



UTD-IPT00-XXXXX-05M0-2RW



Interface

Interface	Programmable Incremental
Programming Functions	PPR (1-32768), Output, Counting Direction
Programmable Output	Push-Pull (HTL) or RS422 (TTL)
Configuration Tool	Configuration Tool: UBIFAST Configuration Tool Version 1.6.10 or newer. If PPR above 16384 is required, this and all additional setups must be adjusted during production.

Outputs

Output Driver	RS 422 (TTL)
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 High Level RS422 (TTL)	> 4 V
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Output Voltage Low Level RS422 (TTL)	< 0.5 V
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Output Voltage Low Level Push-Pull (HTL)	< 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
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Current Consumption	≤60 mA @ 5V DC, ≤30 mA @ 10V DC, ≤25 mA @ 24V DC
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Power Consumption	≤ 1.0 W
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Start-Up Time	< 1 s
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Min. Load Resistance	120 Ω
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Reverse Polarity Protection	Yes
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Short Circuit Protection	Yes
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EMC: Emitted Interference	DIN EN 61000-6-4
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EMC: Noise Immunity	DIN EN 61000-6-2
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MTTF	280 years @ 40 °C
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Sensor

Technology	Magnetic
Accuracy (INL)	$\pm 0.0878^\circ$ (≤ 12 bit)
Duty Cycle	$180^\circ \pm 12^\circ$ (Speed > 100RPM)
Phase Angle	$90^\circ \pm 6^\circ$ (Speed > 100RPM)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)

Environmental Specifications

Protection Class (Shaft)	IP65
Protection Class (Housing)	IP65
Humidity	98% RH, no condensation
Min Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F)
Max Temperature	+80 °C (+176 °F)

Mechanical Data

Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Clamp, $\varnothing$ 50 mm
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 15 mm
Shaft Diameter	$\varnothing$ 8 mm (0.31")
Shaft Material	Stainless Steel V2A (1.4305, 303)

Max. Shaft Load	Axial 40 N, Radial 110 N
Rotor Inertia	$\leq 30 \text{ gcm}^2$ [$\leq 0.17 \text{ oz-in}^2$]
Friction Torque	$\leq 3 \text{ Ncm}$ @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 12000 \text{ 1/min}$
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	43 mm (1.69")
Weight	615 g (1.36 lb)
Minimum Mechanical Lifetime(10^8 revolutions with Fa/Fr)	430 (20N/40N), 150 (40N/60N), 100 (40N/80N), 55 (40N/110N)

Electrical Connection

Connection Orientation	Radial
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

