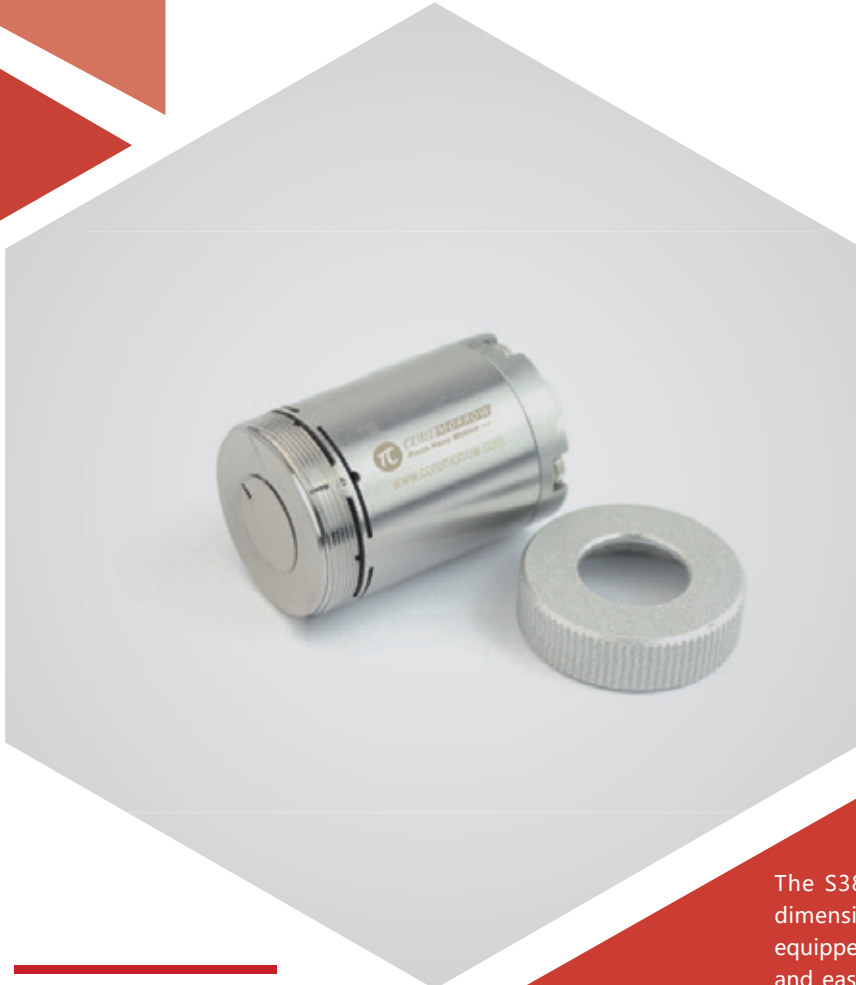


$\theta_x\theta_y$ axes | S38.T1S/K-C1

Piezo Tip/Tilt Platform



Characteristics >>

- θ_x , θ_y tilt
- Tilt angle: 1.2mrad/axis
- Optional closed loop sensor
- Optional right-angle adapter structure

Applications >>

- Light path adjustment
- Laser communication
- Light path stabilization
- Laser fast scanning
- Image processing and stabilization
- Error correction for polygonal mirrors
- Optical switch
- Active and adaptive optics

Introduction

The S38-C1 piezo tip tilt platform is a θ_x , θ_y two-dimensional deflection piezo fast steering mirror. It is equipped with a lens mounting cap and is small in size and easy to integrate. It can be integrated into a cage structure with a right-angle adapter.



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Technical Data >>

Type	S - closed loop K - open loop	S38.T1S-C1	S38.T1K-C1	Units
Active axes		θ_x, θ_y	θ_x, θ_y	
Driving channels		3	3	
Tilt angle (0~100V)		1 or ± 0.5 ($\approx \pm 103^\circ$)		mrad $\pm 10\%$
Tilt angle (0~120V)		1.2 or ± 0.6 ($\approx \pm 123^\circ$)		mrad $\pm 10\%$
Integrated sensor		SGS	-	
Resolution		0.03 ($< 0.01^\circ$)	0.01 ($< 0.01^\circ$)	μ rad
Closed-loop linearity		0.3	-	%F.S.
Closed-loop repeatability		0.1	-	%F.S.
Unloaded resonant frequency		7000	7000	Hz $\pm 20\%$
El. capacitance		1.6/axis	1.6/axis	μ F $\pm 20\%$
Operating temperature ^[1]		-20~80	-20~80	$^\circ$ C
Material		Steel, bronze	Steel, bronze	
Platform length L		20	20	mm ± 0.1
Mass(with no cable)		50	50	g $\pm 5\%$
Cable length ^[2]		1.5	1.5	m ± 10 mm
Sensor/voltage connector ^[2]		-	-	

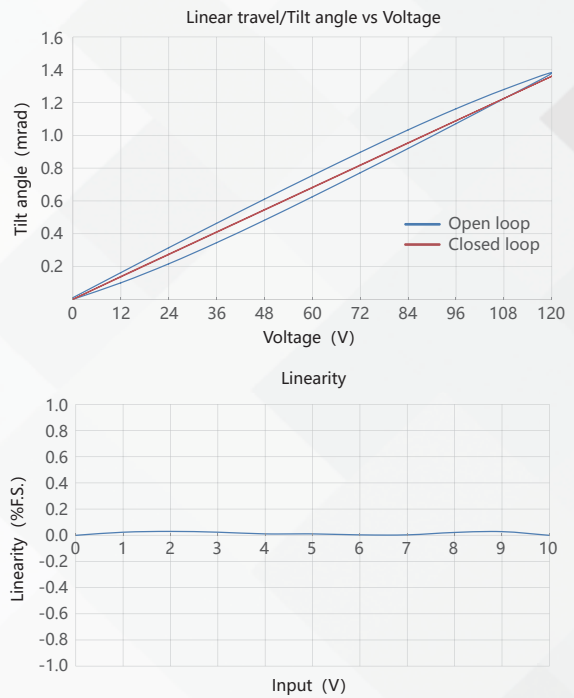
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25 $^\circ$ C.

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

[2] Custom cable length and connector is available.

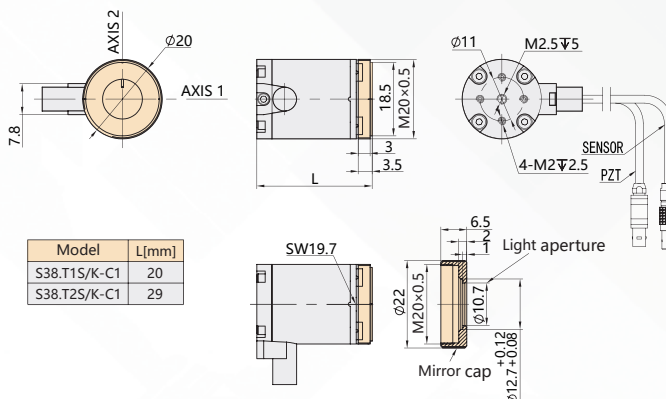
Note: The parallelism of the moving platform is about 20 μ m, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



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

Drawing >>



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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