

# XYZ axes | P15.XYZ100S/K-B2 Piezo Nanopositioning Stages



P15 is a fast, high-precision scanning and nanopositioning stage with very high straightness. The aperture is 60×60mm, which is ideal for transmitted-light applications such as near field scanning, confocal microscopy and mask positioning.

## Characteristics >>

- 3 axes
- Aperture of 60×60mm
- Closed-loop sensor available
- Frictionless, high precision flexible guiding system

## Applications >>

- Scanning microscope
- Interferometry
- Biotechnology
- Mask/wafer Positioning
- Metrology
- Micromanipulation



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#### Make Your Motion and Control More Accurate!

## Technical Data >>

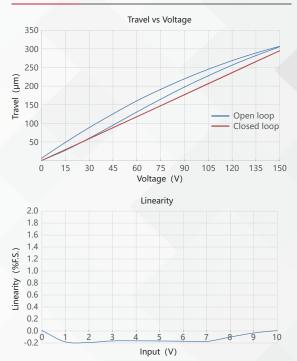
Type S-Closed loop K-Open loop	P15.XYZ100S-B2	P15.XYZ100K-B2	Units
Active axes	X, Y, Z	X, Y, Z	
Driving channels	4	4	
Travel rang(0~120V)	XY±50 Z100	XY±50 Z100	µm±10%
Travel rang(0~150V)	XY±60 Z120	XY±60 Z120	µm±10%
Sensor	SGS	-	
Aperture	60×60	60×60	mm
Resolution	3.5	1	nm
Linearity	0.2	-	%F.S.
Repeatability	0.1	-	%F.S.
Pitch/yaw/roll	30	30	µrad
Push/pull force	XY150/20 Z100/20	XY150/20 Z100/20	Ν
Stiffness	1.6/1.6/0.8	1.6/1.6/0.8	N/µm±20%
Unloaded resonant frequency, X/Y/Z	389/355/400	389/355/400	Hz±20%
Load capacity	2	2	kg
El. capacitance	14.4	14.4	μF±20%
Operating temperature <sup>[1]</sup>	-20~80	-20~80	°C
Material	Steel, Al	Steel, Al	
Size(L×W×H)	140×140×36	140×140×36	mm
Mass	750	750	g±5%
Cable length <sup>[2]</sup>	1.5	1.5	m±10mm

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.

Custom ultralow temperature and ultrahigh vacuum versions are available.
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.

#### Curves >>



Disclaimer: The data here are typical, only for reference. Some variations will occur for different batch.

## Recommended Controllers >>



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



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



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