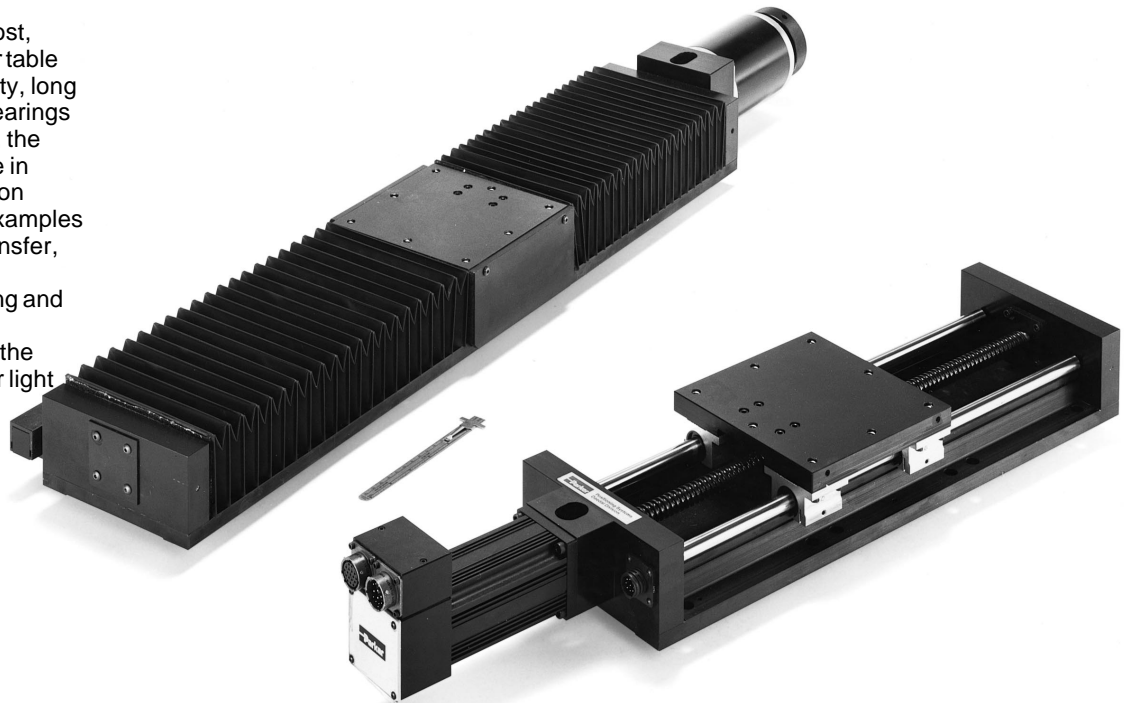


50000ST Series

Versatility

Designed as a low-cost, multi-functional linear table with high load capacity, long life round rail linear bearings and rolled ball screw, the 50000ST is at home in industrial or automation applications. A few examples are welding, parts transfer, gantry units, cutoff machines, part loading and fluid dispensing. Add optional bellows and the positioner is ready for light duty machining.



50000ST Series

| | 500004ST | 500006ST | 500008ST | 500010ST | 500012ST | 500014ST | 500016ST | 500018ST |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Travel – inches (mm) | 4 (100) | 6 (150) | 8 (200) | 10 (250) | 12 (300) | 14 (350) | 16 (400) | 18 (450) |
| Life* @ Listed Specifications – x 1 million in (km) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) |
| Positional Accuracy** – x 0.001 in (µm) | 1.0 (20) | 1.5 (30) | 2.0 (40) | 2.5 (50) | 3.0 (60) | 3.5 (70) | 4.0 (80) | 4.5 (90) |
| Positional Repeatability – x 0.001 in (µm) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) |
| Straight Line Accuracy** – x 0.001 in (µm) | 0.8 (20) | 1.2 (30) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.9 (48) | 2.3 (58) | 2.7 (69) |
| Flatness Accuracy** – x 0.001 in (µm) | 0.8 (20) | 1.2 (30) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.9 (48) | 2.3 (58) | 2.7 (69) |
| Max Screw Speed – rps | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Max Acceleration – in/sec ² (m/sec ²) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) |
| Duty Cycle – % of motion to dwell cycle | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Direct Loading* – lbs (kgf) | Normal | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| | Inverted | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) |
| | Side | 168 (76) | 168 (76) | 168 (76) | 68 (76) | 168 (76) | 168 (76) | 168 (76) |
| Axial Loading – lbs (kgf) Smooth Operation*** | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) |
| Input Inertia**** – 10 ³ oz-in-sec ² (10 ⁶ kg-m-sec ²) | 2.40 (1,73) | 2.77 (1,99) | 3.13 (2,25) | 3.49 (2,52) | 3.86 (2,77) | 4.22 (3,04) | 4.31 (3,11) | 4.95 (3,56) |
| Maximum Running Torque – oz-in (N-m) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) |
| Maximum Breakaway Torque – oz-in (N-m) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) |
| Drive Screw Efficiency – % | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Coefficient of Linear Bearing Friction | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Carriage Weight – lbs (kgf) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) |
| Longitudinal Span between Bearing Truck Centers (d1) – in (mm) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) |
| Lateral Span between Bearing Rail Centers (d2) – in (mm) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) |
| Bearing Rail Center to Carriage Mounting Surface (da) – in (mm) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) |
| Table Weight - lbs (kgf) | 13.2 (6,0) | 14.2 (6,5) | 15.3 (6,9) | 16.5 (7,5) | 17.8 (8,2) | 19 (8,6) | 20.3 (9,2) | 21.5 (9,8) |

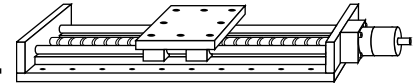
*See page B59 for Life/Load Performance ratings. Compression, tension and side loads values for 50000ST are the same as for 50000ET and 50000PD Series.

** Over total table travel

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

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

Rail Tables



Quality Design in Imperial or Metric Mounting

The top and base are constructed of aluminum alloy and are protected with a black anodize 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 ways are centerless ground rails and recirculating ball bearing bushings. The drive train is a precision rolled 0.2" lead (5 pitch) ball screw. For higher speeds, a 0.5" lead (2 pitch) ball screw is available. Note: travel is reduced by 2 inches when equipped with 2 pitch ball screw. Please see chart on page B57. Both the 0.2" lead and 0.5" lead ball screws incorporate a preloaded dual nut design to

virtually eliminate backlash. All models are available in both Imperial and metric mounting.

Options:

Motor Couplings

A wide range of coupling styles and bores are available to match your motor requirements. Bellows-style couplings offer the lowest radial wind-up, while the aluminum and stainless steel helix couplers offer good wind up characteristics and high durability at a lower cost.

Motor Mounts

The standard motor mount is designed for an industry standard NEMA 23 motor flange with shaft lengths between 0.65 to 0.85 inches. An optional NEMA 34 frame motor mount is available, accepting motors with an industry standard NEMA 34

flange and shafts with lengths from 1.0 to 1.25 inches.

Limit and Home Switches

Limit switches provide a signal when the table is approaching the end of travel and is 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, they are easily adjusted. 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 resolutions of 0.001 mm are available. Refer to page B80 for linear encoder details.

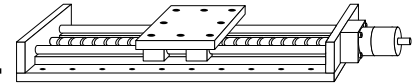
Way Covers

This option protects the linear bearings and ball screws from dirt, chips and other contaminants. These bellows enclose the top and sides of the table and are suitable for light machining applications.

50000ST

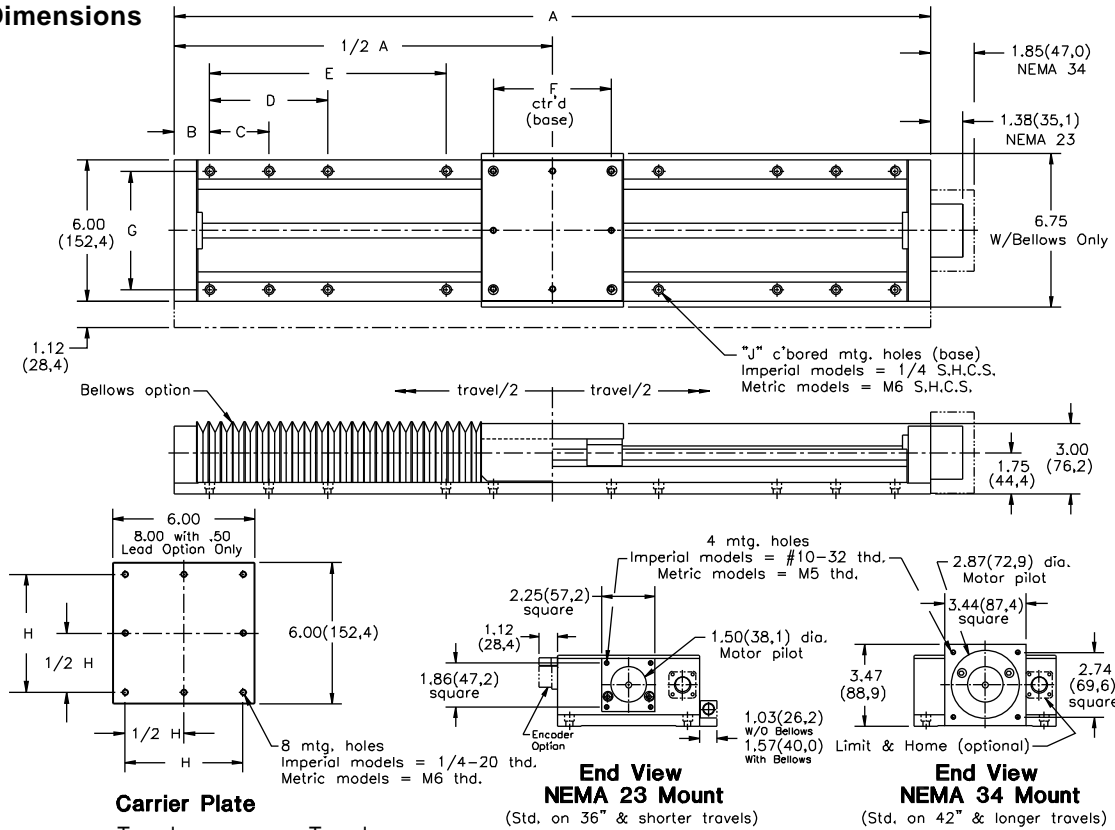
| 500020ST | 500022ST | 500024ST | 500030ST | 500036ST | 500042ST | 500048ST | 500054ST | 500060ST |
|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| 20 (500) | 22 (550) | 24 (600) | 30 (750) | 36 (900) | 42 (1050) | 48 (1200) | 54 (1350) | 60 (1500) |
| 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) |
| 5.0 (100) | 5.5 (110) | 6.0 (120) | 7.5 (150) | 9.0 (180) | 10.5 (210) | 12 (240) | 13.5 (270) | 15 (300) |
| ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) |
| 3.0 (76) | 3.0 (76) | 3.0 (76) | 4.2 (107) | 4.5 (114) | 5.7 (145) | 6.0 (152) | 7.2 (183) | 7.5 (191) |
| 3.0 (76) | 3.0 (76) | 3.0 (76) | 4.2 (107) | 4.5 (114) | 5.7 (145) | 6.0 (152) | 7.2 (183) | 7.5 (191) |
| 45 | 39 | 34 | 23 | 16 | 18 | 14 | 12 | 10 |
| 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) |
| 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) |
| 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) |
| 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) |
| 5.31 (3,82) | 5.67 (4,09) | 6.04 (4,34) | 7.13 (5,15) | 8.22 (5,91) | 18.69 (13,4) | 20.89 (15,0) | 23.07 (16,6) | 25.27 (18,2) |
| 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) |
| 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) |
| 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) | 2.26 (1,02) |
| 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) |
| 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) |
| 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) | 1.06 (26,9) |
| 22.7 (10,3) | 23.9 (10,8) | 25.0 (11,3) | 28.5 (12,9) | 32.1 (14,6) | 37.6 (17,1) | 41.6 (18,9) | 45.6 (20,7) | 49.7 (22,5) |

Rail Tables



506000ST Dimensions

in (mm)



| | Model | Travel D1 & D2 | Travel | | A | B | C | D | E | F | G | H | J | Quantity |
|------------|------------|-------------------|----------------------|--------------|-----------|-----------|----------|--------|--------|--------|--------|--------|--------|----------|
| | | | w/Bellows D1 & D2 | Travel D3 | | | | | | | | | | |
| Imperial | 506004ST-E | 4 in | 2.1 in | 2 in | — | 12 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506006ST-E | 6 in | 4 in | 4 in | 2 | 14 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506008ST-E | 8 in | 5.2 in | 6 in | 3.2 | 16 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506010ST-E | 10 in | 7.2 in | 8 in | 5.2 | 18 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506012ST-E | 12 in | 8 in | 10 in | 6 in | 20 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506014ST-E | 14 in | 9.8 in | 12 in | 7.8 in | 22 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506016ST-E | 16 in | 12 in | 14 in | 10 in | 24 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506018ST-E | 18 in | 13 in | 16 in | 11 in | 26 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506020ST-E | 20 in | 14.5 in | 18 in | 12.5 in | 28 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506022ST-E | 22 in | 13.1 in | 20 in | 11.1 in | 30 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506024ST-E | 24 in | 18 in | 22 in | 16 in | 32 in | 1.5 in | 5 in | 10 in | — | 5 in | 5 in | 5 in | 16 |
| | 506030ST-E | 30 in | 22.3 in | 28 in | 20.3 in | 38 in | 1.5 in | 5 in | 10 in | — | 5 in | 5 in | 5 in | 16 |
| | 506036ST-E | 36 in | 27 in | 34 in | 25 in | 44 in | 1.5 in | 5 in | 10 in | — | 5 in | 5 in | 5 in | 16 |
| | 506042ST-E | 42 in | 31.6 in | 40 in | 29.6 in | 50 in | 1.5 in | 5 in | 15 in | — | 5 in | 5 in | 5 in | 16 |
| | 506048ST-E | 48 in | 36.3 in | 46 in | 34.3 in | 56 in | 1.5 in | 5 in | 15 in | — | 5 in | 5 in | 5 in | 16 |
| | 506054ST-E | 54 in | 41 in | 52 in | 39 in | 62 in | 1.5 in | 5 in | 15 in | 25 in | 5 in | 5 in | 5 in | 20 |
| 506060ST-E | 60 in | 45.6 in | 58 in | 43.6 in | 68 in | 1.5 in | 5 in | 15 in | 25 in | 5 in | 5 in | 5 in | 20 | |
| Metric | 506004ST-M | 100 mm | 53,3 mm | 50 mm | — | 304,8 mm | 39,9 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506006ST-M | 150 mm | 101,6 mm | 100 mm | 50,8 mm | 355,6 mm | 40,3 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506008ST-M | 200 mm | 132,1 mm | 150 mm | 81,3 mm | 406,4 mm | 40,7 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506010ST-M | 250 mm | 182,9 mm | 200 mm | 132,1 mm | 457,2 mm | 41,1 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506012ST-M | 300 mm | 210,8 mm | 250 mm | 152,4 mm | 508,0 mm | 41,5 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506014ST-M | 350 mm | 249,0 mm | 300 mm | 198,1 mm | 558,8 mm | 66,9 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506016ST-M | 400 mm | 304,8 mm | 350 mm | 254,0 mm | 609,6 mm | 42,3 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506018ST-M | 450 mm | 330,2 mm | 400 mm | 279,4 mm | 660,4 mm | 67,7 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506020ST-M | 500 mm | 368,3 mm | 450 mm | 317,5 mm | 711,2 mm | 43,1 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506022ST-M | 550 mm | 408,9 mm | 500 mm | 281,9 mm | 762,0 mm | 68,5 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506024ST-M | 600 mm | 457,2 mm | 550 mm | 406,4 mm | 812,8 mm | 43,9 mm | 125 mm | 250 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506030ST-M | 750 mm | 566,4 mm | 700 mm | 515,6 mm | 965,2 mm | 120,1 mm | 125 mm | 250 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506036ST-M | 900 mm | 685,8 mm | 850 mm | 635,0 mm | 1117,6 mm | 46,3 mm | 125 mm | 250 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506042ST-M | 1050 mm | 802,6 mm | 1000 mm | 751,8 mm | 1270,0 mm | 122,5 mm | 125 mm | 375 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506048ST-M | 1200 mm | 922,0 mm | 1150 mm | 871,2 mm | 1422,4 mm | 48,7 mm | 125 mm | 375 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506054ST-M | 1350 mm | 1041,4 mm | 1300 mm | 990,6 mm | 1574,8 mm | 74,9 mm | 125 mm | 375 mm | 625 mm | 125 mm | 125 mm | 125 mm | 20 |
| 506060ST-M | 1500 mm | 1158,2 mm | 1450 mm | 1107,4 mm | 1727,0 mm | 101,0 mm | 125 mm | 375 mm | 625 mm | 125 mm | 125 mm | 125 mm | 20 | |

506000ST

500000ET Series

Added Benefit

The 500000ET series retains all the benefits of the 500000ST series, such as high load, long life, round rail linear bearings and precision rolled preloaded double nut ball screws at a reduced cost. Also standard is a hard shell extruded cover over the bearings and screw assembly. The 500000ET series can be applied in applications such as welding, parts transfer, gantry units, part loading and fluid dispensing.



500000ET

| | 506004ET | 506006ET | 506008ET | 506010ET | 506012ET | 506014ET | 506016ET | 506018ET |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Travel – inches (mm) | 4 (100) | 6 (150) | 8 (200) | 10 (250) | 12 (300) | 14 (350) | 16 (400) | 18 (450) |
| Life* @ Listed Specifications – x 1 million in (km) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) |
| Positional Accuracy** – x 0.001 in (µm) | 1.0 (20) | 1.5 (30) | 2.0 (40) | 2.5 (50) | 3.0 (60) | 3.5 (70) | 4.0 (80) | 4.5 (90) |
| Positional Repeatability – x 0.001 in (µm) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) |
| Straight Line Accuracy** – x 0.001 in (µm) | 0.8 (20) | 1.2 (30) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.9 (48) | 2.3 (58) | 2.7 (69) |
| Flatness Accuracy** – x 0.001 in (µm) | 0.8 (20) | 1.2 (30) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.9 (48) | 2.3 (58) | 2.7 (69) |
| Max Screw Speed – rps | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Max Acceleration – in/sec ² (m/sec ²) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) |
| Duty Cycle – % of motion to dwell cycle | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Direct Loading* – lbs (kgf) | | | | | | | | |
| Normal | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| Inverted | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) |
| Side | 168 (76) | 168 (76) | 168 (76) | 68 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) |
| Axial Loading – lbs (kgf) Smooth Operation*** | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) |
| Input Inertia**** – 10 ³ oz-in-sec ² (10 ⁶ kg-m-sec ²) | 2.40 (1,73) | 2.77 (1,99) | 3.13 (2,25) | 3.49 (2,52) | 3.86 (2,77) | 4.22 (3,04) | 4.31 (3,11) | 4.95 (3,56) |
| Maximum Running Torque – oz-in (N-m) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) |
| Maximum Breakaway Torque – oz-in (N-m) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) |
| Drive Screw Efficiency – % | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| Coefficient of Linear Bearing Friction | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Carriage Weight – lbs (kgf) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) |
| Longitudinal Span between Bearing Truck Centers (d1) – in (mm) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) |
| Lateral Span between Bearing Rail Centers (d2) – in (mm) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) |
| Bearing Rail Center to Carriage Mounting Surface (da) – in (mm) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) |
| Table Weight – lbs (kgf) | 14.7 (6,7) | 16.0 (7,3) | 17.3 (7,9) | 18.8 (8,5) | 20.3 (9,2) | 21.8 (9,9) | 23.3 (10,6) | 24.8 (11,3) |

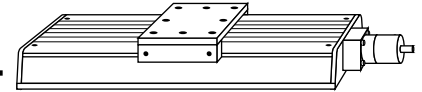
* See page B59 for Life/Load Performance ratings. Compression, tension and side loads values for 500000ET are same as for 500000ST and 500000PD Series.

** Over total table travel

*** For applications with vibration, consult factory for axial loads.

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

Enclosed Rail Tables



Quality Design

The table body is constructed of high quality aluminum alloy with a black anodized surface finish. The hard shell cover has a clear anodized 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 ways are made from centerless ground rails and recirculating ball bearing bushings. The drive train is a precision rolled 0.2" lead (5 pitch) ball screw or for higher speeds, a 0.5" lead (2 pitch) ball screw is available. Note: travel is reduced by 2 inches when equipped with 2 pitch ball screw. See dimensions chart on page B59. Both the 0.2" lead and 0.5" lead ball screws incorporate a preload dual nut design to virtually eliminate backlash.

Options:

Motor Couplings

A wide range of coupling styles and bores are available to match your motor requirements. Bellows-style couplings offer the lowest radial wind up, while the aluminum and stainless steel helix couplers offer good wind up characteristics and high durability at a lower cost.

Motor Mounts

The standard motor mount is designed for an industry standard NEMA 23 motor flange with shaft lengths between 0.65 to 0.85 inches long. An optional NEMA 34 frame motor mount is available, accepting motors with an industry standard NEMA 34 flange and shafts with lengths from 1.0 to 1.25 inches.

Limit and Home Switches

Limit switches provide a signal when the table is approaching the end of travel and is 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.

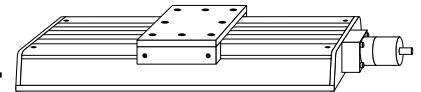
Linear Encoders

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 resolutions of 0.001 mm are available. Refer to [page B80](#) for linear encoder details.

