

θz axis | S21.R3S/K

Piezo Rotation Stage



Introduction

S21.R3S/K piezoelectric rotation stage is a θz rotation stage with small size, a rotation angle of 3mrad and a load capacity of 0.5kg, which can drive the lens to make precise rotation motion.

Characteristics >>

- θz rotary moiton
- Rotation angle range to 3mrad
- Small size
- Closed loop for high accuracy
- Fast response
- · For calibration of angular velocity sensor

Applications >>

- Optical beam scanning
- · Light path adjustment
- Graphical stability
- Interference/metering
- Large loading tilt motion
- · Space perturbation simulation system
- Calibration of acceleration sensor
- Calibration of angular velocity sensor





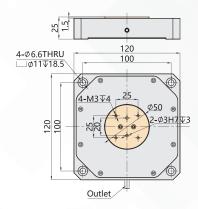
Technical Data >>

Type S-Closed loop	\$21.R3S	S21.R3K	Units
K-Open loop			O.I.I.S
Active axis	θz	θz	
Rotation angle(0~120V)	2.4	2.4	mrad±20%
Rotation angle(0~150V)	3	3	mrad±20%
Integrated sensor	SGS	-	
Resolution	0.3	0.03	μrad±20%
Closed-loop linearity	0.3	-	%F.S.
Closed-loop repeatability	0.1	-	%F.S.
Unloaded resonant frequency	700	700	Hz±20%
Resonant frequency @0.5kg load	120	120	Hz±20%
Load capacity	0.5	0.5	kg
Operating temperature ^[1]	-20~80	-20~80	°C
El. capacitance	5.4	5.4	μF±20%
Material	Al, steel	Al, steel	
Mass(not include cable)	1.8	1.8	kg±5%
Cable length ^[2]	1.5	1.5	m±10mm
Mass	1635	1635	g±5%

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.

Note: The parallelism of the moving platform is about $20\mu m$, 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



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

^[2] Custom cable length and connector is available.