

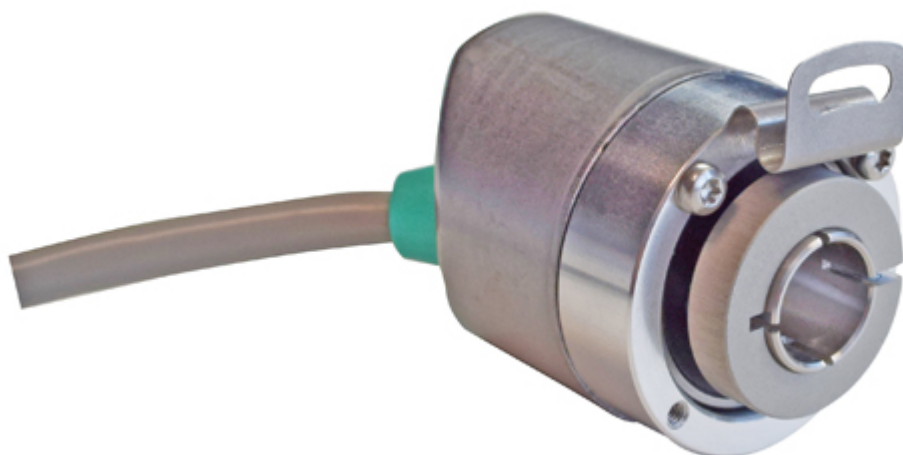


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IXARC Incremental Encoder

UCD-IPH00-00001-VRS0-2TW



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	$\leq 1.0 \text{ W}$
Start-Up Time	$< 1 \text{ s}$
Min. Load Resistance	120Ω
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)	$\pm 0.0878^\circ (\leq 12 \text{ bit})$
Duty Cycle	$180^\circ \pm 27^\circ (\text{Speed} > 100\text{RPM})$
Phase Angle	$90^\circ \pm 14^\circ (\text{Speed} > 100\text{RPM})$

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, $\varnothing 36 \text{ mm} / \varnothing 42 \text{ mm}$
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 18 mm
Shaft Diameter	$\varnothing 6.35 \text{ mm} (1/4")$
Shaft Material	Stainless Steel V2A (1.4305, 303)
Friction Torque	$\leq 3 \text{ Ncm @ } 20^\circ \text{C} (4.2 \text{ oz-in @ } 68^\circ \text{F})$
Max. Permissible Mechanical Speed	$\leq 12000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g} (\text{half sine } 6 \text{ ms, EN 60068-2-27})$
Permanent Shock Resistance	$\leq 10 \text{ g} (\text{half sine } 16 \text{ ms, EN 60068-2-29})$
Vibration Resistance	$\leq 10 \text{ g} (10 \text{ Hz} - 1000 \text{ Hz, EN 60068-2-6})$

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Length	50,2 mm (1.98")
Weight	405 g (0.89 lb)
Maximum Axial / Radial Misalignment	Static ± 0.3 mm / ± 0.5 mm; Dynamic ± 0.1 mm / ± 0.2 mm

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 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

Certification

Approval	CE + cULus
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Product Life Cycle

Product Life Cycle	New
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Connection Plan

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

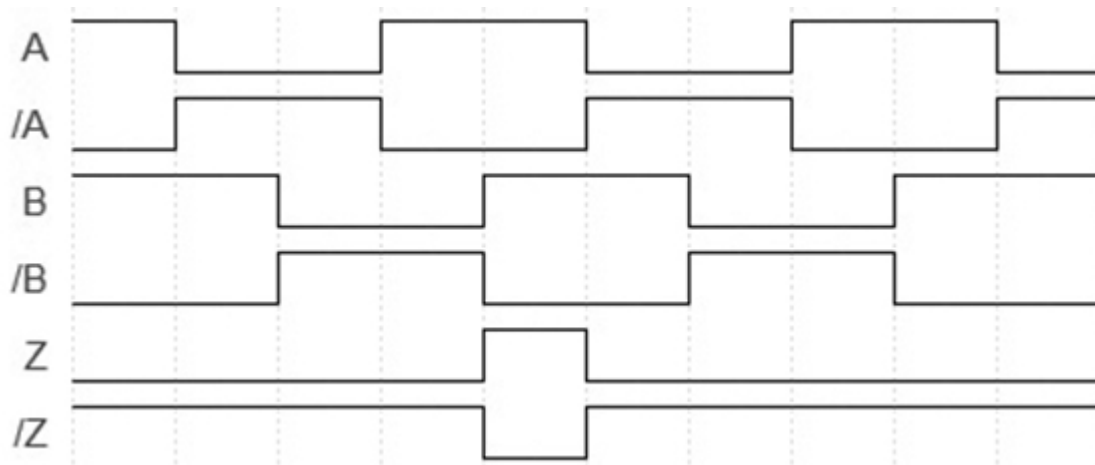
Connector-View on Encoder

Pulse Diagram



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Rotation Clockwise (seen on shaft)

Dimensional Drawing

[2D 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 V06

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



Contact Us

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