The NanoMax-TS™ three-axis stage offers an unmatched combination of high stability and resolution from a three-axis positioner, with major improvements in performance, functionality, and robustness achieved from the patented parallel flexure design.

Modular actuators are easily and quickly fitted to the stage at ergonomically sited locations. Stepper motor, manual differential micrometer, manual differential, and thumbscrew drives are all available. Any combination of these drives can be used on any axis of the stage.

Rapid, ultra-high precision motion can be achieved by combining long-travel actuators with either internal or external piezoelectric actuators.

Features

- 75-mm optical axis height
- Open- and closed-loop piezoelectric actuators
- Modular drives
- No friction or stiction
- Ultimate stability and stiffness
Specifications:

Travel:
- Fine thread: 4 mm (x, y, z)
- Piezo actuator: 20 µm (x, y, z)

RMS repeatability: 15 nm

Piezoelectric pushing force: 250 N maximum

Load capacity: 1 kg

Resonant frequency (f₀, ± 10% Hz):
- No load: 375 Hz
- 275 g: 200 Hz
- 575 g: 150 Hz

Total arcuate displacement: 80 µm

Vacuum compatibility: >10⁻⁴ Pa maximum

Piezoelectric drive voltage: 0–75 Vdc

Weight: 1 kg

Platform size: 60 mm × 60 mm

Resolution:
- Fine thread: 1 µm (x, y, z)
- Differential: 50 nm (x, y, z)
- Piezo actuator: 20 nm (x, y, z)
- Piezo actuator with feedback: 5 nm (x, y, z)

Ordering Information

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17 MAX 302 3-axis stage