

16 - **2** - **6** - **06** - **CP0** - **0** - **S005** - **M02** - **C155** - **L01** - **E00** - **B00**

Table Series

Number of Bearings

2 - 2 bearings

4 - 4 bearings

Carriage Length

6 - 6 inches

Travel Length (see page E-6)

06 - 6 to 60 inches

Cover Plate

CP0 - no cover plate

Carriage Inserts (see page E-7)

0 - T-slot mount

Screw Options (see pages E-30 to E-35)

Rolled ball screws

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)

S013 - .750 x .200 NPL

S014 - .750 x .200 PL

S015 - .750 x .200 NPL(T)

S016 - .750 x .200 PL(T)

S999 - other

Rolled ball screws

S017 - .750 x .500 NPL

S018 - .750 x .500 PL

S019 - .750 x .500 NPL(T)

S020 - .750 x .500 PL(T)

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

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

S122 - .750 x .200 NPL

S123 - .750 x .200 PL

S124 - 20 x 5 NPL

S125 - 20 x 5 PL

S128 - 20 x 20 NPL

S129 - 20 x 20 PL

Motor Mount (see pages E-7, E-68 to E-69)

M00 - none

M01 - hand crank

M20 to M98 - see Website

M99 - other

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

Coupling Options (see pages E-66 to E-67)

C000 - none

C999 - other

C025 to C030 - C100

C048 to C069 - C125

C130 to C136 - H100

C155 to C184 - H131

C190 to C200 - H163

C407 to C415 - G100

C435 to C464 - G126

C470 to C514 - G158

Limit & Home Switches (see pages E-63 to E-65)

L00 - no switches

L99 - other

EOT & home switches

EOT switches only

home switch only

Mechanical

L01

L02

L03

Reed

L04

L05

L06

Hall

L07

L08

L09

Prox (NPN)

L10

L11

L12

Prox (PNP)

L13

L14

L15

Encoder Options (see page E-71)

E00 - none

E01 - rotary (500 lines/rev)

E02 - rotary (1000 lines/rev)

E03 - rotary (1270 lines/rev)

E10 - linear (2500 lines/inch)

E11 - linear (125 lines/mm)

E99 - other

Power-off Brakes (see page E-70)

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

Load Capacities		Two (2) Bearing Carriage		Four (4) Bearing Carriage	
Dynamic Horizontal	2 million inches (50 km) of travel	3,890 lbs	(1765 kgf)	7,780 lbs	(3530 kgf)
Dynamic Horizontal	100 million inches (2540 km) of travel	1,045 lbs	(474 kgf)	2,090 lbs	(948 kgf)
Static Horizontal		5,820 lbs	(2640 kgf)	11,640 lbs	(5280 kgf)
Dynamic Roll Moment	2 million inches (50 km) of travel	510 ft-lbs	(690 N-m)	1,025 ft-lbs	(1390 N-m)
Dynamic Roll Moment	100 million inches (2540 km) of travel	137 ft-lbs	(185 N-m)	275 ft-lbs	(370 N-m)
Static Roll Moment		915 ft-lbs	(1240 N-m)	1,830 ft-lbs	(2480 N-m)
Dyn. Pitch & Yaw Moment	2 million inches (50 km) of travel	71 ft-lbs	(96 N-m)	930 ft-lbs	(1260 N-m)
Dyn. Pitch & Yaw Moment	100 million inches (2540 km) of travel	19 ft-lbs	(26 N-m)	250 ft-lbs	(339 N-m)
Static Pitch & Yaw Moment		126 ft-lbs	(170 N-m)	1,670 ft-lbs	(2260 N-m)
Each Bearing Dyn. Capacity	2 million inches (50 km) of travel	1,945 lbs	(882 kgf)	1,945 lbs	(882 kgf)
Each Bearing Dyn. Capacity	100 million inches (2540 km) of travel	525 lbs	(238 kgf)	525 lbs	(238 kgf)
Each Bearing Static Load Capacity		2,910 lbs	(1320 kgf)	2,910 lbs	(1320 kgf)
Thrust Force Capacity	10 million screw revolutions	895 lbs	(406 kgf)	895 lbs	(406 kgf)
Thrust Force Capacity	500 million screw revolutions	240 lbs	(109 kgf)	240 lbs	(109 kgf)
Maximum Acceleration		386 in/sec ²	(9,8 m/sec ²)	772 in/sec ²	(19,6 m/sec ²)
d₁	Center to center distance (spread) between the two rails	3.660 in	(92,96 mm)	3.660 in	(92,96 mm)
d₂	Center to center distance (spacing) of the bearings on a single rail		-	3.290 in	(83,57 mm)
d_r	Center distance of the bearing to top of carriage plate surface	1.320 in	(33,53 mm)	1.320 in	(33,53 mm)

Other	For Two (2) & Four (4) Bearing Carriages
Table Material	Base, Carriage, End Plates & Cover Plate Option - 6061 anodized aluminum
Linear Rail Material	Case Hardened Steel
Screw Material	Acme Screw - Stainless Steel
Screw Material	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
Unidirectional Repeatability	+/- 0.0002 in (5 microns)
Bidirectional Repeatability	+/- 0.0002 in (5 microns) to +/- 0.0082 in (208 microns) - depends on selected screw
Straightness	< 0.00016 in/in (< 4,06 microns/25mm)
Flatness	< 0.00016 in/in (< 4,06 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

Dimensions & Specifications

- With T-Slot Load Mounting -

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	M		
16x606-CP0	6 (150)	12.125 (308,0)	16.688 (423,9)	3	8	16.00 (406)	14.2 (6,4)
16x612-CP0	12 (300)	18.125 (460,4)	22.688 (576,3)	5	12	22.00 (559)	16.4 (7,4)
16x618-CP0	18 (455)	24.125 (612,8)	28.688 (728,7)	7	16	28.00 (711)	18.6 (8,4)
16x624-CP0	24 (605)	30.125 (765,2)	34.688 (881,1)	9	20	34.00 (864)	20.8 (9,4)
16x630-CP0	30 (760)	36.125 (917,6)	40.688 (1033,5)	11	24	40.00 (1016)	23.0 (10,4)
16x636-CP0	36 (910)	42.125 (1070,0)	46.688 (1185,9)	13	28	46.00 (1168)	25.2 (11,4)
16x642-CP0	42 (1060)	48.125 (1222,4)	52.688 (1338,3)	15	32	52.00 (1321)	27.4 (12,4)
16x648-CP0	48 (1215)	54.125 (1374,8)	58.688 (1490,7)	17	36	58.00 (1473)	29.6 (13,4)
16x654-CP0	54 (1370)	60.125 (1527,1)	64.688 (1643,0)	19	40	64.00 (1625)	31.8 (14,4)
16x660-CP0	60 (1520)	66.125 (1679,6)	70.688 (1795,5)	21	44	70.00 (1778)	34.0 (15,4)

