

# XZ axis | P12A.XZ200S/K

# Piezo Nanopositioning Scanner



# Introduction

The P12A.XZ200S/K piezo scanning stage moves in XY 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 XZ axis precision scanning.

#### Characteristics >>

- Motion in XY
- Travel to 200µm/axis
- · Load capacity to 0.4kg
- Aperture of 45×45mm
- Open/closed-loop version

#### Applications >>

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





## Technical Data >>

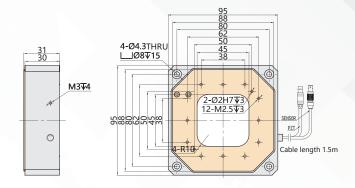
S-Closed loop			
Types K-Open loop	P12A.XZ200S	P12A.XZ200K	Units
Active axes	X, Z	X, Z	
Travel range(0~120V)	160/axis	160/axis	μm±20%
Travel range(0~150V)	200/axis	200/axis	μm±20%
Integrated sensor	SGS	-	
Aperture	45×45	45×45	mm
Resolution	5.5	2	nm
Linearity	0.4	-	%F.S.
Repeatability	0.3	-	%F.S.
Unloaded resonant frequency	X160/Y140	X160/Y140	Hz±20%
Load capacity	0.4	0.4	kg±5%
El. capacitance	7.2/axis	7.2/axis	μF±20%
Operating temperature <sup>[1]</sup>	-20~80	-20~80	°C
Material	Steel, Al	Steel, Al	
Size (L×W×H)	95×95×31	95×95×31	mm
Cable length <sup>[2]</sup>	1.5	1.5	m±10mm
Sensor/voltage connector <sup>[2]</sup>	-	-	

Note: Max driving voltage could be  $-20V\sim150V$ ,  $0\sim120V$  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  $20\mu m$ , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

## Drawing >>



## Recommended Controllers >>



E01.D3 LCD, membrane button, up to 625mA RS-232/RS-422/USB interface Software secondary development



E70 Small size, 70mA RS-232/RS-422/USB interface Software secondary development

