

## IXARC Incremental Encoder

### UTD-IPH00-XXXXX-G10G-PAQ



#### Interface

Interface	Programmable Incremental
Programming Functions	PPR (1-16384), Output, Counting Direction
Configuration Tool	UBIFAST Configuration Tool (Version $\geq$ 1.6.10)

#### 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	$\leq$ 60 mA @ 5V DC, $\leq$ 30 mA @ 10V DC, $\leq$ 25 mA @ 24V DC
Power Consumption	$\leq$ 1.0 W
Start-Up Time	< 1 s
Min. Load Resistance	120 $\Omega$
Reverse Polarity Protection	Yes

Data Sheet

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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)	$\pm 0.0878^\circ$ ( $\leq 12$ bit)
Duty Cycle	$180^\circ \pm 12^\circ$ (Speed > 100RPM)
Phase Angle	$90^\circ \pm 6^\circ$ (Speed > 100RPM)

### Environmental Specifications

Protection Class (Shaft)	IP68/IP69K
Protection Class (Housing)	IP68/IP69K
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation

### Mechanical Data

#### Mechanical Data

Housing Material	Stainless Steel V4A (1.4404, 316 L)
Housing Coating	No Coating
Flange Type	Synchro, $\varnothing$ 42 mm Heavy Duty
Flange Material	Stainless steel V4A (1.4404, 316 L)
Shaft Type	Solid, Length = 20 mm
Shaft Diameter	$\varnothing$ 10 mm (0.39")
Shaft Material	Stainless Steel V4A (1.4112, 440 B), hardened
Max. Shaft Load	Axial 300 N, Radial 300 N
Friction Torque	$\leq 3$ Ncm @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 6000$ 1/min
Shock Resistance	$\leq 200$ g (half sine 11 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 30$ g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 30$ g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	64,9 mm (2.56")
Weight	350 g (0.77 lb)
Minimum Mechanical Lifetime ( $10^8$ revolutions with Fa/Fr)	7.6 (300N / 300 N), 10 (270 N / 270 N), 200 (100 N / 100 N)

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### Electrical Connection

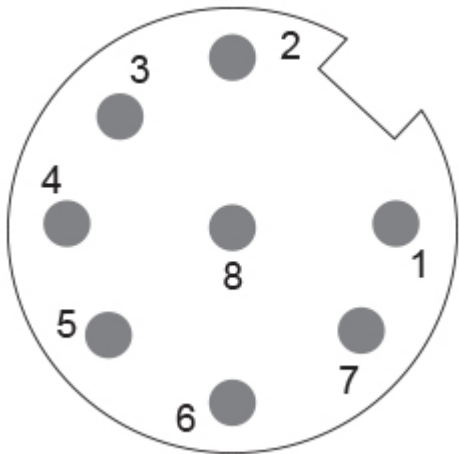
Connection Orientation	Axial
Connector	M12, Male, 8 pin, a coded

### Certification

Approval	CE + cULus
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### Product Life Cycle

Product Life Cycle	New
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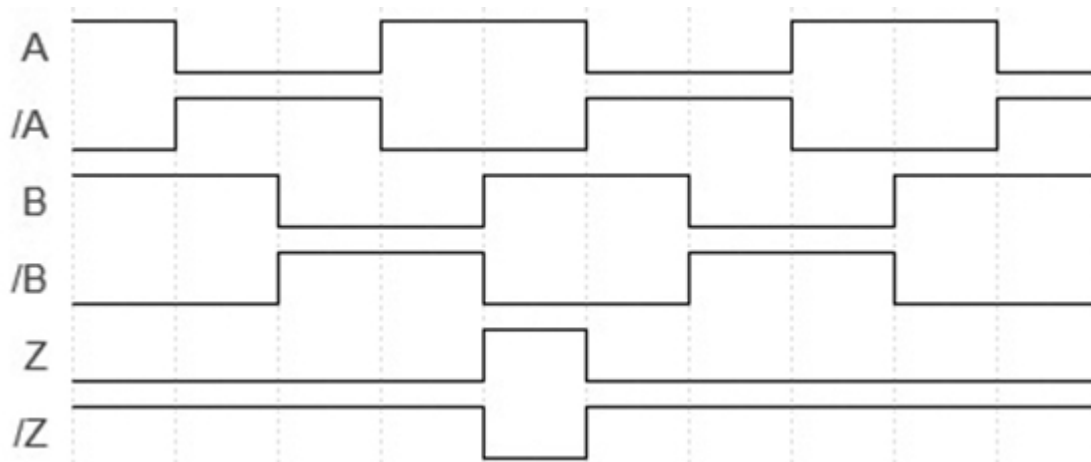


### Connection Plan

SIGNAL	PIN NUMBER
A	3
/A	4
B	5
/B	6
Z	7
/Z	8
Power Supply	2
GND	1
Shielding	Connector housing

Connector-View on Encoder

### Pulse Diagram



Rotation Clockwise (seen on shaft)

## Dimensional Drawing

### Accessories

Configuration/Programming Tools

UBIFAST Configuration Tool

Connectors & Cables

10m PUR Cable, 8pin, A-Coded, f

POS M12 8pin-A Female+5m PUR Cable

POS M12 8pin-A Female+2m PUR Cable

POS M12 8pin-A Female+10m PUR Cable

M12, 8pin A-Coded, Female

More

Couplings

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

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Coupling Disc Type-06-10

Coupling Disc Type-10-10

More

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

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



Contact Us

If the drawings are not available please refer to the "Download" section. The picture and drawing are for general presentation purposes only. 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.