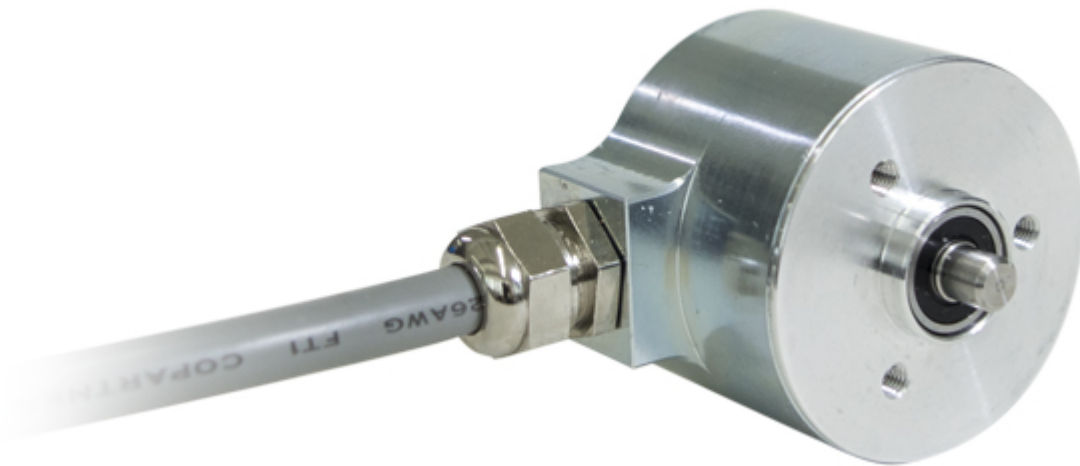


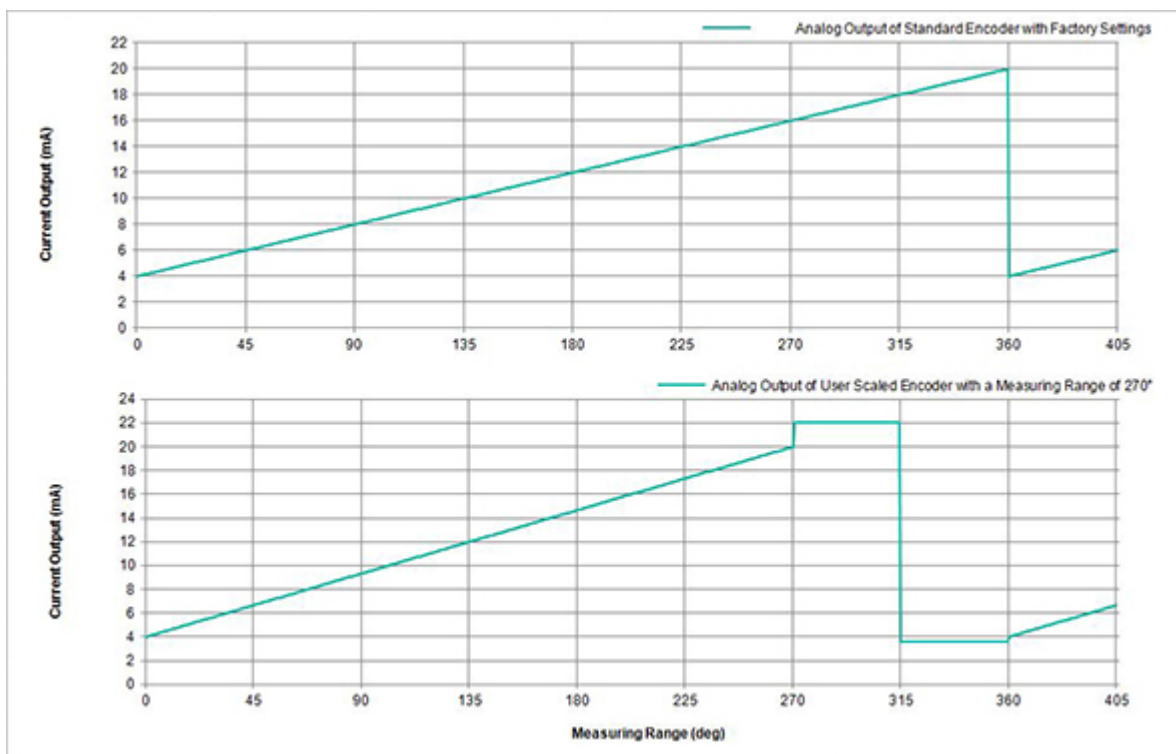
## IXARC Absolute Rotary Encoder

UCD-AC005-0013-0340-2RW



### Interface

Interface	Analog Current
Manual Functions	Start and End point via Cable or Connector
Video Manual	<a href="#">▶ Watch a simple installation video</a>



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**Electrical Data**

Supply Voltage	8 - 32 VDC
Start-Up Time	<500 ms
Max Load Resistance	500 $\Omega$
Analog Accuracy	@ 20 mA = $\pm 20 \mu\text{A}$ (with an ideal power supply)
Linearity	0.15%
Settling Time	32 ms (from min value to max value jump)
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	278.3 years @ 40 °C

**Sensor**

Technology	Magnetic
Resolution Singleturn	13 bit
Resolution Multiturn	0 bit
Accuracy (INL)	$\pm 0.0878^\circ$ ( $\leq 12$ bit)
Code	Analog Current 4 - 20 mA
Cycle Time Base Sensor	< 100 $\mu\text{s}$
Minimum Measurement Range	0 - 11.25°
Resolution of Output	Max. 13 bits over entire measuring range (Fractional Turns - Resolution decreases less than 13 bits when measuring range is less than 90 degrees)
Multiturn Range	Singleturn

**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)
Humidity	98% RH, no condensation

**Mechanical Data**

Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)

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Flange Type	Clamp, ø 37 mm
Flange Material	Aluminum
Flange Coating	No Coating
Shaft Type	Solid, Single Flat, Length = 5 mm
Shaft Diameter	ø 5 mm (0.20")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime (10 <sup>8</sup> revolutions with Fa/Fr)	40 (20 N / 40 N), 14 (40 N / 60 N), 10 (40 N / 80 N), 6 (40 N / 110 N)
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	31 mm (1.22")
Weight	540 g (1.19 lb)

### Electrical Connection

Connection Orientation	Radial
Connector	Cable 2 m
Cable Length	2 m [79"]
Wire Cross Section	0.14 mm <sup>2</sup> / 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
Product Life Cycle	New

### Connection Plan

SIGNAL	CABLE COLOR
Power Supply	Red
GND	Yellow
Analog Output	Green
Set1/Direction	Brown
Set2/Zero Set	White

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Shielding

Shield

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## Connector-View on Encoder **Dimensional Drawing**

[2D Drawing](#)

### **Accessories**

Clamping Rings

Clamp Disc w/ Centred Hole-4pcs

Displays

AP22-D0 Analog Display (4 dig. o/p)

DiMod-A Analog Display

**Got questions? Need an individual solution? We are here to help!**



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.

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