

XYZ axes | P12B.XYZ100S/K

Piezo Nanopositioning Stages



Introduction

The P12B.XYZ100 piezo nanopositioning scanner moves in X, Y and Z, its travel is up to 100 μ m/axis, and it has an aperture with diameter of 10mm, which is very suitable for microscopy.

Characteristics >>

- XYZ motion
- 100 μ m/axis travel
- Load capacity to 200g
- Aperture of \varnothing 10mm
- Suitable for vacuum application

Applications >>

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



Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790

Email: info@coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin

Fax: +86-451-86267847

Web: www.coremorrow.com

Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai

Technical Data >>

Type	S-Closed loop K-Open loop	P12B.XYZ100S	P12B.XYZ100K	Units
Active axes		X, Y, Z	X, Y, Z	
Travel range(0~150V)		100/axis	100/axis	$\mu\text{m}\pm 20\%$
Resolution		3	1	nm
Sensor		SGS	-	
Aperture		$\varnothing 10$	$\varnothing 10$	mm
Unloaded resonant frequency		0.03	0.03	$\text{kHz}\pm 20\%$
Unloaded resonant frequency		0.03	0.03	$\text{kHz}\pm 20\%$
El. capacitance		3.6/axis	3.6/axis	$\mu\text{F}\pm 10\%$
Load capacity		200	200	g
Operating temperature ^[1]		-20~80	-20~80	$^{\circ}\text{C}$
Material		Steel, Aluminum	Steel, Aluminum	
Cable length ^[2]		1.5	1.5	$\text{m}\pm 10\text{mm}$

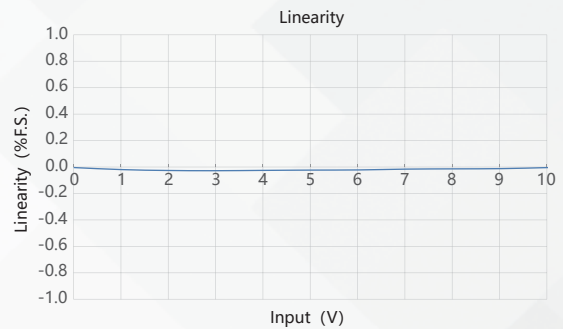
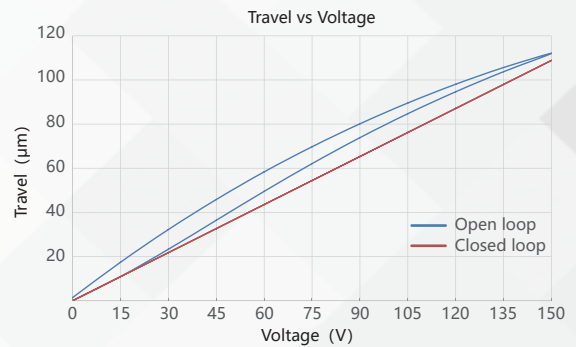
Note: Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25 $^{\circ}$ C.

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

[2] Custom cable length and connector is available.

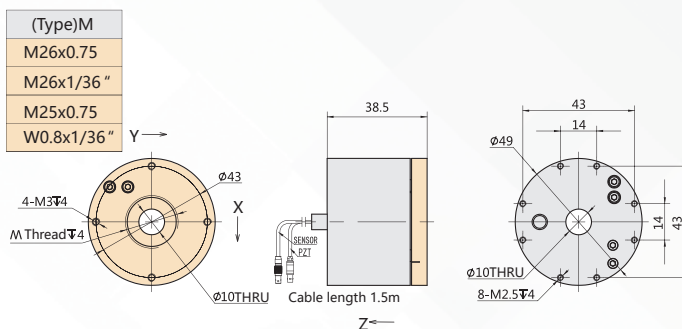
Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



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

Drawing >>



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



Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790 Email: info@coremorrow.com

Fax: +86-451-86267847 Web: www.coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin

Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai