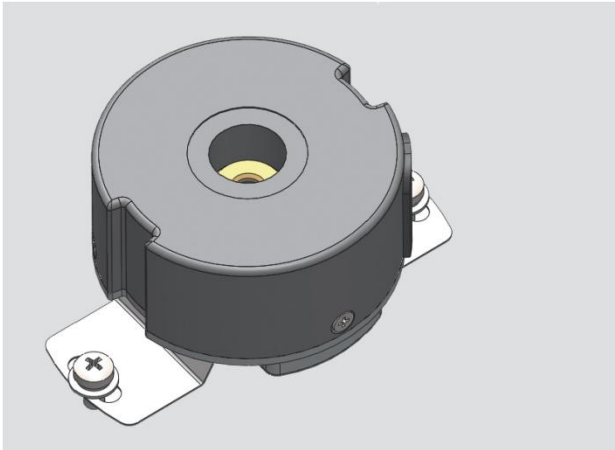


UZ Series Bearing Incremental

UZ4809 UZ4409 UZL4408 UZ3509



Product Introduction

- Well protected
- High frequency response, high speed
- High reliability

Features

- Resolution 1000-5000 CPR
- Differential output
- Count frequency up to 500 KHZ
- Working temperature $-20\text{ }^{\circ}\text{C} \sim +105\text{ }^{\circ}\text{C}$
- Single 5V Supply

