

Z axis | P77.S/K106A

Piezo Phase Shifter





P77.S/K106A piezo phase shifter is specially designed for optical detection and phase shifting applications, with travel range of up to 17.5µm and load capacity is upright 10kg, lateral 5kg, inverted 5kg, 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 17.5µm
- · Max load to 10kg
- Aperture size: Φ106mm
- Custom versions are available

Applications >>

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





Technical Data >>

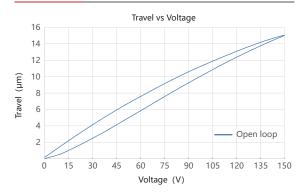
Type S-Closed loop K-Open loop	P77.S106A	P77.K106A	Units
Active axis	Z	Z	
Travel range(0~120V)	14	14	μm±10%
Travel range(0~150V)	17.5	17.5	μm±10%
Sensor	SGS	-	
Aperture	Ф106	Ф106	mm
Resolution	0.5	0.2	nm
Pitch/yaw/roll	<10		μrad
Push/pull force capacity	100	100/20	
Unloaded resonant frequenc	y 15	150	
Unloaded Step time	3.5	3.5	ms±20%
Load capacity	1 3	upright 10, lateral 5, inverted 5	
El. capacitance	7.	7.2	
Operating temperature ^[1]	-20~80		°C
Material	Aluminum, steel		
Size(L×W×H)	160×160×35		mm
Mass	1900(not in	1900(not include cable)	
Cable length ^[2]	1	1.5	
Sensor/voltage connector ^[2]	LEMO		

Note: Max driving voltage could be -20V \sim 150V, 0 \sim 120V is recommended for long-term and high-reliable operation.Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

- $\label{eq:current} \ensuremath{\text{[1]}}\ \text{Custom ultralow temperature and ultrahigh vacuum versions are available}.$
- [2] Custom cable length and connector is available.

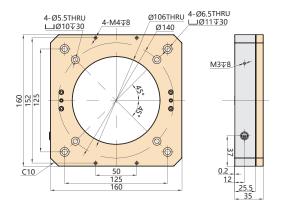
Note: The parallelism of the moving platform is about $20\mu m$, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

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

