

θ x axis | S50.U0C/K Piezo Tilt Stage



Characteristics >>

- θ x deflection
- 7kg load capacity
- Capacitive closed-loop sensor
- Unloaded resonant frequency up to 1kHz

Applications >>

- Optical beam scanning
- Light path adjustment
- Graphical stability
- Interference/metering
- Large loading tilt motion
- Space perturbation simulation system
- Calibration of acceleration sensor
- Calibration of angular velocity sensor

Introduction

S50.U0C/K piezo stage is an X deflection stage, which is specially designed for heavy load applications. It features 7kg load capacity, the deflection angle under 100V driving voltage of 0.19mrad, and the corresponding closed-loop step time of 17ms.



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Technical Data >>

Type	C-Closed loop K-Open loop	S50.U0C	S50.U0K	Units
Active axis		θx	θx	
Driving channels		2	2	
Tilt angle@100V		0.19	0.19	mrad $\pm 10\%$
Integrated sensor		CAP	-	
Closed-loop linearity		1.25	-	%F.S.
Closed-loop repeatability		1	-	%F.S.
Unloaded resonant frequency		1000	1000	Hz $\pm 20\%$
Resonant frequency @7kg load		210	210	Hz $\pm 20\%$
Step time		17	16	ms $\pm 20\%$
Load capacity		7	7	kg $\pm 5\%$
Operating temperature ^[1]		-20~80	-20~80	°C
El. capacitance		40	40	$\mu F \pm 20\%$
Cable length ^[2]		1.5	1.5	m ± 10 mm
Sensor/voltage connector ^[2]		-	-	

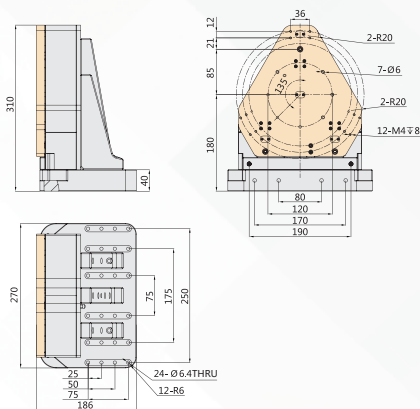
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

[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 μ m, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

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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