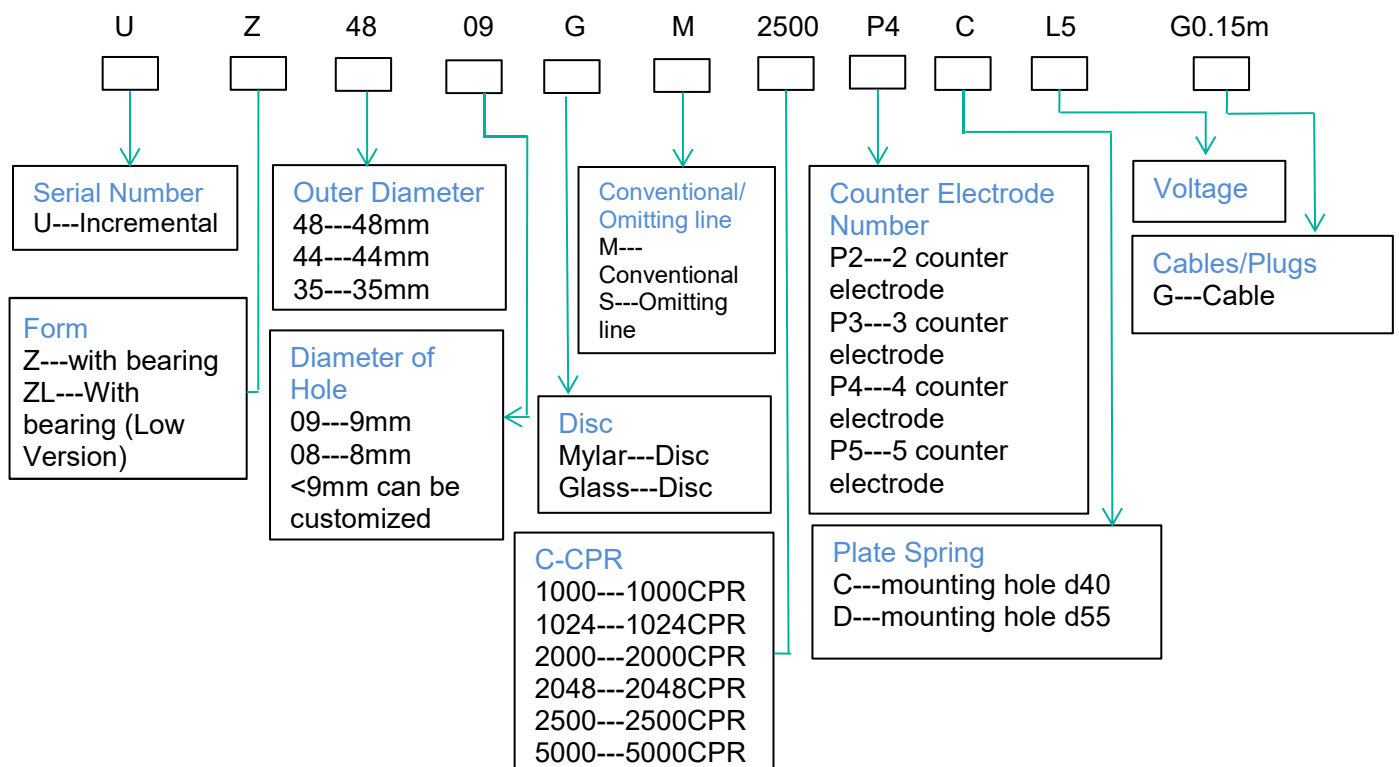
Connections

Signal	A	B	Z	-A	-B	-Z	U
Color	Green	White	Yellow	Green/Black	White/Black	Yellow/Black	Brown
Signal	V	W	-U	-V	-W	Vcc	GND
Color	Gray	Orange	Brown/Black	Gray/Black	Orange/Black	Red	Black

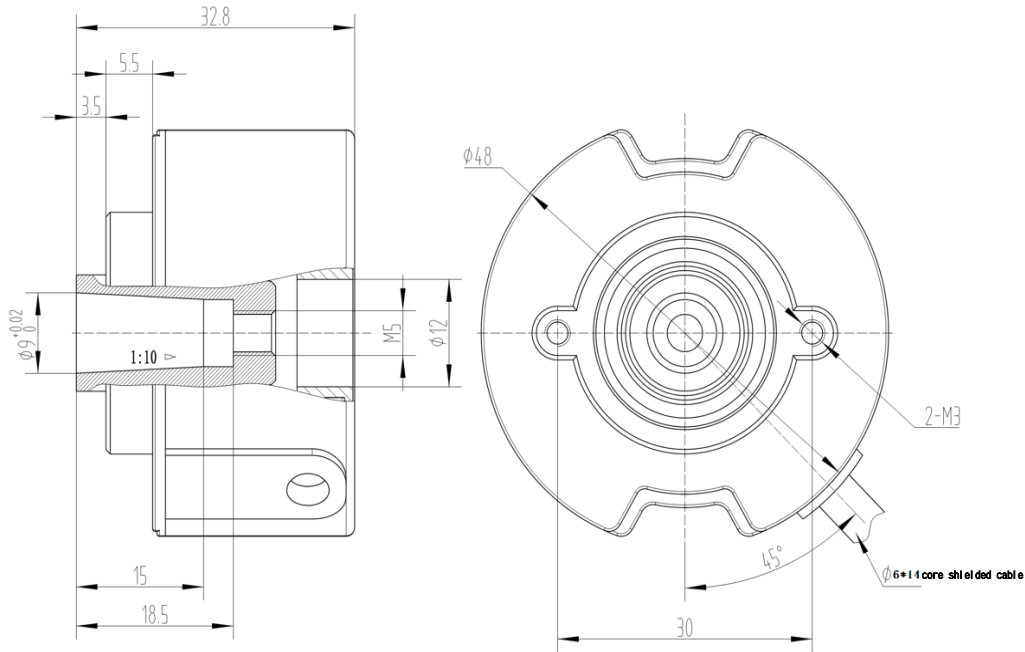
Ellipsis Line

Signal	A	B	Z	-A	-B	-Z	Vcc	GND
Color	Blue	Green	Yellow	Blue/Black	Green/Black	Yellow/Black	Red	Black

