

XY Series



XYR-1517™ Table



XYR-1111™ Table

Ball Way X-Y Tables

The XY Series incorporates precision, cost-effective ball ways. It is built using a monolithic center, which precisely locates the critical duplex and radial bearing journals within the massive center section. This design results in the lowest profile available for an X-Y Table (3.5"), and machines-in" orthogonality which is determined solely by the center section machining. Note that both motors are attached to the center section; when the lower axis moves,

both motors move together. These units incorporate anti-backlash friction nuts coupled to precision leadscrews to achieve very high repeatability. They come complete and ready to operate with motors, knobs, limit switches, and locking connectors.

Features

- :: Space saving, monolithic design
- :: Cost-effective ball ways
- :: Wide range of travels from 2"x2" to 10"x10"
- :: Anti-backlash friction nuts

SPECIFICATIONS		XYR-1517	XYR-1511	XYR-1111	
Travel (inches)		12 x 14	12 x 8	8 x 8	
Positional Accuracy, per axis (µm)	with linear encoders ¹	25	25	20	
Ballscrew Accuracy, per axis (µm)	open loop	35	30	20	
Bidirectional Repeatability	with linear encoders open loop		±1 count 1µm		
Flatness & Straightness per axis (µm)		15	12	10	
Orthogonality (arc-seconds)			20		
Pitch & Yaw (arc-seconds)		40	35	30	
Load Capacity (kg) ²		100	100	100	
Maximum Ballscrew Speed (rps)			50		
Moving Mass (kg)	Upper Axis	7.7	4.5	4.5	
	Lower Axis	30	24	13.7	
Total Mass (kg)		45.4	33	22.7	
CONFIGURATIONS (Apply to all of the above models) ³				PAGE	
Ballscrew	Lead (mm)	10	5	2	172
Motor	Stepper (oz-in)	400 step/rev.	118	others available	194
		200 step/rev.	100	others available	
	Servo	brush	brushless		196
OPTIONS				PAGE	
Encoder	Rotary (counts/rev.)		2000	4000	136
	Linear (µm/count)		5	1 0.5 0.1	
					134

¹With 2 point slope correction

²Please contact our Applications Engineers for loads exceeding 45kg.

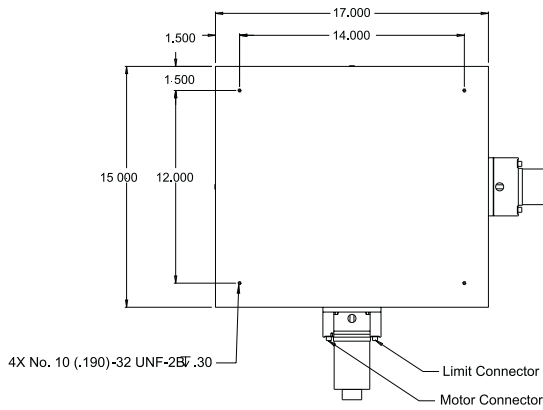
³Standard configuration is highlighted.

Ballscrew XYR

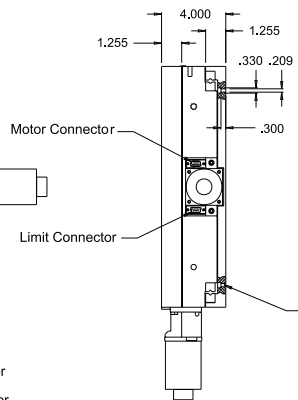


Helping you build a better machine, faster.

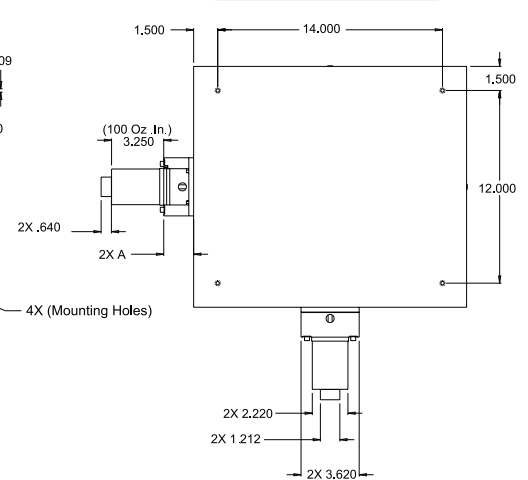
Top View



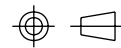
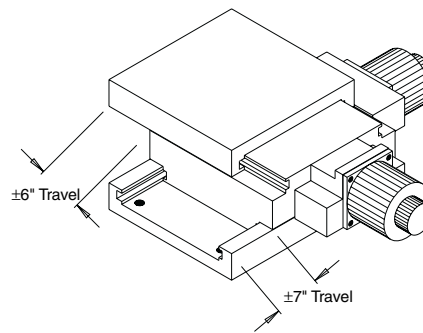
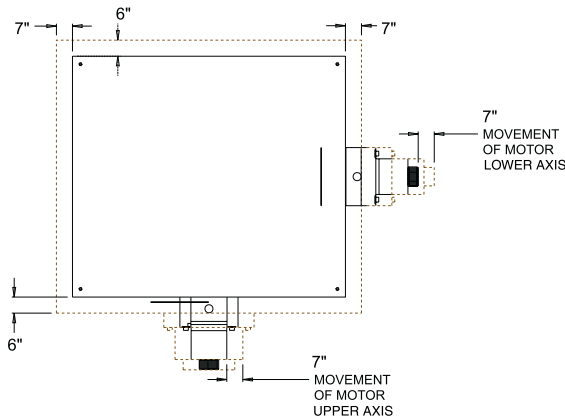
Side View



Bottom View



Moving Envelope



Third Angle Projection
Note: All Dimensions in Inches

This drawing reflects dimensions for the XYR-1517.
Please contact our Applications Engineers for XYR-1511 and XYR-1111 dimensional details.