

θ_x, θ_y axes | S30.T1K

Piezo Tip/Tilt Platform



Introduction

S30.T1 is an open-loop 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: 15kHz
- High-dynamic
- Open-loop

Applications >>

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



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Technical Data >>

Type	S30.T1K	Units
Active axes	θ_x, θ_y	
Tilt angle(0~120V)	1.5/±0.75	mrad±10%
Integrated sensor	-	
Resolution	0.02 (< 0.01 °)	μrad±20%
Unloaded resonant frequency	15	kHz±20%
Resonant frequency @loading Ø12.5×3mm mirror	10	kHz±20%
Distance from pivot point to platform surface	4.2	mm±0.2mm
El. capacitance	0.7/axis	μF±10%
Operating temperature ^[1]	-20~80	°C
Material	Titanium, steel	
Mass	20	g±5%
Driving channels	3, includes one constant voltage output	
Height(L)	21	mm
Cable length ^[2]	1.5	m±10mm

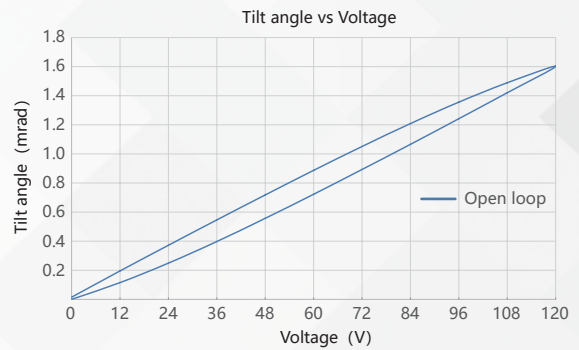
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

[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 20μm, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

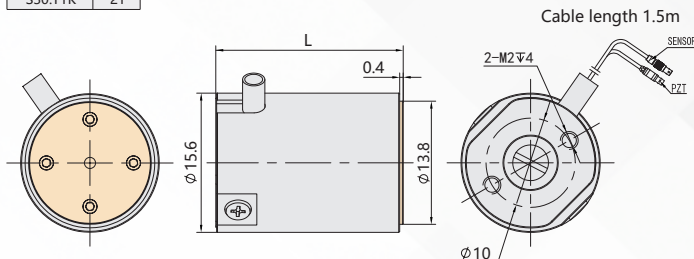
Curves >>



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

Drawing >>

Type	L[mm]
S30.T1K	21



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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