

Picomotor Piezo Linear Actuators









- < 30 nm resolution in a compact design
- Set-and-forget long-term stability- these actuators stay put
- Lifetimes of 1,000,000,000 steps
- Vacuum and Ultrahigh-Vacuum



From left to right: Models 8353 , 8341 , 8301 , 8302 , and 8303 .

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Model		Travel Range (mm)	Mounting
	8301NF	12.7	0.375 in. (9.5 mm) Shank
	8302	25.4	0.375 in. (9.5 mm) Shank
	8303	50.8	0.375 in. (9.5 mm) Shank
	8321	12.7	12 x 0.5 mm Thread
Image Coming Soon	8322NF	25.4	12 x 0.5 mm Thread
	8341NF	NA	0.375 in. (9.5 mm) Shank
	8353	12.7	0.25 in. shank
	8354	12.7	1/4-40 Thread with retaining nut
	8310	12.7	0.375 in. shank (9.5 mm shank)



Vacuum and Ultrahigh-Vacuum

Standard Picomotor Actuators

Picomotor actuators are ideal devices for motorizing fine-positioning stages and mounts in your optical or mechanical systems. Use them with our optomechanical translation stages or your own custom devices. They have better than 30-nm resolution with minimal backlash, and can exert a 5-lb (22-N) force. Moreover, they have exceptional longterm stability and the ability to hold their position with no power applied. These last two features make the Picomotor actuators unique among motion-control devices and ideal for typical set-and-hold applications. Such applications include precision control of sample holders inside cold and/or vacuum chambers, hands-off adjustment of hard-to-reach mirror mounts, or adjustments of optical mounts that are sensitive to forces applied while twisting a knob (for instance optimizing the alignment of a laser cavity or adjusting the pointing of a beam over a long distance).

The standard sized shanks of the Models 830X and 12X0.5-mm threading of the Models 832X let them fit into standard micrometer mounting holes. The Tiny Model 8353 gives you a solution for even the smallest application. For rotation without translation, use the Model 8341NF rotating shaft.

Use these Picomotor actuators with our Model 8753 Intelligent Picomotor (iPico™) driver or Model 8703 TTL/Analog driver.