

$\theta_x\theta_y$ axes | S30.T2S/KF

Piezo Tip/Tilt Platform



Introduction

S30.T2S/KF is a θ_x , θ_y piezo tip/tilt platform, which is designed for highly-dynamic applications, with unloaded resonance frequency up to 15kHz.

Characteristics >>

- Small size
- Nanoradian resolution
- Unloaded resonant frequency: 17kHz
- High-dynamic
- Open-loop

Applications >>

- Laser scanning
- Beam deflection
- Beam stabilization
- Light filter
- Image processing and stabilization
- Error correction for polygonal mirrors
- Optical switch
- Active and adaptive optics



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Technical Data >>

Type	S30.T2SF	S30.T2KF	Units
Integrated sensor	SGS	-	
Active axes	θ_x, θ_y		
Tilt angle(0~120V)	3/1.5 ($\approx \pm 309^\circ$)		mrad $\pm 10\%$
Resolution	0.1 ($\approx 0.02^\circ$)	0.03 ($< 0.01^\circ$)	μ rad
Unloaded resonant frequency	17		kHz $\pm 20\%$
Linearity	0.2/-		%F.S.
Repeatability	0.1/-		%F.S.
Resonant frequency @loading $\varnothing 12.5 \times 3$ mm mirror	14		kHz $\pm 20\%$
Distance from pivot point to platform surface	4.2		mm ± 0.2 mm
El. capacitance	1.6/axis		μ F $\pm 10\%$
Operating temperature ^[1]	-20~80		$^\circ$ C
Material	Titanium, steel		
Mass	35		g $\pm 5\%$
Driving channels	3, includes one constant voltage output		
Height(L)	30		mm
Cable length ^[2]	1.5		m ± 10 mm

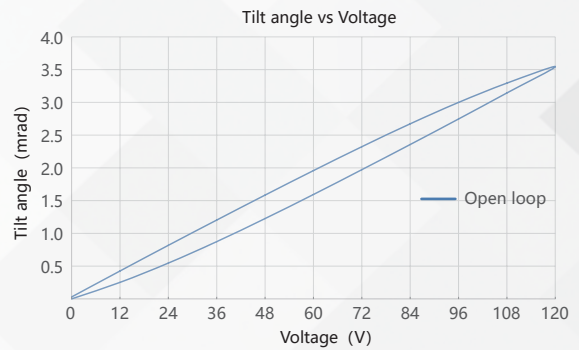
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25 $^\circ$ C.

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

[2] Custom cable length and connector is available.

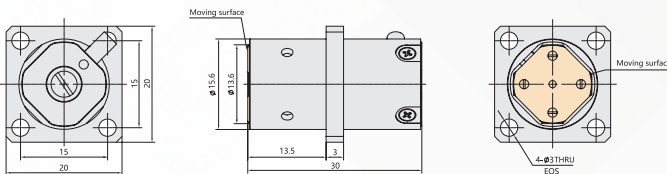
Note: The parallelism of the moving platform is about 20 μ m, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



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

Drawing >>



Recommended Controllers >>



E01.C3
 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



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