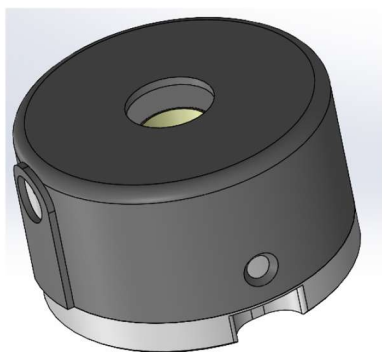
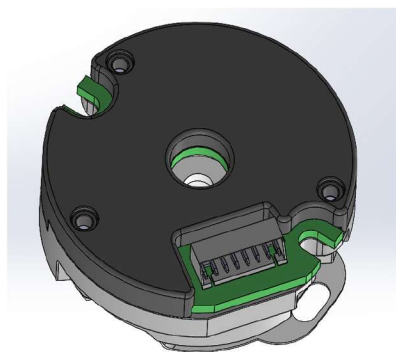


RZ35 Series Bearing Absolute Encoder



RZ35A09



RZ35D06

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 < 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

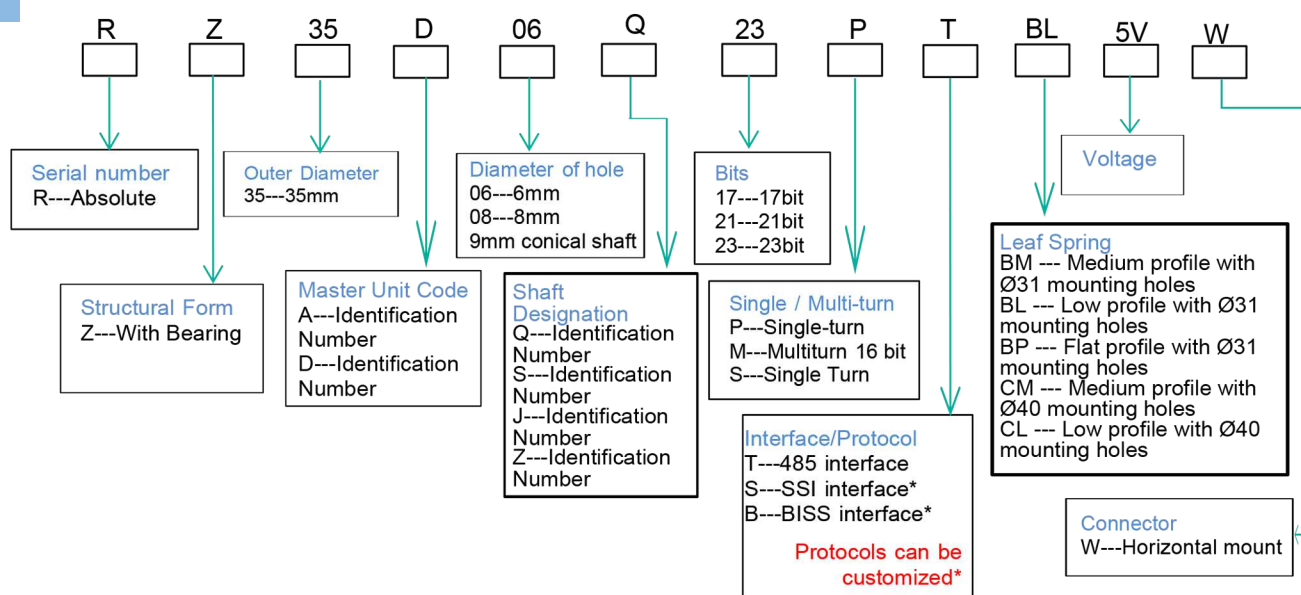
Technical Parameters

- Resolution 131072 (17bit) 8388608 (23 bit)
- 16 bits multi-turn resolution counter
- Absolute positioning accuracy $<\pm 50$ 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 Dip angle: 0.1° Axial endplay: $<0.1mm$ Radial runout: $<0.01mm$
- Operation speeds of up to 6000rpm
- Moment of inertia $0.21kg \cdot mm^2$
- 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 $98ms^2$ 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

