

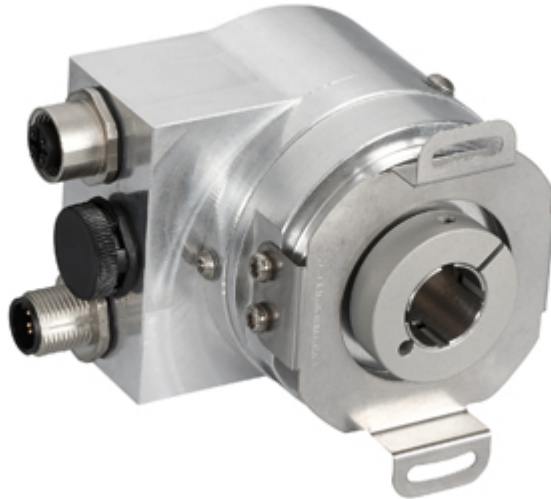


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IXARC Absolute Rotary Encoder

OCD-CAA1B-0013-B10S-PRN



Interface

Interface	CANopen
Profile	DS-406
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	≥ 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
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Electrical Data

Supply Voltage	10 - 30 VDC
Current Consumption	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
Power Consumption	≤ 2.5 W
Start-Up Time	< 1 s
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	13 bit
Accuracy (INL)	$\pm 0.0220^\circ$ (14 - 16 bit), $\pm 0.0439^\circ$ (≤ 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	Aluminum
Housing Coating	No Coating
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	≤ 30 gcm ² [≤ 0.17 oz-in ²]
Friction Torque	≤ 5 Ncm @ 20 °C, (7.1 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	56,5 mm (2.22")
Weight	325 g (0.72 lb)
Maximum Axial / Radial Misalignment	Static ± 0.3 mm / ± 0.5 mm; Dynamic ± 0.1 mm / ± 0.2 mm

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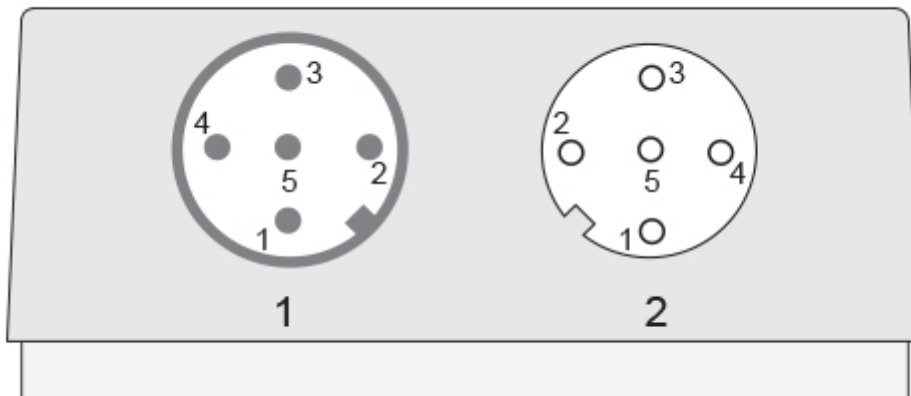
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Electrical Connection

Connection Orientation	Radial
Connection Type	Cable / Connector
Connector 1	M12, Male, 5 pin, a coded
Connector 2	M12, Female, 5 pin, a coded

Product Life Cycle

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



Connection Plan

SIGNAL	CONNECTOR	PIN NUMBER
Power Supply	Connector 1	2
GND	Connector 1	3
CAN High	Connector 1	4
CAN Low	Connector 1	5
CAN GND	Connector 1	1
Power Supply	Connector 2	2
GND	Connector 2	3
CAN High	Connector 2	4
CAN Low	Connector 2	5
CAN GND	Connector 2	1

Connector-View on Encoder Dimensional Drawing

[2D Drawing](#)

Accessories

Connectors & Cables

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M12, 5pin A-Coded, Male
10m PUR Cable, 5pin, A-Coded, f
2m PUR Cable, 5pin, A-Coded, f
5m PUR Cable, 5pin, A-Coded, f
2m PUR Cable, 5pin, A-Coded, m
5m PUR Cable, 5pin, A-Coded, m
10m PUR Cable, 5pin, A-Coded, m
M12, 5pin A-Coded, Female
More
Clamping Rings
Clamping Ring B15

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.