



Dover Motion

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Features

:: Travels from 8"x8" to 25"x25"

:: Clear aperture for two-sided access

:: Anti-backlash friction nuts

Description

The OFL Series provides increased travel and load bearing capacity in an open frame X-Y configuration. These tables address a wide range of precision positioning applications which require mechanical or optical, two-sided access. These include pin insertion, vision systems, optical gaging and inspection, water jet cutting, and biomedical assays. The OFL Series employs individually preloaded ball way

construction, avoiding the difficulties inherent in establishing a preload across the table's open plates. This design also means that the lower axis motor is mounted to the base plate and remains stationary, while the upper axis motor moves in one axis. Side-mounted leadscrews, with anti-backlash friction nuts, are driven by 23 frame motors.

Specifications

Specifications	OFL-1515	OFL-1919	OFL-2121	OFL-2727	OFL-3232	
Travel (inches)	8 x 8	12 x 12	14 x 14	20 x 20	25 x 25	
Leadscrew Accuracy, per axis (µm)	80	120	140	200	250	
Bidirectional Repeatability (µm)	6					
Flatness & Straightness, per axis (µm)	15	30	50	70	135	
Orthogonality (arc-seconds)	50					
Load Capacity (kg) ¹	55	75	90	90	80	
Maximum Leadscrew Speed (rps)	15					
Mass (kg)	Upper Axis	4.5	5.9	6.8	9.1	10.9
	Lower Axis	18.6	23.6	26.8	34.0	37.6
Total Mass (kg)	26.8	34.5	37.6	48.5	57.2	

Configurations (Apply to all of the above models)

Leadscrew	Lead (Inch)	0.50	0.40	0.20	0.10
	Lead (mm)	2			
Motor	Stepper	400 step/rev.	118 oz-in Torque, others available		
		200 step/rev.	135 oz-in Torque, others available		
	Servo	2048 count encoder			

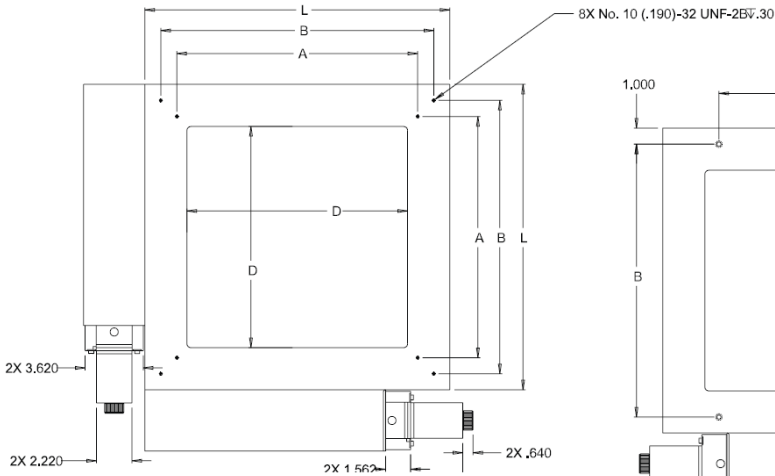
Option

Encoder	Rotary	2,000 or 4,000 counts/rev.
Encoder	Linear	1 or 0.1 µm/count, other options available upon request

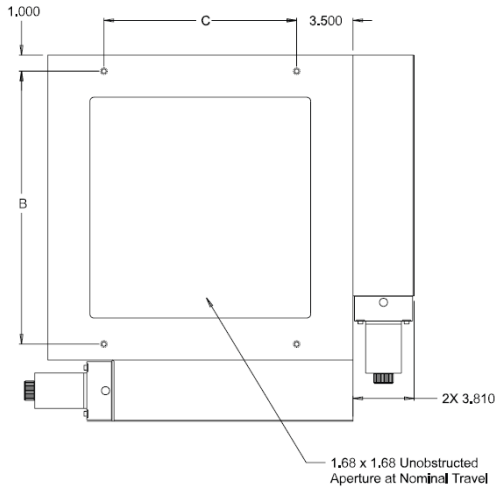
¹ Please contact our Applications Engineers for loads exceeding 25 kg.

Dimensions

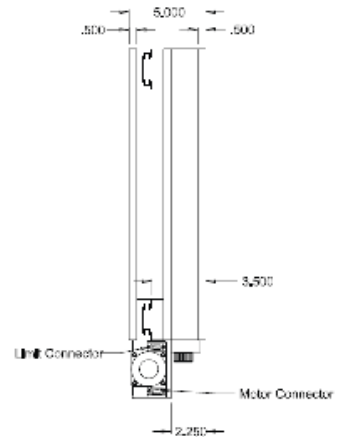
Top View



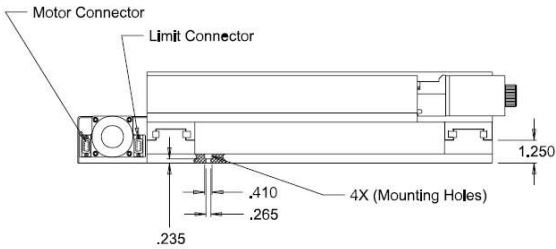
Side View



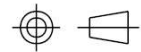
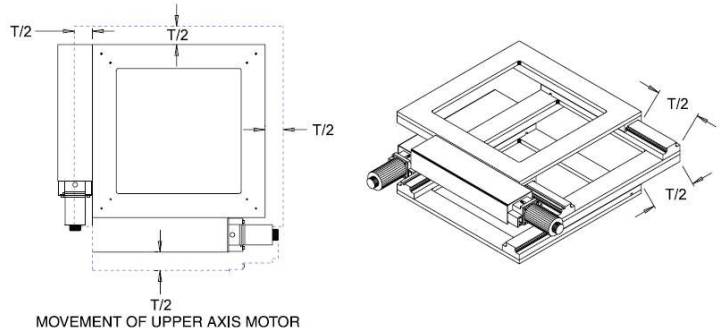
Bottom View



End View



Moving Envelope



Third Angle Projection
Note: All Dimensions in Inches

Model	Travel (T)	Length (L)	A	B	C	D
OFL-1515-SM	8.00	15.00	11.000	13.000	8.000	9.750
OFL-1919-SM	12.00	19.00	15.000	17.000	12.000	13.750
OFL-2121-SM	14.00	21.00	17.000	19.000	14.000	15.750
OFL-2727-SM	20.00	27.00	23.000	25.000	20.000	21.750
OFL-3232-SM	25.00	32.00	28.000	30.000	25.000	26.750

Measurements in inches