

XYZ axes | XD106.XYZ200K

Cryogenic, Vacuum, Non-Magnetic Piezo Stage



Introduction

XD106.XYZ200K piezo stage moves in XYZ, and is designed for cryogenic, vacuum and non-magnetic environment applications. It also features a 50mm diameter aperture.

Characteristics >>

- XYZ motion
- With aperture
- Open-loop motion control
- Low Temperature Vacuum-compatible Non-Magnetic

Applications >>

- Semiconductor processing
- Semiconductor inspection
- High precision testing and operation
- Other nano motion control that requires vacuum and non-magnetic requirements, etc.



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Technical Data >>

Types	XD106.XYZ200K	Units
Active axes	X Y Z	
Nominal travel(0~150V)	XY200, Z100	$\mu\text{m}\pm 10\%$, room temperature
Travel(0~150V)	XY80, Z50	$\mu\text{m}\pm 10\%$, 100K temperture
Resolution	2	nm
Unloaded resonant frequency	X180/Y180/Z250	Hz $\pm 20\%$
Resonant frequency @200g	X140/Y140/Z200	Hz $\pm 20\%$
El.capacitance	XY3.6, Z7.2	$\mu\text{F}\pm 20\%$
Material	Titanium	
Load capacity	700	g
Mass	1360	g $\pm 5\%$
Operating temperature ^[1]	-173~80	$^{\circ}\text{C}$
Cable length ^[2]	1.5	m $\pm 10\text{mm}$
Connector ^[2]	-	

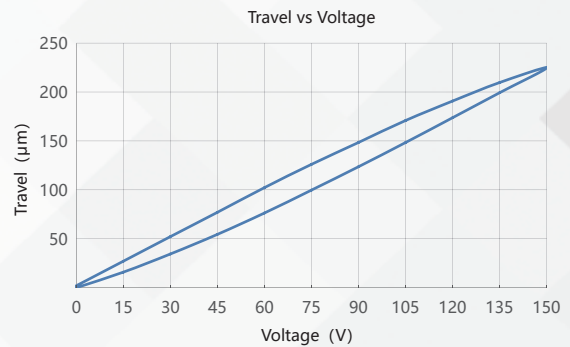
Note: Max driving voltage could be -20V~150V, 0~120V is recommended for long-term and high-reliable operation. Unless otherwise specified, the above parameters are measured at room temperature about 25 $^{\circ}\text{C}$.

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

[2] Custom cable length and connector is available.

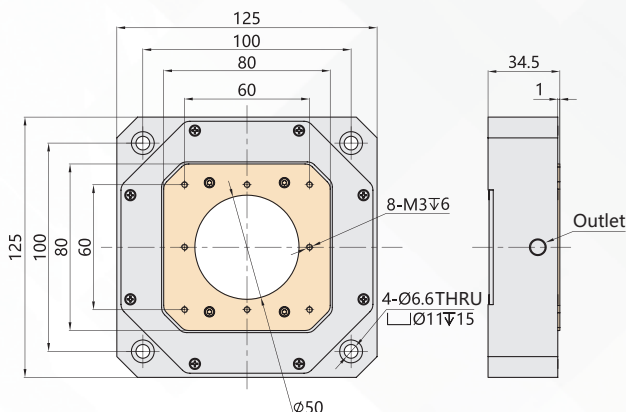
Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

Curves >>



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

Drawing >>



Recommended Controllers >>



E01.D3
 LCD, membrane button, up to 625mA
 RS-232/RS-422/USB interface
 Software secondary development



E70
 Small size, 70mA/channel
 RS-232/RS-422/USB interface
 Software secondary development



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