



芯明天
COREMORROW



Piezo Nanopositioning Scanners

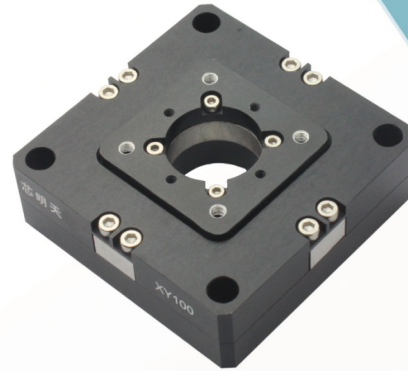
P16.XY50/P16.XY100

Features

- Max travel range 100μm
- Max load 1.5kg
- Aperture: Ø20mm
- Open/closed loop

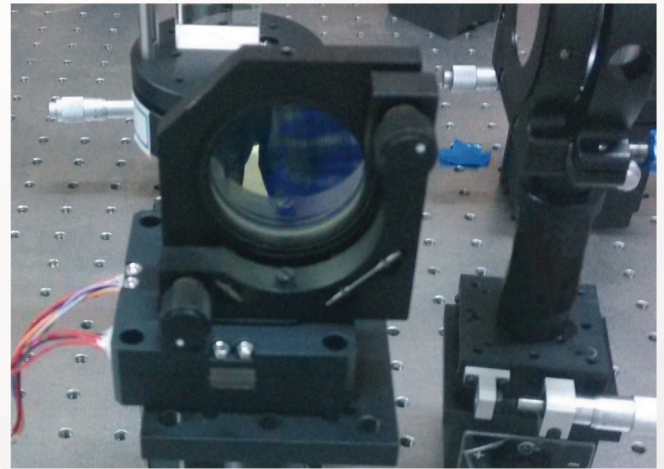
Applications

- Microscopic imaging
- Interference measurement
- Micro operation
- Surface measurement
- Precision positioning
- Optics



Example of application

P16.XY is used in the optical path adjustment experiment, and moving in XY axis with a large lens holder.

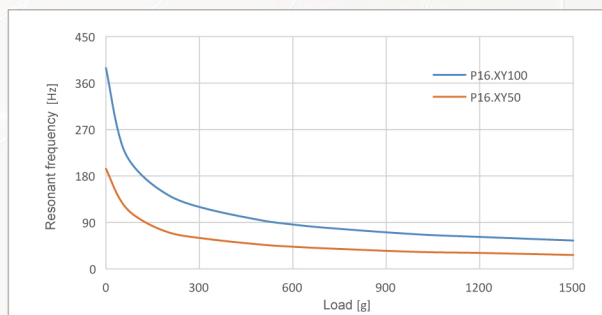


High stiffness, high resonant frequency, large load capacity

P16 piezo nanopositioning scanner adopts mechanism amplification design principle, built-in high-performance piezo actuators, excellent structure can be with load of 1.5kg, unloaded resonant frequency reaches 400Hz.

The aperture is Ø20mm, and with its small size, large load, high dynamic and other characteristics are widely used in microscopy imaging and other fields.

Frequency vs Loading



Recommend Controllers

E00/E01	E72	E70
3 channels Computer software, Analog input, Rotary knob Open/closed loop Ave. power: 35W/7W	3 channels Computer software, Analog input Open/closed loop Ave. power: 6W	3 channels Digital & Analog Control Open/closed loop Ave. power: 5W

Technical data

Models	End with S: Closed-loop End with K: Open-loop	P16.XY50S P16.XY50K	P16.XY100S P16.XY100K	Units
Active axes		X, Y	X, Y	
Nominal travel range(0~120V)		40/axis	80 or ±40/axis	μm±20%
Max travel range(-20~150V)		55/axis	100 or ±50/axis	μm±20%
Integrated sensor		SGS/-	SGS/-	
Aperture		Ø20	Ø20	mm
Closed/open loop resolution		10/5	10/5	nm
Closed-loop linearity		0.4/-	0.4/-	%F.S.
Repeatability		0.1/-	0.1/-	%F.S.
Pitch/Yaw/Roll		<20	<25	μrad
Push/pull force capacity		30/10	30/30	N
Stiffness in motion direction		X0.5/Y0.5	X0.5/Y0.5	N/μm±20%
Unloaded resonant frequency		X200/Y200	X400/Y400	Hz±20%
Closed/open-loop unloaded Step time		10/0.8	10/1.6	ms±20%
Closed-loop Unloaded operating frequency	10% Travel	50	100	Hz±20%
	100% Travel	20	40	
Load capacity		1.5	1.5	kg
Electrical capacitance		1.8/axis	3.6/axis	μF±20%
Material		Aluminum, Steel	Aluminum, Steel	
Mass		200	220	g±5%

The technical data are measured by Coremorrow E00 series piezo controller.

Drawings

P16.XY50
P16.XY100

