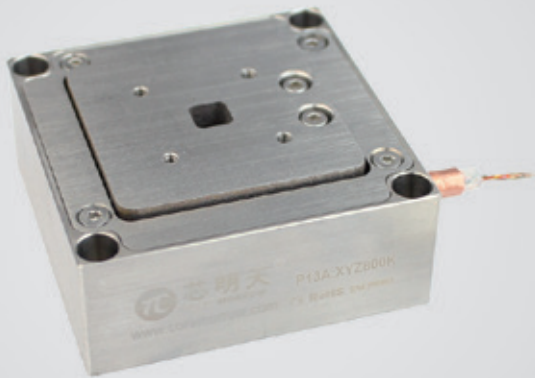


XYZ axes | P13A.XYZ80K

Piezo Nanopositioning Stages



Characteristics >>

- Active axes X, Y, Z
- Low temperature 4K
- Displacement up to 25 μ m@150V at 4K
- Resolution to 0.3nm
- Open-loop drive, quick response

Applications >>

- Microscopic imaging
- Surface detection
- Precision positioning
- Interference/metrology
- Micromanipulation
- Optics

Introduction

P13A piezo stage is specially designed for extremely low temperature and strong magnetic field. It adopts low-temperature piezo drive with light shell and is in XY scanning motion. All components adopt low temperature and strong magnetic compatible version to ensure its performance under low temperature and strong magnetic environment.



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Technical Data >>

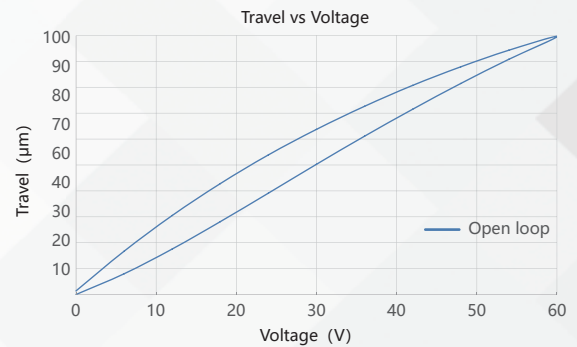
Type	P13A.XYZ80K		Units
Operating temperature	Room	4K	
Active axes	X Y Z	X Y Z	
Travel range	80 (0~60V)	25 (0~150V)	$\mu\text{m} \pm 20\%$
Open-loop resolution	1	0.3	nm
Unloaded resonant frequency	350	350	$\text{Hz} \pm 20\%$
Load capacity	100	100	g
El. capacitance	XY5.5, Z11	XY0.75, Z1.5	$\mu\text{F} \pm 20\%$
Mainbody	Stainless steel	Ti	
Wires	Standard wire	Phosphor Bronze Twisted Paired Wire	
Operating environment	-20~80	Temperature to 4K, Max.magnetic field to 30T, Vacuum degree to 2E-11mbar	
Size(L×W×H)	46×46×18.7	46×46×18.7	mm
Mass	168	168	$\text{g} \pm 5\%$
Cable length ^[1]	1.5	1.5	$\text{m} \pm 10\text{mm}$
Voltage connector ^[1]	Bare wire	Bare wire	

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.

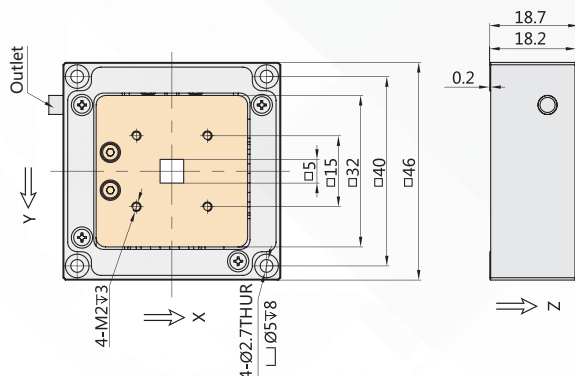
[1] Custom cable length and connector is available.

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.

Curves >>



Drawing >>



Recommended Controllers >>



E01.C3
 LCD, membrane button, up to 1A
 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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