

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)

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

S999 - other

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

M00 - none **M02** - NEMA 23 mount (E) **M06** - NEMA 23 (RH) wrap
M01 - hand crank **M03** - NEMA 23 mount (M) **M07** - NEMA 23 (LH) wrap
M20 to M98 - see Website **M04** - NEMA 34 mount (E) **M08** - NEMA 34 (RH) wrap
M99 - other **M05** - NEMA 34 mount (M) **M09** - NEMA 34 (LH) wrap

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

C000 - none **C025 to C030** - C100 **C130 to C136** - H100 **C407 to C415** - G100
C999 - other **C048 to C069** - C125 **C155 to C184** - H131 **C435 to C464** - G126
C190 to C200 - H163 **C470 to C514** - G158

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

L00 - no switches Mechanical Reed Hall Prox (NPN) Prox (PNP)
L99 - other 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 E-71)

E00 - none **E02** - rotary (1000 lines/rev) **E10** - linear (2500 lines/inch) **E99** - other
E01 - rotary (500 lines/rev) **E03** - rotary (1270 lines/rev) **E11** - linear (125 lines/mm)

Power-off Brakes (see page E-70)

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

(E) - English Interface (NPL) - Non Preloaded
(LH) - Left Hand (PL) - Preloaded
(M) - Metric Interface (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	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 (see pages E-30 to E-35)	Acme Screw - Stainless Steel
Screw Material (see pages E-30 to E-35)	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)

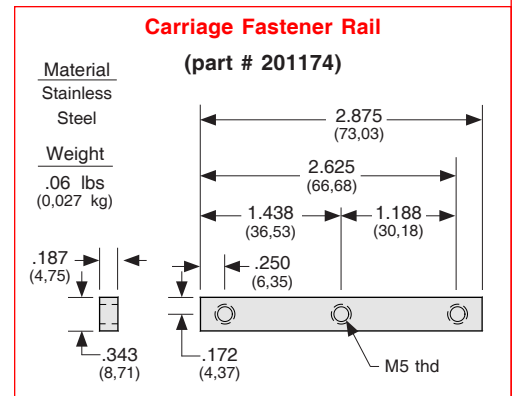
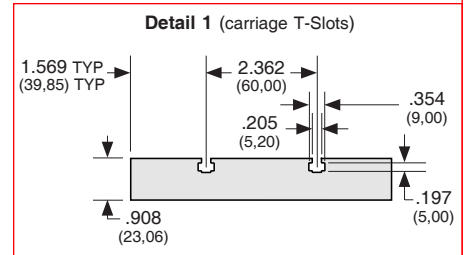
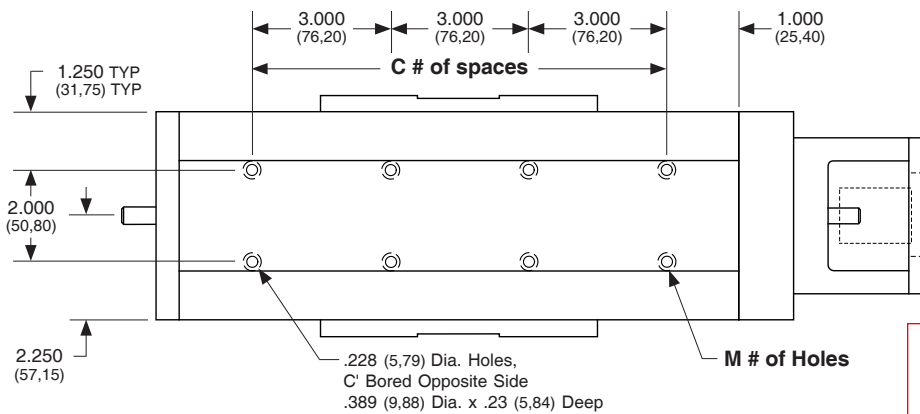
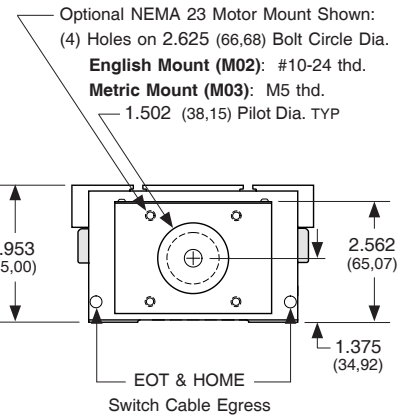
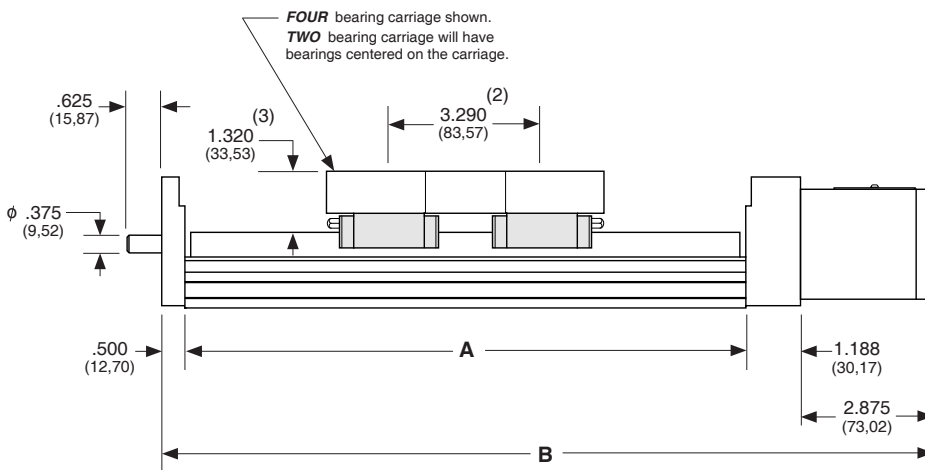
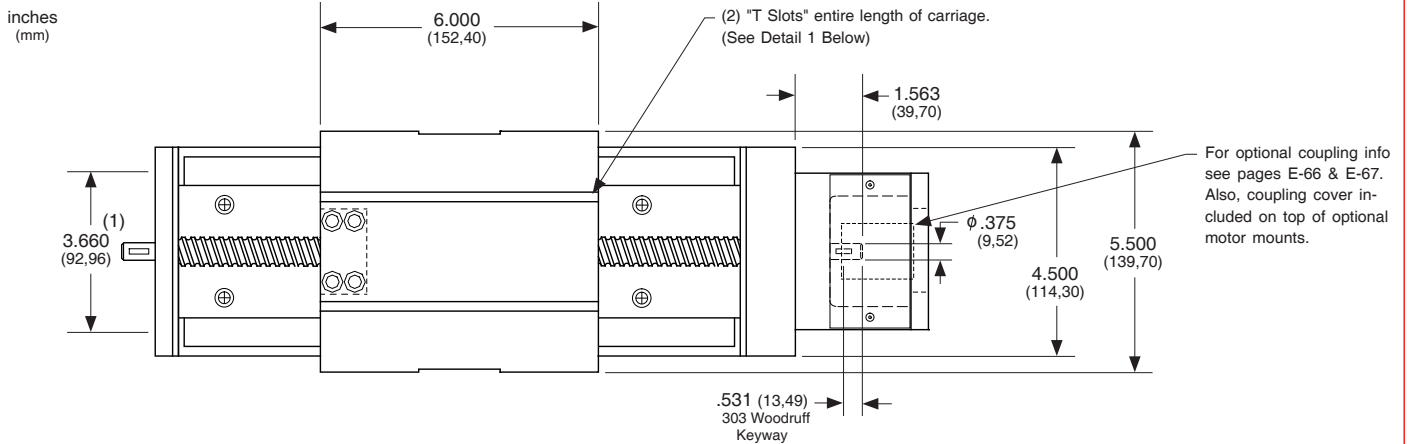
- x = 2; Carriage has 2 bearings; Carriage weight = 3.3 lbs. (1,50 kg)
- x = 4; Carriage has 4 bearings; Carriage weight = 4.1 lbs. (1,86 kg)

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 -



- (1) This value is center to center distance (spread) between the two rails (d₁).
- (2) This value is center to center distance (spacing) of the bearings on a single rail (d₂).
- (3) This value is center distance of the bearing to top of carriage plate surface (d₃).

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.

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