Nano-Theta

Features

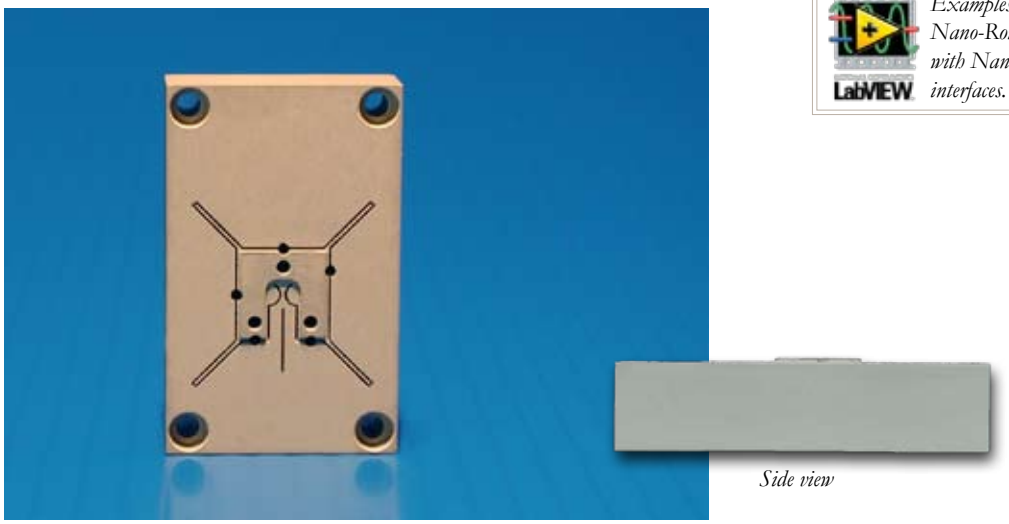
- *Precision rotation: 2 mradians range*
- *Accessible and well defined axis of rotation*
- *Mount in any orientation*
- *High resolution: 4 nanoradians*
- *picoQ® sensor technology*
- *Closed loop control*

Typical Applications

- *Laser beam scanning*
- *Lithography*
- *FBG writing*
- *Interferometry*

LabVIEW Compatible USB Interfaces

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



Side view

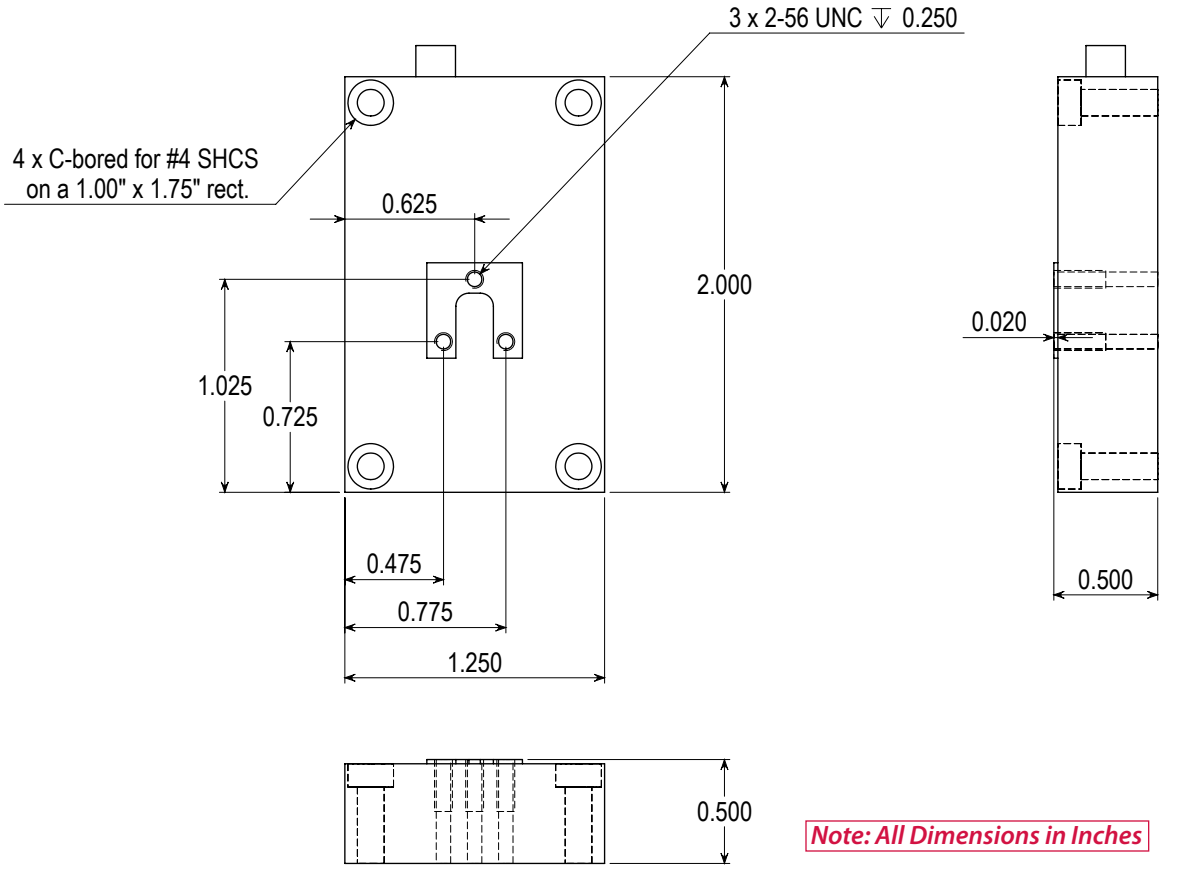
Nano-Theta (actual size) constructed from aluminum.

Product Description

The Nano-Theta is a unique piezo-actuated rotational stage having 2 milliradians of total motion. With nanoradian resolution, the Nano-Theta is designed for applications in lithography, optical disk manufacturing, and laser beam tracking or scanning. The innovative design of the Nano-Theta incorporates a readily accessible and well-defined axis of rotation which allows a mirror to be mounted so that it is co-planar with the axis of rotation. Internal position sensors utilizing proprietary picoQ® technology provide absolute, repeatable position measurement with nanoradian accuracy under closed loop control.

Technical Specifications

Range of motion ..... 2.0 mradians
Resolution ..... 4 nradians
Resonant Frequency (unloaded) ..... 2 kHz ±20%
Body Material ..... Al or Invar
Controller ..... Nano-Drive®



Note: All Dimensions in Inches