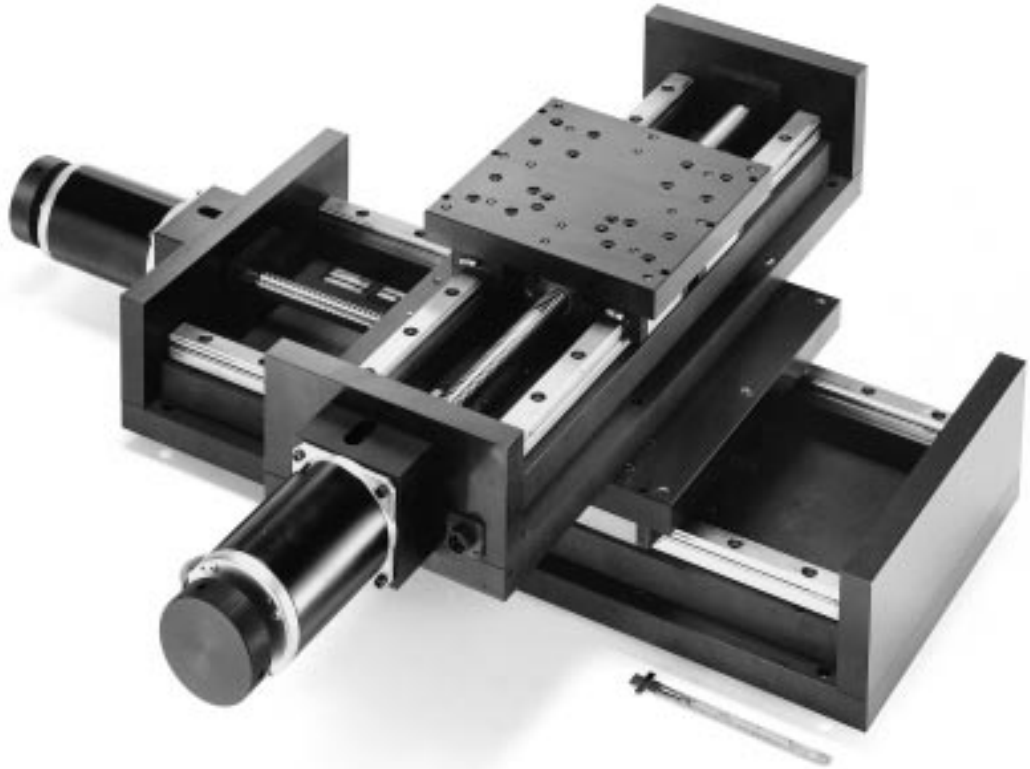


408000-424000ST Series

High Accuracy and High Load Capacity

The 400000ST series is designed for applications requiring accurate positioning of heavy loads. Available in 8, 12, 18 and 24 inch widths, the 400000ST series is ideal for multi-axis applications. When equipped with the optional protective bellows, this table series can be used in lightweight machine tool applications.



408000ST Series

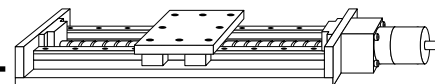
		408004ST	408006ST	408012ST
Travel – inches (mm)		4 (100)	6 (150)	12 (300)
Life @ Listed Specifications – x 1 million in (km)		100 (2540)	100 (2540)	100 (2540)
Positional Accuracy – x 0.001 in (µm) Over Total Table Travel		0.32 (8)	0.48 (12)	0.6 (15)
Positional Repeatability – x 0.001 in (µm)		±0.1 (±2,5)	±0.1 (±2,5)	±0.1 (±2,5)
Straight Line Accuracy – x 0.001 in (µm) Over Total Table Travel		0.4 (10)	0.6 (15)	0.8 (20)
Flatness Accuracy – x 0.001 in (µm) Over Total Table Travel		0.4 (10)	0.6 (15)	0.8 (20)
Max Screw Speed – rps		50	50	50
Max Acceleration – in/sec ² (m/sec ²)		772 (20)	772 (20)	772 (20)
Duty Cycle – % of motion to dwell cycle		100%	100%	100%
Direct Loading* – lbs (kgf)	Normal	1560 (708)	1560 (708)	1560 (708)
	Inverted	1560 (708)	1560 (708)	1560 (708)
	Side	1360 (620)	1360 (620)	1360 (620)
Load per Bearing – lbs (kgf)	Normal	390 (177)	390 (177)	390 (177)
	Inverted	390 (177)	390 (177)	390 (177)
	Side	340 (154)	340 (154)	340 (154)
Axial Loading – lbs (kgf)	Smooth Operation**	240 (109)	240 (109)	240 (109)
Input Inertia*** – 10 ⁻³ oz-in-sec ² (10 ⁻⁶ kg-m-sec ²)		7.40 (5,33)	8.29 (5,96)	10.95 (7,88)
Maximum Running Torque – oz-in (N-m)		25 (0,18)	25 (0,18)	25 (0,18)
Maximum Breakaway Torque – oz-in (N-m)		27.5 (0,19)	27.5 (0,19)	27.5 (0,19)
Drive Screw Efficiency – %		90	90	90
Coefficient of Linear Bearing Friction		0.01	0.01	0.01
Carriage Weight – lbs (kgf)		6.4 (2,9)	6.4 (2,9)	6.4 (2,9)
Longitudinal Span between Bearing Truck Centers (d1) – in (mm)		3.9 (99,1)	3.9 (99,1)	3.9 (99,1)
Lateral Span between Bearing Rail Centers (d2) – in (mm)		4.75 (120,7)	4.75 (120,7)	4.75 (120,7)
Bearing Rail Center to Carriage Mounting Surface (da) – in (mm)		1.787 (45,4)	1.787 (45,4)	1.787 (45,4)
Table Weight - lbs (kgf)		42.3 (19,2)	45.5 (20,6)	55.1 (25,0)

