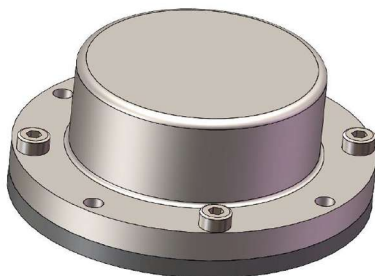




RZ Series Bearing Absolute

RZ7810



Uses

This product is mainly used for servo-driven control system. Provide feedback information and auxiliary signals required by accurate position and speed control units for the system.

Features

- Working temperature -20 °C ~+105 °C
- Current consumption < 120mA
- Battery voltage 3.6V DC
- Battery fault voltage 2.5V
- Battery warning voltage 3.1V
- Differential output
- Single 5V Supply
- Rise/Fall time around 100ns
- Insulated resistance 50MΩ

Technical Parameters

- Resolution 8388608(23bit)~33554432 (25bit)
- 16 bits multi-turn resolution counter
- Absolute positioning accuracy $<\pm 50$ angular seconds

Note: The specific accuracy depends on the motor and mechanical assembly fit
- Repetition positioning accuracy $<\pm 3$ angular seconds

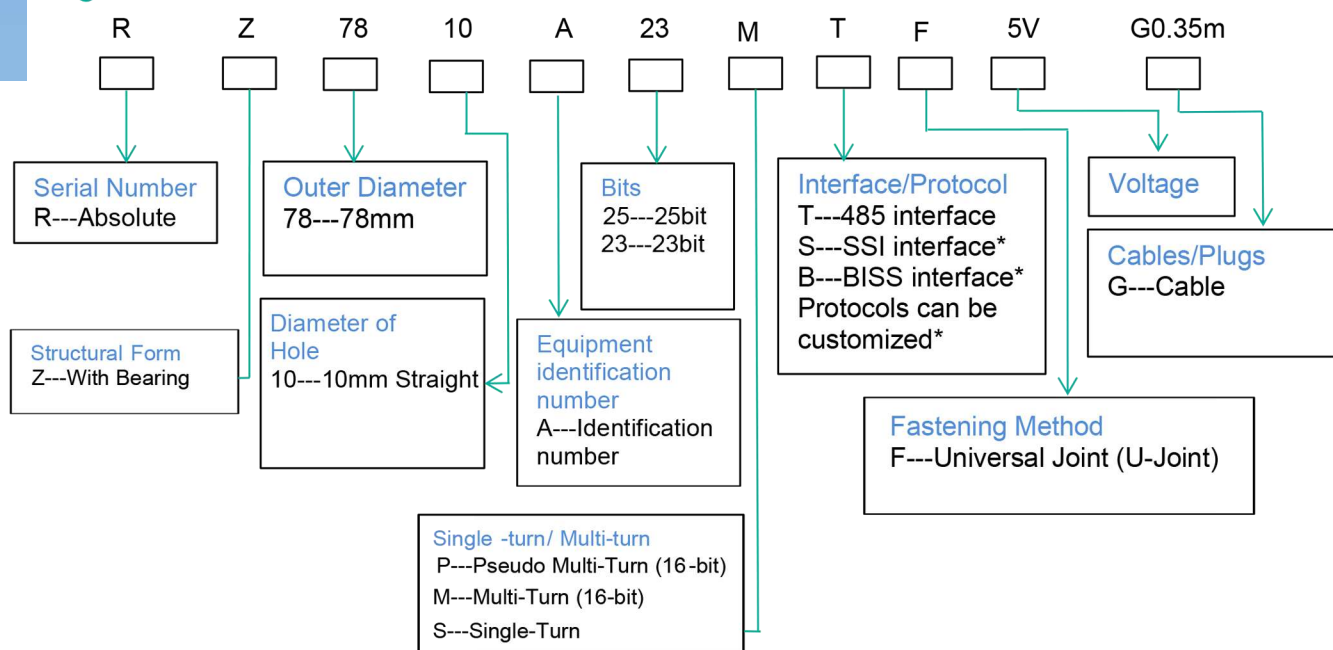
Note: The specific accuracy depends on the motor and mechanical assembly fit
- Battery voltage fault warning
- Interface RS485
- Communication frequency $\leq 16K$
- Baud rate 2.5MHz
- Enter allowable deviation of shaft
Axial: $\pm 0.5mm$ Radial: $\pm 0.02mm$ Dip angle: 0.1° Axial endplay: $< 0.1mm$ Radial runout: $< 0.01mm$
- Operation speeds of up to 6000rpm
- Shaft diameter: axis of a cone $\varnothing 10$ taper 1:10
- Moment of inertia $0.68kg \cdot mm^2$
- Rotor angular acceleration
During power supply $\leq 80000rad/s^2$
When battery powered $\leq 4000rad/s^2$
- Mechanical shock
Impact acceleration $980m/s^2$
11ms. Impact 3 times in each direction, totally 18 times
- Vibrate
10 to 55Hz, keeping the amplitude of 1.5mm
Acceleration between 55 and 2000Hz is $98m/s^2$ XYZ 2 hours per axial direction, 6 hours intotal
- Working temperature $-20^\circ C \sim +105^\circ C$
- Relative humidity $\leq 90\%$ ($40^\circ C/21d$, based on EN 60068-2 -78) without condensation.
- Degree of protection IP40

