

MM-3M-F

Folded Motorized
MicroMini™ Stages



Specifications:

	Standard Slider	AB Slider (anti-backlash)
*Repeatability:	±2µm	±0.5µm
*Homing Repeatability:	±2µm	±0.5µm
*Accuracy (linearity):	±3µm/inch	±1.5µm/inch
Speed (max.):	12mm/second @ 12V	1.65mm/second @ 12V
†Slider Backlash:	50µm	3µm
Encoder Conversion (resolution):	0.49609µm/count	0.12406µm/count
(See also: gearhead options)	with 16:1 gearhead	with 64:1 gearhead

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

†Slider backlash represents maximum overshoot

Runout (max.):	3µm/25.4mm
Gearhead Backlash:	1-2µm equivalent; can be compensated in software without overshoot
Motor:	10 mm diameter, 6-12 VDC servo, brush type (see motor specifications)
Vacuum compatibility:	10 ⁻³ Torr, standard, 10 ⁻⁶ Torr available

Load Capacity:

Direct top or side load:	0.5 kg
Push:	0.5 kg
Pull:	0.5 kg
Tilt:	8 inch-ounce (560 gram-centimeter)
Twist:	4 inch-ounce (280 gram-centimeter)

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

Travel Ranges and Dimensions:

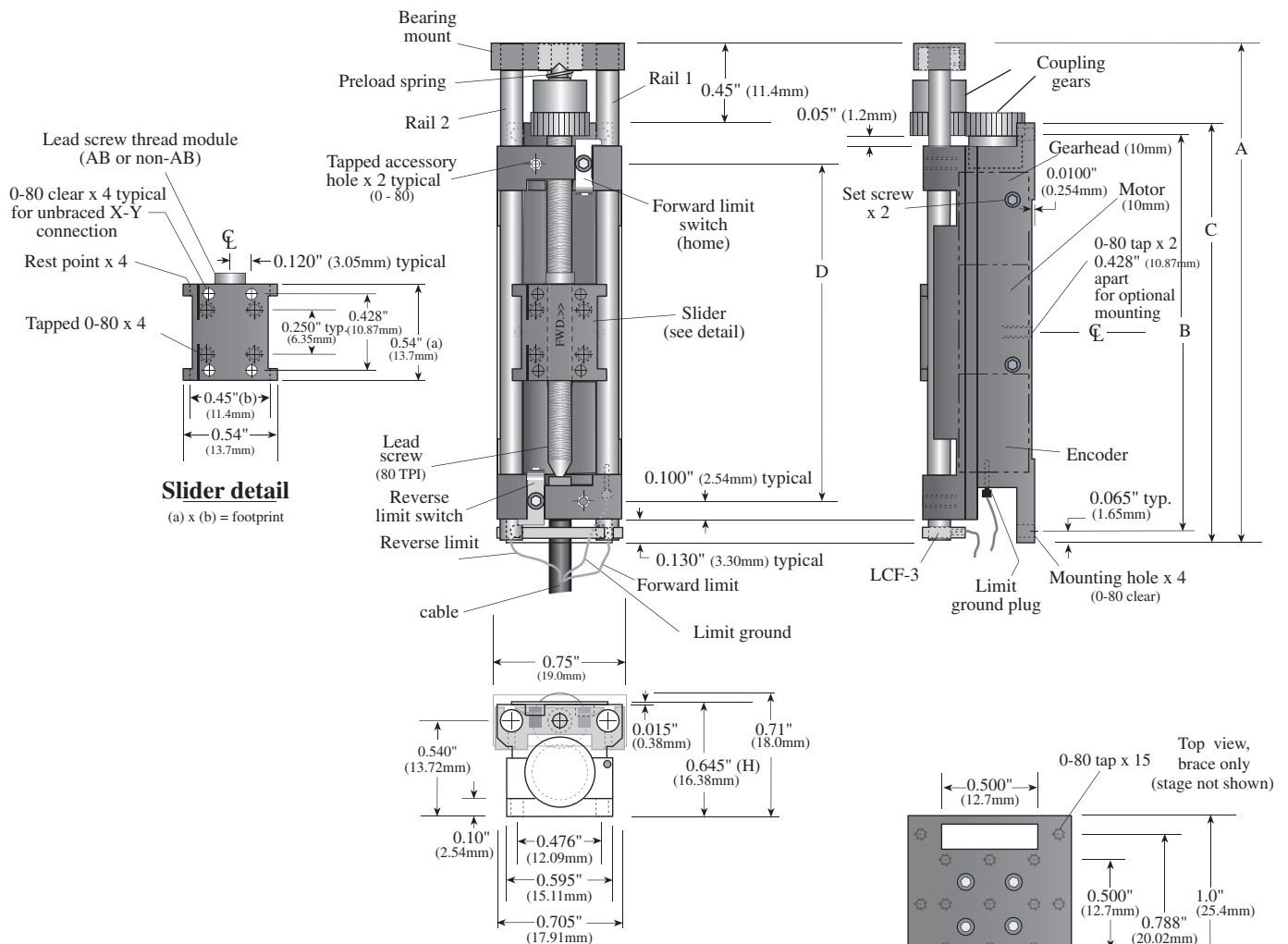
Model No.	Travel Range	Stage Body (L x W x H)	Weight
MM-3M-F-0.5	12.7mm (0.5 inch)	58.9 x 19.1 x 16.3 (mm)	53g
		2.32 x 0.75 x 0.64 (inch)	53g
MM-3M-F-1	25.4mm (1.0 inch)	71.6 x 19.1 x 16.3 (mm)	58g
		2.82 x 0.75 x 0.64 (inch)	58g
MM-3M-F-1.5	38.1mm (1.5 inch)	84.3 x 19.1 x 16.3 (mm)	63g
		3.32 x 0.75 x 0.64 (inch)	63g
MM-3M-F-2	50.8mm (2.0 inch)	97.0 x 19.1 x 16.3 (mm)	68g
		3.82 x 0.75 x 0.64 (inch)	68g
MM-3M-F-2.5	63.5mm (2.5 inch)	109.7 x 19.1 x 16.3 (mm)	73g
		4.32 x 0.75 x 0.64 (inch)	73g

x, xy, xyz, xz configurations available
Specify -AB for Anti-Backlash

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.

Folded **MM-3M-F** Motorized MicroMini™ Stage - 0.5 to 2.5 inch Travel

Dimensional Data



Note: Symmetry is applicable wherever implied

	T (Travel)	A	B	C	D
MM-3M-F-0.5	0.5 inch 12.7mm	2.32 58.9	1.730 43.94	1.86 47.2	1.400 35.56
MM-3M-F-1.0	1.0 inch 25.4mm	2.82 71.6	2.230 56.64	2.36 59.9	1.900 48.26
MM-3M-F-1.5	1.5 inch 38.1mm	3.32 84.3	2.730 69.34	2.86 72.6	2.400 60.96
MM-3M-F-2.0	2.0 inch 50.8 mm	3.82 97.0	3.230 82.04	3.36 85.3	2.900 73.66
MM-3M-F-2.5	2.5 inch 63.5 mm	4.32 109.7	3.730 94.74	3.86 98.0	3.400 86.36

BR-3M-X Optional Crash-resistant Slider Brace

Note:
Single axis brace is essential where attachments are vulnerable to crash.

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