Precision 3-Axis Micropositioners

The SIGNATONE S-926 and S-931 linear-travel micropositioners share a field-proven design which combines precision and stability at a moderate price. The S-926 is suitable for features as small as 1 micron, while the S-931 with its compound coarse/fine leadscrew drive extends the useful range to well below 1 micron for precise feature probing.
Both the S-926 and the S-931 are designed with many features which allow probing of micron and sub-micron geometries. They are made from precision machined aluminum and brass. Both feature true linear X-Y-Z motion with 100 threads per inch drives. Designed to be versatile and work with most probe stations, the S-926 and S-931 have an excellent range of set-up motion, and several different head styles to choose from.

The 'P' version is the pivot head which includes two additional control knobs for quick coarse placement of the probe tip. The horizontal pivot sweeps 180° and the vertical pivot sweeps 120°. This allows orthogonal placement of multiple probes. This option also provides 2" of coarse vertical probe travel. The "P" version is the most popular probe mount we offer.

The 'S' style head features an integrated spring mechanism to insure uniform contact pressure. The spring limits the probe tip force to 10 grams at the tip.

S-931 Fine Motion Micropositioner

The S-931 and S-926 share a common X-Y stage assembly, but the S-931 employs an additional fine X and Y drive mechanism for improved resolution. The S-931 micropositioner is ideal where probing sub-micron geometries is required. Placing the probe tip on fine geometries can be difficult with just the standard 100 threads per inch drive. The coarse/fine X-Y motion is controlled by coaxially mounted knobs. The fine motion moves the tip 32 microns per knob revolution, or 80 nm per degree of knob rotation. The oversized knob permits rotation resolution to within a few degrees.

Specifications

Length .................. Adjustable 4.9 to 6.8 inches
Width .................. 3.1 inches
Height .................. 3.9 inches
Shipping weight ...... 1 pound

X-Y-Z Motion .......... 100 threads per inch or 254 microns per knob revolution
X-Y Fine Motion ...... 800 threads per inch 32μ (S-931 only) per knob revolution

Range X-Y .......... 0.480 inches
Range Z ............... 0.280 inches

Ordering Information

S-9[ ][ ][ ][ ]

Vacuum base, Magnetic base
Right hand, Left hand
Head Styles
Pivot head
Spring pressure
S-926 standard X-Y-Z
S-931 with fine X-Y

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