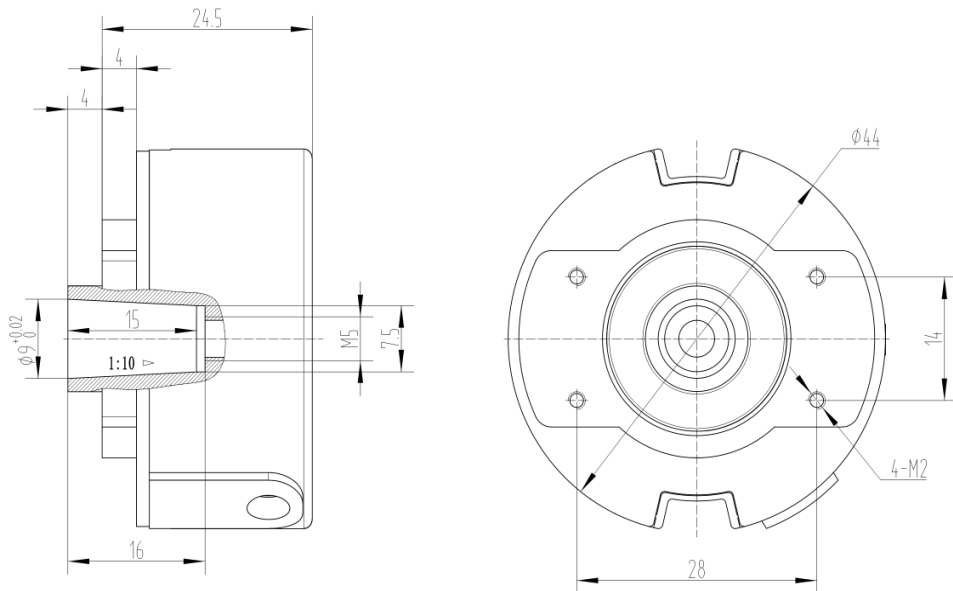
Ordering Information/Part Number



Mechanical Dimension



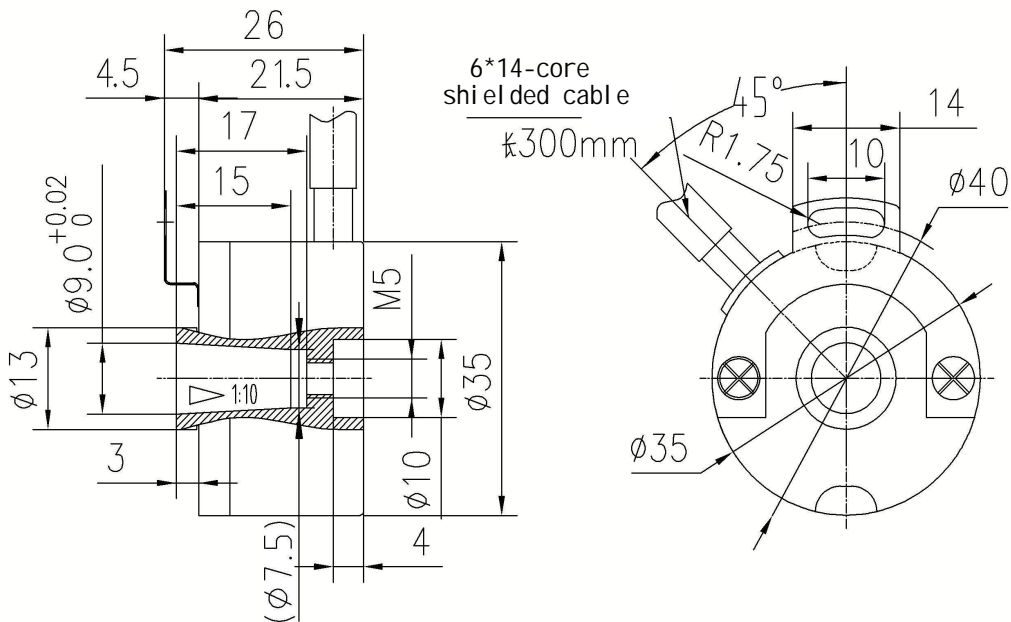
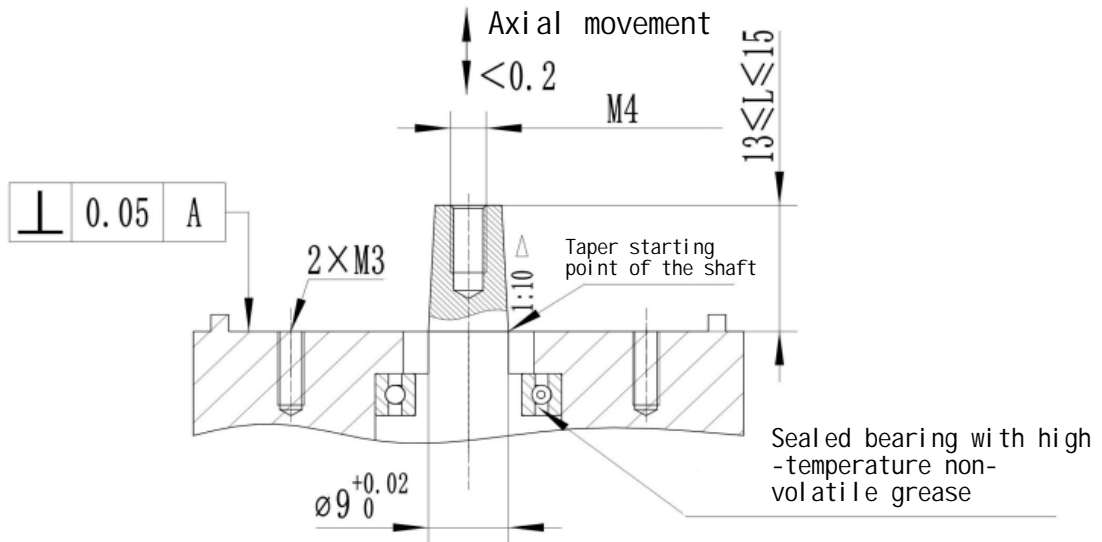
UZ4809 Mechanical Dimension Drawing



