ENCODERS

INCREMENTAL ENCODERS

UZ Series

APPLICATION

Servo motor control

FEATURES

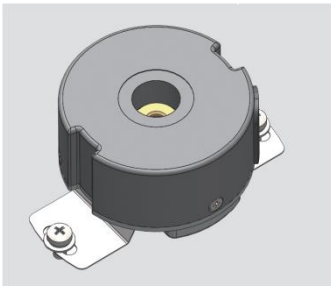
Resolution 1,000-5,000 CPR.

Differential output.

Count Frequency Up To 500 KHZ.

Working temperature -20 ℃ —+105 ℃

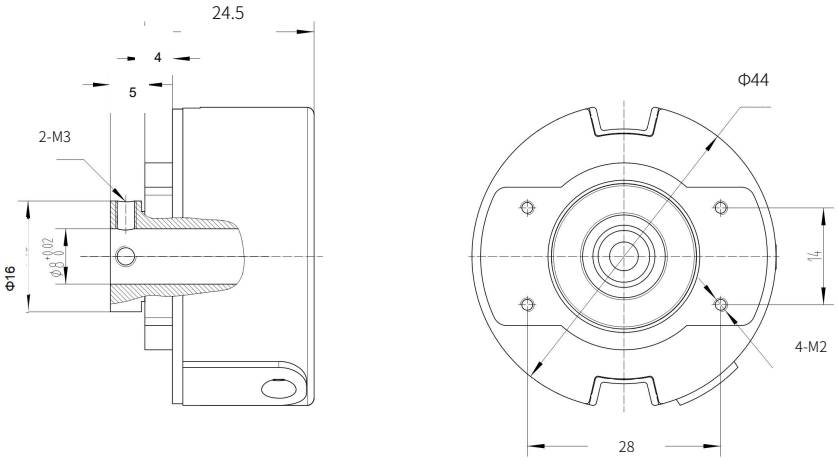
Single 5V Supply



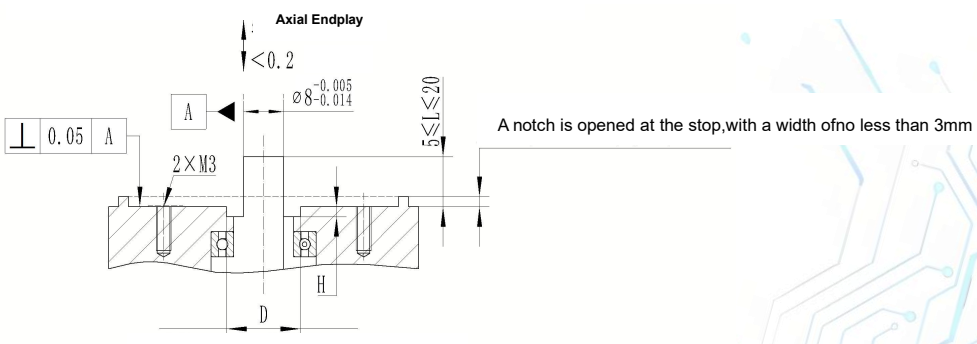
Product Introduction: Well protected, High frequency response, high speed, High reliability.