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

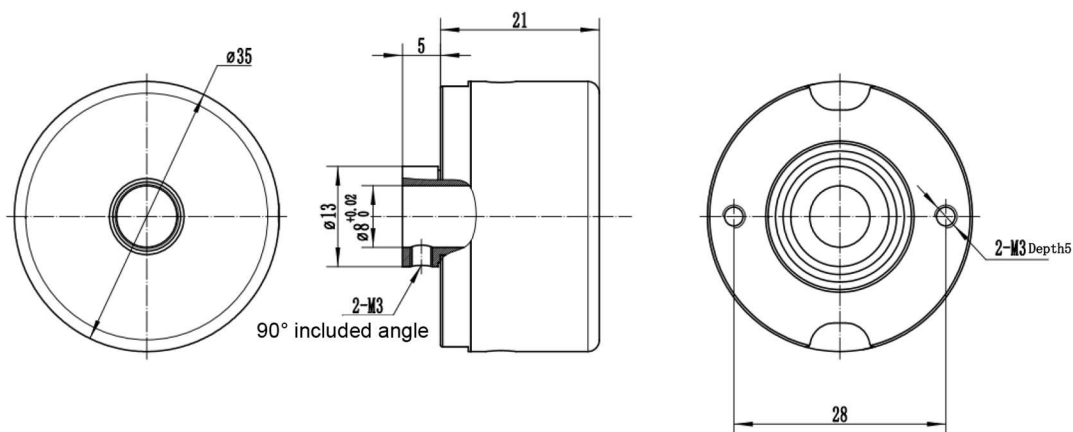
Technical Parameters



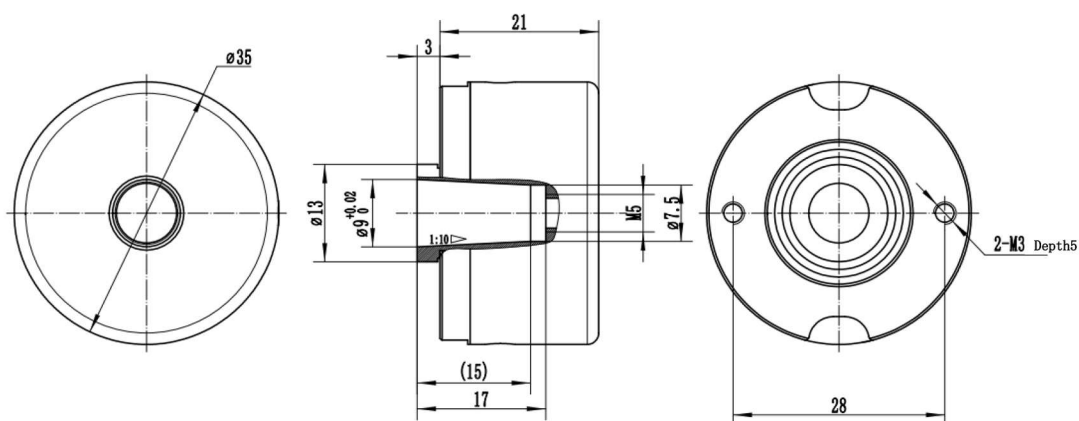
Note: 8mm straight shaft and 9mm conical shaft are only available at RZ35A.

RZ35 Series

Mechanical Dimension

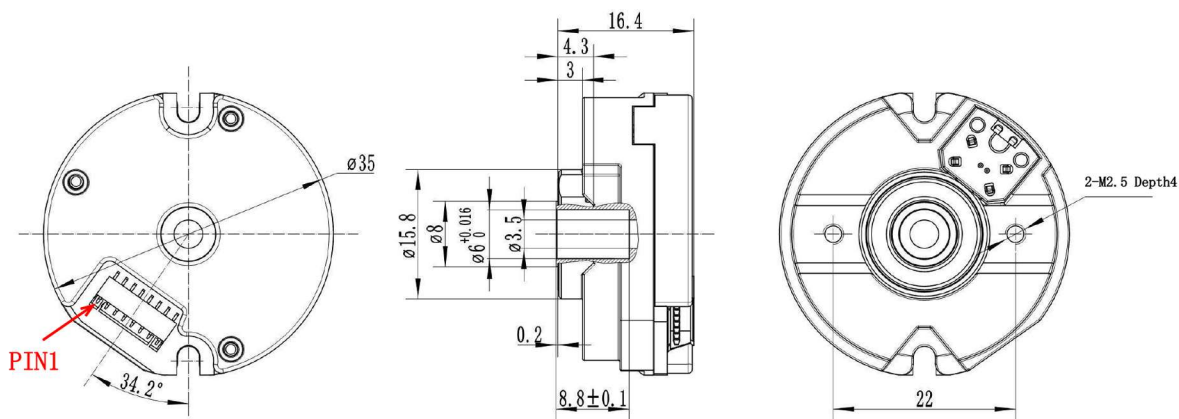


RZ35A08 Mechanical Dimension Drawing

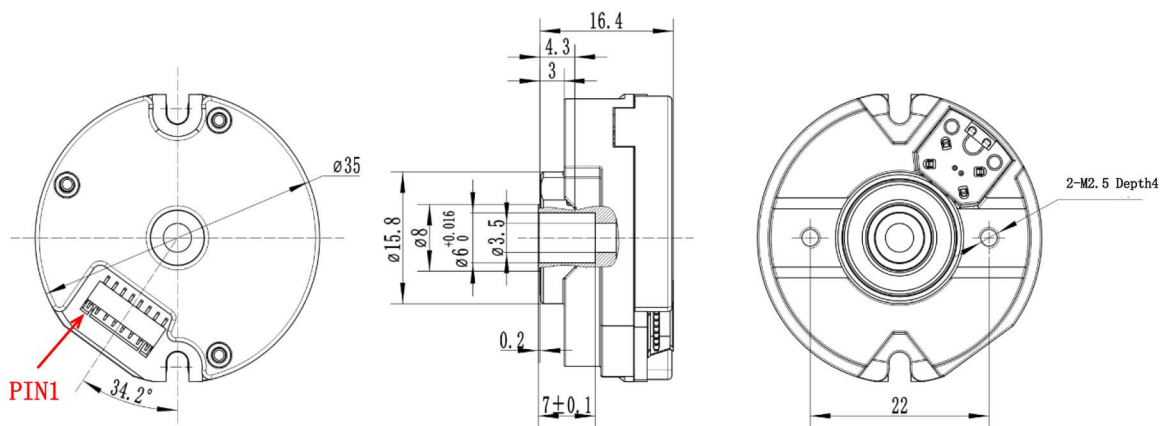


RZ35A09 Mechanical Dimension Drawing

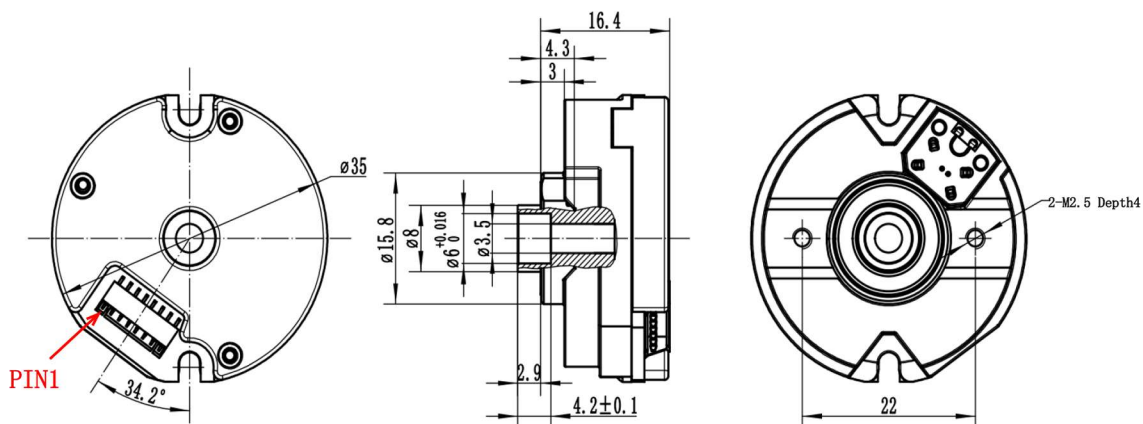
Mechanical Dimension



RZ35D06Q Mechanical Dimension Drawing



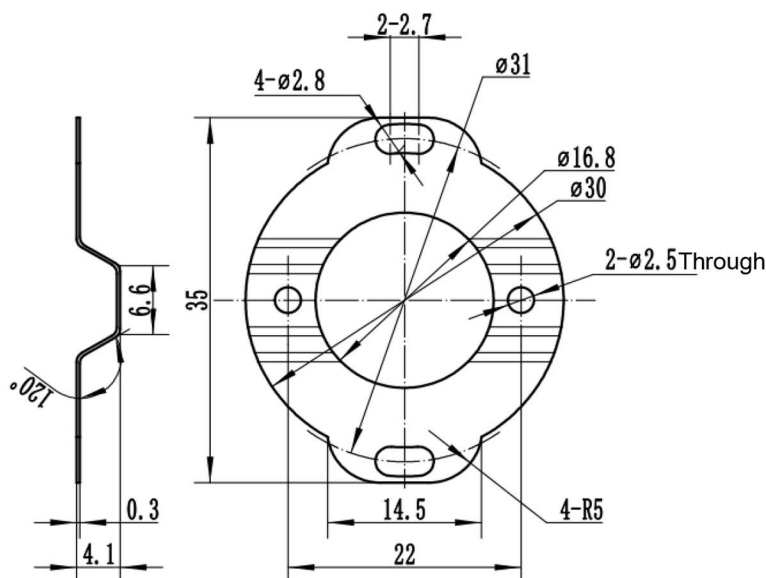