* Refer to page B51 for load/life graphs

** For applications with vibration, consult factory for axial load capacity

*** Based on 5 pitch (0.2 inch lead) ballscrew

Square Rail Bearing Linear Tables



Quality Design in Imperial or Metric Mounting

The top and base are constructed of high quality aluminum alloy and are protected with a black anodized surface finish. The top and bottom mounting surfaces are precision ground to assure flatness and all mounting holes are fitted with locking steel threaded inserts to prevent mounting bolts from working loose. The linear guide ways are 1 inch square rail bearings, with four bearing trucks on the 8" and 12" wide units and six bearing trucks on the 18 and 24 inch wide units. The carriage is driven by a 0.2 inch lead (5 pitch) precision ground ball screw secured at both ends by precision grade angular contact bearings. Models are available in either Imperial or metric mounting.

Options:

Motor Couplings

Bellows couplings are available for both 3/8" motor shafts (NEMA 34) and 0.625" motor shafts (NEMA 42). These couplings provide very little radial wind-up and compensate for motor to screw shaft misalignment.

Motor Mounts

The standard motor mount is designed for an industry standard NEMA 34 motor flange with shaft lengths between 1.0 and 1.25 inches. An optional NEMA 42 frame motor mount is available, accepting motors with an industry standard NEMA 42 flange and shafts with lengths between 1.0 and 1.4 inches or shafts between 2.0 and 2.3 inches long. Refer to short and long motor coupling selections in How to Order section.

Limit and Home Switches

Limit switches provide a signal when the table is approaching its end of travel and are used to command the motor to stop. The Home sensor provides a fixed reference point to which the table can always return. Refer to page B78 for Limit and Home switch details.

Either mechanical reed switch or optical sensor type limit and home switch assemblies are available. The mechanical reed switch option can be supplied either inboard (mounted inside the nominal table width) or outboard (mounted on the side of the table). The inboard version does not increase table width; however, it is more difficult to adjust. While the outboard style adds approximately 1.5" to the width, it is easy to adjust. The optical sensor

limit and home option is mounted outboard and provides excellent repeatability.

Linear Encoders

This option mounts to the side of the table and is used to give direct positional feedback of the carriage. Imperial resolution of 0.0001 inch and metric resolution of 0.001 mm are available. Refer to page B80 for linear encoder details.

400000ST

408018ST		408024ST		408030ST		408036ST		408048ST		408060ST	
18	(450)	24	(600)	30	(750)	36	(900)	48	(1200)	60	(1500)
100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)
1.08	(27)	1.2	(31)	1.7	(43)	1.8	(46)	2.4	(61)	3.0	(76)
±0.1	(±2.5)	±0.1	(±2.5)	±0.1	(±2.5)	±0.1	(±2.5)	±0.1	(±2.5)	±0.1	(±2.5)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
50		40		25		30		30		20	
772	(20)	772	(20)	772	(20)	772	(20)	772	(20)	772	(20)
100%		100%		100%		100%		100%		100%	
1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)
1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)
1360	(620)	1360	(620)	1360	(620)	1360	(620)	1360	(620)	1360	(620)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
340	(154)	340	(154)	340	(154)	340	(154)	340	(154)	340	(154)
240	(109)	240	(109)	240	(109)	240	(109)	240	(109)	240	(109)
13.61	(9,79)	16.33	(11,75)	18.94	(13,6)	136.82	(98,48)	171.74	(123,62)	206.67	(148,75)
25	(0,18)	25	(0,18)	25	(0,18)	45	(0,33)	45	(0,33)	45	(0,33)
27.5	(0,19)	27.5	(0,19)	27.5	(0,19)	49	(0,35)	49	(0,35)	49	(0,35)
90		90		90		90		90		90	
0.01		0.01		0.01		0.01		0.01		0.01	
6.4	(2,9)	6.4	(2,9)	6.4	(2,9)	6.4	(2,9)	6.4	(2,9)	6.4	(2,9)
3.9	(99,1)	3.9	(99,1)	3.9	(99,1)	3.9	(99,1)	3.9	(99,1)	3.9	(99,1)
4.75	(120,7)	4.75	(120,7)	4.75	(120,7)	4.75	(120,7)	4.75	(120,7)	4.75	(120,7)
1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)
64.6	(29,3)	73.7	(33,4)	83.8	(38,0)	103.3	(46,8)	113.5	(51,5)	143.3	(65,0)

