

## Z axis | S23.Z10K

### Piezo Z Platform



#### Characteristics >>

- Center aperture:  $\varnothing 10\text{mm}$
- Z linear motion
- High temperature stability
- Piezo phase shifter

#### Applications >>

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

## Introduction

S23.Z10K piezoelectric Z Platform(phase shifter) is a Z-axis linear motion platform, with a center aperture. The product is compact, Z-axis linear motion travel of  $10\mu\text{m}$ . S23 is an open-loop version with high resolution and response speed, it is the first choice for interference scanning phase shift.



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## Technical Data >>

Type	S23.Z10K	Units
Active axis	Z	
Driving channels	1	
Travel in Z(0~120V)	8	$\mu\text{m}\pm 20\%$
Travel in Z(0~150V)	10	$\mu\text{m}\pm 20\%$
Tilt resolution in $\theta_x, \theta_y$	-	$\mu\text{rad}$
Resolution in Z	0.08	nm
Unloaded resonant frequency	7.5	$\text{kHz}\pm 20\%$
Unloaded step time	1.5	$\text{ms}\pm 20\%$
El. capacitance	0.5	$\mu\text{F}\pm 20\%$
Operating temperature <sup>[1]</sup>	-20~80	$^{\circ}\text{C}$
Material	Steel	
Mass	50	$\text{g}\pm 5\%$
Cable length <sup>[2]</sup>	1.5	$\text{m}\pm 10\text{mm}$
Sensor/voltage connector <sup>[2]</sup>	-	

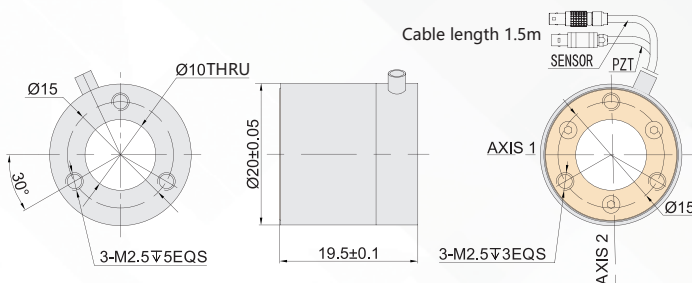
Note: Technical data are measured by CoreMorrow E00/E01 series piezo controller. Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25°C.

[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 20 $\mu\text{m}$ , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

## Drawing >>



## Recommended Controllers >>



**E01.D1**  
 LCD, membrane button, up to 625mA  
 RS-232/RS-422/USB interface  
 Software secondary development



**E53**  
 Small size, 60mA  
 RS-232/RS-422/USB interface  
 Software secondary development



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