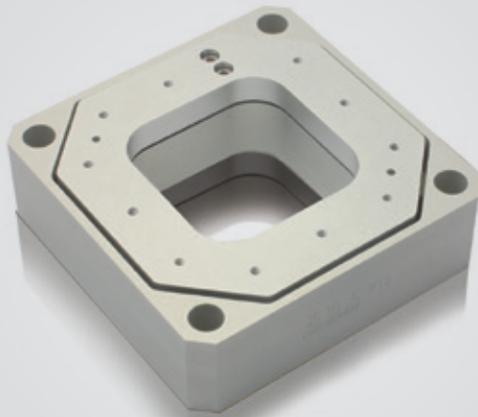


X axis | P12A.Z400S/K

Piezo Nanopositioning Scanner



Characteristics >>

- Motion in Z
- Travel to 400 μ m
- Load capacity to 0.4kg
- Aperture of 45 \times 45mm
- Open/closed-loop version

Applications >>

- Scanning microscopy
- Confocal microscopy
- Surface measurement
- Semiconductor test
- Image process and stability
- Micromanipulation

Introduction

The P12A.Z400S/K piezo scanning stage moves in X direction, and optionally equipped with a high-resolution sensor, which detects the position in real time and feeds it back to the piezo controller.

P12A piezo scan stage, matched with CoreMorrow E70 modular controller, is applied to optical microscopy imaging to realize Z axis precision scanning.



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Technical Data >>

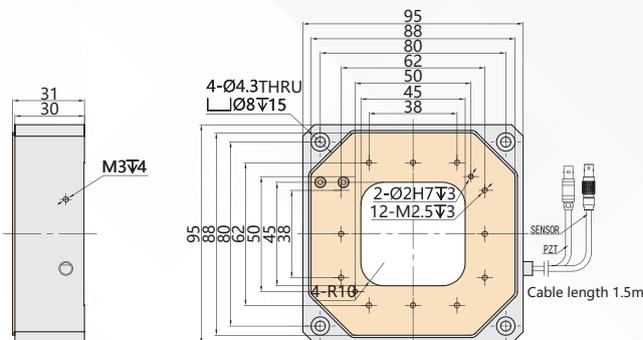
Type	S-Closed loop K-Open loop	P12A.Z400S	P12A.Z400K	Units
Active axes		Z	Z	
Travel range(0~120V)		320	320	$\mu\text{m}\pm 20\%$
Travel range(0~150V)		400	400	$\mu\text{m}\pm 20\%$
Integrated sensor		SGS	-	
Aperture		45×45	45×45	mm
Resolution		11	3.5	nm
Linearity		0.4	-	%F.S.
Repeatability		0.3	-	%F.S.
Unloaded resonant frequency		130	130	Hz $\pm 20\%$
Load capacity		0.4	0.4	kg $\pm 5\%$
El. capacitance		14.4	14.4	$\mu\text{F}\pm 20\%$
Operating temperature ^[1]		-20~80	-20~80	°C
Material		Steel, Al	Steel, Al	
Size (L×W×H)		95×95×31	95×95×31	mm
Cable length ^[2]		1.5	1.5	m $\pm 10\text{mm}$
Sensor/voltage connector ^[2]		-	-	

Note: Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

[1] Custom ultralow temperature and ultrahigh vacuum versions are available.

[2] Custom cable length and connector is available.

Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Drawing >>

Recommended Controllers >>


E01.D1
 LCD, membrane button, up to 625mA
 RS-232/RS-422/USB interface
 Software secondary development



E53
 Small size, 60mA
 RS-232/RS-422/USB interface
 Software secondary development



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