

# ATS25 Series

## Manual Linear Positioning Stage

Micrometer or patented\* sub-micron-resolution drive

12 mm, 25 mm, and 50 mm travel

Crossed-roller bearings for superior positioning performance

Low profile



\*U.S. Patent No. 3,727,471

Aerotech's low profile ATS25 series stages provide smooth and precision linear translation. The ATS25 series stages come with Aerotech's patented\* sub-micron-resolution drive. This drive has both a coarse and fine adjustment. The coarse knob allows rapid translation, while the fine adjustment provides 25 nm resolution.

Preloaded crossed-roller bearings provide better geometrical accuracies and larger load carrying capability than linear ball-bearing systems. These stages can be easily mounted in X-Y and X-Y-Z applications. An optional mounting bracket, HDZ3S, is available for applications that require a vertical mounting orientation.

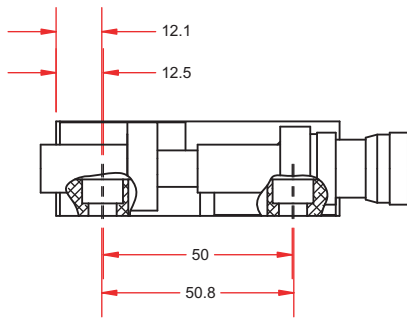
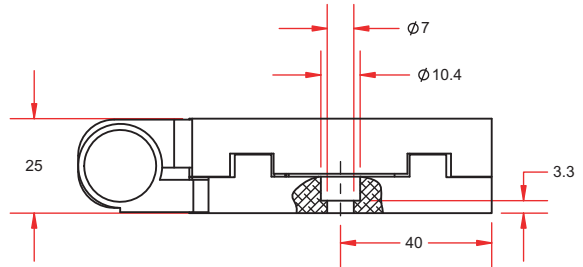
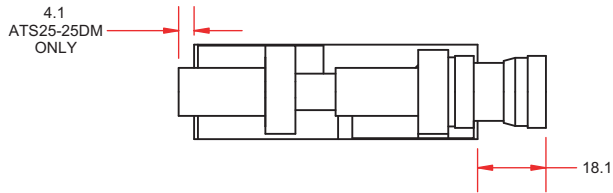
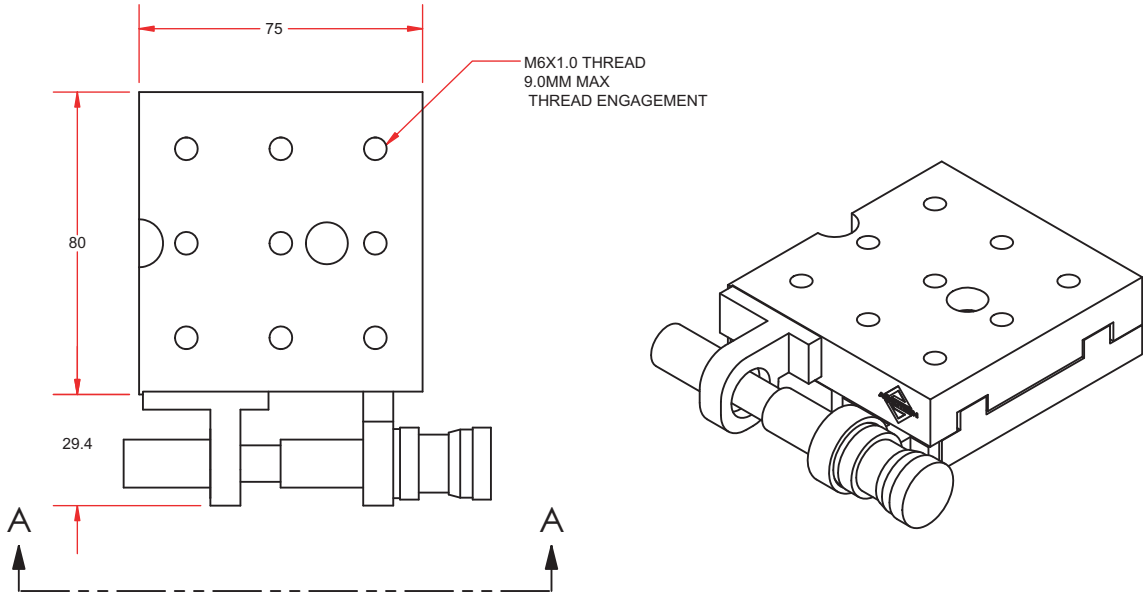
		ATS25-12DM	ATS25-25DM
<b>Range</b>		12.5 mm (0.5 in)	25 mm (1 in)
<b>Thimble Graduation</b>	<b>Micrometer Spindle</b>	1 micron (40 µin)	
	<b>Sub-Micron Drive</b>	0.1 micron (4 µin)	
<b>Resolution<sup>(1)</sup></b>		25 nm	
<b>Max Load</b>	<b>Horizontal</b>	22.7 kg (50 lb)	
	<b>Vertical</b>	9.09 kg (20 lb)	
<b>Straightness and Flatness of Travel</b>		0.5 micron (±20 µin)	
<b>Repeatability (Unidirectional)</b>		1 µm (20 nm)	
<b>Material</b>		Aluminum	
<b>Finish</b>		Black Anodize	
<b>Weight</b>		0.45 kg (1 lb)	0.9 kg (2 lb)

Note:  
1. Per 0.5° movement of the fine adjustment.

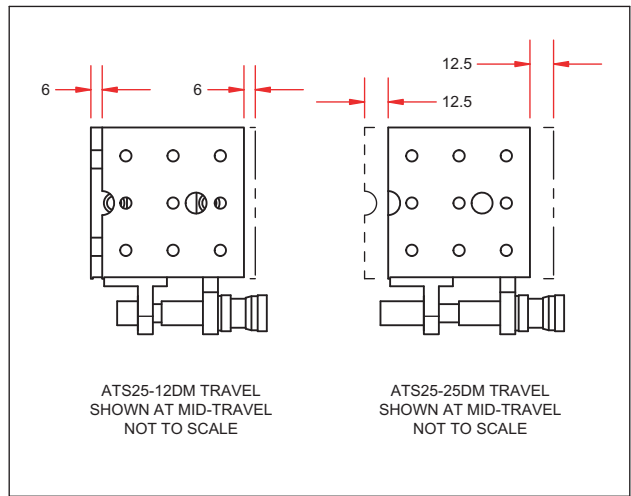
### ATS Series Linear

ATS25-12DM	12.5 mm (0.5 in) travel stage with Aerotech patented differential screw drive
ATS25-25DM	25 mm (1 in) travel stage with Aerotech patented differential screw drive

ATS25 Series DIMENSIONS



VIEW A-A



DIMENSIONS: MILLIMETERS