

# θx, θy axes | P35.T20S/K Piezo Tip/Tilt Platform



# Introduction

Designed for high large-angle deflection applications, P35 Piezo Tip/Tilt Platforms provide beam deflections up to 86mrad (approximately 4.9 degrees, 17000"), making them ideal for fast deflection applications with high precision and large angle.

# Characteristics >>

- θx, θy tilt
- Tilt range to 27mrad
- Resolution to 0.3µrad
- Unloaded resonant frequency to 1.75kHz

# Applications >>

• Laser micromachine

- Laser scanningBeam deflection
- Image processing and stabilization
- Interlacing scanning, dithering
- Interference
- Light filter/optical switchActive and adaptive optics



#### Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790 Emai Fax: +86-451-86267847 Web

Email: info@coremorrow.comWeb: www.coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai



## Technical Data >>

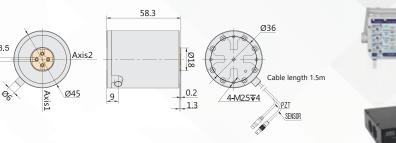
Туре	S - closed loop K - open loop	P35.T20S	Р35.Т20К	Units
Active axes		Өх, Өу		
Driving channels		3		
Tilt angle(0~120V)		22/±11( ≈ ±2268")		mrad±10%
Tilt angle(0~150V)		27/±13.5( ≈ ±2784")		mrad±10%
Integrated sensor		SGS	-	
Resolution		0.8 (≈0.17")	0.3 (≈ 0.06")	µrad
Closed-loop linearity		0.08	-	%F.S.
Closed-loop repeatability		0.04	-	%F.S.
Unloaded resonant frequency		1750		Hz±20%
Resonant frequency @25.4×4mm		800		
El. capacitance		7.2/axis		μF±20%
Operating temperature <sup>[1]</sup>		-20~80		°C
Material		Titanium, aluminum		
Mass		260		g±5%
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.[2] Custom cable length and connector is available.

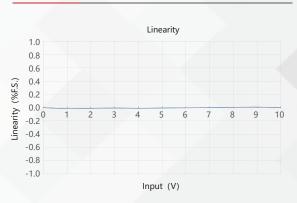
Note: The parallelism of the moving platform is about 20µm, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

# Drawing >>



## Make Your Motion and Control More Accurate!

## Curves >>



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

## 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



## Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790 Fax: +86-451-86267847

Email: info@coremorrow.comWeb: www.coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai