COREMORROW
Piezo Nano Motion

Make Your Motion and Control More Accurate!

θx、θy、Z axes | P32.ZT6S/K

Piezo Tip/Tilt/Z Platform

Introduction

P32 Piezo Tip/Tilt and Z Platform provides high-speed precision θx,θy tilt and Z linear motion. The resolution of linear motion can reach sub-nanometer level, deflection resolution reaches submicroradians, and response time can reach milliseconds. P32 piezoelectric deflection mirrors are compact, enabling up to 11mrad deflection and 55μm Z-axis linear motion.

Characteristics »

- θx, θy and Z motion
- Millisecond response
- Sub-ms response time
- High closed loop positioning accuracy

Applications »

- Image processing and stabilization
- Laser scanning and beam deflection
- Light filter/optical switch
- Optical capture
- Laser tuning
- Optics/beam stabilization

Harbin Core Tomorrow Science & Technology Co., Ltd.

Tel: +86-451-86268790
Fax: +86-451-86267847
Email: info@coremorrow.com
Web: 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 »

Type	S-closed loop K-open loop	P32.ZT6S	P32.ZT6K	Units
Active axes		θx, θy, Z	θx, θy, Z	
θx, θy Tilt angle(0~120V)		9(≈ 1854″)	9(≈ 1854″)	mrad±10%
Travel in Z(0~120V)		45	45	μm±10%
θx, θy tilt angle(0~150V)		11(≈ 2268″)	11(≈ 2268″)	mrad±10%
Travel in Z(0~150V)		55	55	μm±10%
Integrated sensor		SGS	-	
Resolution in θx, θy		0.3(≈ 0.06″)	0.1(≈ 0.02″)	μrad
Resolution in Z		1.5	0.5	nm
Closed-loop linearity		θx θy: 0.2 Z: 0.5	-	%F.S.
Closed-loop repeatability		θx θy: 0.2 Z: 0.5	-	%F.S.
Unloaded resonant frequency		4(2@Φ25x3mm mirror)		kHz±20%
Unloaded step time		10	5	ms±20%
El. capacitance		5.4/axis	5.4/axis	μF±20%
Operating temperature[1]		-20~80	-20~80	℃
Material		Steel	Steel	
Mass		350	350	g±5%
Cable length[2]		1.5	1.5	m±10mm
Sensor/voltage connector[2]		-	-	

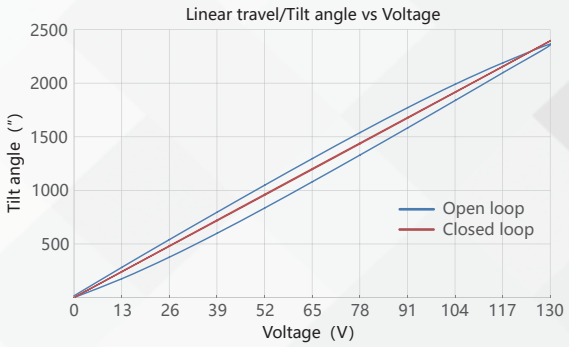
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation.Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

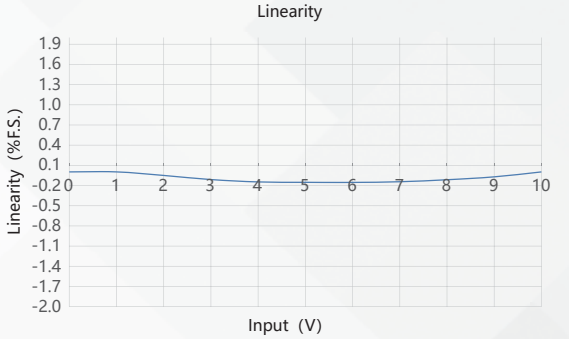
[1] Custom ultralow temperature and ultrahigh vacuum versions are available.

[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 »

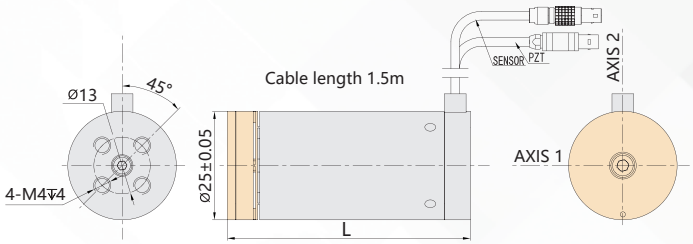




Disclaimer: The data here are typical, only for reference. Some variations will occur for different batch.

Drawing »

Type	L[mm]
P32.ZT6	73



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 Email: info@coremorrow.com Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin

Fax: +86-451-86267847 Web: www.coremorrow.com Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai