11 4 4 01 - WC1 - 1 - S114 - M02 - C145 - L01 - E00 - B00

Table Series

Number of Bearings

2 - 2 bearing per carriage
4 - 4 bearings per carriage

Carriage Length

4 - 4 inches

Travel Length (see page C-14)

01 - 1 to 45 inches

Waycovers

WC1 - with waycovers

Carriage Inserts (see pages C-15)

1 - English mount **2** - Metric mount

Screw Options (see pages C-18 to C-23)

Rolled ball screws

S001 - .500 x .500 NPL
S002 - .500 x .500 PL
S003 - .500 x .500 NPL(T)
S004 - .500 x .500 PL(T)
S005 - .625 x .200 NPL
S006 - .625 x .200 PL
S007 - .625 x .200 NPL(T)
S008 - .625 x .200 PL(T)
S009 - .625 x 1.000 NPL
S010 - .625 x 1.000 PL
S011 - .625 x 1.000 NPL(T)
S012 - .625 x 1.000 PL(T)

Precision ball screws

S114 - .625 x .200 NPL
S115 - .625 x .200 PL
S116 - 16 x 5 NPL
S117 - 16 x 5 PL
S118 - 16 x 10 NPL
S119 - 16 x 10 PL
S120 - 16 x 16 NPL
S121 - 16 x 16 PL

S999 - other

Ground ball screws

S212 - .625 x .200 PL
S213 - .625 x .500 PL
S214 - 16 x 5 PL
S215 - 16 x 16 PL

Rolled acme screws

S300 - .625 x .100 NPL
S301 - .625 x .100 PL
S302 - .625 x .200 NPL
S303 - .625 x .200 PL
S304 - 16 x 4 NPL
S305 - 16 x 4 PL

Motor Mount (see pages C-15, C-46 & C-47)

M00 - none
M01 - hand crank
M02 - NEMA 23 mount (E)
M03 - NEMA 23 mount (M)
M04 - NEMA 34 mount (E)
M05 - NEMA 34 mount (M)
M06 - NEMA 23 (RH) wrap
M07 - NEMA 23 (LH) wrap
M08 - NEMA 34 (RH) wrap
M09 - NEMA 34 (LH) wrap
M99 - other

Coupling Options (see pages C-40 to C-41)

C000 - none
C020 *to* **C024** - C100
C040 *to* **C047** - C125
C125 *to* **C129** - H100
C145 *to* **C154** - H131
C400 *to* **C406** - G100
C425 *to* **C434** - G126
C999 - other

Limit & Home Switches (see pages C-37 to C-39)

L00 - no switches
L99 - other

	Mechanical	Reed	Hall	Prox (NPN)	Prox (PNP)
EOT & home switches	**L01**	**L04**	**L07**	**L10**	**L13**
EOT switches only	**L02**	**L05**	**L08**	**L11**	**L14**
home switch only	**L03**	**L06**	**L09**	**L12**	**L15**

Encoder Options (see page C-49)

E00 - none
E01 - rotary (500 lines/rev)
E02 - rotary (1000 lines/rev)
E03 - rotary (1270 lines/rev)
E10 - linear (2500 lines/inch)
E11 - linear (250 lines/mm)
E99 - other

Power-off Brakes (see page C-48)

B00 - none **B01** - 24 VDC **B02** - 90 VDC **B99** - other

(E) - English Interface
(LH) - Left Hand
(M) - Metric Interface
(NPL) - Non Preloaded
(PL) - Preloaded
(RH) - Right Hand
(T) - Turcite Nut

Specifications subject to change without notice

Specifications

Load Capacities		Two (2) Bearing Carriage	Four (4) Bearing Carriage
Dynamic Horizontal	2 million inches (50 km) of travel	1,550 lbs (703 kg)	3,100 lbs (1406 kg)
Dynamic Horizontal	50 million inches (1270 km) of travel	525 lbs (238 kg)	1,060 lbs (480 kg)
Static Horizontal		2,360 lbs (1070 kg)	4,720 lbs (2140 kg)
Dynamic Roll Moment	2 million inches (50 km) of travel	140 ft-lbs (190 N-m)	280 ft-lbs (379 N-m)
Dynamic Roll Moment	50 million inches (1270 km) of travel	47 ft-lbs (64 N-m)	95 ft-lbs (129 N-m)
Static Roll Moment		210 ft-lbs (285 N-m)	425 ft-lbs (576 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	18 ft-lbs (24 N-m)	240 ft-lbs (325 N-m)
Dyn. Pitch & Yaw Moment	50 million inches (1270 km) of travel	6 ft-lbs (8 N-m)	82 ft-lbs (111 N-m)
Static Pitch & Yaw Moment		30 ft-lbs (41 N-m)	365 ft-lbs (495 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	775 lbs (351 kg)	775 lbs (351 kg)
Each Bearing Dyn. Capacity	50 million inches (1270 km) of travel	263 lbs (119 kg)	263 lbs (119 kg)
Each Bearing Static Load Capacity		1,180 lbs (535 kg)	1,180 lbs (535 kg)
Thrust Force Capacity	10 million screw revolutions	665 lbs (302 kg)	665 lbs (302 kg)
Thrust Force Capacity	500 million screw revolutions	180 lbs (82 kg)	180 lbs (82 kg)
Maximum Acceleration		386 in/sec^2 (9,8 m/sec^2)	772 in/sec^2 (19,6 m/sec^2)
d_1	Center to center distance (spread) between the two rails	2.375 in (60,3 mm)	2.375 in (60,3 mm)
d_2	Center to center distance (spacing) of the bearings on a single rail	-	2.088 in (53,0 mm)
d_r	Center distance of the bearing to top of carriage plate surface	.750 in (19,1 mm)	.750 in (19,1 mm)

Other	For Two (2) & Four (4) Bearing Carriages
Table Material	Base, Carriage, End Plates, & Cover Plate option - 6061 anodized aluminum
Linear Rail Material	Stainless Steel
Screw Material (see pages C-18 to C-23)	Acme Screw - Stainless Steel
Screw Material (see pages C-18 to C-23)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
Straightness	<0.00013 in/in (< 3,30 microns/25mm)
Flatness	<0.00013 in/in (< 3,30 microns/25mm)
Orthogonality (multi-axis systems)	< 30 arc-seconds
Friction Coefficient	< 0.01
Motor Mount	NEMA 23 & 34 Mounts, Metric Mounts, Motor Wraps, and Hand Crank Option
Coupling	Three (3) different styles available
Waycover Material	Hypilon Polyester Bellows firmly mounted to carriage & end plates

Dimensions & Specifications

- With Waycovers -

Model Number	Travel Length inches (mm)	Table Dimensions inches (mm)		Mounting Dimensions inches (mm)				Screw Length inches (mm)	Table (1) Weight lbs (kg)
		A	B	C	D	E	M		
11x401-WC1	1.000 (25)	6.250 (158,7)	9.875 (250,8)	0.500 (12,7)	1.250 (31,7)	1	8	9.25 (235)	6.3 (2,9)
11x402-WC1	2.500 (63)	8.250 (203,2)	11.875 (301,6)	0.250 (6,3)	2.500 (63,5)	1	8	11.25 (286)	7.3 (3,3)
11x404-WC1	4.000 (100)	10.250 (260,3)	13.875 (352,4)	1.250 (31,7)	2.500 (63,5)	1	8	13.25 (337)	8.2 (3,7)
11x405-WC1	5.500 (139)	12.250 (311,1)	15.875 (403,2)	0.250 (6,3)	2.000 (50,8)	3	12	15.25 (387)	9.2 (4,2)
11x408-WC1	8.500 (215)	16.250 (412,7)	19.875 (504,8)	0.250 (6,3)	1.500 (38,1)	5	16	19.25 (489)	11.1 (5,0)
11x411-WC1	11.500 (292)	20.250 (514,3)	23.875 (606,4)	1.250 (31,7)	2.500 (63,5)	5	16	23.25 (591)	13.0 (5,9)
11x414-WC1	14.375 (365)	24.250 (615,9)	27.875 (708,0)	0.750 (19,0)	2.500 (63,5)	7	20	27.25 (692)	14.9 (6,8)
11x417-WC1	17.375 (441)	28.250 (717,5)	31.875 (809,6)	0.250 (6,3)	2.500 (63,5)	9	24	31.25 (794)	16.9 (7,7)
11x422-WC1	22.000 (558)	34.250 (869,9)	37.875 (962,0)	0.750 (19,0)	2.500 (63,5)	11	28	37.25 (946)	19.8 (9,0)
11x428-WC1	28.000 (711)	40.250 (1022,3)	43.875 (1114,4)	1.250 (31,7)	2.500 (63,5)	13	32	43.25 (1099)	22.6 (10,2)
11x431-WC1	31.750 (806)	46.250 (1174,7)	49.875 (1266,8)	1.750 (44,4)	2.500 (63,5)	15	36	49.25 (1251)	25.5 (11,6)
11x436-WC1	36.375 (923)	52.250 (1327,1)	55.875 (1419,2)	2.250 (57,1)	2.500 (63,5)	17	40	55.25 (1403)	28.4 (12,9)
11x440-WC1	40.750 (1035)	58.250 (1479,5)	61.875 (1571,6)	0.250 (6,3)	2.500 (63,5)	21	48	61.25 (1556)	31.3 (14,2)
11x445-WC1	45.500 (1155)	64.250 (1631,9)	67.875 (1724,0)	0.750 (19,0)	2.500 (63,5)	23	52	67.25 (1708)	34.1 (15,5)

x = 2; Carriage has 2 bearings; Carriage weight = 1.8 lbs. (0,82 kg)

x = 4; Carriage has 4 bearings; Carriage weight = 2.0 lbs. (0,91 kg)

Footnotes:

(1) Weight shown is with a 0.625 inch (16 mm) diameter screw, a 2 bearing carriage [1.8 lbs (0,82 kg)], a NEMA 23 motor mount [0.34 lbs (0,16 kg)], and a C100 style [0.09 lbs (0,04 kg)] coupling. When using a 0.500 inch diameter screw subtract 0.022 lbs per inch (0,00039 kg per mm) of screw length for a given model number. When using a 4 bearing carriage add 0.2 lbs (0,09 kg) to each value.

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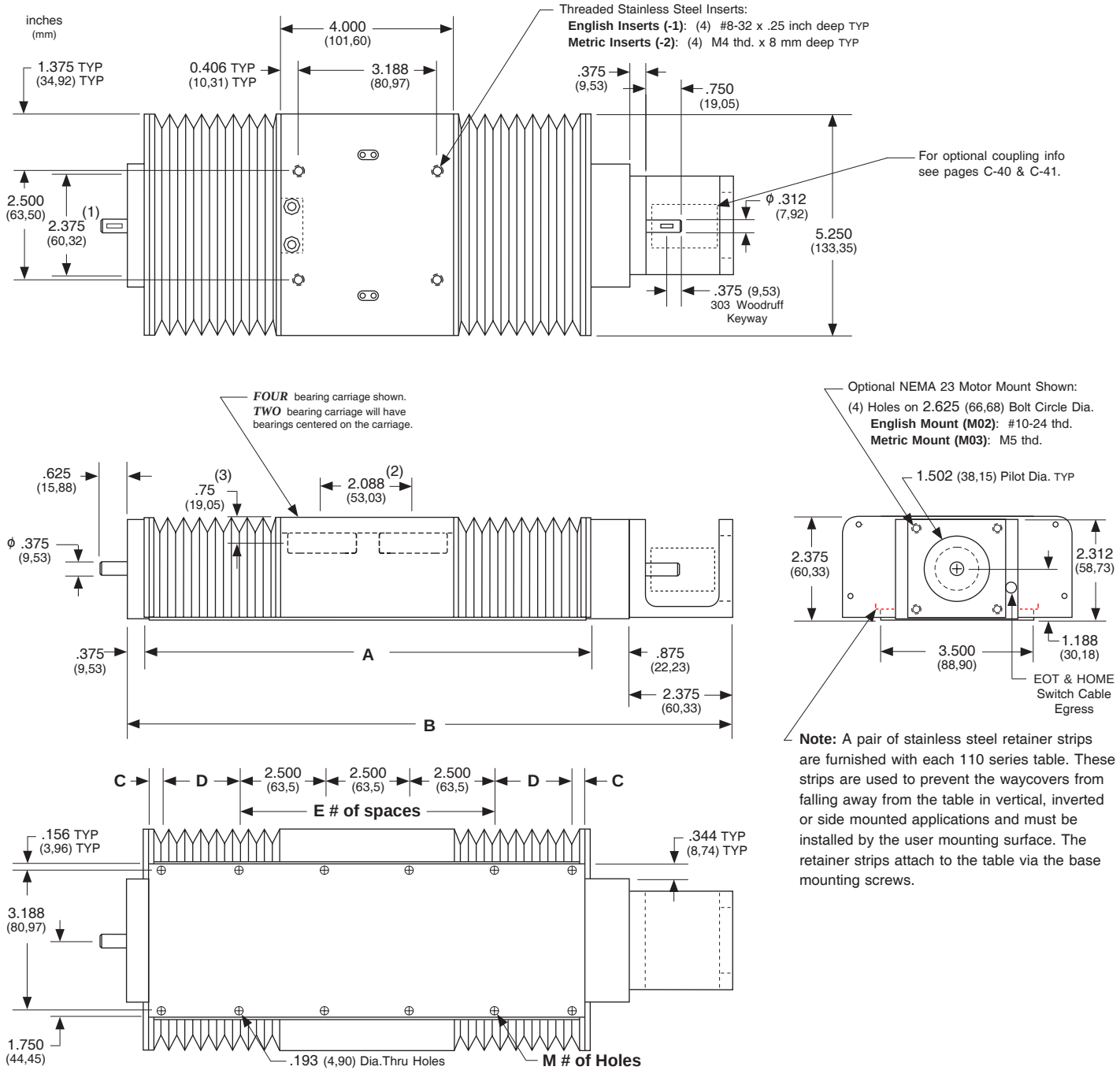
Dimensions

- With Waycovers -



Note: A pair of stainless steel retainer strips are furnished with each 110 series table. These strips are used to prevent the waycovers from falling away from the table in vertical, inverted or side mounted applications and must be installed by the user mounting surface. The retainer strips attach to the table via the base mounting screws.

(1) This value is center to center distance (spread) between the two rails **(d_1)**.

(2) This value is center to center distance (spacing) of the bearings on a single rail **(d_2)**.

(3) This value is center distance of the bearing to top of carriage plate surface **(d_t)**.

Note: Any 100, 110, 120 or 130 series table can be mounted on top of any second 100, 110, 120 series table by the user, in order to create X-Y multiple axis configurations. The 100-CP1, 100-CP2, or 120 series tables require one of the *Carriage Adapter Plate* options. The carriage's threaded stainless steel insert hole pattern exactly matches the base mounting hole pattern on each table, therefore no extra adapter bracket or machining is required. However a precision square tool, or micrometer depth gauge, is required in order to obtain an orthogonality between the two tables of < 30 arc-seconds. The table base, carriage top & carriage sides are all precision machined. LINTECH's 100 series, 4 bearing carriage, should be used for the bottom axis in a mutiple axes application for better system rigidity, performance, and life.