

Piezo Z-Stage

“The New Standard for High Performance Piezo Microscope Focusing”



96A602 Piezo Z-stage
with 99A074 adjustable insert

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Now more than ever LEP makes the advantages of precision automation easy and convenient. The BioPrecision2 Piezo focus insert features all of the expected performance of a Piezo focus but adds improved compatibility with standard stage accessories including multi-well plate holders, slide holders, perfusion chambers and incubators.

There are two versions of the LEP Piezo Z-stage. The 96A602 Piezo Z-stage has a larger aperture and accommodates industry standard specimen holders. The larger insert allows the use of many popular accessories for live cell research. The larger format also makes specimen exchange easier with less chance of upsetting sensitive samples. The 96A603 Piezo Z-stage is more compact and is compatible with standard LEP inverted stages that feature a standard (“Frame K”) opening.

96A602 Large Aperture Z-Stage

- Less interference with chambers and incubators
- Accepts standard LEP (and “Frame K”) specimen holders
- Interfaces with special 96S107 inverted stages

96A603 Compatibility Z-Stage

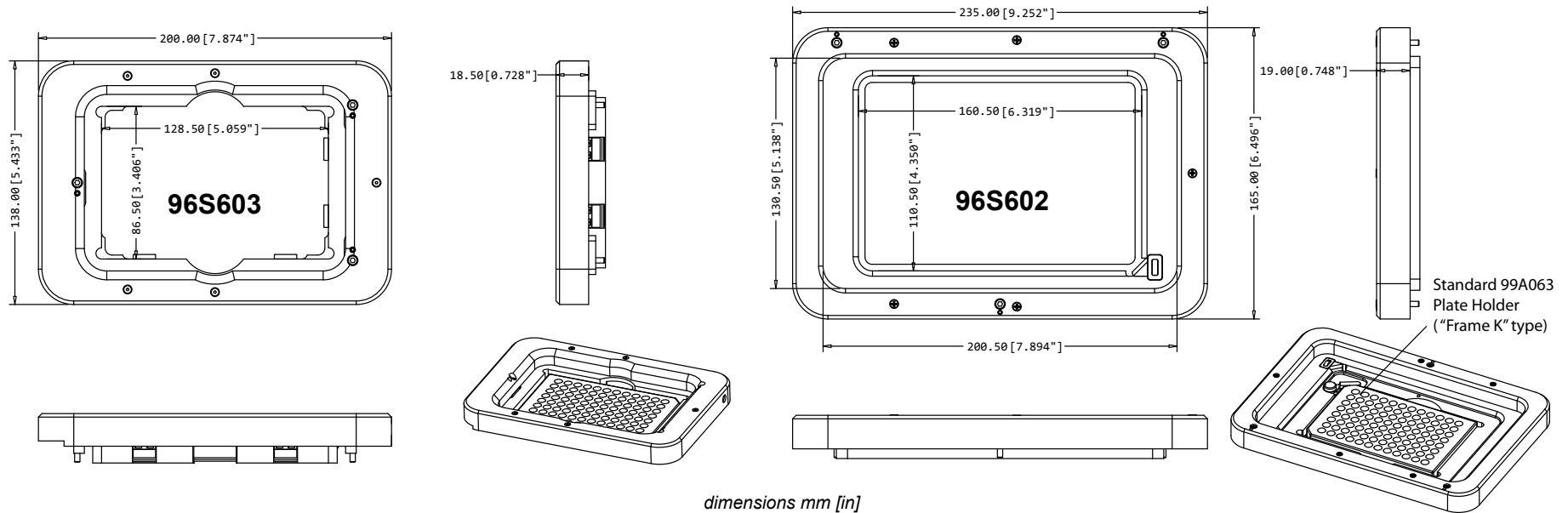
- Fits standard LEP Inverted Stages
- Slide and Petri dish holders available
- Supports standard multi-well plates

The BioPrecision2 Piezo focus insert is compatible with the LEP MAC 6000 controller and features industry wide support from all popular imaging software applications. Software commands are provided that make the BioPrecision2 Piezo Focus appear as a standard focus drive. Digital gating and synchronization signals are also available for high performance applications. DigiPot position control is fully integrated for interactive focus control.

An entirely new 5 point flexure design coupled with a proprietary dynamic tuning system ensure the best dynamic response with the highest accuracy and the most reliable stability - even with variable loads.



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Performance Characteristics

Travel Range	350 μm	Resolution	16 bit
Repeatability	1 nm	Settling time (50 μm move 150g load)	25ms
Accuracy (full travel)	0.5 %	Maximum Load	750 g

Note on characteristics: General characteristics are provided for reference. The complex dynamics of the Piezo transducers and feedback systems make the performance dependent upon characteristics specific to the sample and application.

Ordering Information

The Piezo Z-stage can be an add-on to an existing MAC 6000 system or as a stand-alone unit when included with the 996001 MAC 6000 base system.

Part Number Description

add-on for existing MAC 6000 system

96A602 or 96A603	Open Format Piezo Z-stage insert for LEP Inverted stage with 350 micron travel
73006063	MAC 6000 Piezo control module
73006365	MAC 6000 Digipot for interactive focus control
96S107	Inverted BioPrecision2 Stage with option (required for 96A602 Piezo Z-stage)