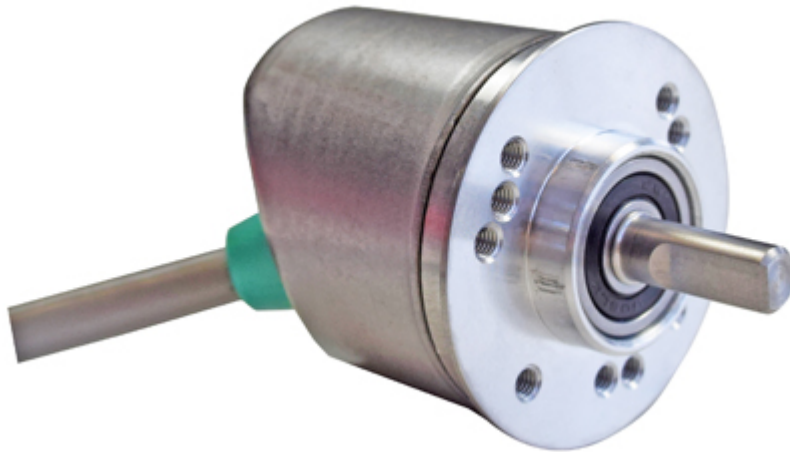




UTD-IPH00-XXXXX-02M0-2TW



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	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 High Level RS422 (TTL)	> 4 V
--	-------

Output Voltage Low Level RS422 (TTL)	< 0.5 V
---	---------

Output Voltage Low Level Push-Pull (HTL)	< 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	≤60 mA @ 5V DC, ≤30 mA @ 10V DC, ≤25 mA @ 24V DC
---------------------	--

Power Consumption	≤ 1.0 W
-------------------	---------

Start-Up Time	< 1 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)	$\pm 0.0878^\circ$ (≤ 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	Zinc Plated
Flange Type	Clamp, $\varnothing$ 40 mm
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 15 mm
Shaft Diameter	$\varnothing$ 6 mm (0.24")
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	$\leq 3 \text{ Ncm @ } 20 \text{ }^\circ\text{C} (4.2 \text{ oz-in @ } 68 \text{ }^\circ\text{F})$
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	33 mm (1.30")
Weight	480 g (1.06 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	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

Product Life Cycle

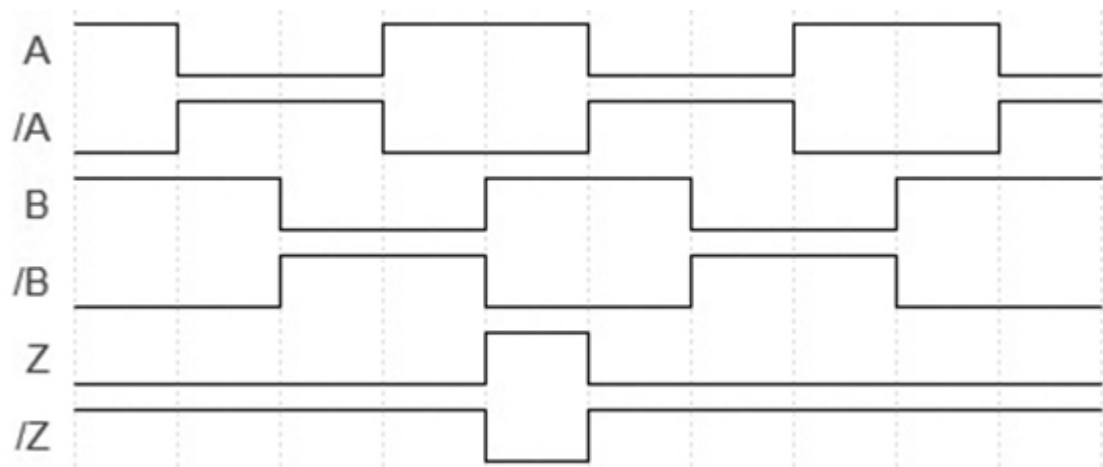
Product Life Cycle

Established

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



Technical drawing of a mechanical part, showing a side view and a top view.

Side View Dimensions:

- Overall diameter: $\phi 40$ [1.57]
- Inner diameter: $\phi 20$ ± 0.02 [0.79 ± 0.01]
- Feature diameter: $\phi 16$ [0.24] [6]
- Feature diameter: $\phi 37$ [1.46]
- Feature diameter: $\phi 6$ [0.24]
- Lengths: 25 ± 0.3 [0.98 ± 0.01], 15 [0.59], 10 [0.39], 1 [0.04], 32 [1.26], 7.65 [0.30]
- Angles: 45°
- Other dimensions: 5 [0.20], 6 [0.24]

Top View Dimensions:

- Outer diameter: $\phi 30$ ± 0.20 [1.18 ± 0.01]
- Inner diameter: $\phi 28$ [1.10]
- Holes: 4 x M3 $\nabla 7$ [0.28], 3 x M3 $\nabla 7$ [0.28], 3 x M3 $\nabla 7$ [0.28]
- Angles: 4 x 90°, 45°, 60°, 3 x 120°, 3 x 120°

Online Datasheet

