

Z axis | P77.S/K310

Piezo Phase Shifter





P77.S/K310 piezo phase shifter is specially designed for optical detection and phase shifting applications, with travel range of up to 17µm and load capacity is upright 12kg, which is very suitable for large-aperture optical inspection equipment, like laser interferometer, for various lenses. Custom versions are available.

Characteristics >>

- Active axes Z
- Stroke to 17µm
- Max load to 12kg
- Aperture size: Φ310mm
- Custom versions are available

Applications >>

- Optical trapping
- · Surface inspection
- Precision positioning
- Microscopic imaging
- · Phase shifter
- Phase shifting/interference/metering





Technical Data >>

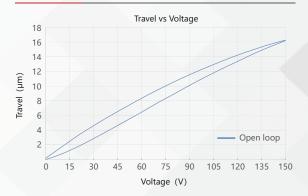
Туре	S-Closed loop K-Open loop	P77.S310	P77.K310	Units
Active axis		Z	Z	
Travel range(0~120V)		13.5	13.5	μm±10%
Travel range(0~150V)		17	17	μm±10%
Sensor		SGS	-	
Aperture		Ф310	Ф310	mm
Resolution		0.5	0.2	nm
Pitch/yaw/roll		-	-	μrad
Push/pull force capacity		100/20	100/20	N
Unloaded resonant frequency		1500	1500	Hz±20%
Unloaded Step time		-	-	ms±20%
Load capacity		12	12	kg
El. capacitance		10.8	10.8	μF±20%
Operating temperature ^[1]		-20~80	-20~80	°C
Material		Al, steel	Al, steel	
Size(L×W×H)		365×365×37	365×365×37	mm
Mass		4200	4200	g±5%
Cable length ^[2]		1.5	1.5	m±10mm
Sensor/voltage connector ^[2]		LEMO	LEMO	

Note: 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.

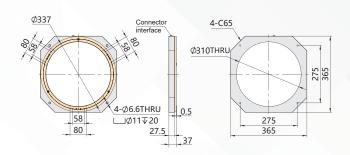
Note: The parallelism of the moving platform is about $20\mu m$, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



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

Drawing >>



Recommended Controllers >>



E53 Small size, 60mA 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

