

MM-4M-F Folded Motorized MicroMini™ Stages (For heavier loads)



Specifications:

*Repeatability:	±0.5µm
*Homing Repeatability:	±0.5µm
*Accuracy (linearity):	±1.0µm per 25mm of travel
Straightness:	±2.0µm maximum deviation per 50mm of travel
Speed (max.):	1.65mm/second @ 12 V with 64:1 gearhead
†Slider Backlash:	1µm
Gearhead Backlash:	<2.54µm; can be compensated in software without overshoot
Encoder Conversion(resolution):	0.49609µm per count, with 16:1 gearhead

*Encoder resolution must be added, based on the gearhead: 16:1 add ±0.0005mm, 64:1 add ±0.00012mm

†Slider backlash represents maximum overshoot

Motor:	10mm diameter, 6-12 VDC servo, brush type
Slide:	Cross roller bearing
Vacuum Compatibility:	10 ⁻³ Torr, standard, 10 ⁻⁶ Torr available
Load Capacity:	
Horizontal:	3.0 kg
Vertical:	1.0 kg
Side:	1.5 kg

Travel Ranges and Dimensions:

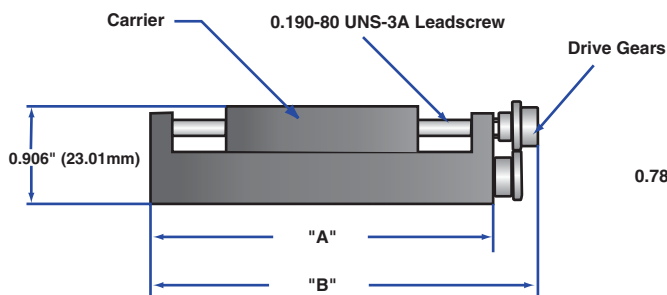
Model No.	Travel Range	Stage Body (L x W x H)	Weight
MM-4M-F-25	25mm	97 x 31.5 x 23 (mm)	165g
		3.82 x 1.24 x 0.905 (inch)	165g
MM-4M-F-50	50mm	162 x 31.5 x 23 (mm)	246g
		6.38 x 1.24 x 0.905 (inch)	246g

x, xy, xyz, xz configurations available

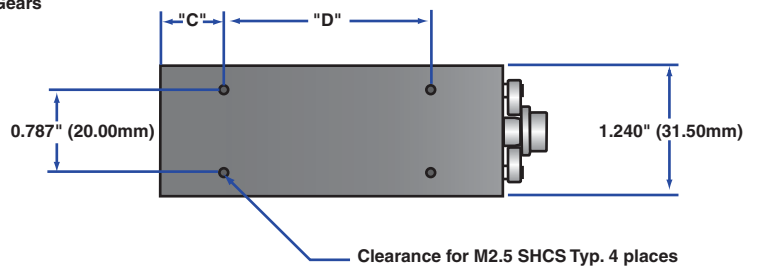
MM-4M-F Motor Stage 25mm & 50mm Travel

Dimensional Data

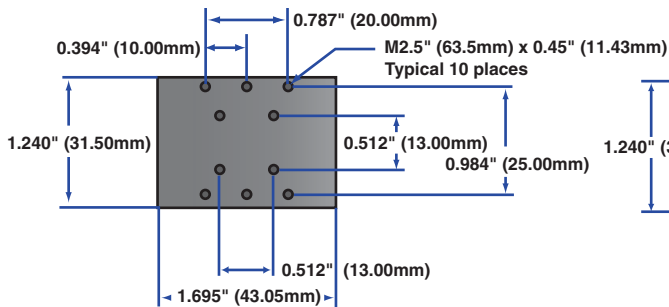
Tabulated Data for MM-4M-F Stages				
Travel	"A"	"B"	"C"	"D"
25mm	3.255" (82.68mm)	3.795" (96.39mm)	0.643" (16.34mm)	1.969" (50.00mm)
50mm	5.830" (148.02mm)	6.370" (161.80mm)	0.946" (24.04mm)	3.937" (100.00mm)



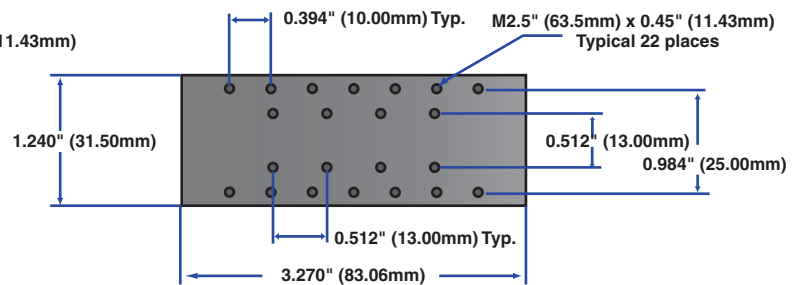
Side View



Bottom View



**25mm Carrier
Top View**



**50mm Carrier
Top View**

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.