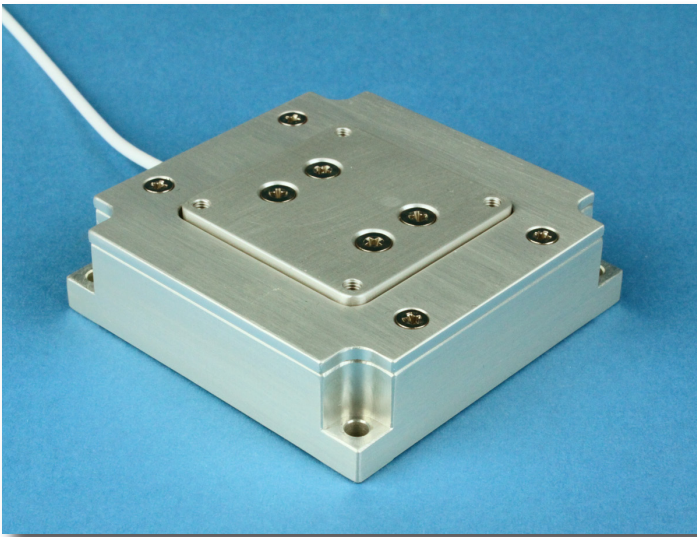


## Features

- ▶ Compact design
- ▶ Low profile: 0.76"
- ▶ Closed loop control
- ▶ Custom travel ranges available
- ▶ **pico** sensor technology

## Typical Applications

- ▶ High resolution Z-axis alignment
- ▶ AFM
- ▶ Metrology



### LabVIEW Compatible USB Interfaces



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

## Product Description

The Nano-MZ is a compact Z-axis nanostaging system designed to be easily integrated into existing instrumentation where space is restricted. Internal position sensors utilizing proprietary **pico** technology provide absolute, repeatable position measurement with picometer accuracy under closed loop control. The Nano-MZ has the same footprint as other models within the Nano-M Series - see the Nano-M350 and the Nano-Man5. A related model, the Nano-M3Z, includes additional

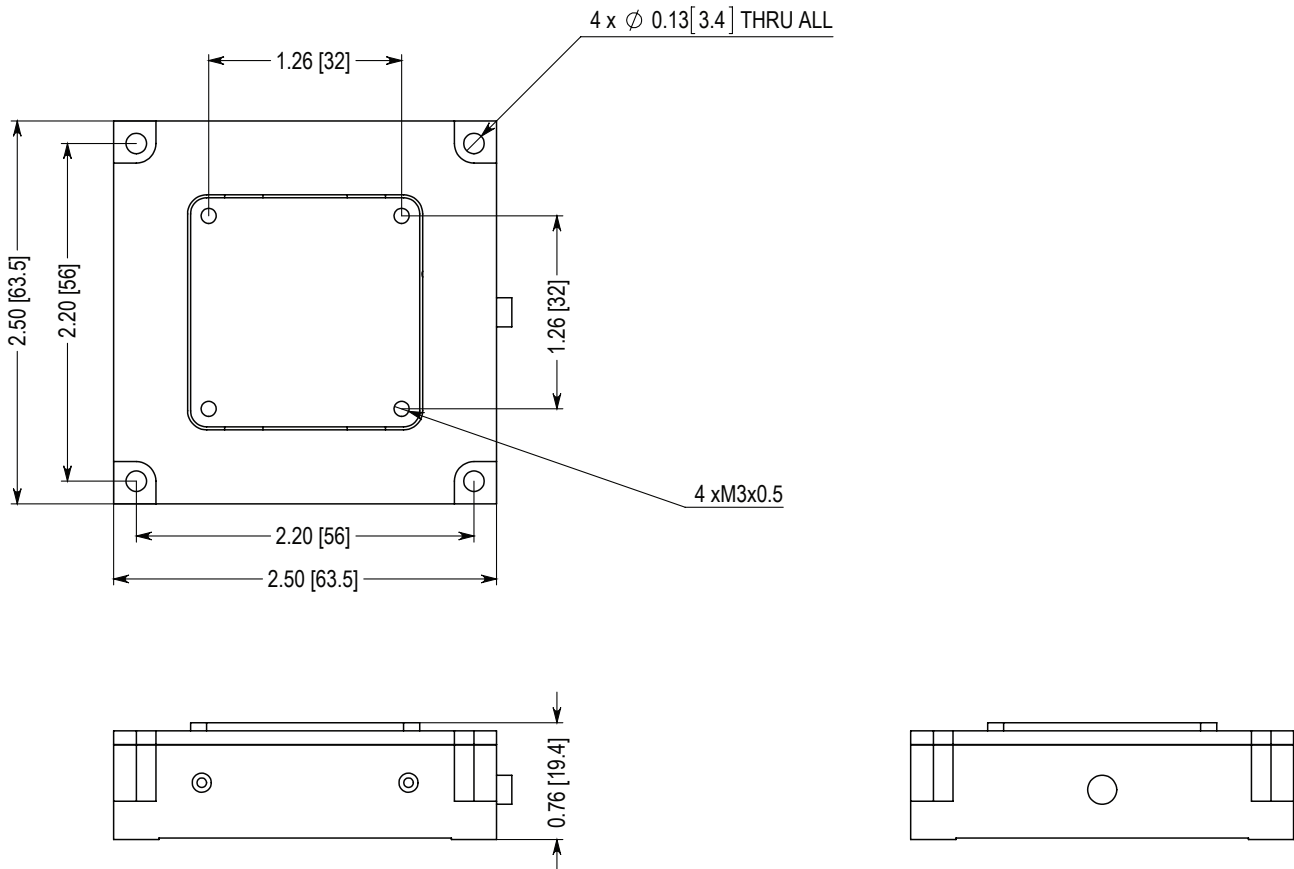
“tip” and “tilt” motions ( $\theta_x, \theta_y$ ) to the linear motion in the Z-axis.

The Nano-MZ can be customized for longer ranges of motion (up to 100 microns) and a center aperture can also be incorporated for transmission of light.

## Technical Specifications

Range of motion (Z) .....	25 $\mu\text{m}$
Resolution .....	0.05 nm
Resonant Frequency .....	1300 Hz $\pm$ 20%
Stiffness .....	1.0 N/ $\mu\text{m}$
Recommended max. load (horizontal)* .....	0.5 kg
Body Material .....	Aluminum
Controller .....	Nano-Drive <sup>®</sup>

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



**Note: All Dimensions in Inches [mm]**