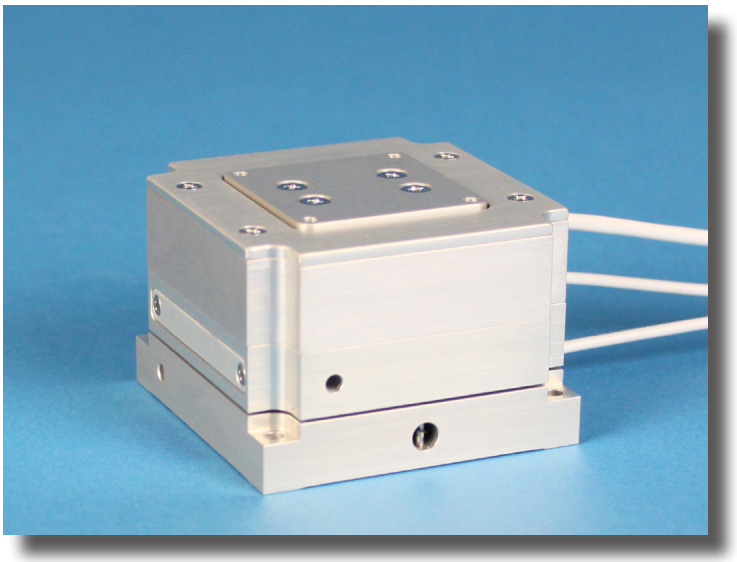
Nano-M350

Features

- *Compact size*
- *Three axis motion (XYZ)*
- *50 µm x 50 µm x 20 µm ranges of motion*
- *Closed loop control*
- *picoQ® sensor technology*

Typical Applications

- *Alignment*
- *MEMS*
- *Nanolithography*
- *SEM*



LabVIEW Compatible USB Interfaces

Examples, tutorial, and Nano-Route® 3D supplied with Nano-Drive® USB interfaces.

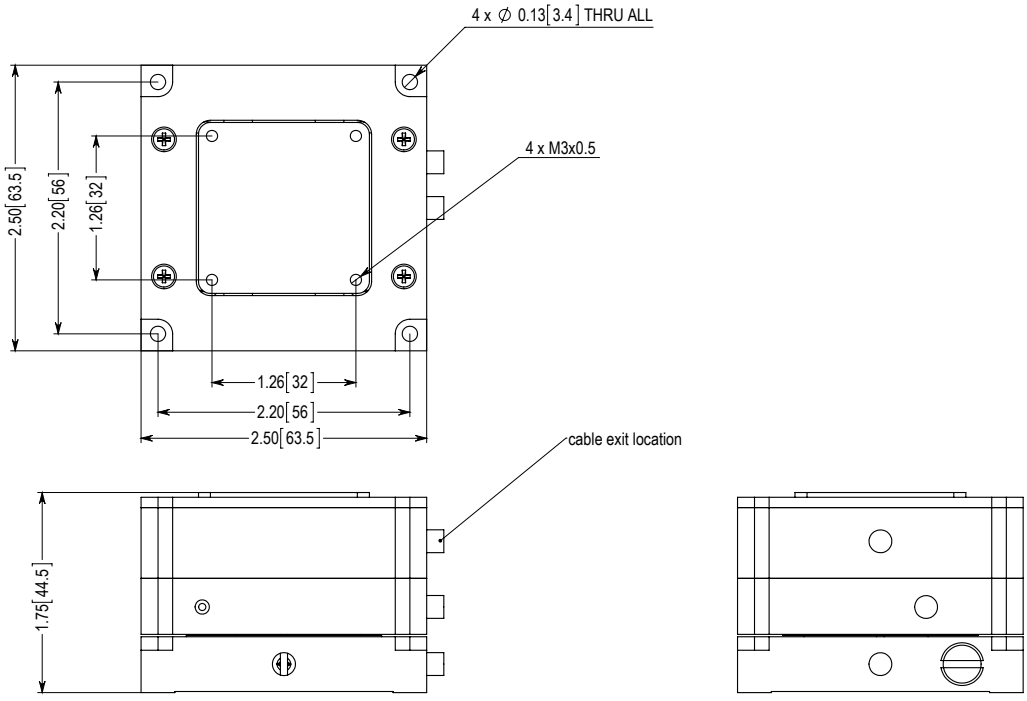
Product Description

The Nano-M350 is a compact three axis (X, Y, Z) nanopositioning system constructed from aluminum. The XY travel range is 50 µm and 20 µm in the Z axis under closed loop control. The compact design of the Nano-M350 allows it to be easily integrated into existing instrumentation for applications such as nanolithography, SEM. Internal position sensors utilizing proprietary picoQ® technology provide absolute, repeatable position measurement with picometer accuracy under closed loop control. The Nano-M350 has been designed for high speed performance in the Z-axis while maintaining high precision motion and is also available in high vacuum (non-bakeable) compatible models.

Technical Specifications

Range of motion (X) ..... 50 µm
Range of motion (Y) ..... 50 µm
Range of motion (Z) ..... 20 µm
Resolution ..... 0.1 nm/0.04 nm
Resonant Frequency (X) ..... 285 Hz ±20%
Resonant Frequency (Y) ..... 235 Hz ±20%
Resonant Frequency (Z) ..... 1580 Hz ±20%
θ_{roll} , θ_{pitch} (typical) ..... ≤1 µrad
θ_{yaw} (typical) ..... ≤3 µrad
Recommended max. load (horizontal)* .....0.5 kg
Recommended max. load (vertical)* .....0.2 kg
Body Material ..... Aluminum
Controller ..... Nano-Drive®

* Larger load requirements should be discussed with our engineering staff.



Note: All Dimensions in Inches [mm]