

Heavy-Load Z Stage



Features

- High stiffness and precision guide column
- High precision screw structure
- High load, high eccentricity resistance
- Full closed-loop servo design

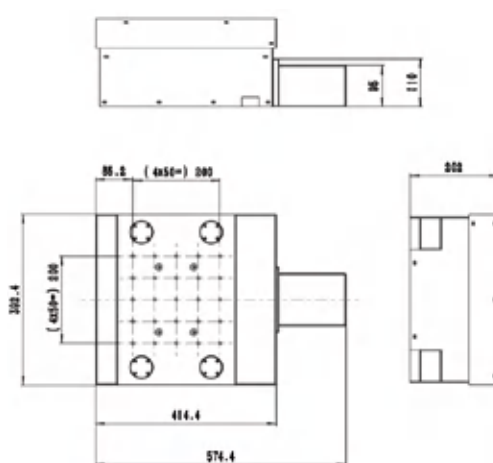
Description

The stage adopts innovative wedge design with a compact, low-profile. Through the high stiffness guide column and high precision screw structure, the platform has a very high positioning accuracy, repeatability and high load capacity.

Applications

- Semiconductor
- Flat panel display
- Optical fiber alignment

Interface Definition



*Interface dimensions from MZH400 in the middle of vertical stroke

Technical Specifications

MZH400-25	
Travel range	25 mm
Max. velocity	20 mm/s
Max. acceleration	50 mm/s ²
Accuracy	±1 μm
Bidirectional repeatability	±0.5 μm
Straightness	±3 μm
Pitch	100 μrad (21 arcsec)
Roll	100 μrad (21 arcsec)
Yaw	100 μrad (21 arcsec)
Orthogonality	100 μrad (21 arcsec)
Mechanical properties	
Moving mass (without payload)	23 Kg
Max. load	50 Kg
Stage mass	44 Kg
Dimensions	574.4 mm × 392.4 mm × 202 mm
Material	Aviation aluminum, black anodized

Customization Information

The series is configured with options that can be selected based on the user's actual application. Options include travel, encoder, and more.

Table 1 Travel Options

-10	10mm travel displacement platform with servo motor and limit
-20	20mm travel displacement platform with servo motor and limit
-30	30mm travel displacement platform with servo motor and limit

Table 2 Encoder Options

-S1	Incremental analog optical linear encoder, 1Vpp
-S2	Incremental digital optical linear encoder, RS422
-S3	Absolute optical linear encoder, BISS