

X axis | P12A.Z600S/K

Piezo Nanopositioning Scanner





The P12A.Z600S/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.

Characteristics >>

- Motion in Z
- Travel to 600µm
- · Load capacity to 0.3kg
- Aperture of 45×45mm
- Open/closed-loop version

Applications >>

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





Technical Data >>

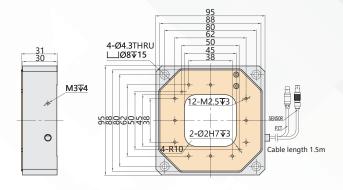
| Type S-Closed loop K-Open loop | P12A.Z600S | P12A.Z600K | Units |
|---|------------|------------|--------|
| Active axes | Z | Z | |
| Travel range(0~120V) | 480 | 480 | μm±20% |
| Travel range(0~150V) | 600 | 600 | μm±20% |
| Integrated sensor | SGS | - | |
| Aperture | 45×45 | 45×45 | mm |
| Resolution | 16 | 5 | nm |
| Linearity | 0.5 | - | %F.S. |
| Repeatability | 0.4 | - | %F.S. |
| Unloaded resonant frequency | 80 | 80 | Hz±20% |
| Load capacity | 0.3 | 0.3 | kg±5% |
| El. capacitance | 21.6 | 21.6 | μF±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±10mm |
| Sensor/voltage connector ^[2] | - | - | |

Note: Max driving voltage could be $-20V \sim 150V$, $0 \sim 120V$ 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 $20\mu m$, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Drawing >>



Recommended Controllers >>



E01.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

