

X axis| P92.X20S/K

Fast Tool Positioning Stages



Introduction

P92.X20S/K fast tool positioning stage is a fast tool microfeed stage designed for ultra-precision turning. It adopts direct-driving structure, features large load capacity, high frequency, and optional capacitive sensor with nano-scale positioning accuracy.

Characteristics >>

- Active axes X
- Load capacity to 300g
- Operating frequency to 95Hz
- Optional sensor
- Direct drive

Applications >>

- Diamond micro-feeding
- Precision processing
- High-speed tool control
- Workpiece positioning
- Light guide plate mold processing
- FTS fast tool servo turning system
- Precision machining and grinding
- Optical element processing
- Precise positioning of Large load workpiece



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	P92.X20S	P92.X20K	Units
Active axis		X	X	
Travel range		18@95Hz (0~150V)		$\mu\text{m} \pm 10\%$
		9@190Hz	9@190Hz	
		1@600Hz	1@600Hz	
Sensor		SGS	-	
Resolution		0.5	0.2	nm
Linearity		0.1	-	%F.S.
Repeatability		15	-	nm
Load capacity		300	300	g
Stiffness		120	120	N/ $\mu\text{m} \pm 20\%$
Unloaded resonant frequency		4000	4000	Hz $\pm 20\%$
El. capacitance		14.4	14.4	$\mu\text{F} \pm 20\%$
Size(L×W×H)		110×95×42	110×95×42	mm
Mass		2100	2100	g $\pm 5\%$
Operating temperature ^[1]		-20~80	-20~80	°C
Material		Steel	Steel	
Cable length ^[2]		1.5m or longer	1.5m or longer	m $\pm 10\text{mm}$

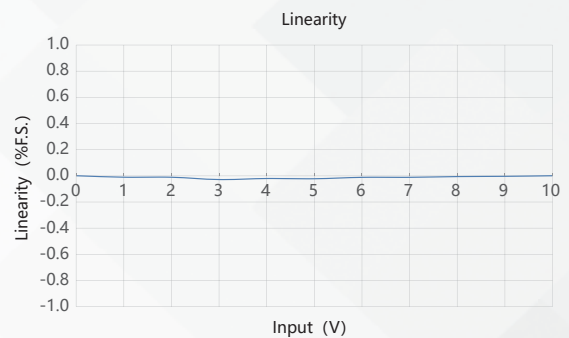
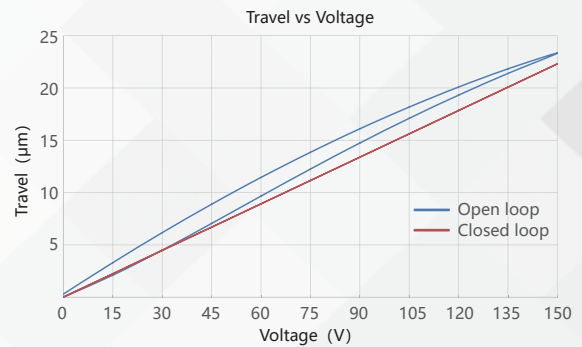
Note: Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

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

[2] Custom cable length and connector is available.

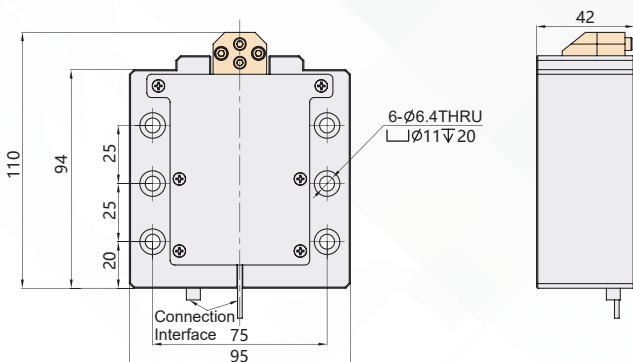
Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



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

Drawing >>



Recommended Controllers >>



E01.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



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