▼ TECHNOLOGY

Motion Control

▼ CHAPTERS

Manual Stages

Motorized Stages

Mult<u>i-Axis</u>

Platforms

Actuators

Controllers

v sections 3-Axis Roller Bearing Platforms

3-Axis Flexure Platforms

4-Axis Flexure Platforms 5-Axis Flexure Platforms 6-Axis Flexure Platforms Flexure Accessories 4 mm Travel, NanoMax[™] with Micrometers

MAX313 Patents 6,186,016 and 6,467,762



Specifications

- XYZ Travel: 4 mm
- Thermal Stability: 1 µm/°C
- Differential Adjusters:
 - Coarse Adjust: 0.5 mm/rev
 - Fine Adjust: 50 μm/rev
- High Resolution Manual Drives: Patented Drive Design Provides 50 nm of Fine Control Resolution Over a Total Range of 300 μm
- Crosstalk: Maximum 20 µm/mm of Travel
- Repeatability: 500 nm RMS Bidirectional
- Load Capacity: 2.2 lbs (1kg)

Resonant Frequency (±10%):

375 Hz, with No Load on the Stage; 200 Hz with a 275 g Load, and 150 Hz with a 575 g Load

- **Weight:** 2.2 lbs (1 kg)
- Deck Height: 62.5 mm From the Bottom Surface of the Stage to the Moving Platform. The Accessory Beam Height is 75 mm from the Bottom of the Stage

The MAX313 is the manual version of our NanoMaxTM series three-axis platform. It provides an unmatched combination of high stability and high resolution. Major improvements in performance, functionality, and robustness have been achieved by the patented parallel flexure design. This design has the unique feature that all three actuators are connected directly to the base, thus providing a degree of rigidity unachievable in multi-axis systems built from a series of stacked single axis stages.

The advantages of the MAX300 Series parallel flexure design are readily apparent when implemented in alignment applications requiring submicron resolution. With a multi-axis stacked stage, touching one of the two drives that are not referenced to the base will result in unwanted motion within the assembly. With each of the drives coupled directly to the base of the NanoMaxTM series platforms, these adverse effects are eliminated.



The NanoMaxTM series 3-axis platforms can be easily configured to meet the ever changing requirements of both research and manufacturing. We offer a series of different actuator options such as manual drives, stepper motors, and piezoelectric actuators with internal strain gauge displacement sensors. Additionally, we offer over 50 different component devices that are designed to interface with the 3 mm wide keyway that is machined into the top deck of the stage (see page 496).



Preconfigured Fiber Launch Systems

The 3 Axis NanoMaxTM stages are ideal for fiber coupling applications, to save time, we have assembled complete launch systems that are configured to meet many of the most common laboratory applications

ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
MAX313	MAX313/M	\$ 1,535.00	£ 1,064.00	€ 1.363,00	¥ 12,962.00	NanoMax [™] Stage with Differential Micrometer Drives

