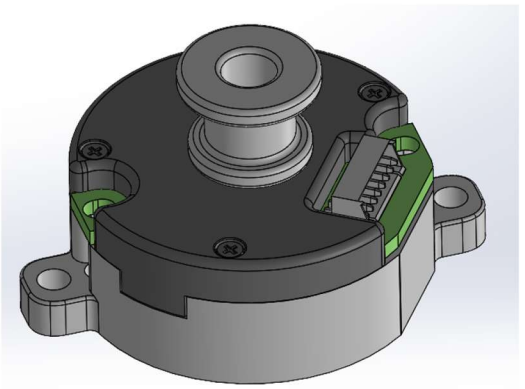
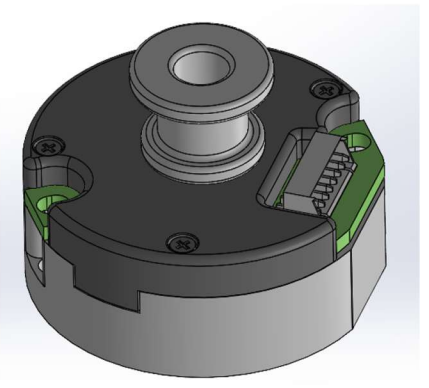
RSG35 Series Bearingless Absolute



RSG35R



RSG35B

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 ℃ ~+105 ℃
- Current consumption < 100mA
- 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 131072（17bit） 8388608（23 bit）
- 16 bits multi-turn resolution counter
- Absolute positioning accuracy <±50 angular seconds

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

  Note: The specific accuracy depends on the motor and mechanical assembly fit
- Battery voltage fault warning
- Interface RS485
- Communication frequency ≤16K
- Baud rate 2.5MHz
- Enter allowable deviation of shaft Dip angle:0.1°Axial endplay:＜0.1mm Radial runout:＜0.01mm
- Operation speeds of up to 6000rpm
- Moment of inertia 0.21kg • mm^2
- Rotor angular acceleration

  During power supply ⩽80000rad/s^2

  When battery powered ⩽4000rad/s^2
- Mechanicalshock

  Impact acceleration 980m/s^2

  11ms.Impact 3 times in each direction, totally 18 times
- Vibrate

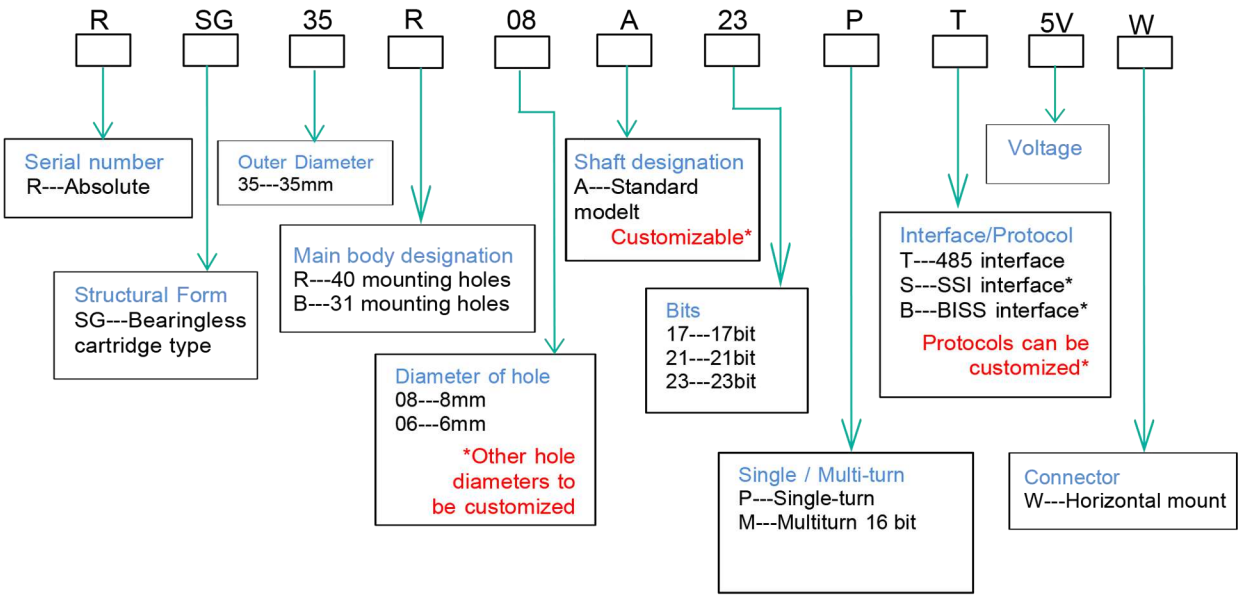
  10 to 55Hz, keeping the amplitude of 1.5mm