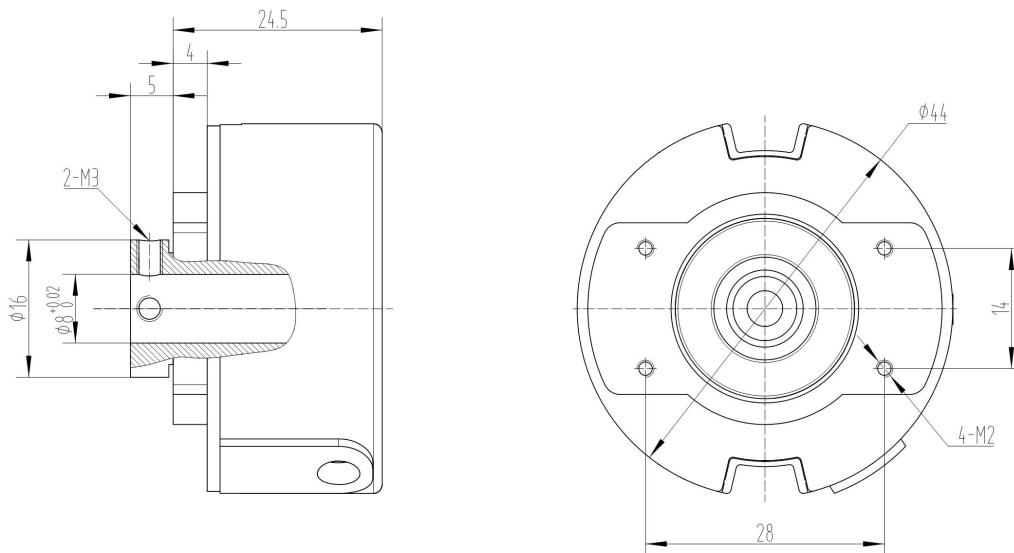
UZ4409 Mechanical Dimension Drawing

Mechanical Dimension

UZ4409 Recommended motor end dimensions:

