

# θx/θy axes | XD500.T0S/K-B1

# Piezo Tip/Tilt Stage





XD500.T0S/K-B1 piezo tilt/tip platform does the motion in  $\theta x$  and  $\theta y$  direction, its load capacity is to 10kg, which is designed for large load tilt application.

#### Characteristics >>

- Motion in θx, θy
- Load capacity to 10kg
- · Optional closed-loop sensor
- Suitable for large load application

#### Applications >>

- Laser beam deflection
- · Laser beam combining
- Beam scanning
- Interference/metering
- Heavy mirror holder deflection
- Space perturbation simulation system
- Calibration of acceleration sensor
- Calibration of angular velocity sensor



Harbin Core Tomorrow Science & Technology Co., Ltd.



#### Technical Data >>

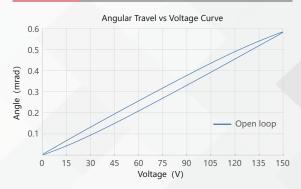
Type S-Closed loop K-Open loop	XD500.T0S-B1	XD500.T0K-B1	Units
Active axes	Өх, Өу	Өх, Өу	
Driving channels	3	3	
Tilt angle(0~120V)	0.46/axis	0.46/axis	mrad±10%
Tilt angle(0~150V)	0.58/axis	0.58/axis	mrad±10%
Integrated sensor	SGS	-	
Resolution	0.2	0.1	μrad
Closed-loop repeatability	0.1	-	%F.S.
Push/pull force	200/20	200/20	N
Unloaded resonant frequency	1000	1000	Hz±20%
Resonant frequency@10kg	230	230	Hz±20%
Load capacity	10	10	kg
Operating temperature <sup>[1]</sup>	-20~80	-20~80	°C
El. capacitance	21.5/axis	21.5/axis	μF±20%
Material	Aluminum, Steel		
Mass	5	5	kg±5%
Cable length <sup>[2]</sup>	1.5	1.5	m±10mm
Sensor/voltage connector <sup>[2]</sup>	-	-	

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.
- $\cite{Model}$  Custom cable length and connector is available.

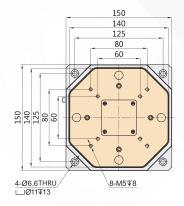
Note: The parallelism of the moving platform is about  $20\mu m$ , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

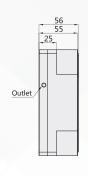
#### Curves >>



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, ave current 70mA/channel RS-232/RS-422/USB interface Software secondary development