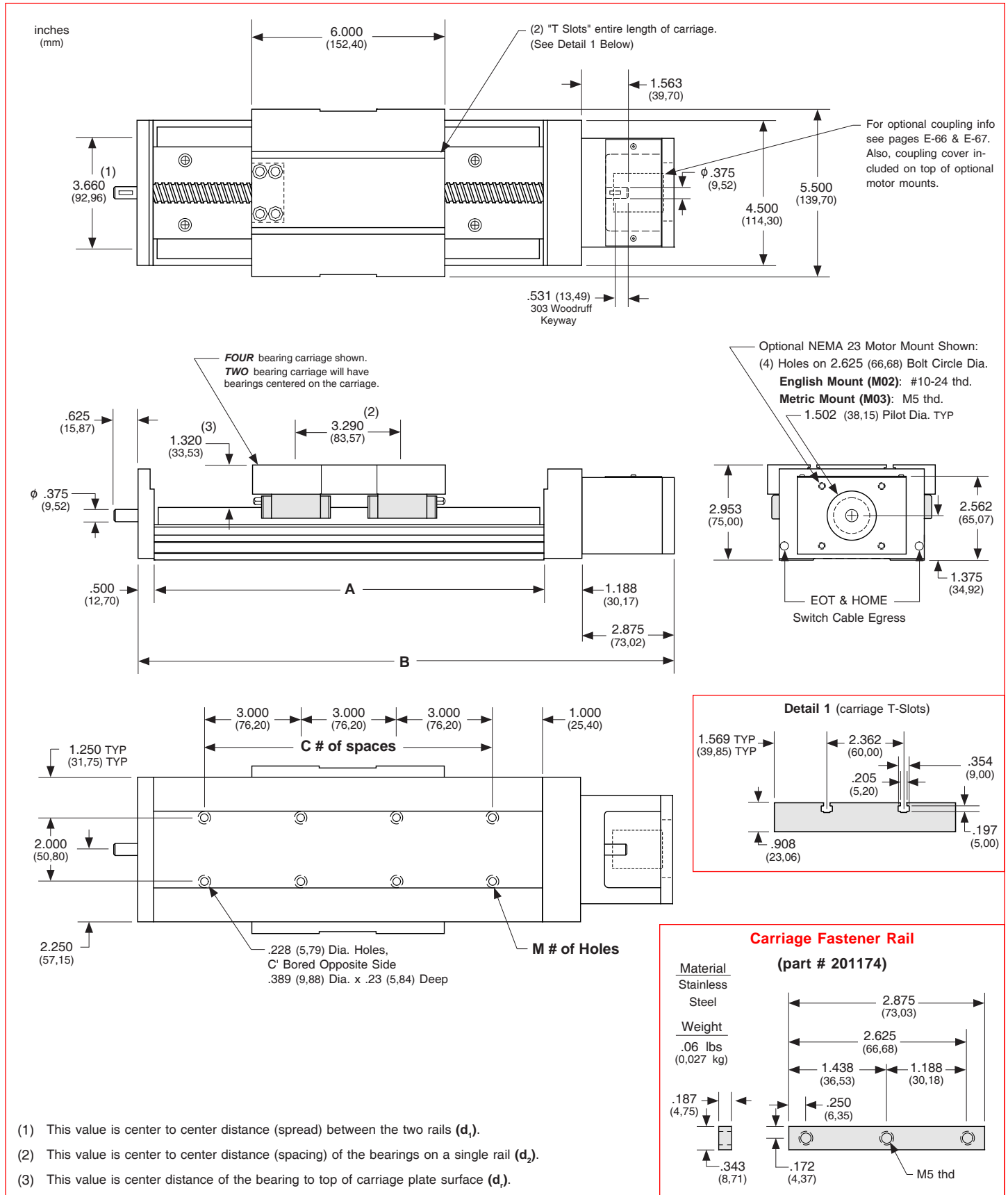
- x = 2; Carriage has 2 bearings; Carriage weight = 3.3 lbs. (1,50 kg)
- x = 4; Carriage has 4 bearings; Carriage weight = 4.1 lbs. (1,86 kg)

Footnotes:

- (1) Weight shown is with a 0.625 inch (16 mm) diameter screw, a NEMA 23 motor mount [0.42 lbs (0,19 kg)], a C100 style [0.09 lbs (0,04 kg)] coupling, and a 2 bearing carriage. When using a 0.750 inch (20 mm) diameter screw add 0.042 lbs per inch (0,00075 kg per mm) of screw length for a given model number. When using a 4 bearing carriage add 0.8 lbs (0,36 kg) to each value.

Dimensions

- With T-Slot Load Mounting -



Note: Any 160, 170, or 180 series table can be mounted on top of a second 160, 170 or 180 series table, in order to create X-Y multiple axis configurations. See page E-72 for optional carriage adapter plate information or contact *LINTECH* for details.

Specifications subject to change without notice