

IXARC Absolute Rotary Encoder

UCD-CA01B-0013-L06S-PRM



Interface

| | |
|-----------------------|---|
| Interface | CANopen |
| Profile | DS-406 |
| Features | Round Axis |
| Transmission Rate | min. 20 kBaud, max. 1 MBaud |
| Interface Cycle Time | ≥ 1 ms |
| Video Manual | ▶ Watch a simple installation video |
| 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 | ≤ 65 mA @ 10 V DC, ≤ 60 mA @ 24 V DC |
| 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 |

Data Sheet

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

Sensor

| | |
|-----------------------|---------------------|
| Technology | Magnetic |
| Resolution Singleturn | 13 bit |
| Accuracy (INL) | ±0.0878° (≤ 12 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 | Clamp, ø 58 mm (L) |
| Flange Material | Aluminum |
| Shaft Type | Solid, Length = 10 mm |
| Shaft Diameter | ø 6 mm (0.24") |
| Shaft Material | Stainless Steel V2A (1.4305, 303) |
| Max. Shaft Load | Axial 40 N, Radial 110 N |
| Minimum Mechanical Lifetime (10 ⁸ revolutions with Fa/Fr) | 530 (20 N / 40 N), 185 (40 N / 60 N), 130 (40 N / 80 N), 80 (40 N / 110 N) |
| Rotor Inertia | ≤ 30 gcm ² [≤ 0.17 oz-in ²] |
| Friction Torque | ≤ 5 Ncm @ 20 °C, (7.1 oz-in @ 68 °F) |
| Max. Permissible Mechanical Speed | ≤ 3000 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 | 52,7 mm (2.07") |
| Weight | 320 g (0.71 lb) |

Data Sheet

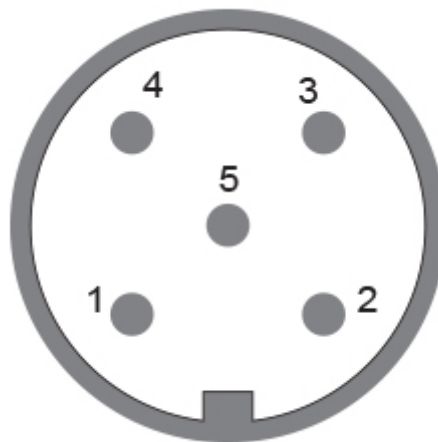
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Electrical Connection

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

Product Life Cycle

| | |
|--------------------|-----------------|
| Product Life Cycle | Established |
| Approval | CE + cULus + E1 |



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

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

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

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

10m PUR Cable, 5pin, A-Coded, f IP69K

M12, 5pin A-Coded, Female

More

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 Clamping Flange w/ fixtures

L Mounting Bracket w/ screws

Mounting Bracket Spring Loaded f. Clamping Flange

Spring Loaded Pivot Arm 58mm

More

Clamping Rings

Clamp Disc w/ Eccentric Hole-4pcs

Clamp Disc w/ Centred Hole-4pcs

Got questions? Need an individual solution? We are here to help!

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