COREMORROW
Piezo Nano Motion

Make Your Motion and Control More Accurate!

θx, θy axes | P34.T1S/K-B2

Piezo Tip/Tilt Platform

Introduction

P34.T1-B2 piezoelectric deflection platform is designed for lenses large up to 80 mm in diameter. Their differential drive exhibits excellent angular positioning stability over a wide temperature range. P34.T1-B2's structure allows the top platform to perform high dynamic precision deflection motion on two orthogonal axes with common pivot points.

Characteristics »

- θx, θy tilt
- Tilt range to 1.4mrad/axis
- Sub-ms response time
- High closed-loop positioning accuracy
- High temperature stability

Applications »

- Laser scanning
- Beam deflection
- Interference
- Laser micromachine
- Image processing and stabilization
- Interlacing scanning, dithering
- Light filter/optical switch
- Active and adaptive optics

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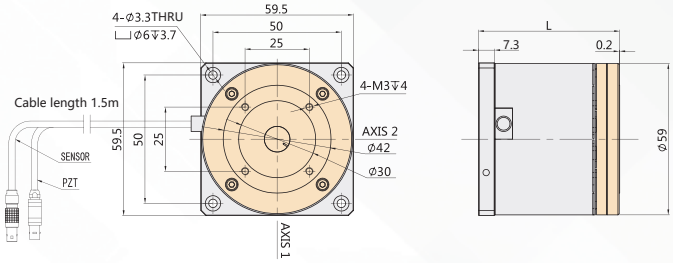
Technical Data »

Type	S - closed loop K - open loop	P34.T1S-B2	P34.T1K-B2	Units
Active axes		θx, θy	θx, θy	
Driving channels		3	3	
Tilt angle (0~120V)		1.1		mrad±20%
Tilt angle (0~150V)		1.4		mrad±20%
Integrated sensor		SGS	-	
Resolution		0.2	0.1	μrad
Closed-loop linearity		0.1	-	%F.S.
Closed-loop repeatability		0.02	-	%F.S.
Unloaded resonant frequency		3.6	3.6	kHz±20%
El. capacitance		3.6/axis	3.6/axis	μF±20%
Operating temperature[1]		-20~80	-20~80	℃
Material		Aluminum	Aluminum	
Platform Length L		38	38	mm±0.1
Mass		380	200	g±5%
Cable length[2]		1.5	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.

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

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