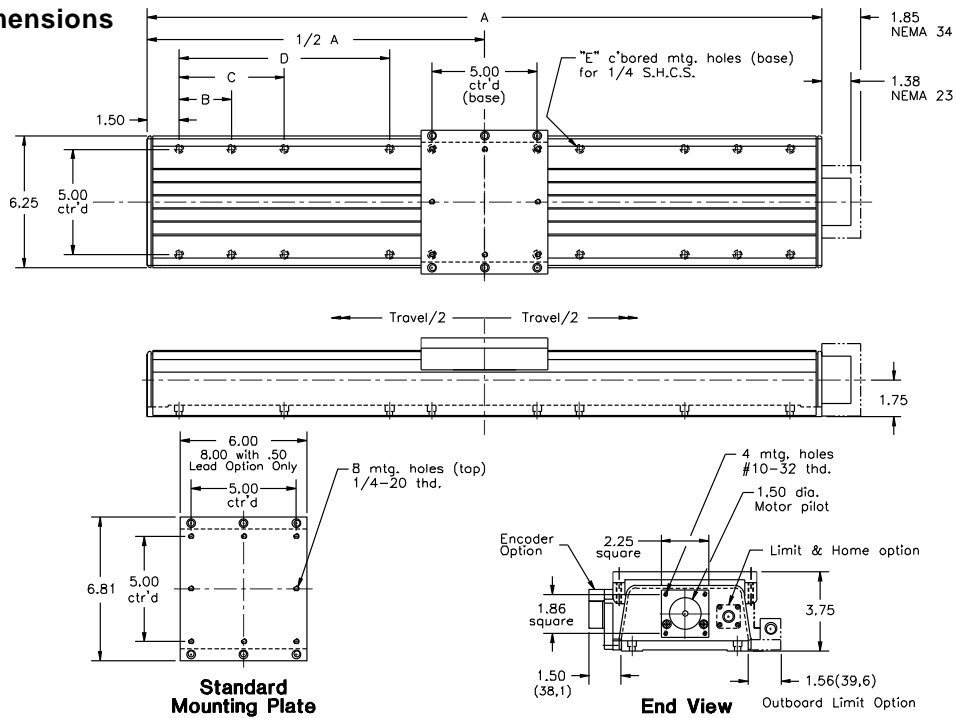
50000ET

| 506020ET | 506022ET | 506024ET | 506030ET | 506036ET | 506042ET | 506048ET | 506054ET | 506060ET |
|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| 20 (500) | 22 (550) | 24 (600) | 30 (750) | 36 (900) | 42 (1050) | 48 (1200) | 54 (1350) | 60 (1500) |
| 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) |
| 5.0 (100) | 5.5 (110) | 6.0 (120) | 7.5 (150) | 9.0 (180) | 10.5 (210) | 12 (240) | 13.5 (270) | 15 (300) |
| ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) | ±0.2 (±5) |
| 3.0 (76) | 3.0 (76) | 3.0 (76) | 4.2 (107) | 4.5 (114) | 5.7 (145) | 6.0 (152) | 7.2 (183) | 7.5 (191) |
| 3.0 (76) | 3.0 (76) | 3.0 (76) | 4.2 (107) | 4.5 (114) | 5.7 (145) | 6.0 (152) | 7.2 (183) | 7.5 (191) |
| 45 | 39 | 34 | 23 | 16 | 18 | 14 | 12 | 10 |
| 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) |
| 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) |
| 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) |
| 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) | 160 (73) |
| 5.31 (3,82) | 5.67 (4,09) | 6.04 (4,34) | 7.13 (5,15) | 8.22 (5,91) | 18.69 (13,4) | 20.89 (15,0) | 23.07 (16,6) | 25.27 (18,2) |
| 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) |
| 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) | 26 (0,19) |
| 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) |
| 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) |
| 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) |
| 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) |
| 26.2 (11,9) | 27.7 (12,6) | 29.0 (13,2) | 33.3 (15,1) | 37.6 (17,1) | 43.9 (19,9) | 48.6 (22,0) | 54.4 (24,2) | 58.2 (26,4) |

Enclosed Rail Tables



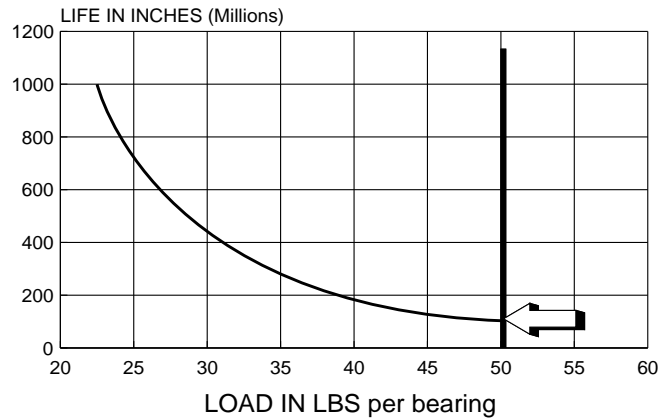
500000ET Dimensions



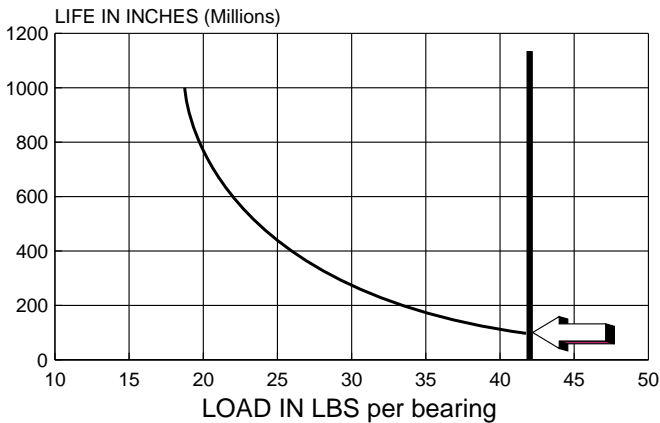
| Imperial Model | Travel D1 and D2 | Travel D3 | A | B | C | D | E | Quantity |
|----------------|------------------|-----------|-------|------|-------|-------|---|----------|
| 506004ET | 4 in | 2 in | 12 in | — | — | — | — | 8 |
| 506006ET | 6 in | 4 in | 14 in | — | — | — | — | 8 |
| 506008ET | 8 in | 6 in | 16 in | — | — | — | — | 8 |
| 506010ET | 10 in | 8 in | 18 in | — | — | — | — | 8 |
| 506012ET | 12 in | 10 in | 20 in | 5 in | — | — | — | 12 |
| 506014ET | 14 in | 12 in | 22 in | 5 in | — | — | — | 12 |
| 506016ET | 16 in | 14 in | 24 in | 5 in | — | — | — | 12 |
| 506018ET | 18 in | 16 in | 26 in | 5 in | — | — | — | 12 |
| 506020ET | 20 in | 18 in | 28 in | 5 in | — | — | — | 12 |
| 506022ET | 22 in | 20 in | 30 in | 5 in | — | — | — | 12 |
| 506024ET | 24 in | 22 in | 32 in | 5 in | 10 in | — | — | 16 |
| 506030ET | 30 in | 28 in | 38 in | 5 in | 10 in | — | — | 16 |
| 506036ET | 36 in | 34 in | 44 in | 5 in | 10 in | — | — | 16 |
| 506042ET | 42 in | 40 in | 50 in | 5 in | 15 in | — | — | 16 |
| 506048ET | 48 in | 46 in | 56 in | 5 in | 15 in | — | — | 16 |
| 506054ET | 54 in | 52 in | 62 in | 5 in | 15 in | 25 in | — | 20 |
| 506060ET | 60 in | 58 in | 68 in | 5 in | 15 in | 25 in | — | 20 |

Life/Load Performance*

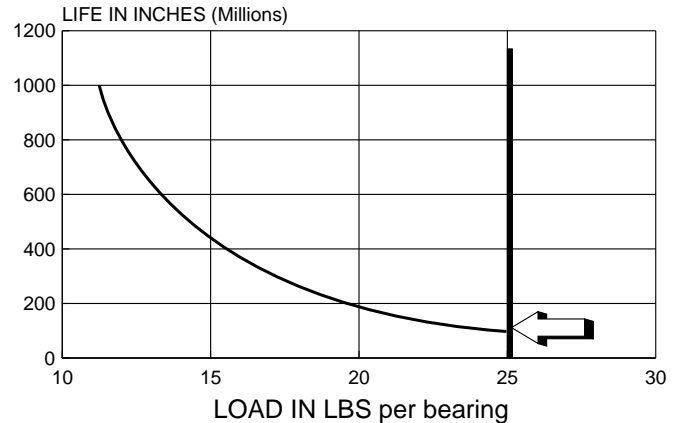
Life with Compression Load



Life with Side Load



Life with Tension Load



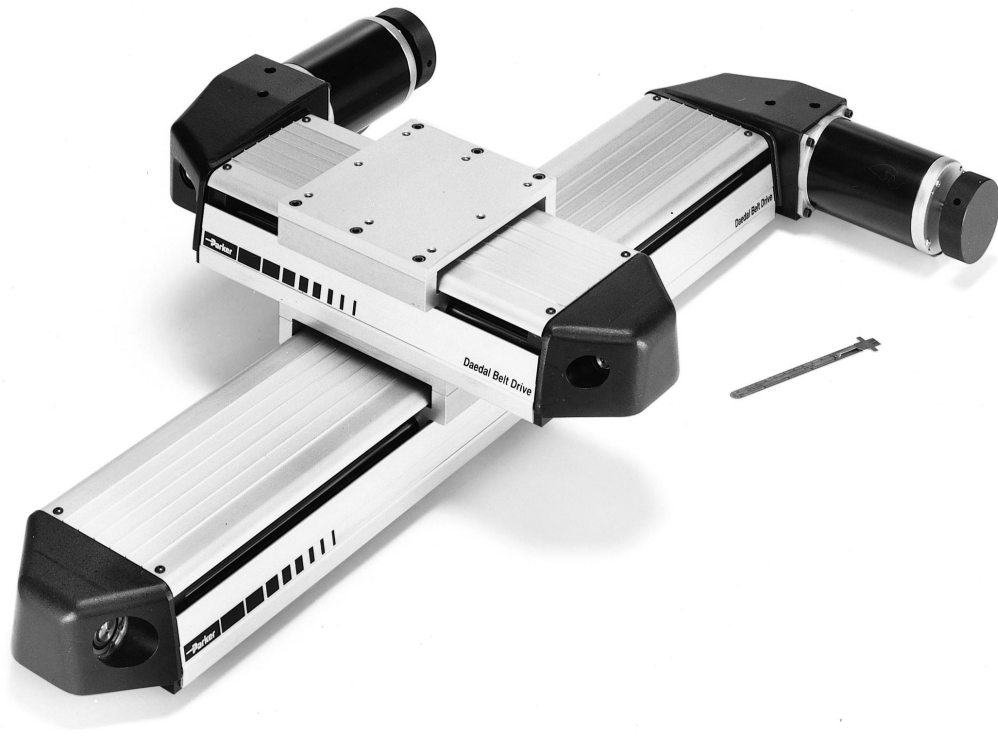
*Life/Load Performance values are same for 500000ST and 500000PD Series.

500000ET

500000PD Series

High Speed, Repeatable Motion

The belt-driven 500000PD table offers high speed motion up to 120 in/sec with repeatability to ± 0.004 inches. Riding on long life precision round rail linear bearings, it is ideal for applications such as part transfer, pick and place, high speed scanning, glue dispensing and linear transfer stations.



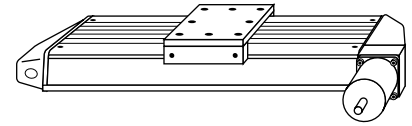
500000PD

| | 506004PD | 506006PD | 506008PD | 506010PD | 506012PD | 506014PD | 506016PD | 506018PD |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Travel – inches (mm) | 4 (100) | 6 (150) | 8 (200) | 10 (250) | 12 (300) | 14 (350) | 16 (400) | 18 (450) |
| Life* @ Listed Specifications – x 1 million in (km) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) |
| Positional Repeatability** – x 0.001 in (μm) | ± 4 (± 100) | ± 4 (± 100) | ± 4 (± 100) | ± 4 (± 100) | ± 4 (± 100) | ± 4 (± 100) | ± 4 (± 100) | ± 4 (± 100) |
| Straight Line Accuracy** – x 0.001 in (μm) | 0.8 (20) | 1.2 (30) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.9 (48) | 2.3 (58) | 2.7 (69) |
| Flatness Accuracy** – x 0.001 in (μm) | 0.8 (20) | 1.2 (30) | 1.5 (38) | 1.5 (38) | 1.5 (38) | 1.9 (48) | 2.3 (58) | 2.7 (69) |
| Max Speed – in/sec (m/sec) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) |
| Max Acceleration – in/sec ² (m/sec ²) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) |
| Duty Cycle – % of motion to dwell cycle | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Direct Loading – lbs (kgf) | | | | | | | | |
| Normal | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| Inverted | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) |
| Side | 168 (76) | 168 (76) | 168 (76) | 68 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) |
| Axial Loading – lbs (kgf) | | | | | | | | |
| Tensile Limit | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| Nominal | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) |
| Input Inertia – 10^{-3} oz-in-sec ² (10^{-6} kg-m-sec ²) | 54.19 (39,0) | 54.32 (39,14) | 54.58 (39,24) | 54.71 (39,34) | 54.98 (39,54) | 55.11 (39,65) | 55.37 (39,85) | 55.50 (39,95) |
| Maximum Running Torque – oz-in (N-m) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) |
| Maximum Breakaway Torque – oz-in (N-m) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) |
| Belt Drive Efficiency – % | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Coefficient of Linear Bearing Friction | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Carriage Weight – lbs (kgf) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) |
| Longitudinal Span between Bearing Truck Centers (d1) – in (mm) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) |
| Lateral Span between Bearing Rail Centers (d2) – in (mm) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) |
| Bearing Rail Center to Carriage Mounting Surface (da) – in (mm) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) |
| Table Weight – lbs (kgf) | 14.7 (9,0) | 16 (9,1) | 17.3 (9,5) | 18.8 (9,5) | 20.3 (10,0) | 21.8 (10,5) | 23.3 (11,0) | 24.8 (11,5) |

* See page B59 for Life/Load Performance ratings. Compression, tension and side loads values for 500000PD are same as for 500000ST and 500000ET Series.

** Over total table travel

Belt-Driven Rail Tables



Quality Design

The table body is constructed of high quality aluminum alloy with a black anodize surface finish. The hard shell cover has a clear anodized 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. Linear ways are made from a centerless ground rails and recirculating ball bearing bushings. The drive train is a 1.25" wide polyurethane toothed belt driven by a 90 mm lead pulley. The belt is reinforced with steel cable members to increase strength and minimize belt stretch. The 500000PD series is available in both Imperial and metric mountings.

Options:

Motor Couplings

Couplings are available for both 0.375" motor shafts (NEMA 34) and 0.625" motor shafts (NEMA 42). These couplings are very robust and compensate for motor to input shaft misalignment.

Motor Mounts

The 500000PD tables come standard with a NEMA 34 motor mount and is available with a NEMA 42 frame mount.

Limit and Home Switches

Limit switches provide a signal when the table is approaching the 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, they are more difficult to adjust. While the outboard style adds approximately 1.5" to the width, they are easily adjusted. The optical sensor limit and home option is mounted outboard and provides excellent repeatability.

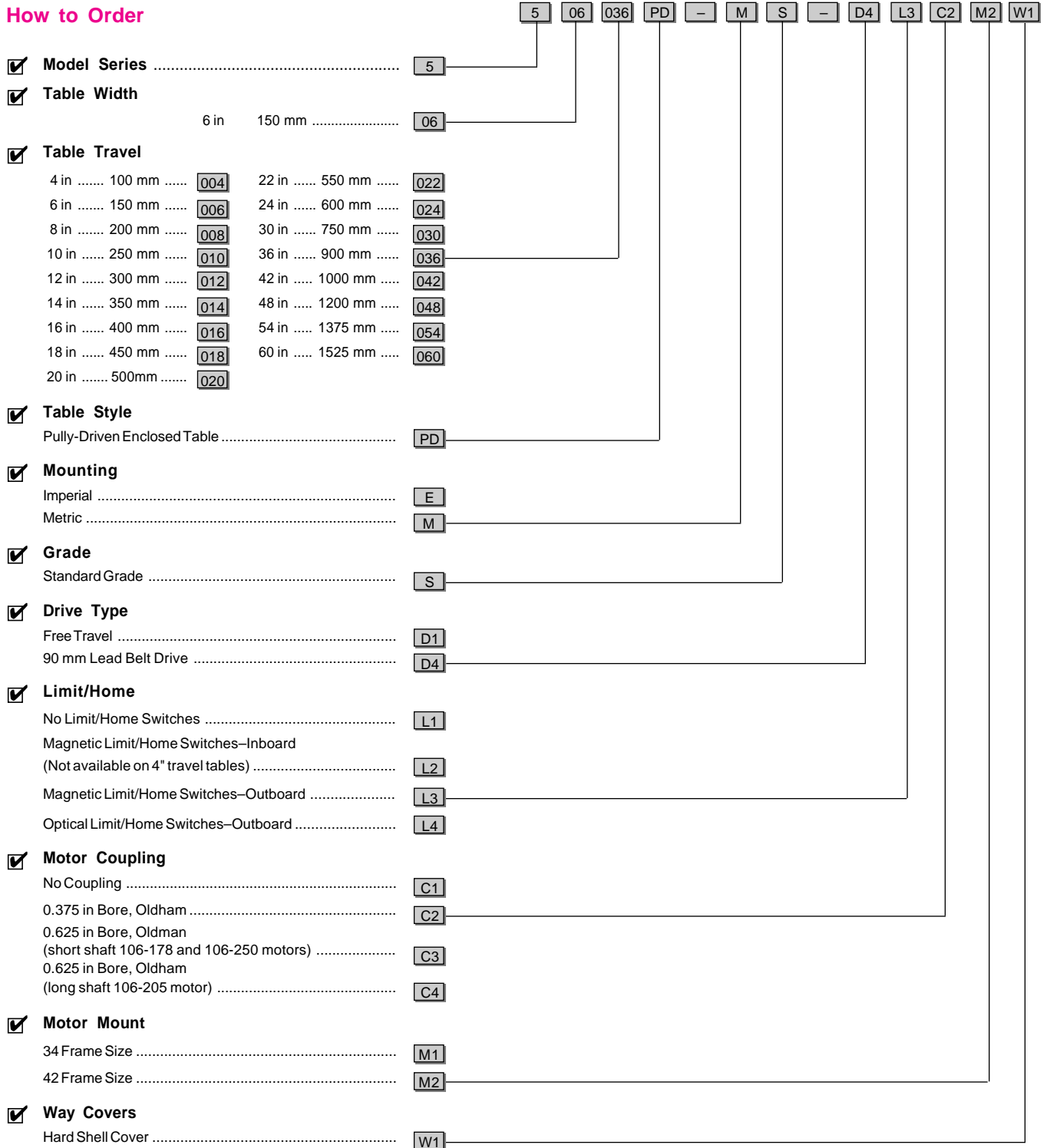
500000PD

| 506020PD | 506022PD | 506024PD | 506030PD | 506036PD | 506042PD | 506048PD | 506054PD | 506060PD |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 20 (500) | 22 (550) | 24 (600) | 30 (750) | 36 (900) | 42 (1050) | 48 (1200) | 54 (1350) | 60 (1500) |
| 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) | 100 (2540) |
| ±4 (±100) | ±4 (±100) | ±4 (±100) | ±4 (±100) | ±4 (±100) | ±4 (±100) | ±4 (±100) | ±4 (±100) | ±4 (±100) |
| 3.0 (76) | 3.0 (76) | 3.0 (76) | 4.2 (107) | 4.5 (114) | 5.7 (145) | 6.0 (152) | 7.2 (183) | 7.5 (191) |
| 3.0 (76) | 3.0 (76) | 3.0 (76) | 4.2 (107) | 4.5 (114) | 5.7 (145) | 6.0 (152) | 7.2 (183) | 7.5 (191) |
| 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) | 120 (3) |
| 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) | 772 (20) |