Model: UZ4408

Main Size Selection

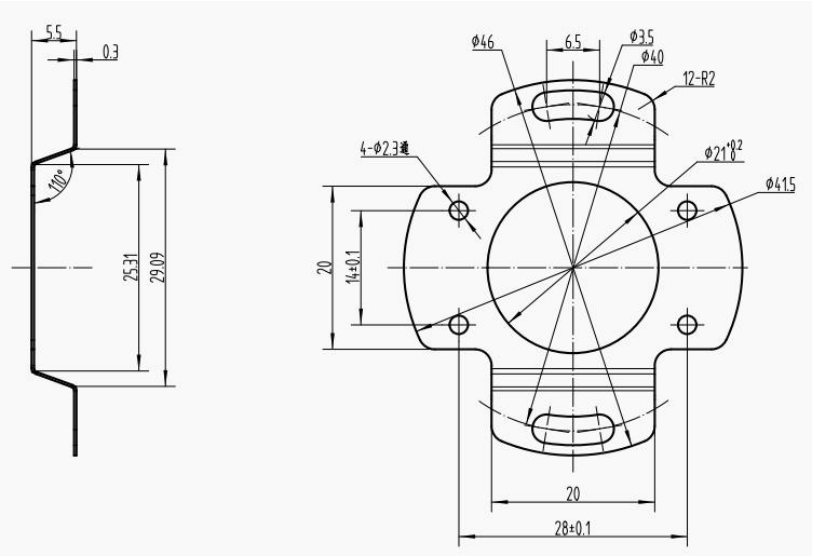


4408 Encoder Motor End Face Dimensional Requirements:

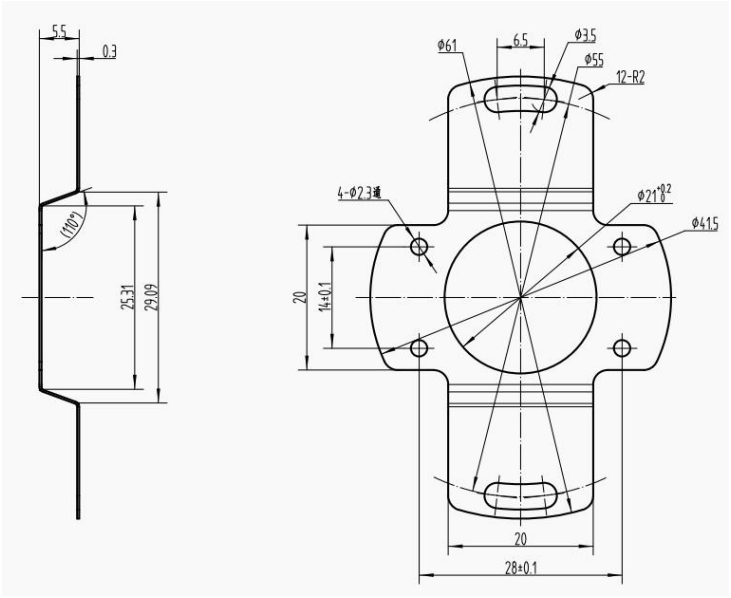


Diameter D > 14mm, Depth H ≥ 2mm

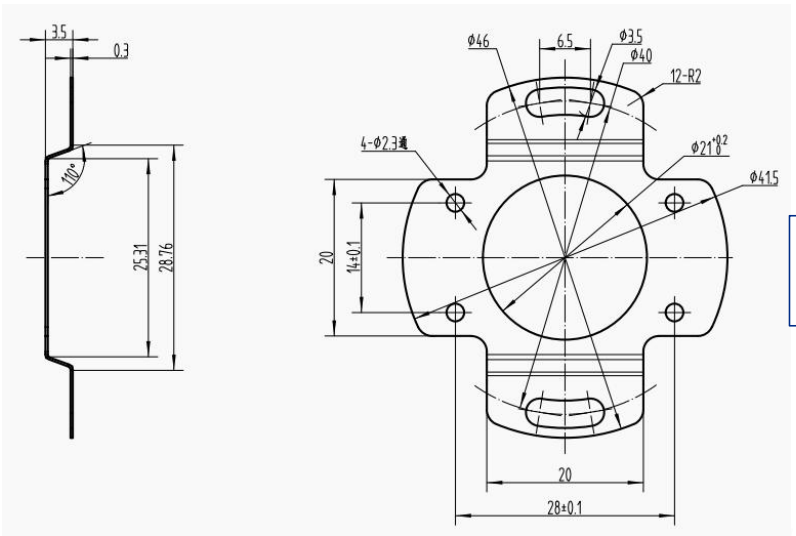
Spring Tab Size Selection



MP4409-002A-40（C-Mounting hole d40）



MP4409-001A-55（D-Mounting hole d55）



MP4409-003A-40（CL- Mounting hole d40）

Note: The spring tab should be selected according to the motor end size.

ORDERING INFORMATION / PART NUMBER

U	Z	48	09	G	M	2500	P4	C	L5	G0.15m

Series
U-Incremental

Type
Z-Hollow shaft

Size
48-Φ48mm
44-Φ44mm
35-Φ35mm

Code Wheel
G - Glass
P - Film

Standard / Cable-Saving
M-Standard type
S-Cable-saving type

Number of Pole Pairs
P2 - 2 Pole pair
P3 - 3 Pole pair
P4 - 4 Pole pair
P5 - 5 Pole pair

Spring Tab
C-Mounting hole d40
D-Mounting hole d55

Voltage

Cable
G-Cable

Hole Diameter
09-9mm Tapered
08-8mm Straight
<9mm Customized

C-CPR
1000-1000CPR
1024-1024CPR
2000-2000CPR
2048-2048CPR
2500-2500CPR
5000-5000CPR

CONNECTIONS

SIGNAL	A	B	Z	$\overline{A}$	$\overline{B}$	$\overline{Z}$	U	V	W	$\overline{U}$	$\overline{V}$	$\overline{W}$	Vcc	GND
COLOR	GREEN	WHITE	YELLOW	GREEN/BLACK	WHITE/BLACK	YELLOW/BLACK	BROWN	GREY	ORANGE	BROWN/BLACK	GREY/BLACK	ORANGE/BLACK	RED	BLACK

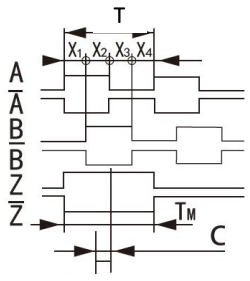
Cable-Saving Type

SIGNAL	A	B	Z	$\overline{A}$	$\overline{B}$	$\overline{Z}$	Vcc	GND
COLOR	BLUE	GREEN	YELLOW	BLUE/BLACK	GREEN/BLACK	YELLOW/BLACK	RED	BLACK

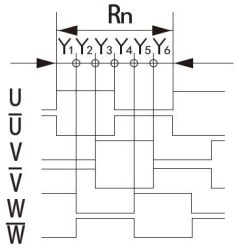
OUTPUT PHASE

OUTPUT WAVEFORM

STANDARD TYPE



U Phase Rising Edge Z Signal Center



Waveform Ratio: X1+X2=0.5T±0.1T

X2+X3=0.5T±0.1T

Phase Difference: Xn=0.25T±0.1T

Z Signal Width: Z=1T±0.5T

T=360°/N (N is the number of pulses per revolution)

Period P = 360°/N1±1.5°N1=2、3、4)

Phase Difference Y: P / 6±1.5°(n=1、2、3、4、5、6)

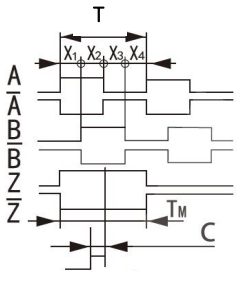
The Phase Position between A, B Signals and U, V, W Signals is

-Not Specified.

Z Phase and U Phase Relationship: C≤±1°(Mechanical Angle)

OUTPUT WAVEFORM

CABLE-SAVING TYPE



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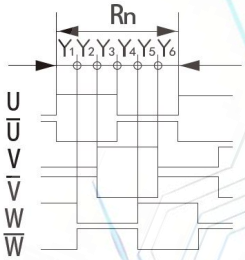

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-Not Specified.

Z Phase and U Phase Relationship: C≤±1°(Mechanical Angle)

*Difference from Standard Type: During the first 20ms after power-on, ABZ lines output UVW signals. After 20ms, ABZ lines continuously output ABZ signals.