RZ35D06J Mechanical Dimension Drawing



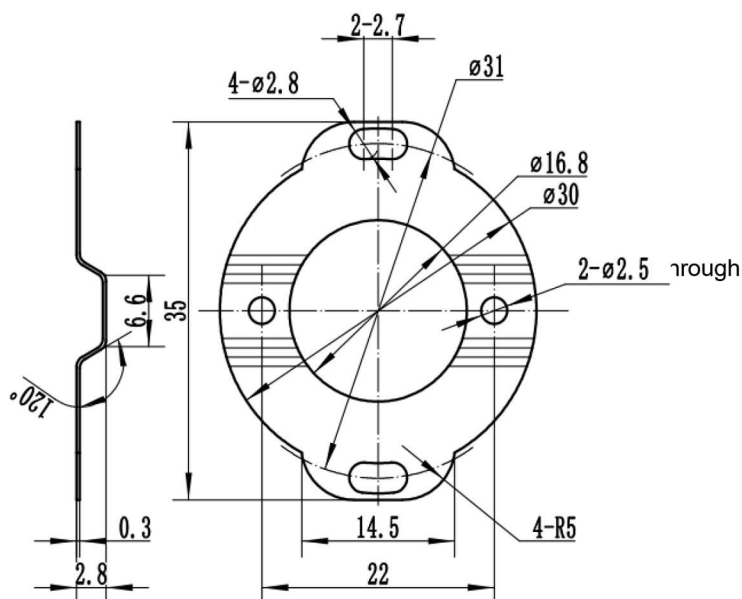
RZ35D06S Mechanical Dimension Drawing

Mechanical Dimension

Note: Select leaf spring according to motor face dimensions.

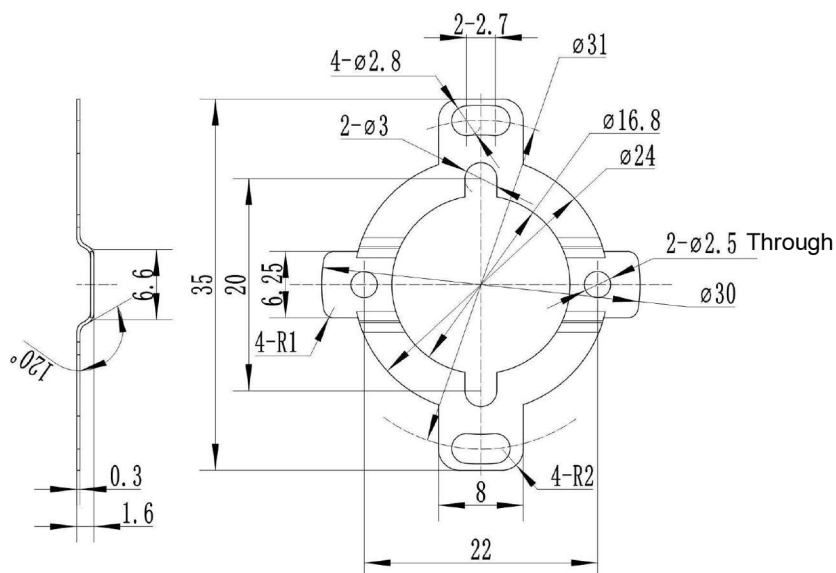


MP4131-704R (BM Type - Medium Profile with Ø31 Mounting Holes) Leaf Spring
Mechanical Drawing