  Acceleration between 55 and 2000Hz is98ms^2 XYZ 2 hours per axial direction,6 hours intotal
- Working temperature -20 ℃ ~+105 ℃
- Relative humidity ≤90% (40℃/21d, based on EN 60068-2 -78) without condensation.
- Degree of protection IP40

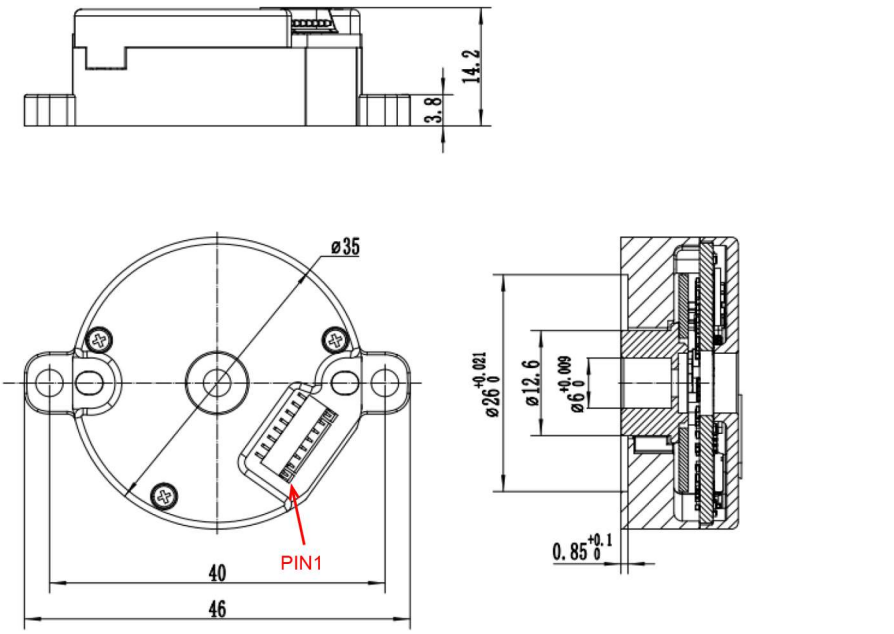
Cable Definitions

Pin Number	1	2	3	4	5	6	7	8
Signal Definition	5V	GND	485+	485-	Battery +	Battery GND	NC	PE
Cable Color	Red	Black	Blue	Yellow	Brown	White		Shielded Mesh

