IXARC Absolute Rotary Encoder

OCD-D2C1B-1212-C100-HCC



Interface	
Interface	DeviceNet
Profile	CIP (Common Industrial Protocol)
Manual Functions	Address selector switch 0-99 and terminal resistor (with connection cap)
Transmission Rate	150 kBaud, 250 kBaud, 500 kBaud
Interface Cycle Time	≥ 10 ms
Programming Functions	Resolution, preset, complement, transmission mode: polled mode, cyclic mode, sync mode

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

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
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	12 bit
Resolution Multiturn	12 bit
Multiturn Technology	Mechanical Gearing (no Battery)
Accuracy (INL)	±0.0220° (14 – 16 bit), ±0.0439° (≤13 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	Clamp, ø 58 mm (C)
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 20 mm
Shaft Diameter	ø 10 mm (0.39")
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)	430 (20 N / 40 N), 150 (40 N / 60 N), 100 (40 N / 80 N), 55 (40 N / 110 N)
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	52,5 mm (2.07")

Weight	315 g (0.69 lb)

Electrical Connection	
Connection Orientation	Radial
Connection Type	Without Connection Cap

Certification	
Approval	CE + cULus

Product Life Cycle	
Product Life Cycle	Established

Connection Plan	

Connector-View on Encoder

Dimensional Drawing

Accessories

Couplings
Coupling Disc Type-10-12
Coupling Bellow Type-10-10
Coupling Bellow Type-06-10
Coupling Bellow Type-08-10
Coupling Bellow Type-10-12
Coupling Bellow Type-10-(1/4")
Coupling Bellow Type-10-(3/8")
Coupling Jaw Type-06-10
Coupling Jaw Type-08-10
Coupling Jaw Type-10-12
Coupling Jaw Type-10-(1/4")
Coupling Jaw Type-10-(3/8")
Coupling Jaw Type-10-10
Coupling Disc Type-06-10
Coupling Disc Type-10-10
More
Adapter Flanges
Mounting Bracket for Clamping Flange w/ fixtures
L Mounting Bracket w/ screws

Mounting Bracket Spring Loaded f. Clamping Flange
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!

Contact Us

If the drawings are not available please refer to the "Download" section.The picture and drawing are for general presentation purposes only. 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.