



UCF-IPT00-XXXXX-HFSS-H3E



Product Description

POSITAL IXARC incremental Zone 2 & 22 encoder: RS 422 (TTL) output, Blind Hollow, $\varnothing$ 58 mm (H), $\varnothing$ 15 mm (0.59") shaft and IP67 protection class.

INTERFACE		✓
Interface	Programmable Incremental	
Programming Functions	PPR (1-16384), Output, Counting Direction	
Programmable Output	Push-Pull (HTL) or RS422 (TTL)	
Configuration Tool	UBIFAST Configuration Tool (Version $\geq$ 1.6.3)	

OUTPUTS



Output Driver	RS 422 (TTL)
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Output Voltage High Level Push-Pull (HTL)	> 4 V @ 4.75-9 V Supply Voltage > V-3 V @ 9-30 V Supply Voltage
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Output Voltage Low Level Push-Pull (HTL)	< 0.5 V
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Output Voltage High Level RS422 (TTL)	> 4 V
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Output Voltage Low Level RS422 (TTL)	< 0.5 V
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Maximum Frequency Response	1 MHz
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Maximum Switching Current	50 mA per Channel
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ELECTRICAL DATA



Supply Voltage	4.75 - 30 VDC
Current Consumption	$\leq 140\text{mA}$ @ 5V DC, $\leq 70\text{mA}$ @ 10V DC, $\leq 40\text{mA}$ @ 24V DC
Power Consumption	$\leq 1.0\text{ W}$
Start-Up Time	$< 1\text{ s}$
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)	$\pm 0.0878^\circ$ ($\leq 12\text{ bit}$)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)
Duty Cycle	$180^\circ \pm 27^\circ$ (Speed > 100RPM)
Phase Angle	$90^\circ \pm 14^\circ$ (Speed > 100RPM)

ENVIRONMENTAL SPECIFICATIONS



Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Min Temperature	-40 °C (-40 °F)
Max Temperature	+85 °C (+185 °F)
Humidity	98% RH, no condensation

MECHANICAL DATA ✓	
Connection Cap Material	Aluminium
Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Blind Hollow, ø 58 mm (H)
Flange Material	Aluminum
Shaft Type	Blind Hollow, Depth = 28 mm
Shaft Diameter	ø 15 mm (0.59")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Rotor Inertia	$\leq 30 \text{ gcm}^2$ [$\leq 0.17 \text{ oz-in}^2$]
Friction Torque	$\leq 5 \text{ Ncm}$ @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000 \text{ 1/min}$
Shock Resistance	$\leq 100 \text{ g}$ (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10 \text{ g}$ (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10 \text{ g}$ (10 Hz – 1000 Hz, EN 60068-2-6)
Length	60 mm (2.36")
Weight	340 g (0.75 lb)
Maximum Axial / Radial Misalignment	Static $\pm 0.3 \text{ mm}$ / $\pm 0.5 \text{ mm}$; Dynamic $\pm 0.1 \text{ mm}$ / $\pm 0.2 \text{ mm}$

ELECTRICAL CONNECTION



Connection Orientation Radial

Connection Type 3 x Cable Gland Zone2+22

CERTIFICATION



Approval CE + ATEX Zone 2 & 22

PRODUCT LIFE CYCLE

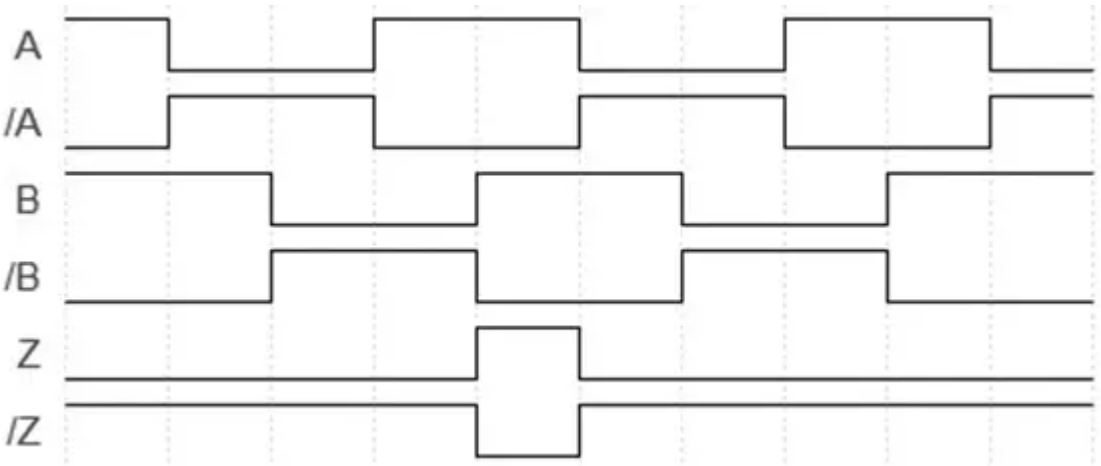


Product Life Cycle New

Connection Plan

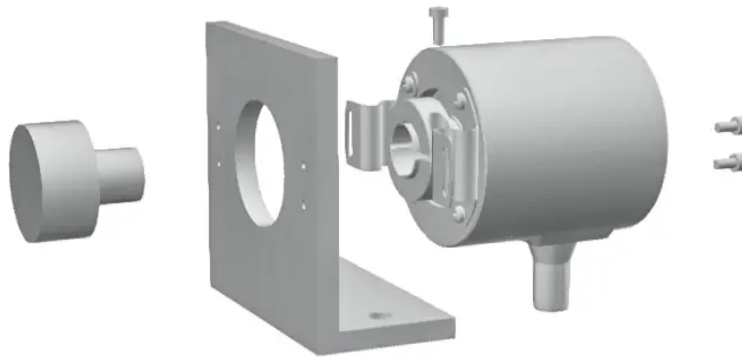
Signal	Connector	Pin Number
A	1	2
/A	1	12
B	1	10
/B	1	3
Z	1	11
/Z	1	4
Power Supply	1	9
GND	1	1
Shielding	1	Connector Housing

Pulse Diagram



[illegible]

Picture Flange Mounting



Online Datasheet

