

# $\theta x$ , $\theta y$ axes | S37.T3S/KF

### Piezo Tip/Tilt Platform



## Introduction

S37.T3 piezo tip/tilt platform is specially designed for vibrating environments, with anti-vibration properties, and adopt a fully closed loop method, which can provide higher positioning accuracy.

#### Characteristics >>

- θx, θy tilt
- Anti-vibration design
- · High reliability
- Optional open/closed loop

#### Applications >>

- Optical trapping
- Image processing and stabilization
- · Laser tuning
- · Laser scanning/beam deflection
- Beam stability
- Optical
- Light filter/optical switch





#### Technical Data >>

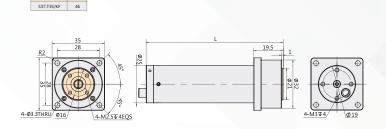
Type S - closed loop K - open loop	\$37.T3\$F	S37.T3KF	Units
Active axes	Өх, Өу	Өх, Өу	
Driving channels	3	3	
Tilt angle(0~120V)	4/±2	4/±2	mrad±20%
Tilt angle(0~150V)	5.5/±2.75	5.5/±2.75	mrad±20%
Integrated sensor	SGS	-	
Resolution	0.15 (≈ 0.03")	0.04 ( < 0.01")	μrad
Closed-loop linearity	0.1	-	%F.S.
Closed-loop repeatability	0.02	-	%F.S.
Unloaded resonant frequency	6.4		kHz±20%
El. capacitance	5.2		μF±20%
Operating temperature <sup>[1]</sup>	-20~80		°C
Material	Steel, titanium		
Mass	230		g±5%
Platform Length	46		mm±0.1
Cable length <sup>[2]</sup>	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.
- $\label{eq:custom} \ensuremath{\text{[2]}} \ensuremath{\text{Custom}} \ensuremath{\text{cable}} \ensuremath{\text{length}} \ensuremath{\text{and}} \ensuremath{\text{connector}} \ensuremath{\text{is available}}.$

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.

#### 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

