

**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

**C197 to C199** - H163

**C407 to C415** - G100

**C435 to C464** - G126

**C470 to C480** - 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	
<b>Dynamic Horizontal</b>	2 million inches (50 km) of travel	3,890 lbs	( 1765 kgf)	7,780 lbs	( 3530 kgf)
<b>Dynamic Horizontal</b>	50 million inches (1270 km) of travel	1,045 lbs	( 474 kgf)	2,090 lbs	( 948 kgf)
<b>Static Horizontal</b>		5,830 lbs	( 2645 kgf)	11,660 lbs	( 5290 kgf)
<b>Dynamic Roll Moment</b>	2 million inches (50 km) of travel	510 ft-lbs	( 690 N-m)	1,025 ft-lbs	( 1390 N-m)
<b>Dynamic Roll Moment</b>	50 million inches (1270 km) of travel	137 ft-lbs	( 185 N-m)	275 ft-lbs	( 370 N-m)
<b>Static Roll Moment</b>		915 ft-lbs	( 1240 N-m)	1,830 ft-lbs	( 2480 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b>	2 million inches (50 km) of travel	71 ft-lbs	( 96 N-m)	930 ft-lbs	( 1260 N-m)
<b>Dyn. Pitch &amp; Yaw Moment</b>	50 million inches (1270 km) of travel	19 ft-lbs	( 26 N-m)	250 ft-lbs	( 339 N-m)
<b>Static Pitch &amp; Yaw Moment</b>		126 ft-lbs	( 170 N-m)	1,670 ft-lbs	( 2260 N-m)
<b>Each Bearing Dyn. Capacity</b>	2 million inches (50 km) of travel	1,945 lbs	( 882 kgf)	1,945 lbs	( 882 kgf)
<b>Each Bearing Dyn. Capacity</b>	50 million inches (1270 km) of travel	525 lbs	( 238 kgf)	525 lbs	( 238 kgf)
<b>Each Bearing Static Load Capacity</b>		2,910 lbs	( 1320 kgf)	2,910 lbs	( 1320 kgf)
<b>Thrust Force Capacity</b>	10 million screw revolutions	895 lbs	( 406 kgf)	895 lbs	( 406 kgf)
<b>Thrust Force Capacity</b>	500 million screw revolutions	240 lbs	( 109 kgf)	240 lbs	( 109 kgf)
<b>Maximum Acceleration</b>		386 in/sec <sup>2</sup>	( 9,8 m/sec <sup>2</sup> )	772 in/sec <sup>2</sup>	( 19,6 m/sec <sup>2</sup> )
<b>d<sub>1</sub></b>	Center to center distance (spread) between the two rails	3.660 in	( 92,96 mm)	3.660 in	( 92,96 mm)
<b>d<sub>2</sub></b>	Center to center distance (spacing) of the bearings on a single rail	-		3.290 in	( 83,57 mm)
<b>d<sub>r</sub></b>	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
<b>Table Material</b>	Base, Carriage, End Plates, & Cover Plate option - 6061 anodized aluminum
<b>Linear Rail Material</b>	Case Hardened Steel
<b>Screw Material</b> (see pages E-30 to E-35)	Acme Screw - Stainless Steel
<b>Screw Material</b> (see pages E-30 to E-35)	Rolled Ball, Precision Ball, & Ground Ball - Case Hardened Steel
<b>Straightness</b>	< 0.00016 in/in (< 4,06 microns/25mm)
<b>Flatness</b>	< 0.00016 in/in (< 4,06 microns/25mm)
<b>Orthogonality</b> (multi-axis systems)	< 30 arc-seconds
<b>Friction Coefficient</b>	< 0.01
<b>Motor Mount</b>	NEMA 23 & 34 Mounts, Metric Mounts, Motor Wraps, and Hand Crank Option
<b>Coupling</b>	Three (3) different styles available