408000-424000ST Series

412000ST Series

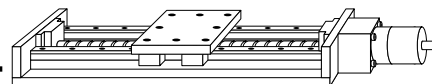
		412004ST	412006ST	412012ST
Travel – inches (mm)		4 (100)	6 (150)	12 (300)
Life @ Listed Specifications – x 1 million in (km)		100 (2540)	100 (2540)	100 (2540)
Positional Accuracy – x 0.001 in (µm) Over Total Table Travel		0.32 (8)	0.48 (12)	0.6 (15)
Positional Repeatability – x 0.001 in (µm)		±0.1 (±2,5)	±0.1 (±2,5)	±0.1 (±2,5)
Straight Line Accuracy – x 0.001 in (µm) Over Total Table Travel		0.4 (10)	0.6 (15)	0.8 (20)
Flatness Accuracy – x 0.001 in (µm) Over Total table Travel		0.4 (10)	0.6 (15)	0.8 (20)
Max Screw Speed – rps		50	50	50
Max Acceleration – in/sec ² (m/sec ²)		772 (20)	772 (20)	772 (20)
Duty Cycle – % of motion to dwell cycle		100%	100%	100%
Direct Loading* – lbs (kgf)	Normal	1560 (708)	1560 (708)	1560 (708)
	Inverted	1560 (708)	1560 (708)	1560 (708)
	Side	1360 (620)	1360 (620)	1360 (620)
Load per Bearing – lbs (kgf)	Normal	390 (177)	390 (177)	390 (177)
	Inverted	390 (177)	390 (177)	390 (177)
	Side	340 (154)	340 (154)	340 (154)
Axial Loading – lbs (kgf)	Smooth Operation**	240 (109)	240 (109)	240 (109)
Input Inertia – 10 ⁻³ oz-in-sec ² (10 ⁻⁶ kg-m-sec ²)		9.57 (6,89)	10.39 (7,48)	9.94 (7,15)
Maximum Running Torque – oz-in (N-m)		25 (0,18)	25 (0,18)	25 (0,18)
Maximum Breakaway Torque – oz-in (N-m)		27.5 (0,19)	27.5 (0,19)	27.5 (0,19)
Drive Screw Efficiency – %		90	90	90
Coefficient of Linear Bearing Friction		0.01	0.01	0.01
Carriage Weight – lbs (kgf)		14.4 (6,5)	14.4 (6,5)	14.4 (6,5)
Longitudinal Span between Bearing Truck Centers (d1) – in (mm)		6.9 (175,3)	6.9 (175,3)	6.9 (175,3)
Lateral Span between Bearing Rail Centers (d2) – in (mm)		8.75 (222,3)	8.75 (222,3)	8.75 (222,3)
Bearing Rail Center to Carriage Mounting Surface (da) – in (mm)		1.787 (45,4)	1.787 (45,4)	1.787 (45,4)
Table Weight - lbs (kgf)		66.7 (30,2)	70.7 (32,1)	82.5 (37,4)

418000ST Series

		418004ST	418006ST	418012ST
Travel – inches (mm)		4 (100)	6 (150)	12 (300)
Life @ Listed Specifications – x 1 million in (km)		100 (2540)	100 (2540)	100 (2540)
Positional Accuracy – x 0.001 in (µm) Over Total Table Travel		0.32 (8)	0.48 (12)	0.6 (15)
Positional Repeatability – x 0.001 in (µm)		±0.1 (±2,5)	±0.1 (±2,5)	±0.1 (±2,5)
Straight Line Accuracy – x 0.001 in (µm) Over Total Table Travel		0.4 (10)	0.6 (15)	0.8 (20)
Flatness Accuracy – x 0.001 in (µm) Over Total Table Travel		0.4 (10)	0.6 (15)	0.8 (20)
Max Screw Speed – rps		50	50	50
Max Acceleration – in/sec ² (m/sec ²)		772 (20)	772 (20)	772 (20)
Duty Cycle – % of motion to dwell cycle		100%	100%	100%
Direct Loading* – lbs (kgf)	Normal	2340 (1060)	2340 (1060)	2340 (1060)
	Inverted	2340 (1060)	2340 (1060)	2340 (1060)
	Side	2040 (925)	2040 (925)	2040 (925)
Load per Bearing – lbs (kgf)	Normal	390 (177)	390 (177)	390 (177)
	Inverted	390 (177)	390 (177)	390 (177)
	Side	340 (154)	340 (154)	340 (154)
Axial Loading – lbs (kgf)	Smooth Operation**	240 (109)	240 (109)	240 (109)
Input Inertia*** – 10 ⁻³ oz-in-sec ² (10 ⁻⁶ kg-m-sec ²)		13.02 (9,37)	13.90 (10,01)	12.13 (8,72)
Maximum Running Torque – oz-in (N-m)		25 (0,18)	25 (0,18)	25 (0,18)
Maximum Breakaway Torque – oz-in (N-m)		27.5 (0,19)	27.5 (0,19)	27.5 (0,19)
Drive Screw Efficiency – %		90	90	90
Coefficient of Linear Bearing Friction		0.01	0.01	0.01
Carriage Weight – lbs (kgf)		31.75 (14,4)	31.75 (14,4)	31.75 (14,4)
Longitudinal Span between Bearing Truck Centers (d1) – in (mm)		13.87 (352,3)	13.87 (352,3)	13.87 (352,3)
Lateral Span between Bearing Rail Centers (d2) – in (mm)		14.75 (374,65)	14.75 (374,65)	14.75 (374,65)
Bearing Rail Center to Carriage Mounting Surface (da) – in (mm)		1.787 (45,4)	1.787 (45,4)	1.787 (45,4)
Table Weight - lbs (kgf)		116.7 (52,9)	121.8 (56,2)	137.4 (62,3)

* Refer to page B51 for load/life graphs. ** For applications with vibration, consult factory for axial load capacity *** Based on 5 pitch (0.2 inch lead) ballscrew

