

XYRB™ Crossed Roller Table



Ballscrew Crossed Roller X-Y Table

Features

- :: Low profile, monolithic design
- :: Precision crossed roller ways for high stiffness
- :: Travels from 2" x 2" to 10" x 10"
- :: High speed precision ground ballscrews
- :: Stage limits adjustable to any range of motion

DM-Dover XYRB crossed roller stages are low profile stages designed for a wide range of applications. Common uses include factory automation, microelectronics assembly, and laser machining. These tables use 3mm crossed roller ways and provide high stiffness. Precision ground preloaded ballscrews allow higher speeds than our leadscrew-driven XYR™ tables. A specialized monolithic center couples the upper and lower axes,

making the stage stiff and compact with machined in orthogonality. Both motors are mounted to the center section, so they move with the lower axis.

Pitch cover protection is also standard, eliminating any safety concerns. Motors, knobs, couplings, adjustable halleffect limits, and locking connectors are included. Standard travels range from 2" x 2" to 10" x 10".

LINEAR MOTOR POSITIONER SPECIFICATIONS

SPECIFICATIONS	XYRB-4040	XYRB-6060	XYRB-8080	XYRB-1010	XYRB-1212	
Travel (inches)	2 x 2	4 x 4	6 x 6	8 x 8	10 x 10	
Positional Accuracy (microns, per axis) w/linear encoders	8	10	15	20	25	
Positional Accuracy (microns, per axis) open loop	13	15	20	25	30	
Bidirectional Repeatability (micron, for all)						
with linear encoder	±1 count					
open loop	1 micron					
Flatness & Straightness (microns, per axis) ³	5	7	9	11		
Orthogonality (arc-seconds, for all)	20					
Pitch & Yaw (arc-seconds)	20	25	30	35	40	
Load Capacity (kg) ¹	75	95	125	145	175	
Maximum Ballscrew Speed (rps, for all)						
50						
Moving Mass (kg)	Upper Axis	0.5	1.0	1.7	2.5	3.6
	Lower Axis	3.4	6.3	9.2	14.1	20.0
Total Mass (kg)		3.9	7.3	10.9	16.6	23.6

CONFIGURATIONS (APPLIES TO ALL OF THE ABOVE MODELS)²

Ballscrew (for all)	Lead (mm)	2, 5			
Motor (for all)	Stepper (oz-in)	400 step/rev.	118	others available	
		200 step/rev.	53	100	others available
	Servo	brush	brushless		

OPTIONS

Encoder (for all)	Rotary (counts/rev.)	2000, 4000			
Linear (microns/count)		5, 1, 0.5, 0.1			

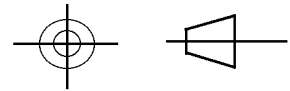
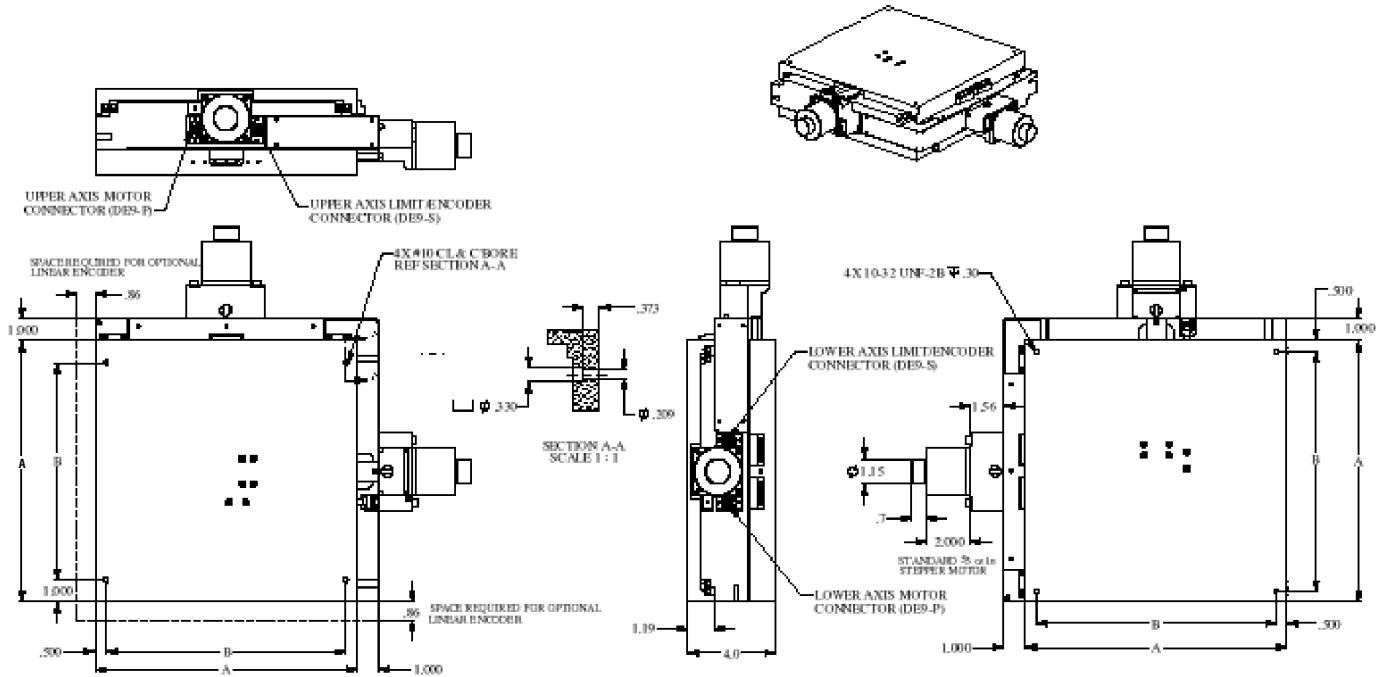
¹Please contact our Applications Engineers for loads exceeding 35kg.
²Standard configuration is highlighted.

X YRB™ Crossed Roller Table

LINEAR MOTOR POSITIONER SPECIFICATIONS



Helping you build a better machine, faster.



Third Angle Projection

MODEL	TRAVEL			
	T	A	B	C
XYRB-4040	2.00	4.00	3.000	2.000
XYRB-6060	4.00	6.00	5.000	4.000
XYRB-8080	6.00	8.00	7.000	6.000
XYRB-1010	8.00	10.00	9.000	8.000
XYRB-1212	10.00	12.00	11.000	10.000

Note: All dimensions are in inches.