



IXARC Incremental Encoder UCD-IPH00-XXXXX-Y06S-PRL



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 \geq 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	\leq 140mA @ 5V DC, \leq 70mA @ 10V DC, \leq 40mA @ 24V DC

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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	-40 °C (-40 °F) - +85 °C (+185 °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 spray 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 gcm ² [≤ 0.17 oz-in ²]
Friction Torque	≤ 5 Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 3000 1/min

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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	56,7 mm (2.23")
Weight	275 g (0.61 lb)
Minimum Mechanical Lifetime (10 ⁸ revolutions with Fa/Fr)	400 (20 N / 40 N)

Electrical Connection

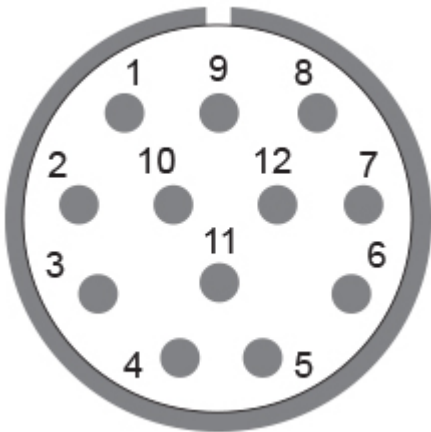
Connection Orientation	Radial
Connector	M23, Male, 12 pin, CCW / left

Certification

Approval	CE + cULus
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Product Life Cycle

Product Life Cycle	Established
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Connection Plan

SIGNAL	PIN NUMBER
Power Supply	12
GND	10
A	5
/A	6
B	8

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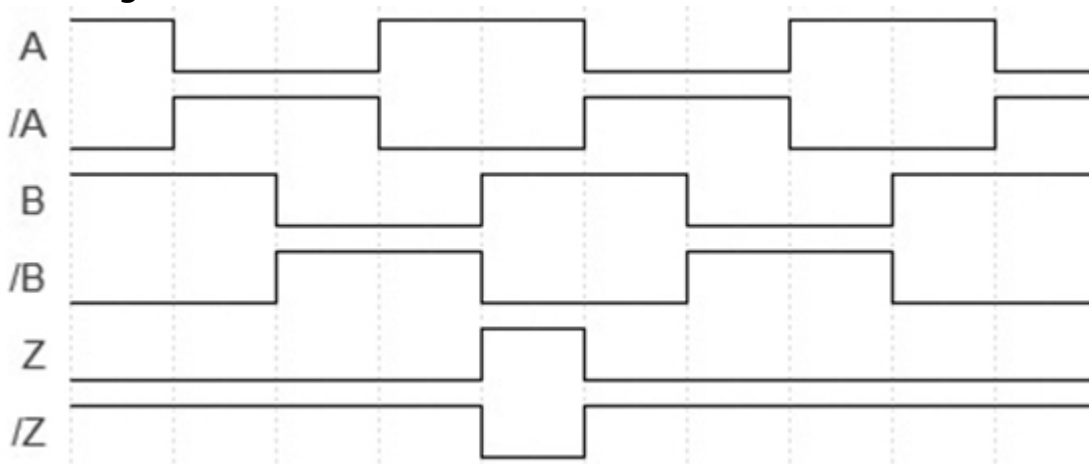
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/B	1
Z	3
/Z	4
Shielding	Connector housing

Connector-View on Encoder

Pulse Diagram



Rotation Clockwise (seen on shaft)

Dimensional Drawing

[2D Drawing](#)

Accessories

Configuration/Programming Tools

UBIFAST Configuration Tool

Connectors & Cables

10m PVC Cable, 12pin, Clockwise, f

15m PVC Cable, 12pin, Clockwise, f

1m PVC Cable, 12pin, Clockwise, f

20m PVC Cable, 12pin, Clockwise, f

5m PVC Cable, 12pin, Clockwise, f

30m PVC Cable, 12pin, Clockwise, f

2m PVC Cable, 12pin, Clockwise, f

M23, 12pin Clockwise, Female

More

Couplings

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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

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