RZ Series Bearing Absolute

Cable Definitions

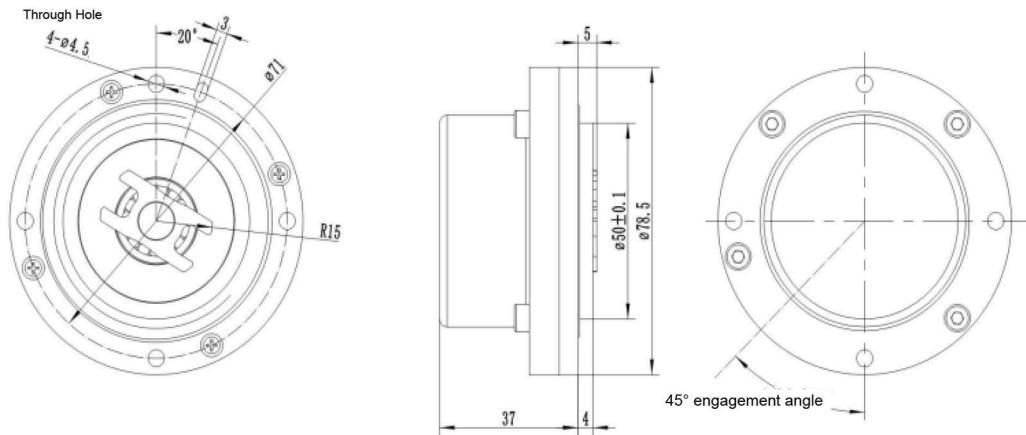
Cable Color	Red	Black	Blue	Yellow	Brown	White	Shielded Mesh
Signal Definition	5V	GND	485+	485-	Battery +	Battery GND	P

Ordering Information/Part Number

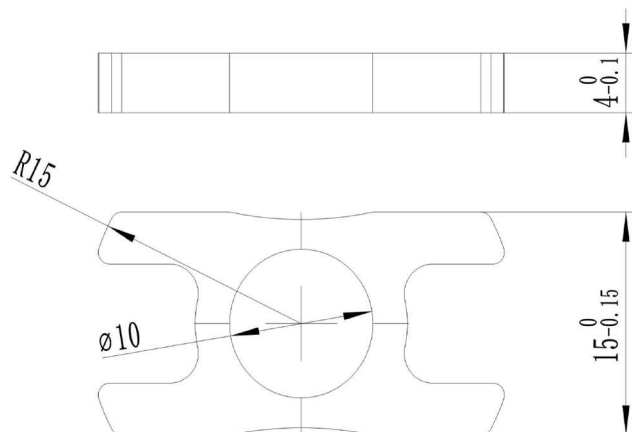


RZ Series Bearing Absolute

Mechanical Dimension

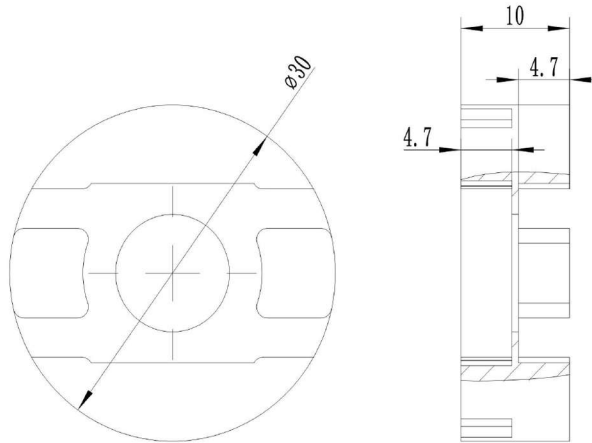


RZ7810A Mechanical Dimension Drawing



MD1510-701A Mechanical Dimension Drawing

Mechanical Dimension



MN3010-701A Mechanical Dimension Drawing