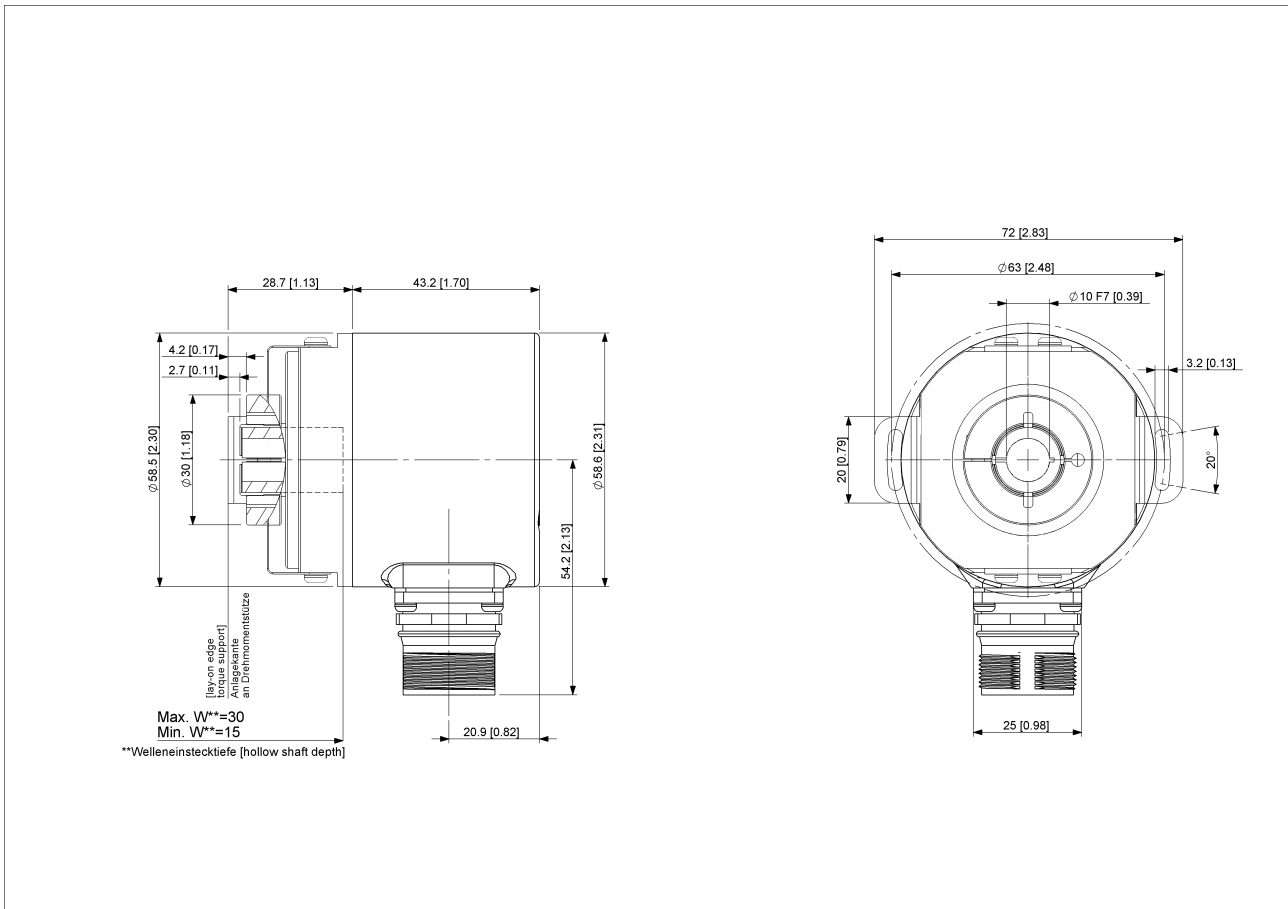
|                    |   |
|--------------------|---|
| Approval           | CE + cULus listed, Industrial Control Equipment |
| Product Life Cycle | Established                                     |



### Connection Plan

| SIGNAL       | PIN NUMBER |
|--------------|------------|
| Power Supply | 12         |
| GND          | 10         |
| CAN High     | 7          |
| CAN Low      | 2          |
| CAN GND      | 3          |

Connector-View on Encoder



### [2D Drawing](#)

### Accessories

#### Connectors & Cables

- 10m PVC Cable, 12pin, Clockwise, f
- 15m PVC Cable, 12pin, Clockwise, f
- 1m PVC Cable, 12pin, Clockwise, f
- 20m PVC Cable, 12pin, Clockwise, f
- 5m PVC Cable, 12pin, Clockwise, f
- 30m PVC Cable, 12pin, Clockwise, f
- 2m PVC Cable, 12pin, Clockwise, f
- M23, 12pin Clockwise, Female
- More

#### Clamping Ring B15

### Contact

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