Product Life Cycle

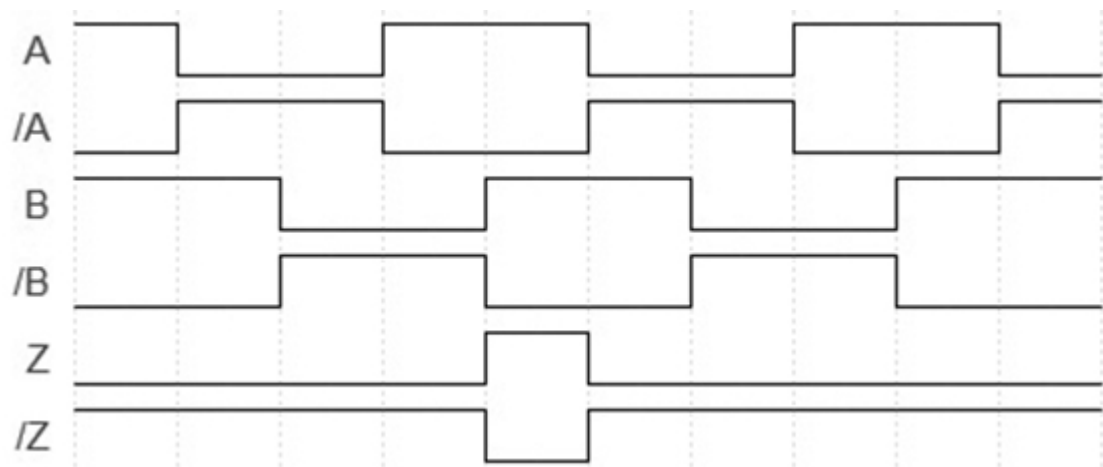
Product Life Cycle

New

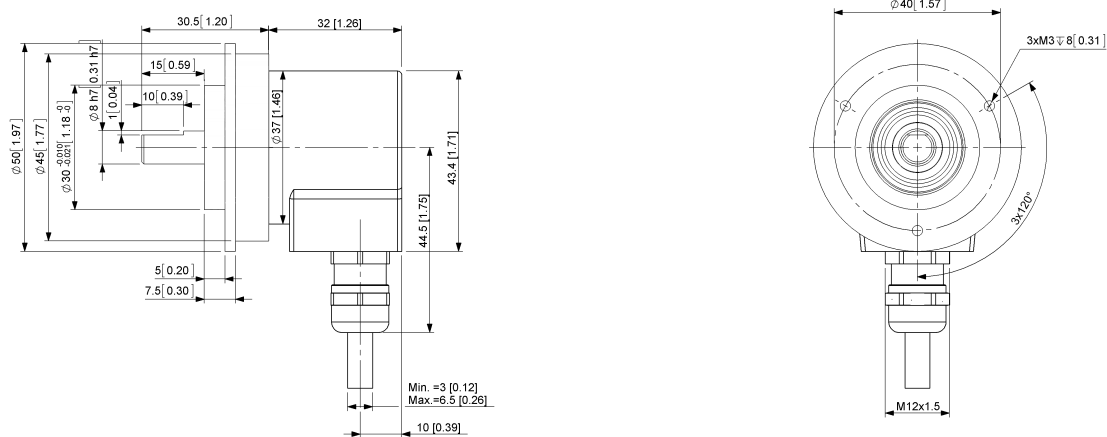
Connection Plan

Signal	Color
A	Green
/A	Yellow
B	Gray
/B	Pink
Z	Blue
/Z	Red
Power Supply	Brown
GND	White
Shielding	Shield

Pulse Diagram



Dimensional Drawing

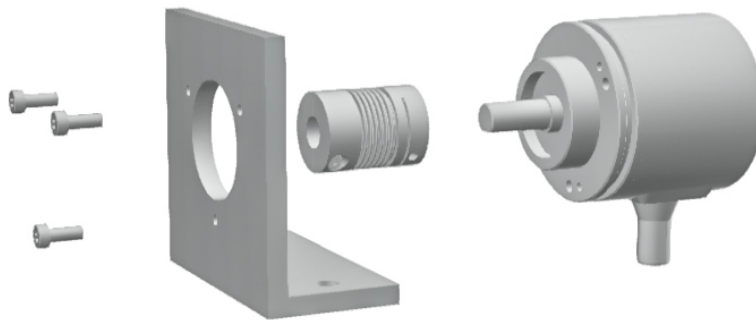


Picture Cable Exit

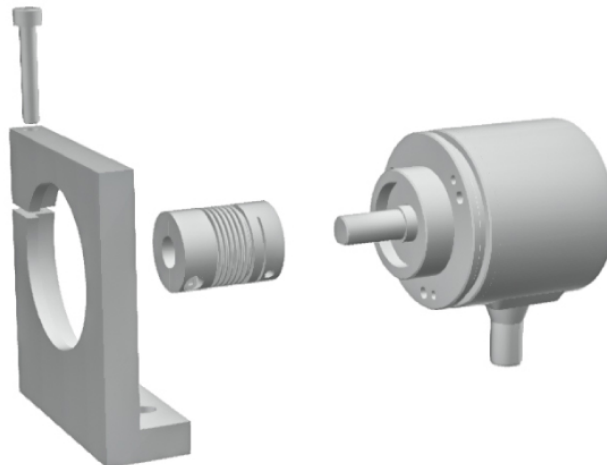


Picture Flange Mounting

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Online Datasheet

