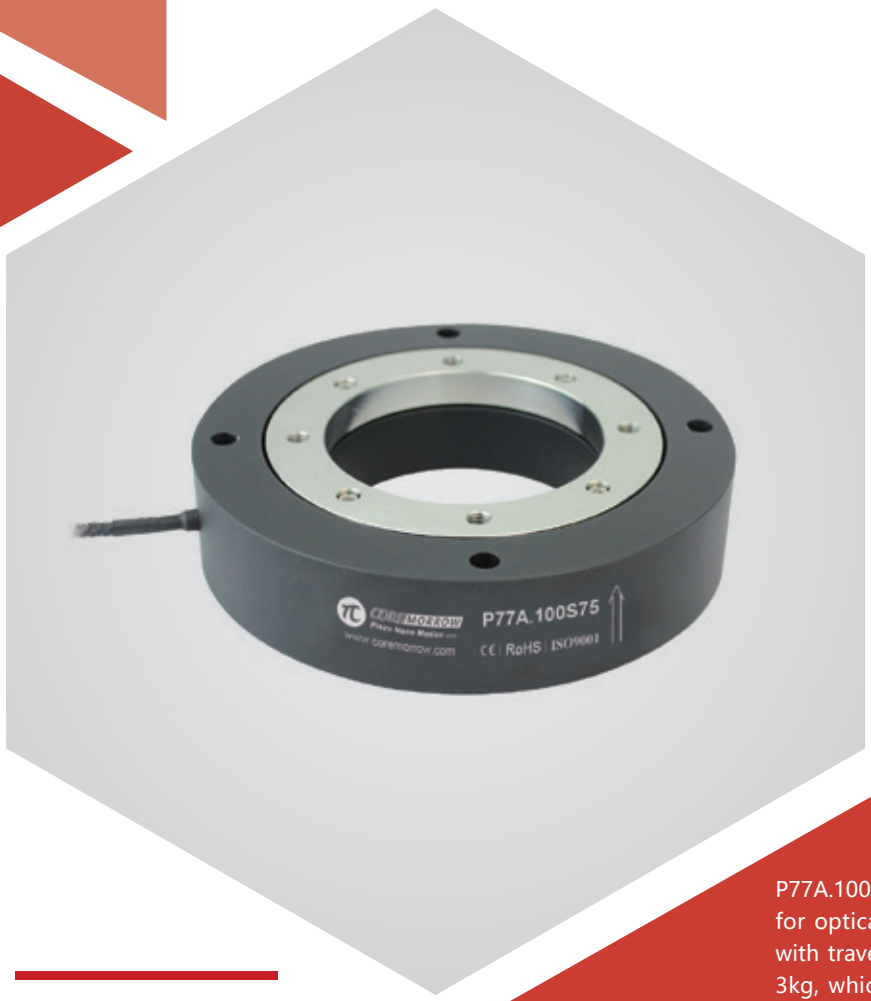
COREMORROW
Piezo Nano Motion

Make Your Motion and Control More Accurate!

Z axis | P77A.100S/K75

Piezo Phase Shifter



Introduction

P77A.100S/K75 piezo phase shifter is specially designed for optical detection and phase shifting applications, with travel range of up to 100μm and load capacity is 3kg, 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 100μm
- Max load to 3kg
- Aperture size: Φ75mm
- Custom versions are available

Applications »

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

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Technical Data »

Type	S-Closed loop K-Open loop	P77A.100S75	P77A.100K75	Units
Active axis		Z	Z	
Sensor		SGS	-	
Travel range(0~120V)		80	80	μm±10%
Travel range(0~150V)		100	100	μm±10%
Aperture		Φ75	Φ75	mm
Outer diameter		Φ145	Φ145	mm
Height		33	33	mm
Resolution		3	1	nm
Pitch/yaw/roll		-	-	μrad
Push/pull force capacity		-	-	N
Unloaded resonant frequency		350	350	Hz±20%
Unloaded Step time		-	-	ms±20%
Load capacity		inverted 3	inverted 3	kg
El. capacitance		21.6	21.6	μF±20%
Operating temperature[1]		-20~80	-20~80	℃
Material		Aluminum, steel	Aluminum, steel	
Mass		1260	1260	g±5%
Cable length[2]		1.5	1.5	m±10mm
Voltage connector[2]		LEMO	LEMO	

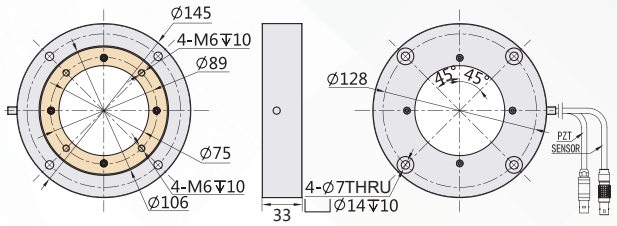
Note: Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation.Unless otherwise specified, the above parameters are measured at room temperature about 25° C.

[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 20μm, and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

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

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