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IXARC Absolute Rotary Encoder

UCD-CA01B-1416-M100-2AW



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	16 bit
Resolution Multiturn	14 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)	IP65
Operating Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +80 °C (+176 °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	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Clamp, ø 58 mm (M)
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	96 mm (3.78")
Weight	330 g (0.73 lb)

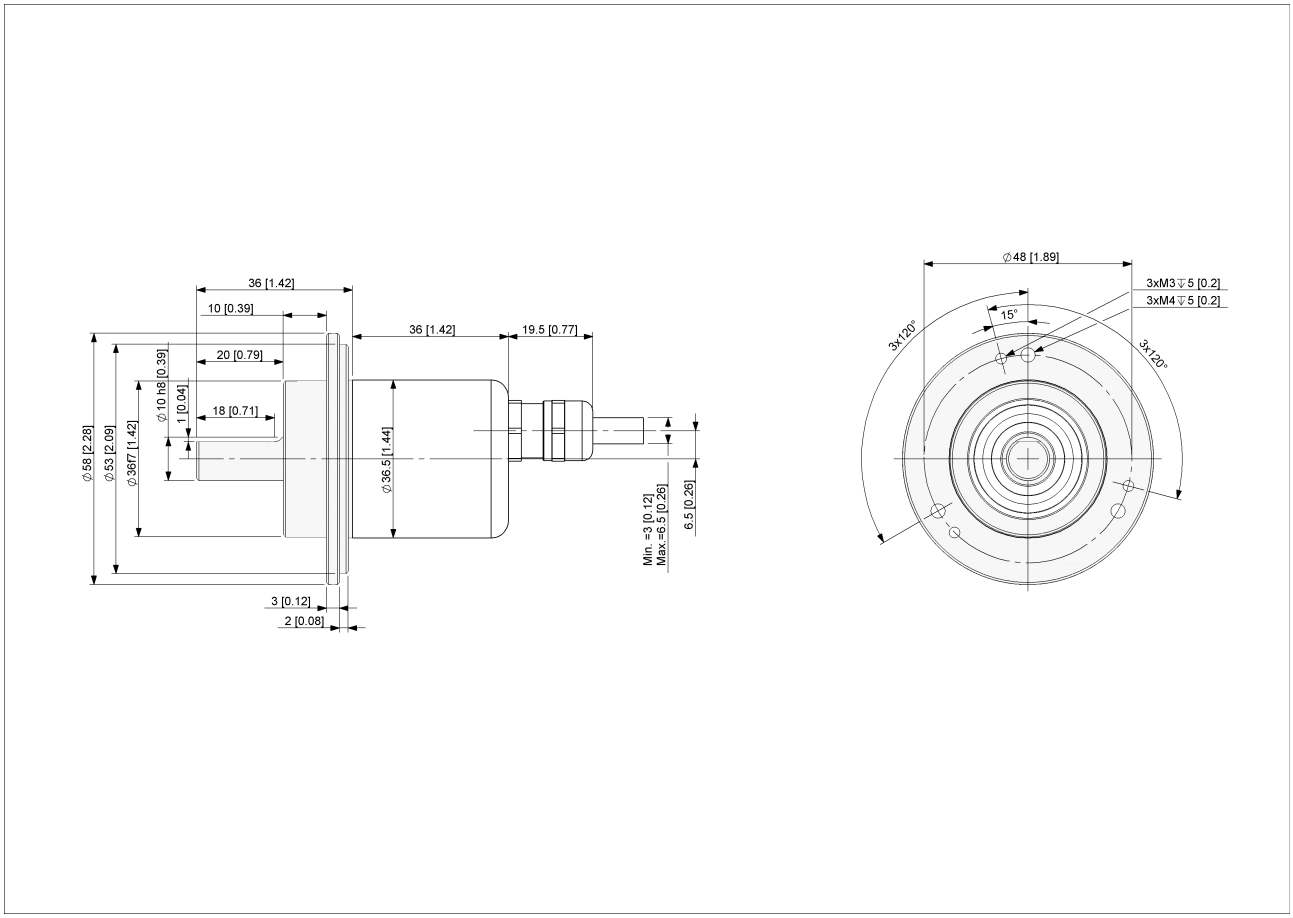
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Electrical Connection	
Connection Orientation	Axial
Connection Type	Cable / Connector
Cable Length	2 m [79"]
Wire Cross Section	0.14 mm² / AWG 26
Material / Type	PVC
Cable Diameter	6 mm (0.24 in)
Minimum Bend Radius	46 mm (1.81") fixed, 61 mm (2.4") flexing

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

Connection Plan	
SIGNAL	CABLE COLOR
Power Supply	Red
GND	Yellow
CAN High	White
CAN Low	Brown
CAN GND	Green

Connector-View on Encoder



2D Drawing

Accessories

Clamp Disc w/ Eccentric Hole-4pcs
Clamp Disc w/ Centred Hole-4pcs

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

Mounting Bracket for Clamping Flange w/ fixtures
L Mounting Bracket w/ screws
Mounting Bracket Spring Loaded f. Clamping Flange

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.