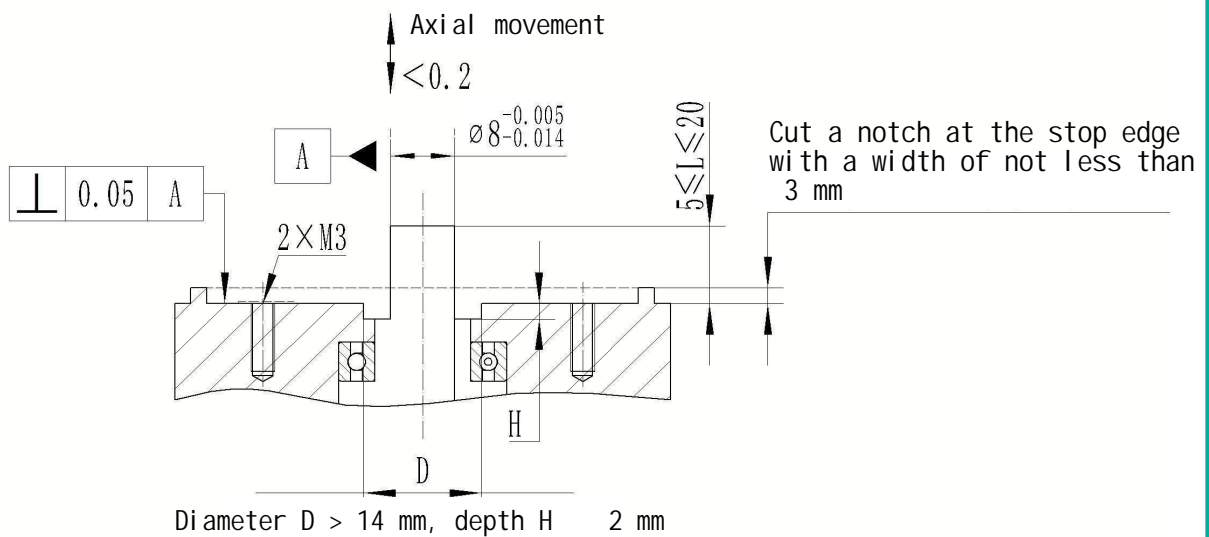


UZ3509 Mechanical Dimension Drawing



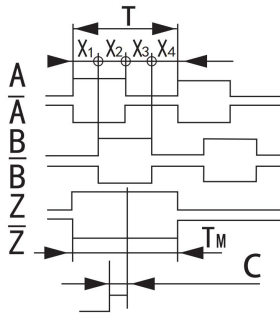
UZ4408 Mechanical Dimension Drawing

UZ4408 Recommended motor end dimensions:



Output Phase

Output Waveform Conventional



Waveform ratio: $X1+X2=0.5T\pm0.1T$

$X2+X3=0.5T\pm0.1T$

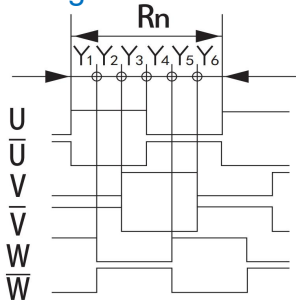
Phase difference: $Xn=0.25T\pm0.1T$

Z signal width: $Z=1T\pm0.5T$

$T=360^\circ/N$ (N is the number of pulses per revolution)

Period $P=360^\circ/N1\pm1.5^\circ$ ($N1=2,3,4$)

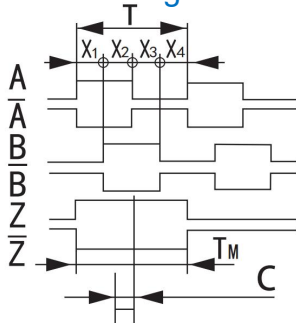
U-phase rising edge Z signal center



Phase difference $Y=P/6\pm1.5^\circ$ ($n=1,2,3,4,5,6$)

A, B phase and U, V, W phase position is not specified Z phase and U phase relationship: $C \leq \pm 1^\circ$ (mechanical angle)

Output Waveform Wire-saving



Waveform ratio: $X1+X2=0.5T\pm0.1T$

$X2+X3=0.5T\pm0.1T$

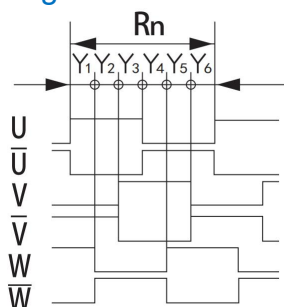
Phase difference: $Xn=0.25T\pm0.1T$

Z signal width: $Z=1T\pm0.5T$

$T=360^\circ/N$ (N is the number of output pulses per revolution)

Period $P=360^\circ/N1\pm1.5^\circ$ ($N1=2,3,4$)

U-phase rising edge Z signal center



Phase difference $Y=P/6\pm1.5^\circ$ ($n=1,2,3,4,5,6$)

A, B phase and U, V, W phase position is not specified

Relationship between phase Z and phase U: $C \leq \pm 1^\circ$ (mechanical angle)