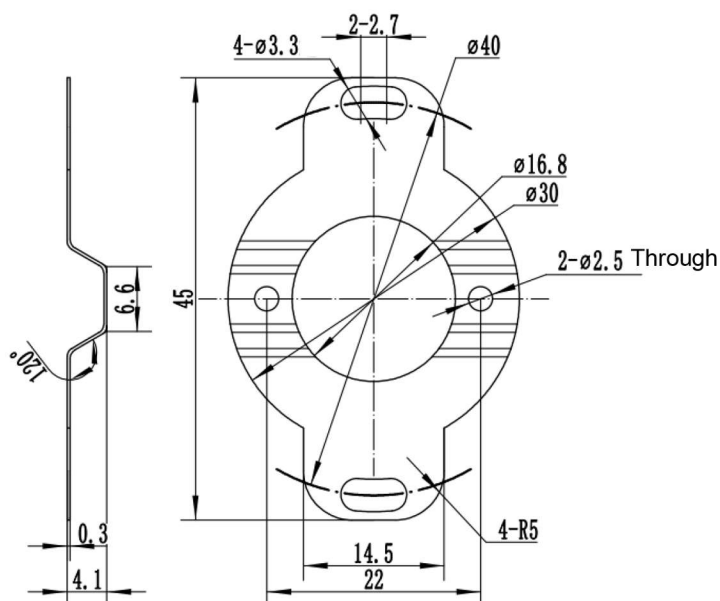


MP2831-704R (BL Type - Low Profile with Ø31 Mounting Holes) Leaf Spring
Mechanical Drawing

Mechanical Dimension

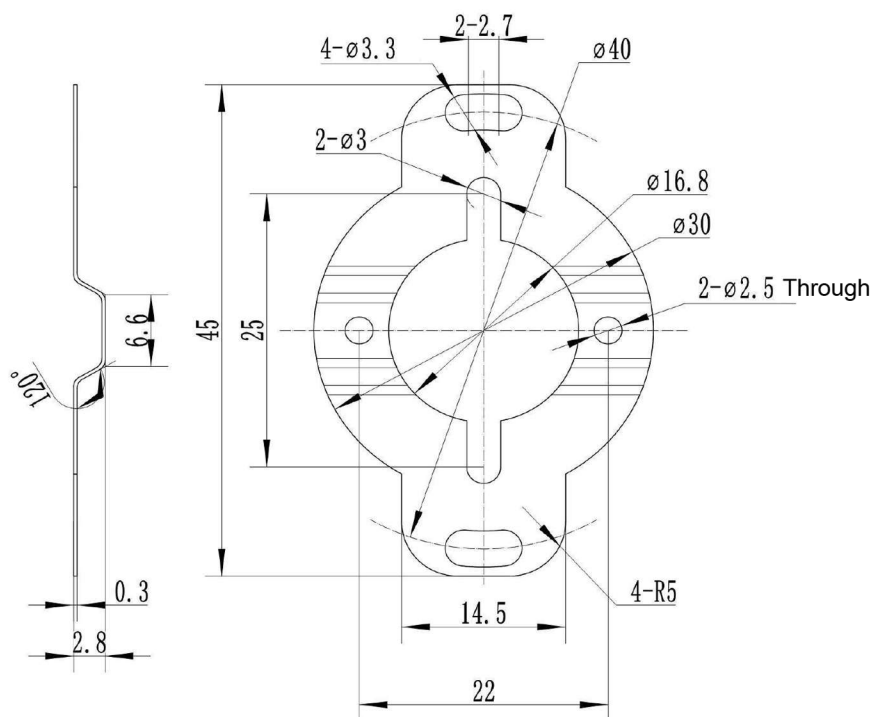


MP1631-704R (BP Type - Flat Profile with Ø31 Mounting Holes) Leaf Spring Mechanical Drawing



MP4140-704R (CM Type - Standard Profile with Ø40 Mounting Holes) Leaf Spring Mechanical Drawing

Mechanical Dimension



MP2840-704R (CL Type - Low Profile with Ø40 Mounting Holes) Leaf Spring
Mechanical Drawing