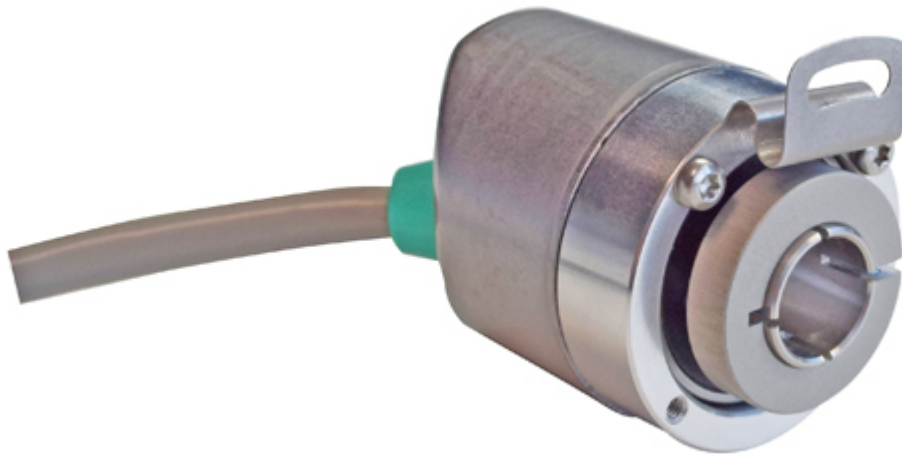


## IXARC Incremental Encoder

**UTD-IPH00-XXXXX-VSS0-2TW**



### 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

Printed at 24-08-2023 13:08



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)	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

#### Mechanical Data

Housing Material	Steel
Housing Coating	Zinc Plated
Flange Type	Blind Hollow, $\varnothing 36$ mm / $\varnothing 42$ mm
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 18 mm
Shaft Diameter	$\varnothing 9.52$ mm (3/8")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Friction Torque	$\leq 3$ Ncm @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 12000$ 1/min
Shock Resistance	$\leq 100$ g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10$ g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10$ g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	50,2 mm (1.98")
Weight	405 g (0.89 lb)
Maximum Axial / Radial Misalignment	Static $\pm 0.3$ mm / $\pm 0.5$ mm; Dynamic $\pm 0.1$ mm / $\pm 0.2$ mm

Data Sheet

Printed at 24-08-2023 13:08



### Electrical Connection

Connection Orientation	Axial/Radial
Connection Type	Cable / Connector
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 + cULus
----------	------------

### Product Life Cycle

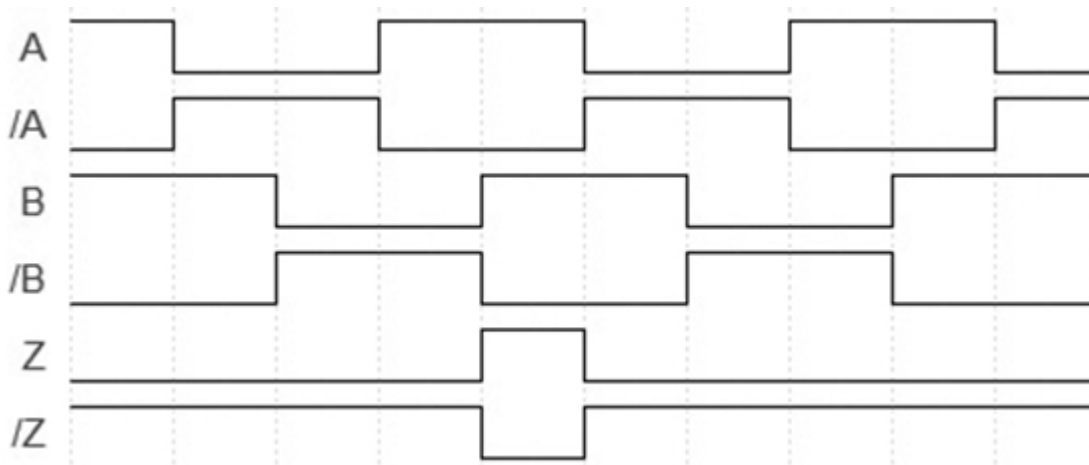
Product Life Cycle	New
--------------------	-----

### 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**

#### **Accessories**

Configuration/Programming Tools

UBIFAST Configuration Tool

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

Clamping Ring V12

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



Contact Us

Data Sheet

Printed at 24-08-2023 13:08



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.