Square Rail Bearing Linear Tables



412018ST		412024ST		412030ST		412036ST		412048ST		412060ST	
18	(450)	24	(600)	30	(750)	36	(900)	48	(1200)	60	(1500)
100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)
1.08	(27)	1.2	(31)	1.7	(43)	1.8	(46)	24	(61)	3.0	(76)
±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
50		40		25		30		30		20	
772	(20)	772	(20)	772	(20)	772	(20)	772	(20)	772	(20)
100%		100%		100%		100%		100%		100%	
1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)
1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)	1560	(708)
1360	(620)	1360	(620)	1360	(620)	1360	(620)	1360	(620)	1360	(620)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
340	(154)	340	(154)	340	(154)	340	(154)	340	(154)	340	(154)
240	(109)	240	(109)	240	(109)	240	(109)	240	(109)	240	(109)
13.33	(9,59)	16.62	(12,0)	18.08	(13,02)	128.50	(92,5)	164.22	(118,25)	199.14	(143,4)
25	(0,18)	25	(0,18)	25	(0,18)	45	(0,33)	45	(0,33)	45	(0,33)
27.5	(0,19)	27.5	(0,19)	27.5	(0,19)	49	(0,35)	49	(0,35)	49	(0,35)
90		90		90		90		90		90	
0.01		0.01		0.01		0.01		0.01		0.01	
14.4	(6,5)	14.4	(6,5)	14.4	(6,5)	14.4	(6,5)	14.4	(6,5)	14.4	(6,5)
6.9	(175,3)	6.9	(175,3)	6.9	(175,3)	6.9	(175,3)	6.9	(175,3)	6.9	(175,3)
8.75	(222,3)	8.75	(222,3)	8.75	(222,3)	8.75	(222,3)	8.75	(222,3)	8.75	(222,3)
1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)
94.4	(42,8)	106.4	(48,3)	118.4	(53,7)	139.8	(63,4)	166.3	(75,4)	192.8	(87,4)

400000ST

418018ST		418024ST		418030ST		418036ST		418048ST		418060ST	
18	(450)	24	(600)	30	(750)	36	(900)	48	(1200)	60	(1500)
100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)
1.08	(27)	1.2	(31)	1.7	(43)	1.8	(46)	24	(61)	3.0	(76)
±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
50		40		25		30		30		20	
772	(20)	772	(20)	772	(20)	772	(20)	772	(20)	772	(20)
100%		100%		100%		100%		100%		100%	
2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)
2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)
2040	(925)	2040	(925)	2040	(925)	2040	(925)	2040	(925)	2040	(925)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
340	(154)	340	(154)	340	(154)	340	(154)	340	(154)	340	(154)
240	(109)	240	(109)	240	(109)	240	(109)	240	(109)	240	(109)
14.79	(10,64)	15.80	(11,37)	21.75	(15,65)	129.96	(93,54)	165.06	(118,9)	199.99	(143,9)
25	(0,18)	25	(0,18)	25	(0,18)	45	(0,33)	45	(0,33)	45	(0,33)
27.5	(0,19)	27.5	(0,19)	27.5	(0,19)	49	(0,35)	49	(0,35)	49	(0,35)
90		90		90		90		90		90	
0.01		0.01		0.01		0.01		0.01		0.01	
31.75	(14,4)	31.75	(14,4)	31.75	(14,4)	31.75	(14,4)	31.75	(14,4)	31.75	(14,4)
13.87	(352,3)	13.87	(352,3)	13.87	(352,3)	13.87	(352,3)	13.87	(352,3)	13.87	(352,3)
14.75	(374,65)	14.75	(374,65)	14.75	(374,65)	14.75	(374,65)	14.75	(374,65)	14.75	(374,65)
1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)
152.8	(69,3)	168.3	(76,3)	183.8	(83,4)	208.8	(94,7)	242.4	(110)	276.1	(125,2)

408000-424000ST Series

424000ST Series

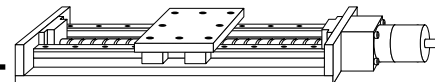
	424004ST		424006ST		424012ST	
Travel – inches (mm)	4	(100)	6	(150)	12	(300)
Life @ Listed Specifications – x 1 million in (km)	100	(2540)	100	(2540)	100	(2540)
Positional Accuracy – x 0.001 in (µm) Over Total Table Travel	0.32	(8)	0.48	(12)	0.6	(15)
Positional Repeatability – x 0.001 in (µm)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)
Straight Line Accuracy – x 0.001 in (µm) Over Total table Travel	0.4	(10)	0.6	(15)	0.8	(20)
Flatness Accuracy – x 0.001 in (µm) Over Total Table Travel	0.4	(10)	0.6	(15)	0.8	(20)
Max Screw Speed – rps	50		50		50	
Max Acceleration – in/sec ² (m/sec ²)	772 (20)		772 (20)		772 (20)	
Duty Cycle – % of motion to dwell cycle	100%		100%		100%	
Direct Loading* – lbs (kgf)	Normal	2340 (1060)	2340 (1060)	2340 (1060)	2340 (1060)	2340 (1060)
	Inverted	2340 (1060)	2340 (1060)	2340 (1060)	2340 (1060)	2340 (1060)
	Side	2040 (925)	2040 (925)	2040 (925)	2040 (925)	2040 (925)
Load per Bearing – lbs (kgf)	Normal	390 (177)	390 (177)	390 (177)	390 (177)	390 (177)
	Inverted	390 (177)	390 (177)	390 (177)	390 (177)	390 (177)
	Side	340 (154)	340 (154)	340 (154)	340 (154)	340 (154)
Axial Loading – lbs (kgf)	Smooth Operation**		240 (109)		240 (109)	
Input Inertia*** – 10 ⁻³ oz-in-sec ² (10 ⁻⁶ kg-m-sec ²)	16.73	(12,02)	17.67	(12,74)	15.23	(11,0)
Maximum Running Torque – oz-in (N-m)	25	(0,18)	25	(0,18)	25	(0,18)
Maximum Breakaway Torque – oz-in (N-m)	27.5	(0,19)	27.5	(0,19)	27.5	(0,19)
Drive Screw Efficiency – %	90		90		90	
Coefficient of Linear Bearing Friction	0.01		0.01		0.01	
Carriage Weight – lbs (kgf)	56.4	(25,6)	56.4	(25,6)	56.4	(25,6)
Longitudinal Span between Bearing Truck Centers (d1) – in (mm)	19.87	(504,7)	19.87	(504,7)	19.87	(504,7)
Lateral Span between Bearing Rail Centers (d2) – in (mm)	20.75	(527,1)	20.75	(527,1)	20.75	(527,1)
Bearing Rail Center to Carriage Mounting Surface (da) – in (mm)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)
Table Weight - lbs (kgf)	180.2	(84,5)	186.6	(84,6)	204.8	(92,9)

* Refer to page B51 for load/life graphs.

** For applications with vibration, consult factory for axial load capacity.

*** Based on 5 pitch (0.2 inch lead) ballscrew

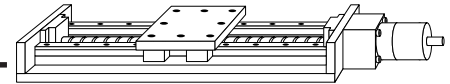
Square Rail Bearing Linear Tables



400000ST

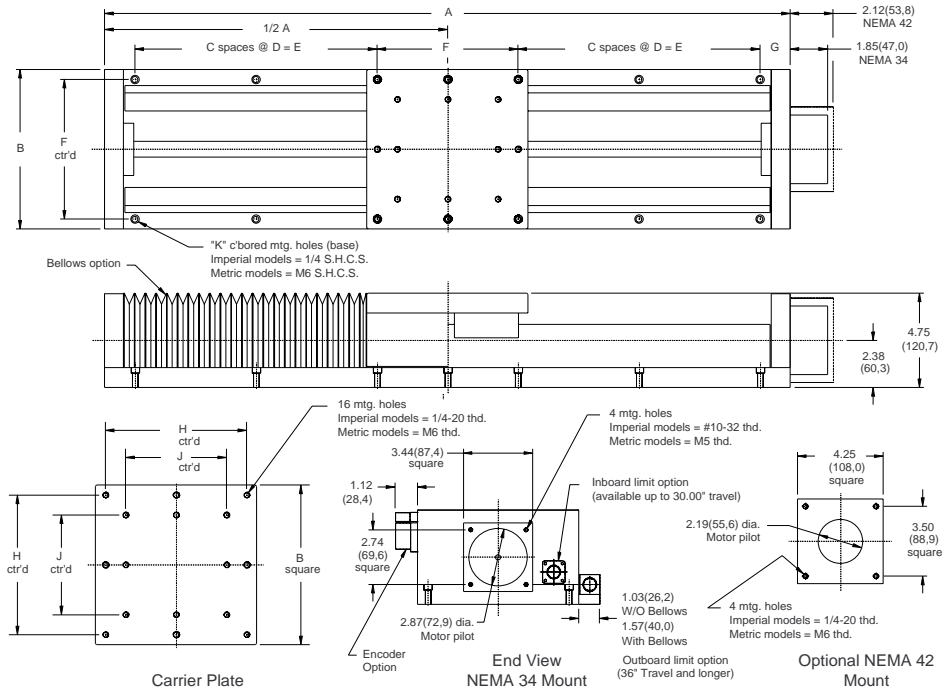
424018ST		424024ST		424030ST		424036ST		424048ST		424060ST	
18	(450)	24	(600)	30	(750)	36	(900)	48	(1200)	60	(1500)
100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)	100	(2540)
1.08	(27)	1.2	(31)	1.7	(43)	1.8	(46)	2.4	(61)	3.0	(76)
±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)	±0.1	(±2,5)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
1.4	(36)	1.6	(40)	2.2	(56)	2.4	(60)	3.2	(80)	4.0	(100)
50		40		425		30		30		20	
772	(20)	772	(20)	772	(20)	772	(20)	772	(20)	772	(20)
100%		100%		100%		100%		100%		100%	
2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)
2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)	2340	(1060)
2040	(925)	2040	(925)	2040	(925)	2040	(925)	2040	(925)	2040	(925)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
390	(177)	390	(177)	390	(177)	390	(177)	390	(177)	390	(177)
340	(154)	340	(154)	340	(154)	340	(154)	340	(154)	340	(154)
240	(109)	240	(109)	240	(109)	240	(109)	240	(109)	240	(109)
15.23	(11,0)	17.41	(12,54)	119.48	(86,02)	151.57	(109,05)	186.48	(134,53)	221.41	(159,0)
25	(0,18)	25	(0,18)	45	(0,33)	45	(0,33)	45	(0,33)	45	(0,33)
27.5	(0,19)	27.5	(0,19)	49	(0,35)	49	(0,35)	49	(0,35)	49	(0,35)
90		90		90		90		90		90	
0.01		0.01		0.01		0.01		0.01		0.01	
56.4	(25,6)	56.4	(25,6)	56.4	(25,6)	56.4	(25,6)	56.4	(25,6)	56.4	(25,6)
19.87	(504,7)	19.87	(504,7)	19.87	(504,7)	19.87	(504,7)	19.87	(504,7)	19.87	(504,7)
20.75	(527,1)	20.75	(527,1)	20.75	(527,1)	20.75	(527,1)	20.75	(527,1)	20.75	(527,1)
1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)	1.787	(45,4)
224	(101,6)	243.1	(110,3)	271.8	(123,3)	292.2	(132,5)	332.9	(151,0)	372.7	(169,1)

Square Rail Bearing Linear Tables



408000/412000ST Series Dimensions

in (mm)



408000 Series

	Model	Travel	Travel w/ Bellows	Quantity									
				A	B	C	D	E	F	G	H	J	K
Imperial	408004ST-E	4 in	2.1 in	14.0 in	8.0 in	1	2.0 in	2.0 in	7.0 in	1.5 in	7.0 in	5.0 in	10
	408006ST-E	6 in	3.7 in	16.0 in	8.0 in	1	3.0 in	3.0 in	7.0 in	1.5 in	7.0 in	5.0 in	10
	408012ST-E	12 in	8.3 in	22.0 in	8.0 in	1	6.0 in	6.0 in	7.0 in	1.5 in	7.0 in	5.0 in	10
	408018ST-E	18 in	13.0 in	28.0 in	8.0 in	2	4.0 in	8.0 in	7.0 in	2.5 in	7.0 in	5.0 in	14
	408024ST-E	24 in	17.7 in	34.0 in	8.0 in	2	6.0 in	12.0 in	7.0 in	1.5 in	7.0 in	5.0 in	14
	408030ST-E	30 in	22.3 in	40.0 in	8.0 in	2	7.0 in	14.0 in	7.0 in	2.5 in	7.0 in	5.0 in	14
	408036ST-E	36 in	27.0 in	46.0 in	8.0 in	3	6.0 in	18.0 in	7.0 in	1.5 in	7.0 in	5.0 in	18
408048ST-E	48 in	36.3 in	58.0 in	8.0 in	4	6.0 in	24.0 in	7.0 in	1.5 in	7.0 in	5.0 in	22	
408060ST-E	60 in	45.7 in	70.0 in	8.0 in	4	7.0 in	28.0 in	7.0 in	3.5 in	7.0 in	5.0 in	22	
Metric	408004ST-M	100 mm	55 mm	355,6 mm	203,2 mm	1	50 mm	50 mm	175 mm	40,3 mm	175 mm	125 mm	10
	408006ST-M	150 mm	95 mm	406,4 mm	203,2 mm	1	75 mm	75 mm	175 mm	40,7 mm	175 mm	125 mm	10
	408012ST-M	300 mm	210 mm	558,8 mm	203,2 mm	1	150 mm	150 mm	175 mm	41,9 mm	175 mm	125 mm	10
	408018ST-M	450 mm	330 mm	711,2 mm	203,2 mm	2	100 mm	200 mm	175 mm	68,1 mm	175 mm	125 mm	14
	408024ST-M	600 mm	450 mm	863,6 mm	203,2 mm	2	150 mm	300 mm	175 mm	44,3 mm	175 mm	125 mm	14
	408030ST-M	750 mm	560 mm	1016,0 mm	203,2 mm	2	175 mm	350 mm	175 mm	70,5 mm	175 mm	125 mm	14
	408036ST-M	900 mm	685 mm	1168,4 mm	203,2 mm	3	150 mm	450 mm	175 mm	46,7 mm	175 mm	125 mm	18
408048ST-M	1200 mm	925 mm	1473,2 mm	203,2 mm	4	150 mm	600 mm	175 mm	49,1 mm	175 mm	125 mm	22	
408060ST-M	1525 mm	1160 mm	1778,0 mm	203,2 mm	4	175 mm	700 mm	175 mm	101,5 mm	175 mm	125 mm	22	

412000 Series

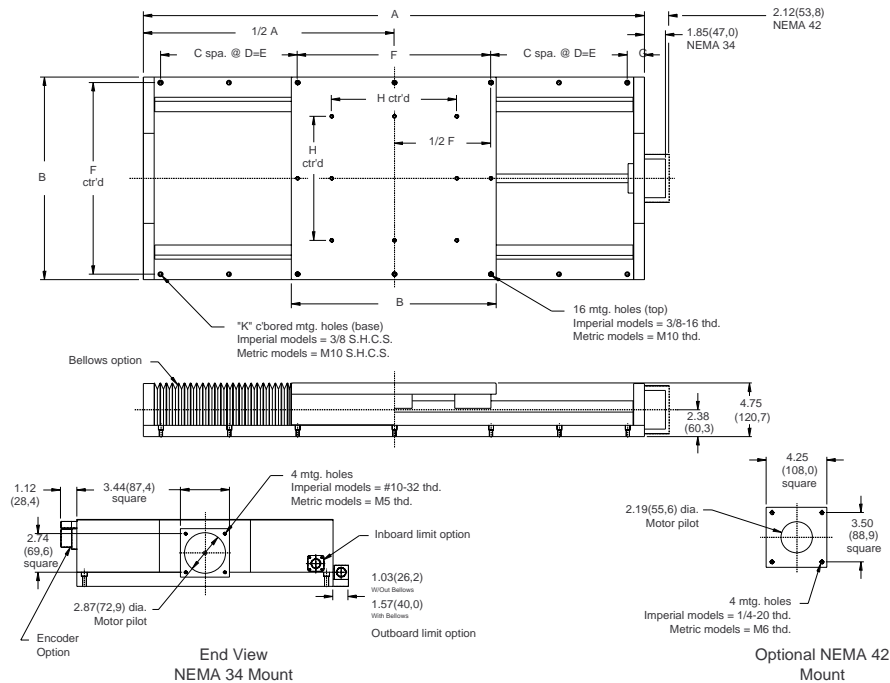
	Model	Travel	Travel w/ Bellows	Quantity									
				A	B	C	D	E	F	G	H	J	K
Imperial	412004ST-E	4 in	2.1 in	18.0 in	12.0 in	1	2.0 in	2.0 in	11.0 in	1.5 in	11.0 in	7.0 in	10
	412006ST-E	6 in	3.7 in	20.0 in	12.0 in	1	3.0 in	3.0 in	11.0 in	1.5 in	11.0 in	7.0 in	10
	412012ST-E	12 in	8.3 in	26.0 in	12.0 in	1	6.0 in	6.0 in	11.0 in	1.5 in	11.0 in	7.0 in	10
	412018ST-E	18 in	13.0 in	32.0 in	12.0 in	2	4.0 in	8.0 in	11.0 in	2.5 in	11.0 in	7.0 in	14
	412024ST-E	24 in	17.7 in	38.0 in	12.0 in	2	6.0 in	12.0 in	11.0 in	1.5 in	11.0 in	7.0 in	14
	412030ST-E	30 in	22.3 in	44.0 in	12.0 in	2	7.0 in	14.0 in	11.0 in	2.5 in	11.0 in	7.0 in	14
	412036ST-E	36 in	27.0 in	50.0 in	12.0 in	3	6.0 in	18.0 in	11.0 in	1.5 in	11.0 in	7.0 in	18
412048ST-E	48 in	36.3 in	62.0 in	12.0 in	4	6.0 in	24.0 in	11.0 in	1.5 in	11.0 in	7.0 in	22	
412060ST-E	60 in	45.7 in	74.0 in	12.0 in	4	7.0 in	28.0 in	11.0 in	3.5 in	11.0 in	7.0 in	22	
Metric	412004ST-M	100 mm	55 mm	457,2 mm	304,8 mm	1	50 mm	50 mm	275 mm	41,1 mm	275 mm	175 mm	10
	412006ST-M	150 mm	95 mm	508,0 mm	304,8 mm	1	75 mm	75 mm	275 mm	41,5 mm	275 mm	175 mm	10
	412012ST-M	300 mm	210 mm	660,4 mm	304,8 mm	1	150 mm	150 mm	275 mm	42,7 mm	275 mm	175 mm	10
	412018ST-M	450 mm	330 mm	812,8 mm	304,8 mm	2	100 mm	200 mm	275 mm	68,9 mm	275 mm	175 mm	14
	412024ST-M	600 mm	450 mm	965,2 mm	304,8 mm	2	150 mm	300 mm	275 mm	45,1 mm	275 mm	175 mm	14
	412030ST-M	750 mm	560 mm	1117,6 mm	304,8 mm	2	175 mm	350 mm	275 mm	71,3 mm	275 mm	175 mm	14
	412036ST-M	900 mm	685 mm	1270,0 mm	304,8 mm	3	150 mm	450 mm	275 mm	47,5 mm	275 mm	175 mm	18
412048ST-M	1200 mm	925 mm	1574,8 mm	304,8 mm	4	150 mm	600 mm	275 mm	49,9 mm	275 mm	175 mm	22	
412060ST-M	1525 mm	1160 mm	1879,6 mm	304,8 mm	4	175 mm	700 mm	275 mm	102,3 mm	275 mm	175 mm	22	

400000ST

408000-424000ST Series

418000/424000ST Series Dimensions

in (mm)



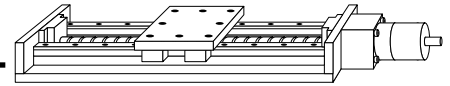
418000 Series

	Model	Travel	Travel w/ Bellows	Quantity							Quantity	
				A	B	C	D	E	F	G	H	K
Imperial	418004ST-E	4 in	2.1 in	24 in	18 in	1	2.0 in	2.0 in	17.0 in	1.5 in	11.0 in	10
	418006ST-E	6 in	3.7 in	26 in	18 in	1	3.0 in	3.0 in	17.0 in	1.5 in	11.0 in	10
	418012ST-E	12 in	8.3 in	32 in	18 in	1	6.0 in	6.0 in	17.0 in	1.5 in	11.0 in	10
	418018ST-E	18 in	13.0 in	38 in	18 in	2	4.0 in	8.0 in	17.0 in	2.5 in	11.0 in	14
	418024ST-E	24 in	17.7 in	44 in	18 in	2	6.0 in	12.0 in	17.0 in	1.5 in	11.0 in	14
	418030ST-E	30 in	22.3 in	50 in	18 in	2	7.0 in	14.0 in	17.0 in	2.5 in	11.0 in	14
	418036ST-E	36 in	27.0 in	56 in	18 in	3	6.0 in	18.0 in	17.0 in	1.5 in	11.0 in	18
Metric	418048ST-E	48 in	36.3 in	68 in	18 in	4	6.0 in	24.0 in	17.0 in	1.5 in	11.0 in	22
	418060ST-E	60 in	45.7 in	80 in	18 in	4	7.0 in	28.0 in	17.0 in	3.5 in	11.0 in	22
	418004ST-M	100 mm	55 mm	609,6 mm	457,2 mm	1	50 mm	50 mm	425 mm	42,3 mm	275 mm	10
	418006ST-M	150 mm	95 mm	660,4 mm	457,2 mm	1	75 mm	75 mm	425 mm	42,7 mm	275 mm	10
	418012ST-M	300 mm	210 mm	812,8 mm	457,2 mm	1	150 mm	150 mm	425 mm	43,9 mm	275 mm	10
	418018ST-M	450 mm	330 mm	965,2 mm	457,2 mm	2	100 mm	200 mm	425 mm	70,1 mm	275 mm	14
418024ST-M	600 mm	450 mm	1117,6 mm	457,2 mm	2	150 mm	300 mm	425 mm	46,3 mm	275 mm	14	
418030ST-M	750 mm	560 mm	1270,0 mm	457,2 mm	2	175 mm	350 mm	425 mm	72,5 mm	275 mm	14	
418036ST-M	900 mm	685 mm	1422,4 mm	457,2 mm	3	150 mm	450 mm	425 mm	48,7 mm	275 mm	18	
418048ST-M	1200 mm	925 mm	1727,2 mm	457,2 mm	4	150 mm	600 mm	425 mm	51,1 mm	275 mm	22	
418060ST-M	1525 mm	1160 mm	2032,0 mm	457,2 mm	4	175 mm	700 mm	425 mm	103,5 mm	275 mm	22	

424000 Series

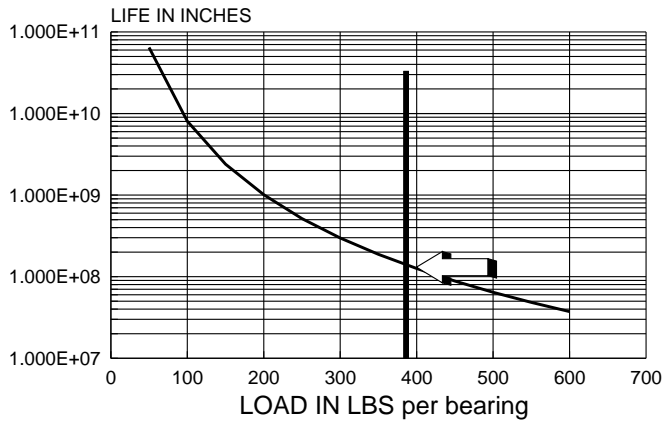
	Model	Travel	Travel w/ Bellows	Quantity							Quantity	
				A	B	C	D	E	F	G	H	K
Imperial	424004ST-E	4	2.1 in	30.0 in	24.0 in	1	2.0 in	2.0 in	23.0 in	1.5 in	17.0 in	10
	424006ST-E	6	3.7 in	32.0 in	24.0 in	1	3.0 in	3.0 in	23.0 in	1.5 in	17.0 in	10
	424012ST-E	12	8.3 in	38.0 in	24.0 in	1	6.0 in	6.0 in	23.0 in	1.5 in	17.0 in	10
	424018ST-E	18	13.0 in	44.0 in	24.0 in	2	4.0 in	8.0 in	23.0 in	2.5 in	17.0 in	14
	424024ST-E	24	17.7 in	50.0 in	24.0 in	2	6.0 in	12.0 in	23.0 in	1.5 in	17.0 in	14
	424030ST-E	30	22.3 in	56.0 in	24.0 in	2	7.0 in	14.0 in	23.0 in	2.5 in	17.0 in	14
	424036ST-E	36	27.0 in	62.0 in	24.0 in	3	6.0 in	18.0 in	23.0 in	1.5 in	17.0 in	18
Metric	424048ST-E	48	36.3 in	74.0 in	24.0 in	4	6.0 in	24.0 in	23.0 in	1.5 in	17.0 in	22
	424060ST-E	60	45.7 in	86.0 in	24.0 in	4	7.0 in	28.0 in	23.0 in	3.5 in	17.0 in	22
	424004ST-M	100 mm	55 mm	762,0 mm	575 mm	1	50 mm	50 mm	575 mm	43,5 mm	425 mm	10
	424006ST-M	150 mm	95 mm	712,8 mm	575 mm	1	75 mm	75 mm	575 mm	43,9 mm	425 mm	10
	424012ST-M	300 mm	210 mm	965,2 mm	575 mm	1	150 mm	150 mm	575 mm	45,1 mm	425 mm	10
	424018ST-M	450 mm	330 mm	1117,6 mm	575 mm	2	100 mm	200 mm	575 mm	71,3 mm	425 mm	14
424024ST-M	600 mm	450 mm	1270,0 mm	575 mm	2	150 mm	300 mm	575 mm	47,5 mm	425 mm	14	
424030ST-M	750 mm	560 mm	1422,4 mm	575 mm	2	175 mm	350 mm	575 mm	73,7 mm	425 mm	14	
424036ST-M	900 mm	685 mm	1574,8 mm	575 mm	3	150 mm	450 mm	575 mm	49,9 mm	425 mm	18	
424048ST-M	1200 mm	925 mm	1879,6 mm	575 mm	4	150 mm	600 mm	575 mm	52,3 mm	425 mm	22	
424060ST-M	1525 mm	1160 mm	2184,4 mm	575 mm	4	175 mm	700 mm	575 mm	104,7 mm	425 mm	22	

Square Rail Bearing Linear Tables

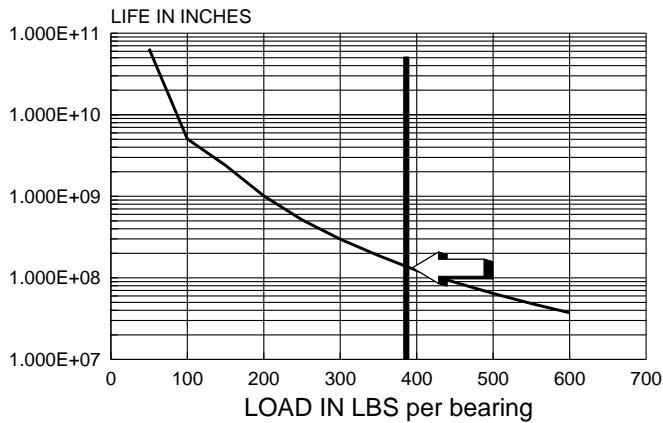


Life/Load Performance

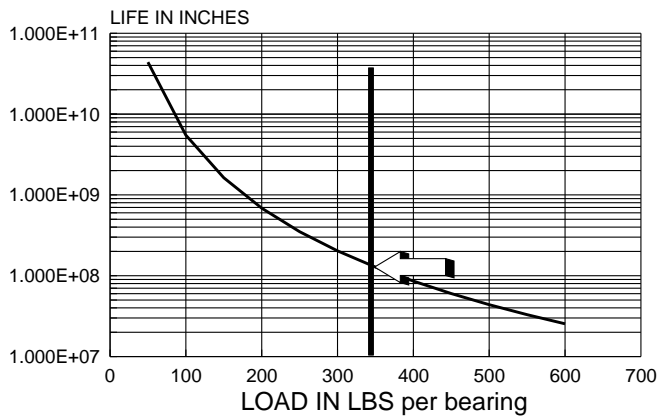
Life with Compression Load



Life with Tension Load



Life with Side Load



400000ST