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## IXARC Absolute Rotary Encoder

## UCD-CA01B-1312-HTS0-PRM



| **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 |
| Features | Round Axis |
| Transmission Rate | min. 20 kBaud, max. 1 MBaud |
| Interface Cycle Time | ≥ 1 ms |
| Video Manual | **Watch a simple installation video** |

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

| **Electrical Data** | |
|---|---|
| Supply Voltage | 9 – 30 VDC |
| Power Consumption | ≤ 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 |
| MTTF | 240 years @ 40 °C |

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| Sensor | |
|---|---|
| Technology | Magnetic |
| Resolution Singleturn | 12 bit |
| Resolution Multiturn | 13 bit |
| Multiturn Technology | Self powered magnetic pulse counter (no battery, no gear) |
| Accuracy (INL) | ±0.0878° (≤ 12 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 |

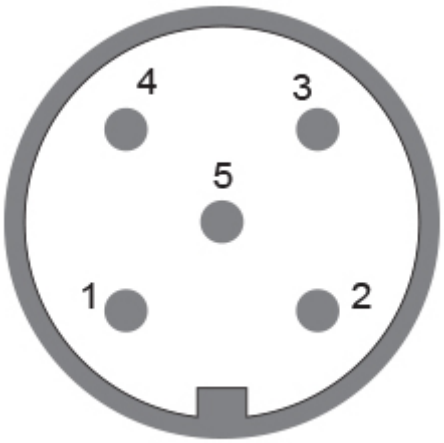
| Mechanical Data | |
|---|---|
| Connection Cap Material | None |
| Housing Material | Steel |
| Housing Coating | Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spay resistance) |
| Flange Type | Blind Hollow, ø 58 mm (H) |
| Flange Material | Aluminum |
| Shaft Type | Blind Hollow, Depth = 28 mm |
| Shaft Diameter | ø 12.7 mm (1/2") |
| Shaft Material | Stainless Steel V2A (1.4305, 303) |
| Rotor Inertia | ≤ 30 gcm² [≤ 0.17 oz-in²] |
| Friction Torque | ≤ 3 Ncm @ 20 °C (4.2 oz-in @ 68 °F) |
| Max. Permissible Mechanical Speed | ≤ 12000 1/min |
| Shock Resistance | ≤ 100 g (half sine 6 ms, EN 60068-2-27) |
| Permanent Shock Resistance | ≤ 10 g (half sine 16 ms, EN 60068-2-29) |
| Vibration Resistance | ≤ 10 g (10 Hz – 1000 Hz, EN 60068-2-6) |
| Length | 71,2 mm (2.80") |
| Weight | 360 g (0.79 lb) |

| Electrical Connection | |
|---|---|
| Connection Orientation | Radial |

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

**Certification**

| | |
|---|---|
| Approval | CE + cULus listed, Industrial Control Equipment + E1 |
| Product Life Cycle | Established |

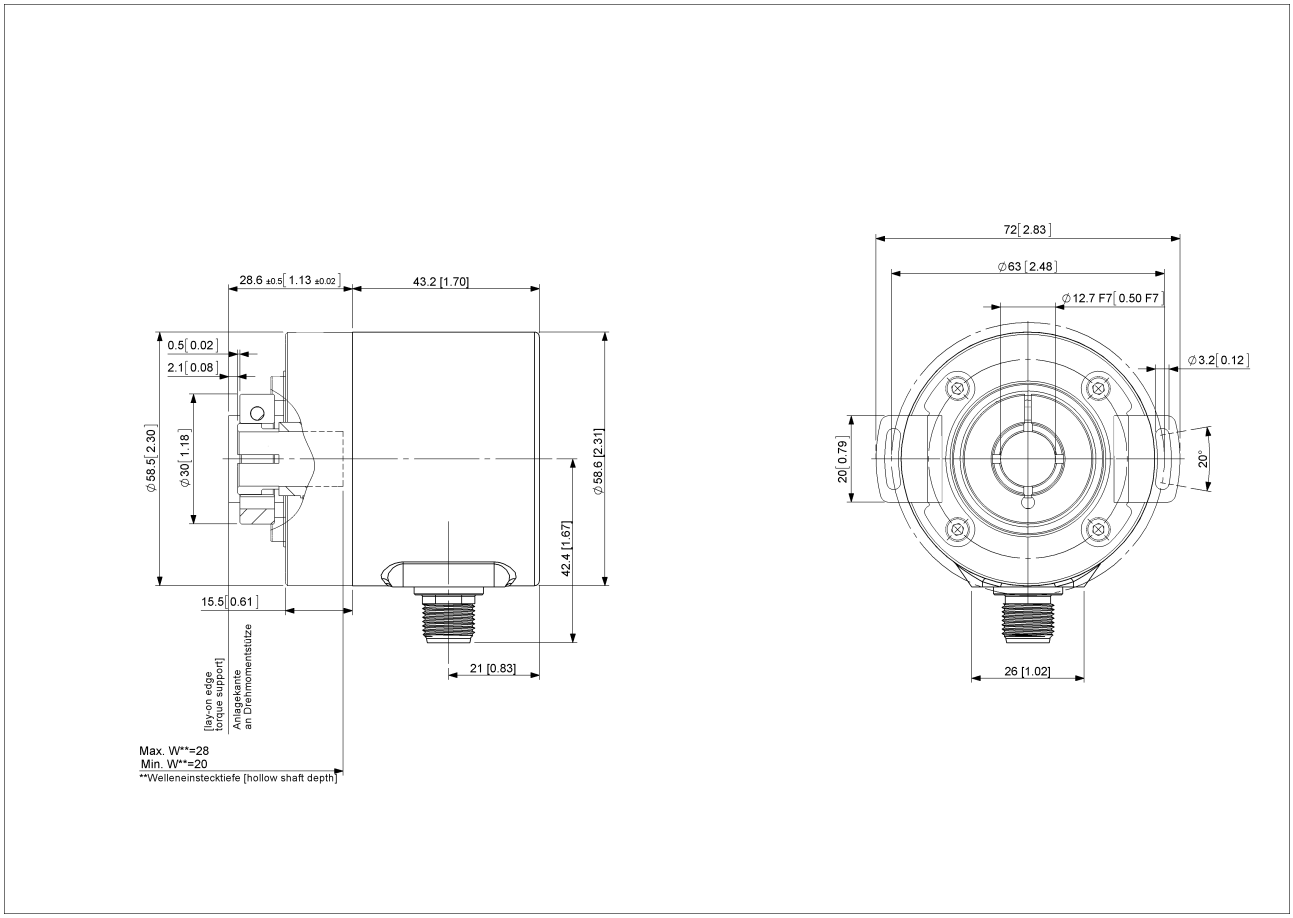



**Connection Plan**

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

Connector-View on Encoder

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2D Drawing

**Accessories**

Connectors & Cables
10m PUR Cable, 5pin, A-Coded, f
2m PUR Cable, 5pin, A-Coded, f
5m PUR Cable, 5pin, A-Coded, f
10m PUR Cable, 5pin, A-Coded, f
M12, 5pin A-Coded, Female
More

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. Specifications are subject to change without notice.