POSITAL
FRABA

IXARC Absolute Rotary Encoder

OCD-P1A1B-0016-CA30-PAT



Interface	
Interface	Bit Parallel preset
Manual Functions	Preset + complement via cable or connector
Interface Cycle Time	150 µs

Outputs	
Output Driver	Push-Pull

Electrical Data	
Supply Voltage	10 – 30 VDC
Current Consumption	≤ 400 mA @ 10 V DC, ≤ 180 mA @ 24 V DC
Power Consumption	≤ 1.5 W
Start-Up Time	< 250 ms
Settling Time	80 ms
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	22.3 years @ 40 °C

Sensor	
Technology	Optical
Resolution Singleturn	16 bit

Accuracy (INL)	±0.0220° (14 – 16 bit), ±0.0439° (≤13 bit)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)
Code	Binary

Environmental Specifications

Protection Class (Shaft)	IP65
Protection Class (Housing)	IP65
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation

Mechanical Data

Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray 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	41,7 mm (1.64")
Weight	305 g (0.67 lb)

Electrical Connection

Connection Orientation	Axial
Connector	M27, Male, 26 pin

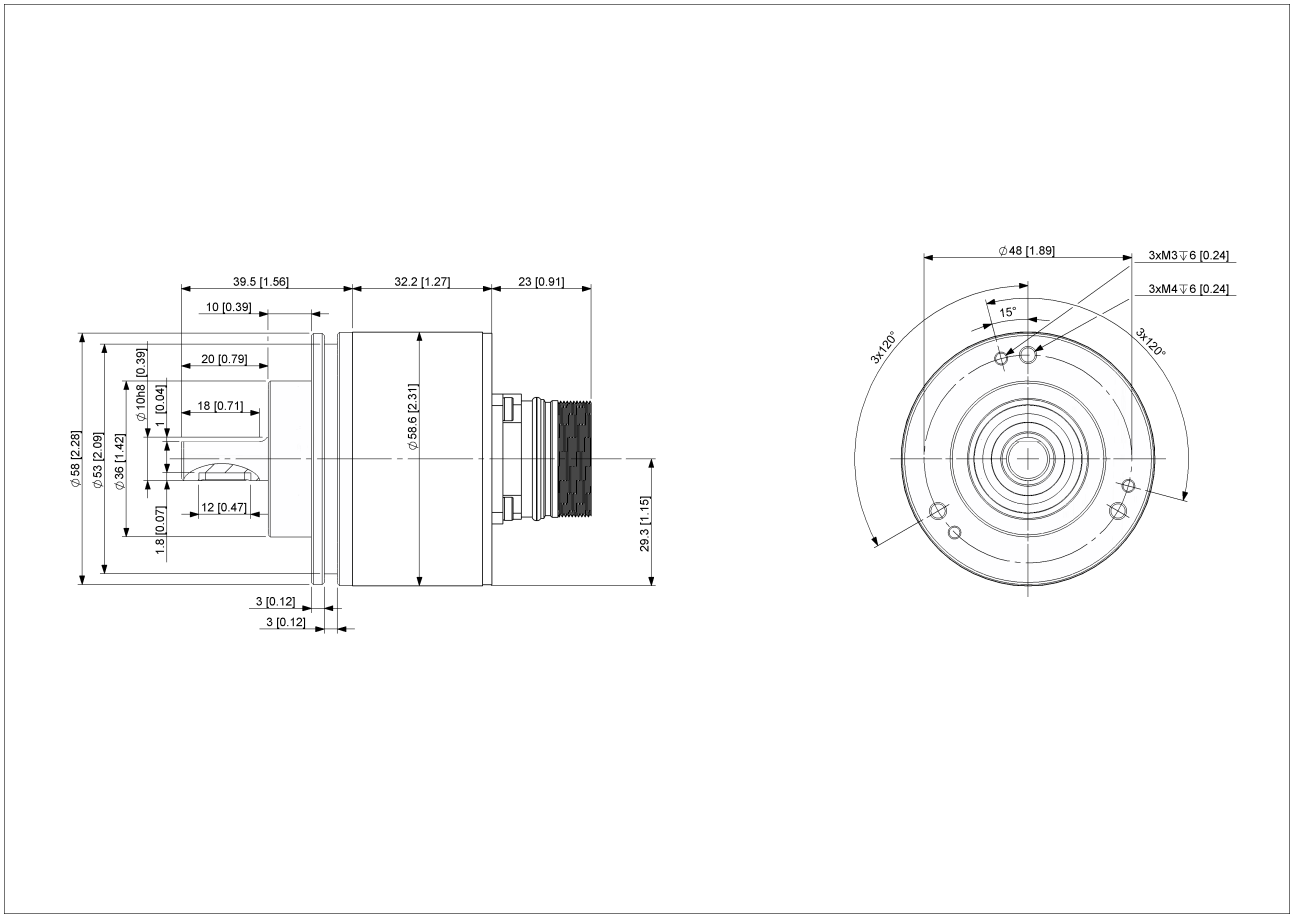
Certification

Approval	CE + cULus listed, Industrial Control Equipment

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Product Life Cycle	Established

Connection Plan



2D Drawing

Accessories

Connectors & Cables
10m PVC Cable, 26pin, f
5m PVC Cable, 26pin, f
20m PVC Cable, 26pin, f
15m PVC Cable, 26pin, f
2m PVC Cable, 26pin, f
M27, 26pin, Female
More

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.