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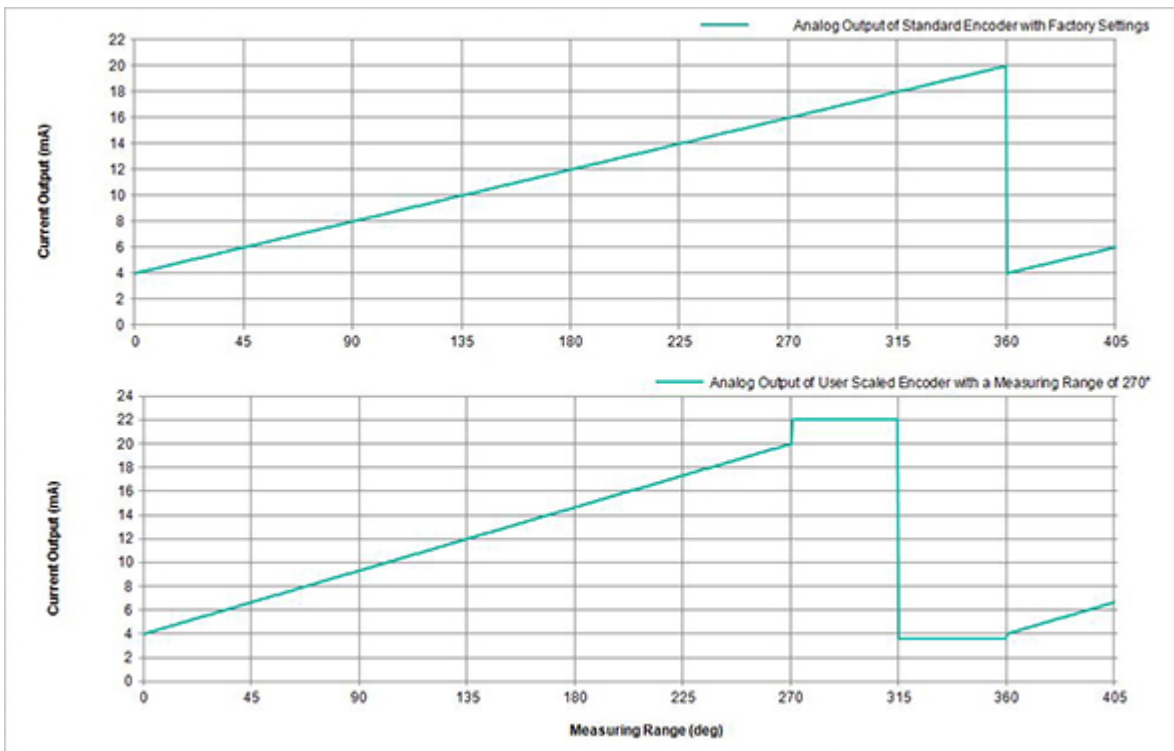
IXARC Absolute Rotary Encoder

UCD-ACP05-0013-03MA-5RW



Interface

Interface	Analog Current
Manual Functions	Programmable Start and End point via Cable or Connector or Push Button
Video Manual	Watch a simple installation video



Data Sheet

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Electrical Data

Supply Voltage	8 - 32 VDC
Current Consumption	Typical 20 mA @24 V (no load)
Start-Up Time	<500 ms
Max Load Resistance	500 Ω
Analog Accuracy	@ 20 mA = ±20 μA (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)	±0.0878° (≤ 12 bit)
Sense Signal (Default)	Counterclockwise shaft movement (front view on shaft)
Code	Analog Current 4 - 20 mA
Cycle Time Base Sensor	< 100 μs
Minimum Measurement Range	0 - 22.5°
Resolution of Output	Max. 13 bits over entire measuring range (Fractional Turns - Resolution decreases less than 13 bits when measurements range is less than 90 degrees)
Multiturn Range	Singleturn

Environmental Specifications

Protection Class (Shaft)	IP65
Protection Class (Housing)	IP54
Operating Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +80 °C (+176 °F)
Humidity	98% RH, no condensation

Mechanical Data



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Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Clamp, \varnothing 50 mm
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 15 mm
Shaft Diameter	\varnothing 6 mm (0.24")
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	$\leq 30 \text{ gcm}^2$ [$\leq 0.17 \text{ oz-in}^2$]
Friction Torque	$\leq 3 \text{ Ncm}$ @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 12000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g}$ (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10 \text{ g}$ (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10 \text{ g}$ (10 Hz - 1000 Hz, EN 60068-2-6)
Length	46 mm (1.81")
Weight	480 g (1.06 lb)

Electrical Connection

Connection Orientation	Radial
Cable Length	5 m [197"]
Wire Cross Section	0.14 mm ² / 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

Product Life Cycle

Product Life Cycle	Established
Approval	CE

Connection Plan

SIGNAL	CABLE COLOR
Power Supply	Red
GND	Yellow
Analog Output	Green



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Set1/Direction	Brown
Set2/Zero Set	White

Connector-View on Encoder **Dimensional Drawing**

[2D Drawing](#)

Accessories

Couplings

Coupling Bellow Type-06-06

Coupling Bellow Type-06-10

Coupling Bellow Type-06-08

Coupling Bellow Type-06-(3/8")

Coupling Bellow Type-06-(1/4")

Coupling Jaw Type-06-06

Coupling Jaw Type-06-10

Coupling Jaw Type-06-08

Coupling Jaw Type-06-12

Coupling Jaw Type-06-(1/4")

Coupling Jaw Type-06-(3/8")

Coupling Disc Type-06-06

Coupling Disc Type-06-10

More

Displays

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

DiMod-A Analog Display

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.