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

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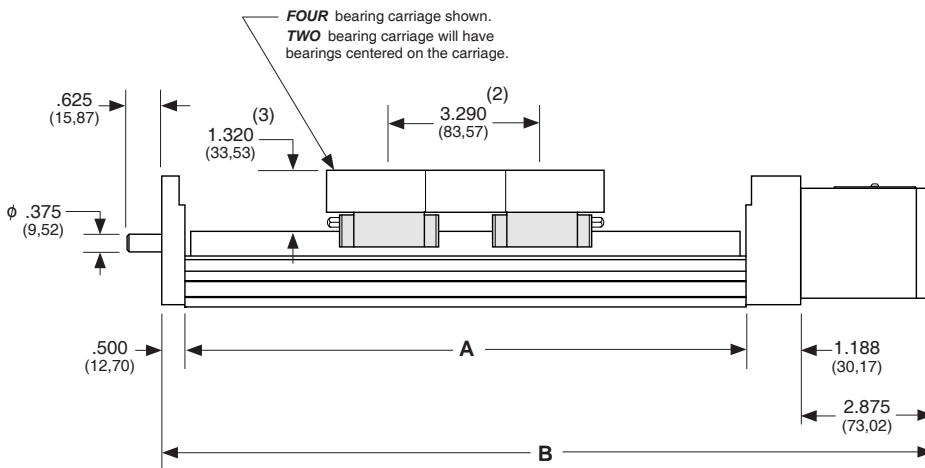
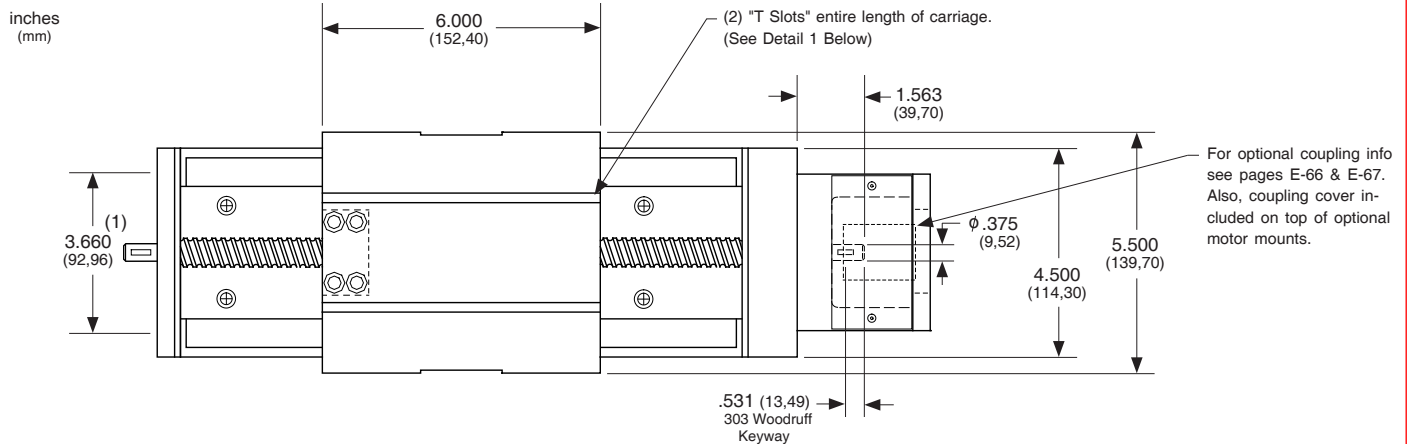
 x = 2; Carriage has 2 bearings; Carriage weight = 3.3 lbs. (1,50 kg)  
 x = 4; Carriage has 4 bearings; Carriage weight = 4.1 lbs. (1,86 kg)

#### Footnotes:

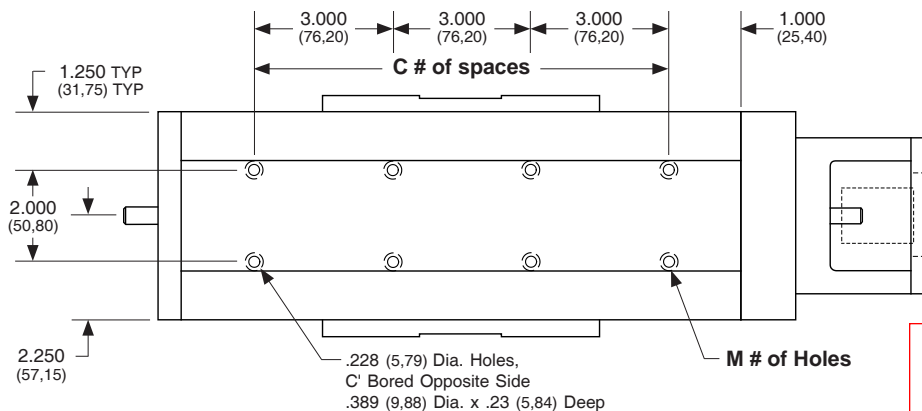
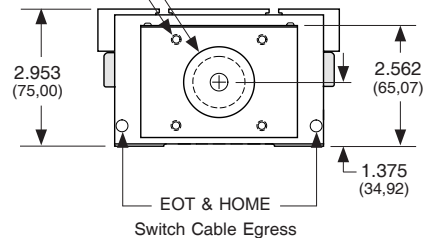
(1) Weight shown is with a 0.625 inch (16 mm) diameter screw, a NEMA 23 motor mount [0.42 lbs (0,19 kg)], a C100 style [0.09 lbs (0,04 kg)] coupling, and a 2 bearing carriage. When using a 0.750 inch (20 mm) diameter screw add 0.042 lbs per inch (0,00075 kg per mm) of screw length for a given model number.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

### Dimensions

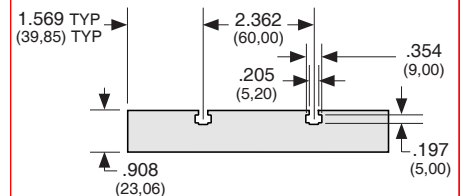
### - With T-Slot Load Mounting -



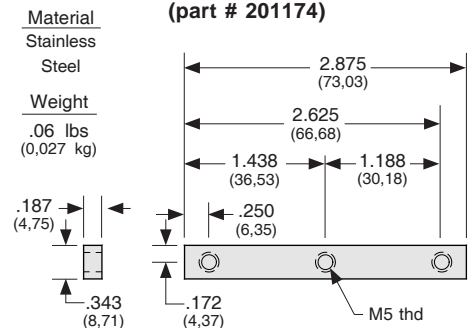
Optional NEMA 23 Motor Mount Shown:  
 (4) Holes on 2.625 (66,68) Bolt Circle Dia.  
**English Mount (M02):** #10-24 thd.  
**Metric Mount (M03):** M5 thd.  
 — 1.502 (38,15) Pilot Dia. TYP



#### Detail 1 (carriage T-Slots)



#### Carriage Fastener Rail (part # 201174)



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- (1) This value is center to center distance (spread) between the two rails (d<sub>1</sub>).
- (2) This value is center to center distance (spacing) of the bearings on a single rail (d<sub>2</sub>).
- (3) This value is center distance of the bearing to top of carriage plate surface (d<sub>3</sub>).

**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.