

XYL Series

Features

- 12" x 12" to 27" x 27" travels
- Precision crossed roller ways for high load capacity
- Anti-backlash friction nuts



Large Travel X-Y Tables

The XYL Series utilizes crossed roller ways with 22mm tool steel rails and hardened, 9mm diameter rollers for very high stiffness and load capacity. This table's plate and riser design means the lower axis motor is mounted to the base and remains stationary, while the upper axis motor moves in one axis. The XYL Series uses 3/4" diameter leadscrews (larger than in the XY and XYR Series) to move heavier loads. These units include motors, knobs, couplings, Hall-

effect limit sensors, and locking motor and limit/encoder connectors.

If the increased accuracy of linear encoders is desired, they are mounted next to the leadscrews to minimize Abbé error. Load capacities reflect the amount of force that each stage can withstand. Load distribution and choice of motors, leadscrews, and controls impact the load capacity.

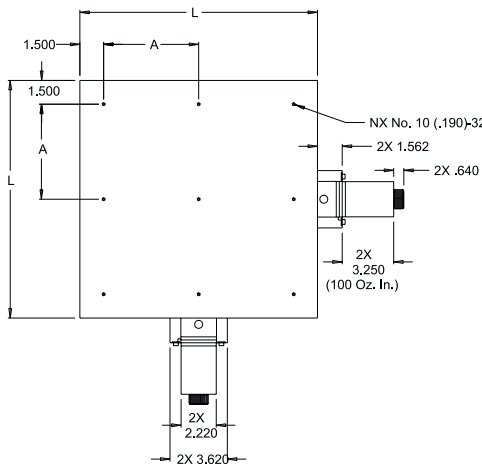
SPECIFICATIONS		XYL-1515	XYL-2121	XYL-2727	XYL-3030
Travel (inches)		12 x 12	18 x 18	24 x 24	27 x 27
Leadscrew Accuracy, per axis (µm)		35	45	60	70
Bidirectional Repeatability (µm)		6			
Flatness & Straightness, per axis (µm)		25	50	75	100
Orthogonality (arc-seconds)		50			
Load Capacity (kg) ¹		100	125	150	175
Maximum Leadscrew Speed (rps)		15			
Moving Mass (kg)	Upper Axis	8.6	15.0	34.9	44.0
	Lower Axis	31.8	51.3	77.1	95.3
Total Mass (kg)		42.2	67.1	113.4	140.6
CONFIGURATIONS (Apply to all of the above models) ²					
Leadscrew	Lead (inch)	0.50	0.40	0.20	0.10
	Lead (mm)	2			
Motor	Stepper (oz-in) 400 step/rev. 200 step/rev.	118	others available		
	Servo	100	others available		
		brush	brushless		
OPTIONS					
Encoder	Rotary (counts/rev.)	2000	4000		
	Linear (µm/count) ³	5	1	0.5	0.1

¹Please contact our Applications Engineers for loads exceeding 70kg.

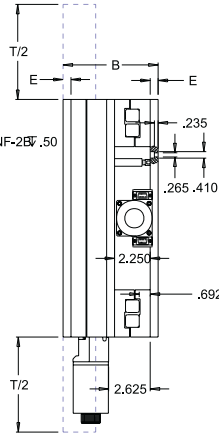
²Standard configuration is highlighted.

³Please note that Servo with Linear Encoder is not available.

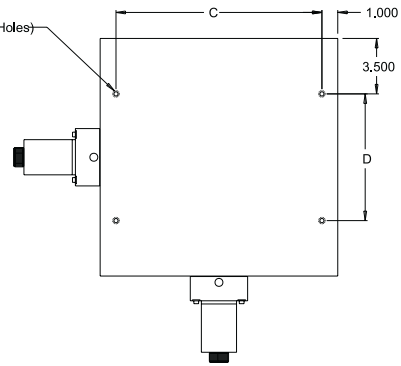
Top View



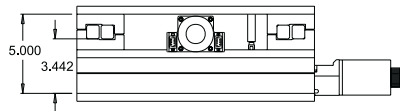
Side View



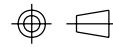
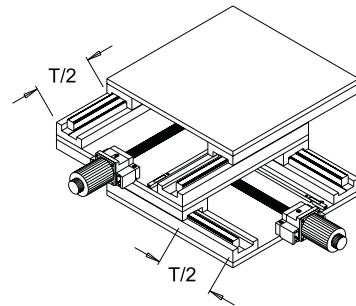
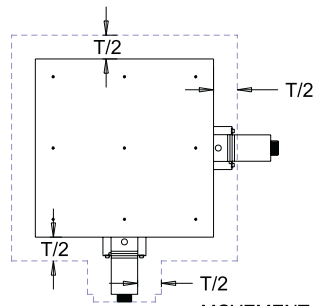
Bottom View



End View



Moving Envelope



Third Angle Projection
Note: All Dimensions in Inches

MODEL	TRAVEL T	LENGTH L	A	B	C	D	E	N
XYL-1515-SM	12.00	15.00	6.000	6.000	13.000	8.000	.50	9
XYL-2121-SM	18.00	21.00	6.000	6.000	19.000	14.000	.50	16
XYL-2727-SM	24.00	27.00	6.000	6.500	25.000	20.000	.75	25
XYL-3030-SM	27.00	30.00	9.000	6.500	28.000	23.000	.75	16

Note: All dimensions are in inches.