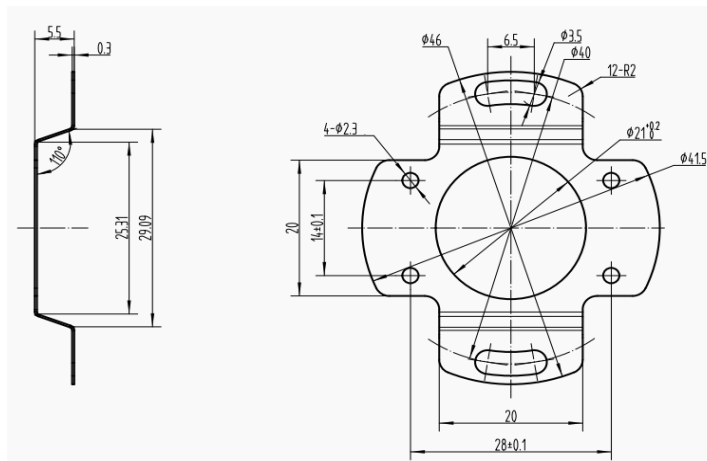
Package

First, put the encoder fold line into a sealed bag, then wrap it with bubble paper and put into a packing box, with ten pieces in each box.

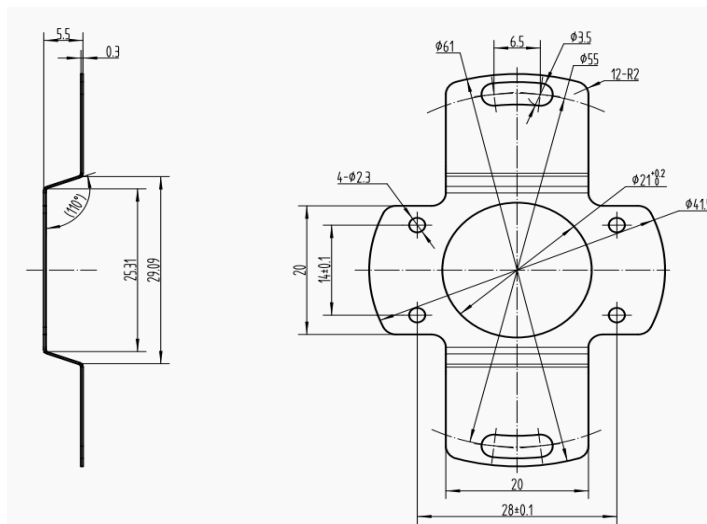
Packing box size : 335*176*47mm

Accessory Selection

Note: The leaf spring should be selected according to the motor end face dimensions.



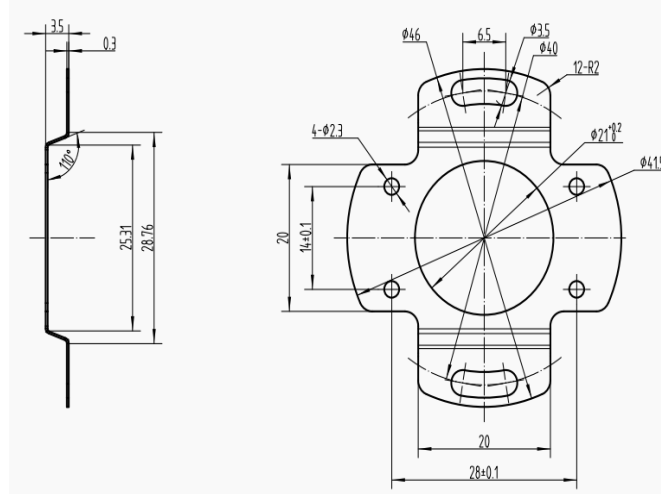
Mechanical Dimension Drawing of Leaf Spring MP4409-002A-40 (Type C – Mounting Hole d40)



Mechanical Dimension Drawing of Leaf Spring MP4409-001A-55 (Type D – Mounting Hole d55)

Accessory Selection

Note: The leaf spring should be selected according to the motor end face dimensions.



Mechanical Dimension Drawing of Leaf Spring MP4409-003A-40 (Type CL – Mounting Hole d40)