POSITAL
FRABA

IXARC Incremental Encoder

UCD-IPH00-XXXXX-Y06S-2AW

The picture is for presentation purposes only. Please refer to the detailed technical drawing at the end of the page.

Interface	
Interface	Programmable Incremental
Programming Functions	PPR (1-16384), Output, Counting Direction
Configuration Tool	UBIFAST Configuration Tool (Version ≥ 1.6.3)

Outputs	
Output Driver	Push-Pull (HTL)
Output Voltage High Level Push-Pull (HTL)	> 4 V @ 4.75-9 V Supply Voltage > V-3 V @ 9-30 V Supply Voltage
Output Voltage Low Level Push-Pull (HTL)	< 0.5 V
Output Voltage High Level RS422 (TTL)	> 4 V
Output Voltage Low Level RS422 (TTL)	< 0.5 V
Maximum Frequency Response	1 MHz
Maximum Switching Current	50 mA per Channel

Electrical Data	
Supply Voltage	4.75 – 30 VDC
Current Consumption	≤140mA @ 5V DC, ≤70mA @ 10V DC, ≤40mA @ 24V DC

Power Consumption	≤ 1.0 W
Start-Up Time	< 1 s
Min. Load Resistance	120 Ω
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	280 years @ 40 °C

Sensor

Technology	Magnetic
Accuracy (INL)	±0.0878° (≤ 12 bit)
Duty Cycle	180° ± 27° (Speed > 100RPM)
Phase Angle	90° ± 14° (Speed > 100RPM)

Environmental Specifications

Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +80 °C (+176 °F)
Humidity	98% RH, no condensation

Mechanical Data

Mechanical Data

Housing Material	Steel
Housing Coating	Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spay resistance)
Flange Type	Synchro, ø 58 mm (Y)
Flange Material	Aluminum
Shaft Type	Solid, Length = 10 mm
Shaft Diameter	ø 6 mm (0.24")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Rotor Inertia	≤ 30 gcm² [≤ 0.17 oz-in²]
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	45,7 mm (1.80")
Weight	675 g (1.49 lb)
Minimum Mechanical Lifetime (10^8 revolutions with Fa/Fr)	400 (20 N / 40 N)

Electrical Connection

Connection Orientation	Axial
Connector	Cable 2 m
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

Product Life Cycle

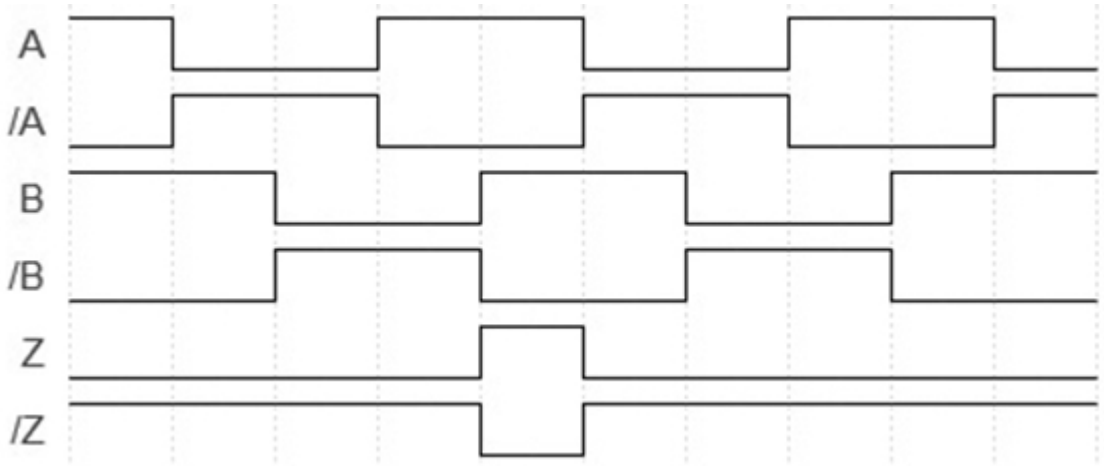
Product Life Cycle	Established

Connection Plan

SIGNAL	CABLE COLOR
A	Green
/A	Yellow
B	Gray
/B	Pink
Z	Blue
/Z	Red
Power Supply	Brown
GND	White
Shielding	Shield

Connector-View on Encoder

Pulse Diagram



Rotation Clockwise (seen on shaft)

Dimensional Drawing

2D Drawing

Accessories

Configuration/Programming Tools
UBIFAST Configuration Tool
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
Adapter Flanges
Mounting Bracket for Synchro Flange w/ fixtures
Displays
AP20-00 Counter

AP20-D0 Counter (4 dig. o/p)
AP20-0A Counter (analog o/p)
AP20-DA Counter (4 dig. + analog o/p)
DiMod Counter (Relay o/p)
More
Clamping Rings
Clamp Disc w/ Eccentric Hole-4pcs
Clamp Disc w/ Centred Hole-4pcs

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

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