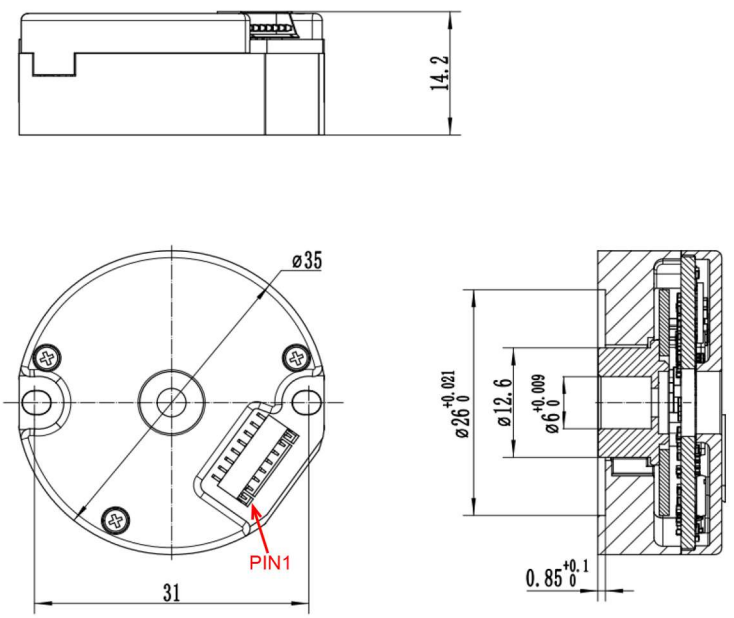
Technical Parameters



Mechanical Dimension



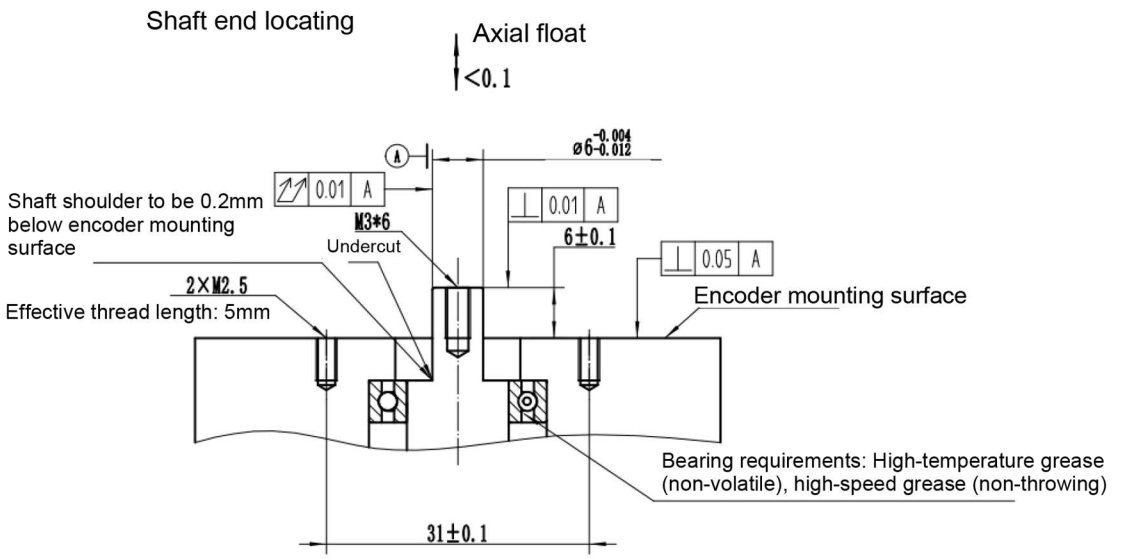
RSG35R06A Mechanical Dimension Drawing



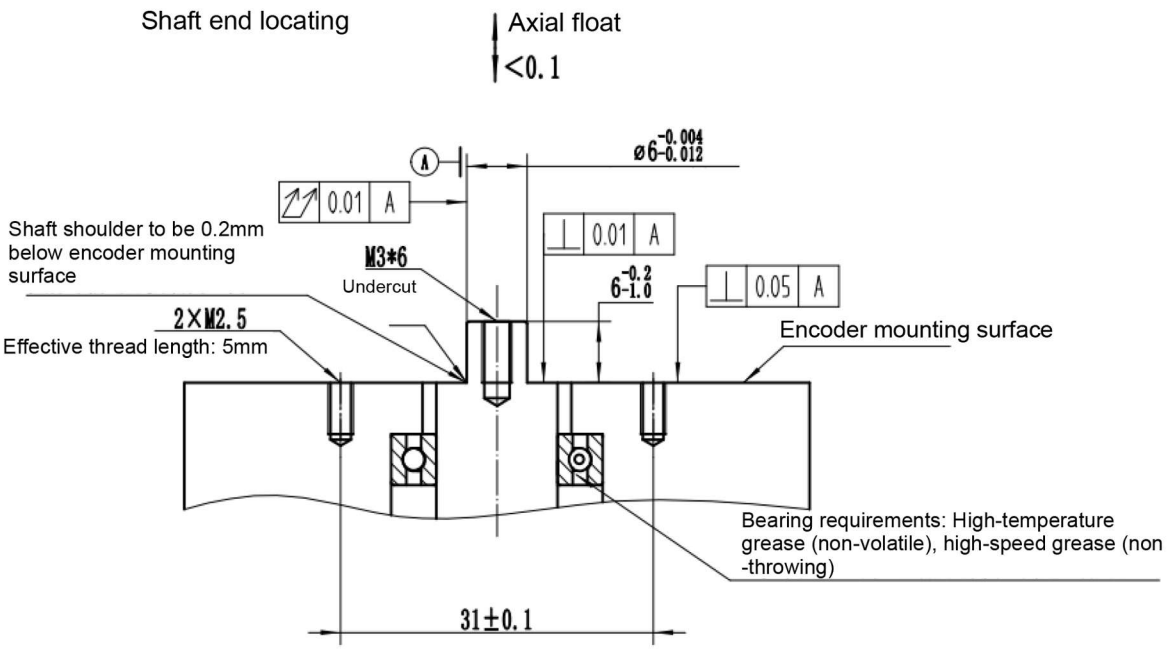
RSG35B06A Mechanical Dimension Drawing

Mechanical Dimension

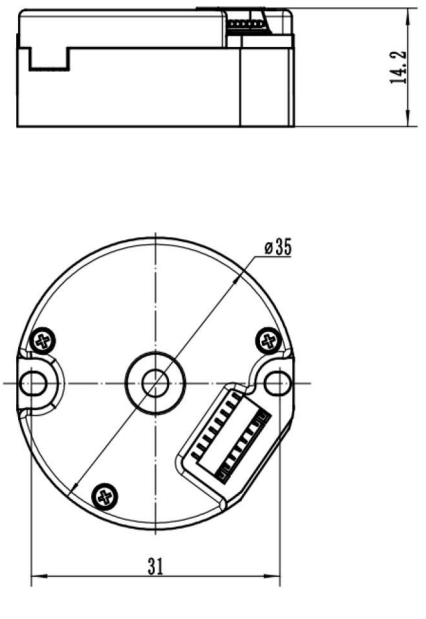
Shaft End Locating - Motor Face Dimension Drawing



Shaft Shoulder Locating - Motor Face Dimension Drawing



Mechanical Dimension



RSG35B08A Mechanical Dimension Drawing