



UTD-IPH00-XXXXX-L100-PRQ



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

Mechanical Data

Housing Material	Steel
Housing Coating	Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spray resistance)
Flange Type	Clamp, $\varnothing$ 58 mm (L)
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 20 mm
Shaft Diameter	$\varnothing$ 10 mm (0.39")
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 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

52,7 mm (2.07")

Weight

285 g (0.63 lb)

Minimum Mechanical
Lifetime(10^8 revolutions
with F_a/F_r)

430 (20N/40N), 150 (40N/60N), 100 (40N/80N), 55
(40N/110N)

Electrical Connection

Connection Orientation

Radial

Connector

M12, Male, 8 pin, a coded

Certification

Approval

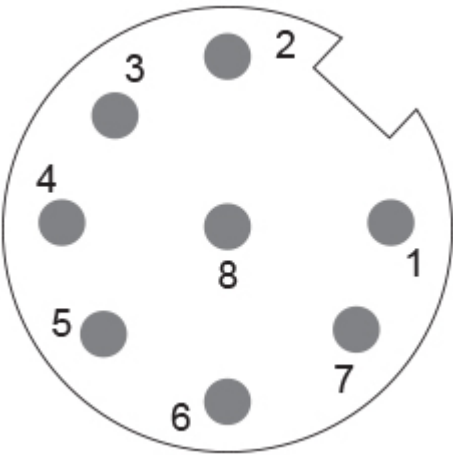
CE + cULus

Product Life Cycle

Product Life Cycle

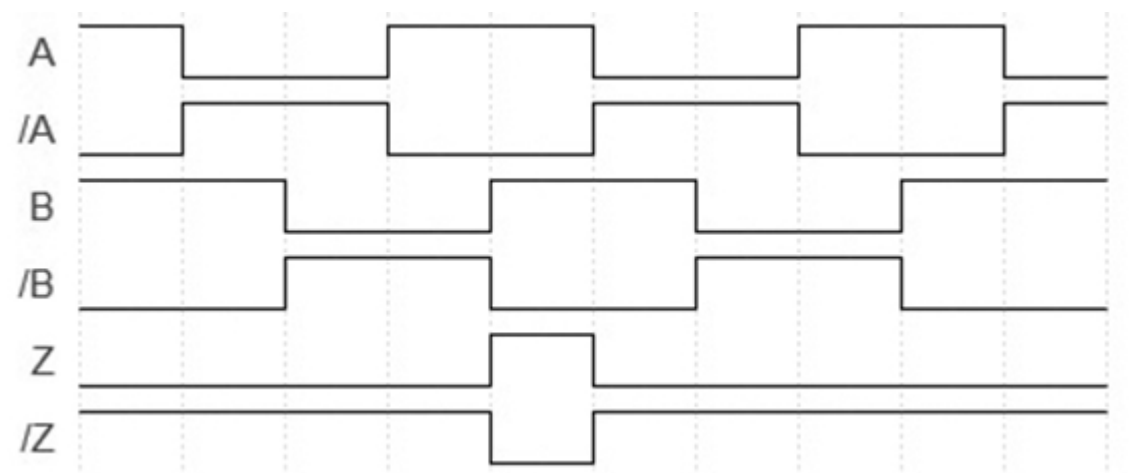
Established

Connection Plan

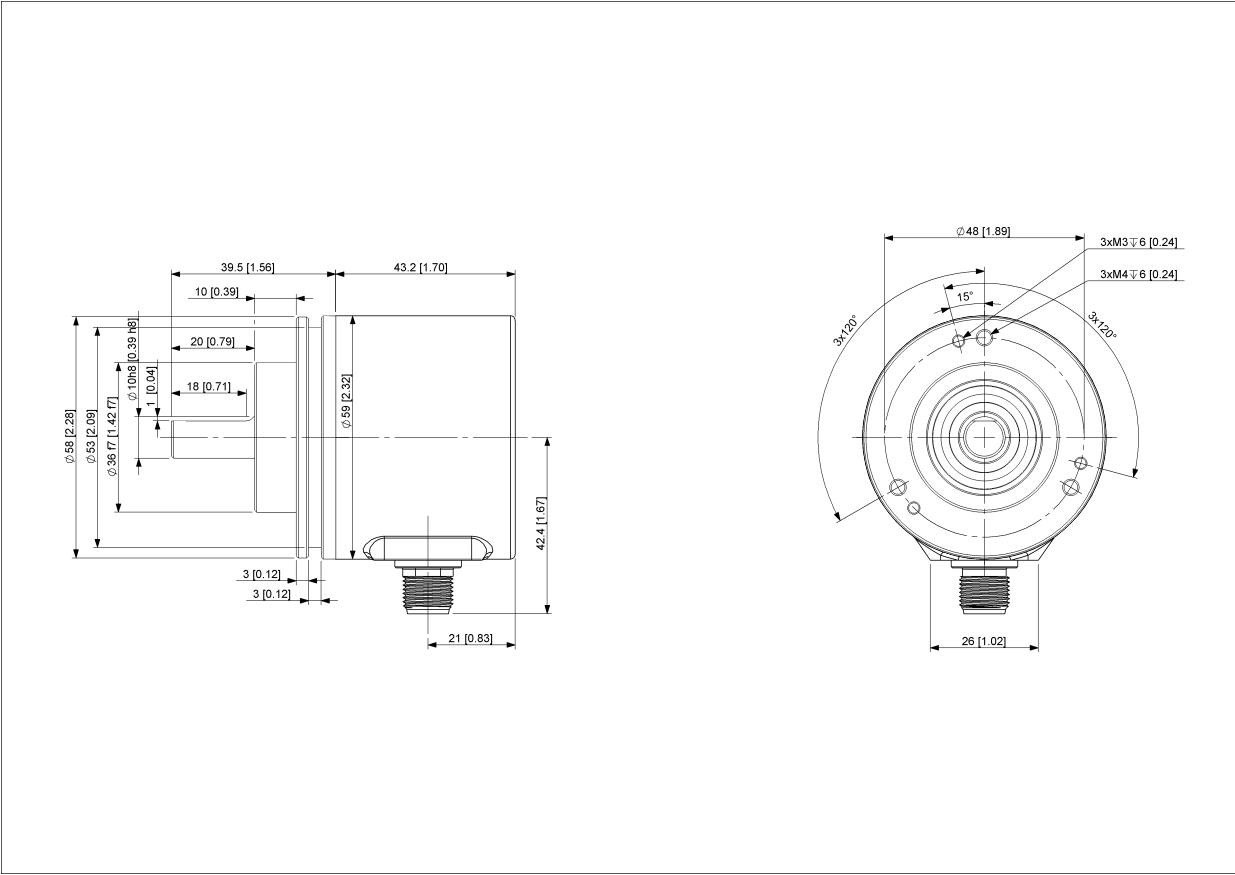


Signal	Pin Number
A	3
/A	4
B	5
/B	6
Z	7
/Z	8
Power Supply	2
GND	1
Shielding	Connector housing

Pulse Diagram



Dimensional Drawing



Online Datasheet

