

1304 Series Linear Motor XY Slides

Our 1304 series of linear motor tables were developed as an evolution of our 1199 series low profile XY tables. It boasts the same high standards for linear accuracy (<0.0005") and orthogonality (<9 arc seconds) as our standard XY's, but it also has impressive stats for acceleration, speed, and encoder positional accuracy (down to 0.1 µm). These systems are typically used in highspeed production systems where low cycle time and ultra precision accuracy are of the highest importance. As an example, say an application required spot-welds 1/4" apart as quickly as possible. Accounting for acceleration and deceleration, our base level linear motor table would perform those welds 20 times per second with staggering accuracy.

Features:

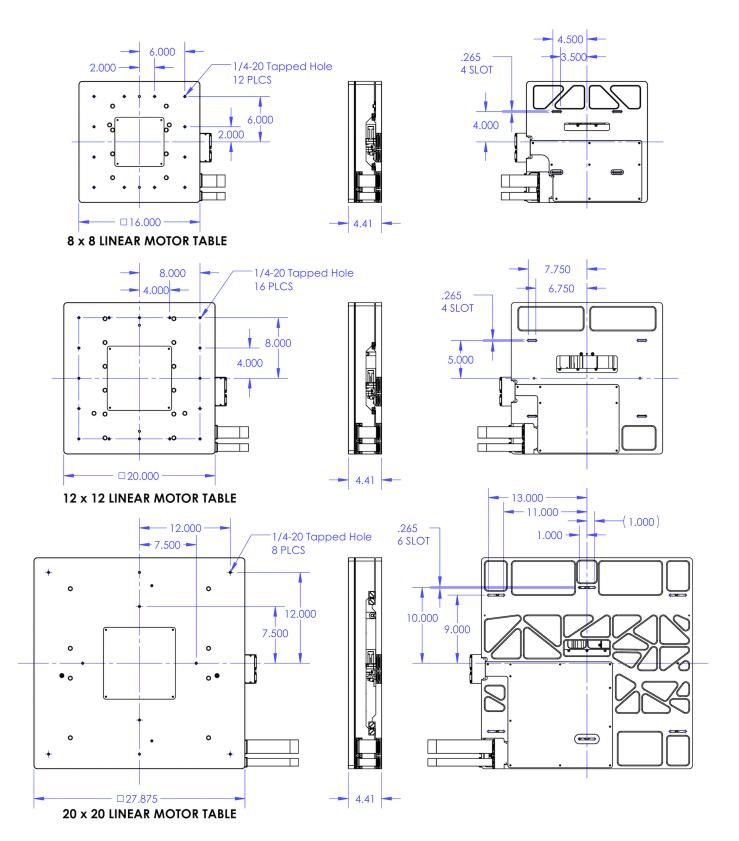
• Standard travel lengths of 8", 12", and 20"

 Custom options available for varying travel lengths up to 24"

- Position accuracy and repeatability capable of hitting down to 0.1um (0.00003937")
- High speed and acceleration
- Available as a single axis
- Low mass, low profile design
- Preloaded steel rail, crossed roller bearings maintain high linear accuracy and stiffness
- Orthogonality is closely monitored and machined in. It never goes out of adjustment
- Drive and switch mechanisms are covered to protect from dirt and contamination
- A total of 6 optical switches to use as limit switches or home switches. Switches include 5' Cable with Amphenol connector



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	8x8 (200mm~)	12x12 (300mm~)	20x20 (500mm~)
Load Capacity (evenly distributed)	500 lbs. (225kg~)		
Accuracy and Repeatablility*	0.1um (0.00003937in)		
Straightness	<.0005" per 12in (.01mm per 300mm~)		
Orthogonality (X to Y)	< 9 arc seconds		
Table Weight (approximate)	68 lbs. (30.8kg)	93 lbs. (42.1kg)	200 lbs. (90.7kg)
Moving Mass Top Axis (approximate)	20 lbs. (9.1kg)	30 lbs. (13.6kg)	62 lbs. (28.1kg)
Moving Mass Both Axis (approximate)	51 lbs. (23.1kg)	68 lbs. (30.8kg)	149 lbs. (67.6kg)
Maximum Speed*	20 in/sec (500mm/sec~)		
Maximum Acceleration 1xMotor*	2.0g (10% Duty)	1.3 g (10% Duty)	0.63 g (10% Duty)
(No Load; Upper Axis)	0.7g (continuous)	0.5g (continuous)	0.25g (continuous)
Maximum Force*	39 lbs (17.7kg) (10% duty cycle)		
	13 lbs (5.9kg) (continuous)		
*Listed Specs are dependent on customer provided electronics and tuning			