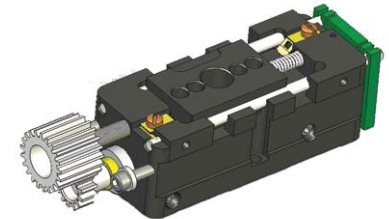


MM-1M

Standard Motorized
MicroMini™ Stages

Specifications:



*Repeatability:	±2µm
*Homing Repeatability:	±2µm
*Accuracy (linearity):	±3µm
Speed (max.):	1.17mm/second @ 4.5 V with 64:1 gearhead
Slider Backlash:	<10µm
Encoder Conversion (resolution):	0.01654µm per count with 64:1 gearhead

**Encoder resolution must be added based on the gearhead: 16:1 add ±0.5µm, 64:1 add ±0.12µm*

Wobble (max.):	10 µrad (~2 arc-second) (No ball bearings)
Runout (max.):	0.002 mm
Gearhead Backlash:	≤2.65 µm equivalent; can be compensated in software without overshoot
Motor:	6 mm diameter, 4.5 VDC servo, brush type (MTR-6-50E-4.5v)
Vacuum compatibility:	TBD

Load Capacity:

*Direct top or side load:	0.25 kg (0.55 lb)
*Push:	0.5 kg (1.10 lb)
**Return Force ext-comp.:	5 ounce-23 ounce (1.39 gram - 6.39 gram)
*Tilt:	3 inch-ounce (2100 gram-centimeter)
*Twist:	1.5 inch-ounce (105 gram-centimeter)

**These stages may be run at twice the specified ratings without damage, but with a loss of accuracy and speed.*

***Retract is limited by the preload spring.*

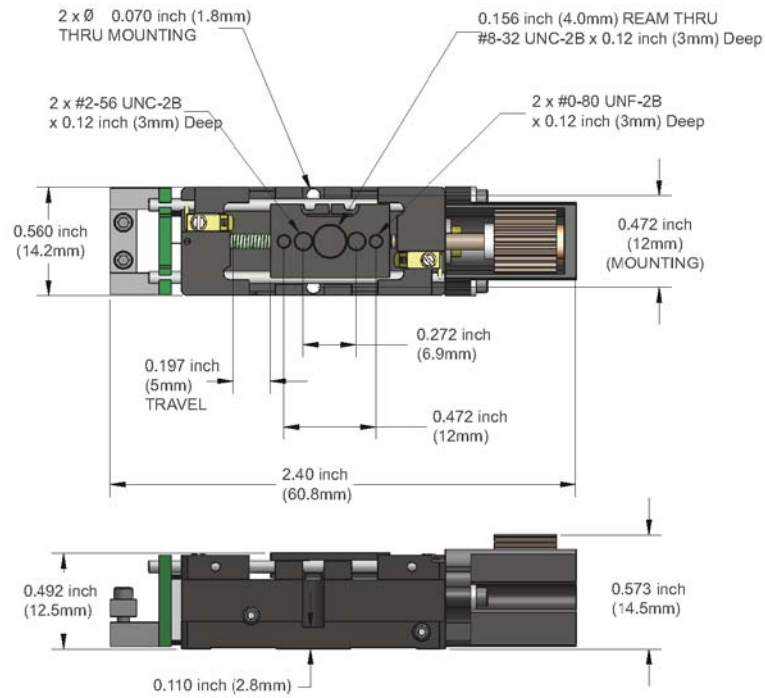
Travel Ranges and Dimensions:

Model No.	Travel Range	Stage Body (L x W x H)	Weight
MM-1M	5mm	113.8 x 19.05 x 12.5 (mm)	28 grams
	0.197 inch	4.48 x 0.75 x 0.5 (inch)	1 ounce

The information contained in this data sheet is subject to change without notice. Critical dimensions or specifications should be verified with our technical support staff.

MM-1M Motorized Stage

Dimensional Data



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