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IXARC Absolute Rotary Encoder

OCD-D2C1B-1216-B12S-H3P



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
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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
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 13.5 years @ 40 °C

Sensor

Technology	Optical
Resolution Singleturn	16 bit
Resolution Multiturn	12 bit
Multiturn Technology	Mechanical Gearing (no Battery)
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	Aluminum
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 12 mm (0.47")
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	≤ 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	99 mm (3.90")
Weight	485 g (1.07 lb)
Maximum Axial / Radial Misalignment	Static ± 0.3 mm / ± 0.5 mm; Dynamic ± 0.1 mm / ± 0.2 mm

Data Sheet

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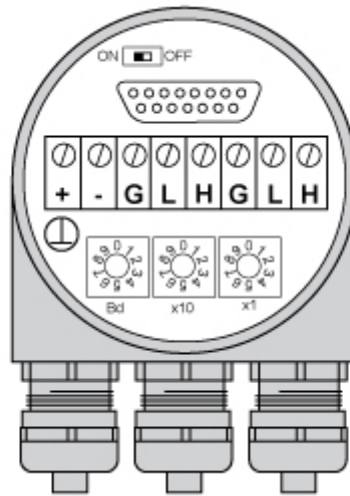
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Electrical Connection

Connection Orientation	Radial
Connection Type	3 x Cable Gland

Product Life Cycle

Product Life Cycle	Established
Approval	CE



Connection Plan

SIGNAL	PIN NUMBER
Power Supply	+
GND	-
CAN High	H
CAN Low	L
CAN GND	G
CAN High	H
CAN Low	L
CAN GND	G
GND	⊥

Connector-View on Encoder

Dimensional Drawing

[2D Drawing](#)



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Accessories

Clamping Rings
Clamping Ring B15

Contact

Sold & Serviced By:

 Canadian and International Sales
ELECTROMATE
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www.electromate.com

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SERVO2GO.com
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