

Z axis | XD730.400S/K-B1

Piezo Objective Scanner



Introduction

The XD730.400S/K-B1 Piezo Objective Scanner is a Z axis objective lens drive platform. Its Z-direction stroke can reach 500 μ m and the load capacity can reach 0.5kg, which is very suitable for static positioning applications.

Characteristics >>

- Z axis motion
- Travel to 500 μ m
- Load capacity to 0.5kg
- Optional closed loop sensor

Applications >>

- Focus microscopy
- Laser processing
- Biotechnology
- Surface structure analysis
- Confocal microscope
- Z-direction positioning and scanning



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Technical Data >>

Type	S-Closed loop K-Open loop	XD730.400S-B1	XD730.400K-B1	Units
Active axis		Z	Z	
Travel range(0~120V)		400	400	$\mu\text{m} \pm 10\%$
Travel range(0~150V)		500	500	$\mu\text{m} \pm 10\%$
Integrated sensor		SGS	-	
Resolution		14	4	nm
Linearity		0.2	-	%F.S.
Repeatability		0.05	-	%F.S.
Unloaded resonant frequency		150	150	Hz $\pm 20\%$
Load capacity		0.5	0.5	kg
El. capacitance		28.8	28.8	$\mu\text{F} \pm 10\%$
Operating temperature ^[1]		-20~80	-20~80	°C
Material	Aluminium, steel			
Mass		520	520	g $\pm 5\%$
Cable length ^[2]		1.5	1.5	m $\pm 10\text{mm}$

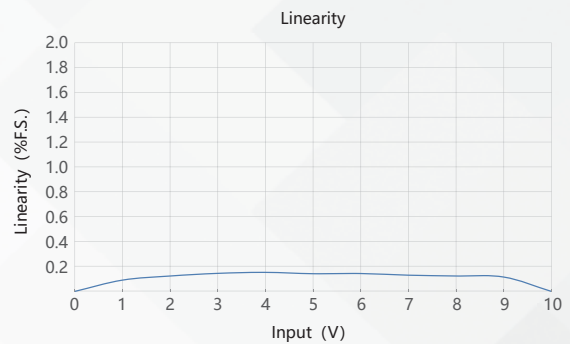
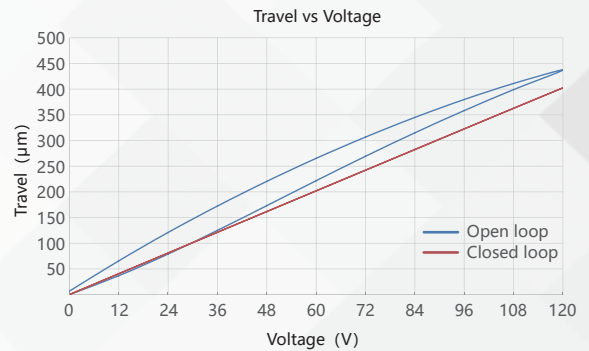
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

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

[2] Custom cable length and connector is available.

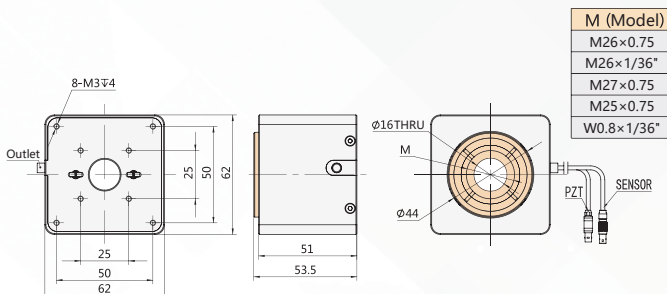
Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

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



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