| 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) | 100 (45) |
| 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) | 168 (76) |
| 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) | 200 (90) |
| 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) | 50 (22) |
| 55.77 (40,16) | 55.90 (40,26) | 56.16 (40,46) | 56.69 (40,77) | 57.35 (41,28) | 58.14 (41,89) | 58.67 (42,19) | 59.06 (42,50) | 59.59 (42,91) |
| 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) | 24 (0,17) |
| 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) | 26 (0,18) |
| 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) | 2.56 (1,2) |
| 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) | 4.4 (111,8) |
| 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) | 3.9 (99,1) |
| 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) | 2.08 (52,8) |
| 26.2 (12,0) | 27.7 (12,5) | 29 (13,0) | 33.3 (13,5) | 37.6 (15,0) | 43.9 (16,5) | 48.6 (22,0) | 53.4 (24,2) | 58.2 (26,4) |

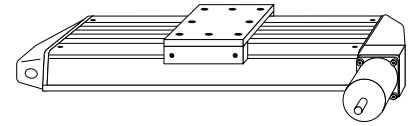
500000PD Series

Order Example

How to Order

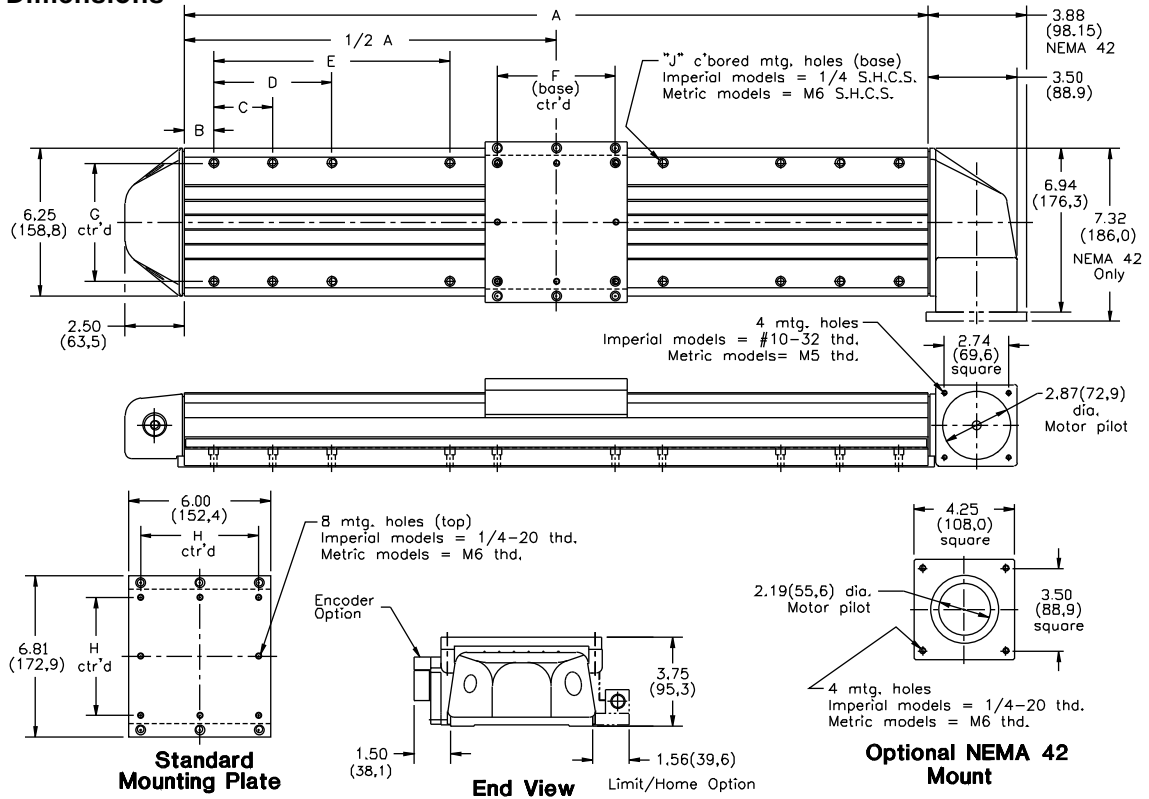


Belt-Driven Rail Tables



506000PD Dimensions

in (mm)



| | Model | Travel | A | B | C | D | E | F | G | H | Quantity |
|------------|------------|-----------|-----------|----------|--------|--------|--------|--------|--------|--------|----------|
| Imperial | 506004PD-E | 4 in | 12 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506006PD-E | 6 in | 14 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506008PD-E | 8 in | 16 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506010PD-E | 10 in | 18 in | 1.5 in | — | — | — | 5 in | 5 in | 5 in | 8 |
| | 506012PD-E | 12 in | 20 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506014PD-E | 14 in | 22 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506016PD-E | 16 in | 24 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506018PD-E | 18 in | 26 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506020PD-E | 20 in | 28 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506022PD-E | 22 in | 30 in | 1.5 in | 5 in | — | — | 5 in | 5 in | 5 in | 12 |
| | 506024PD-E | 24 in | 32 in | 1.5 in | 5 in | 10 in | — | 5 in | 5 in | 5 in | 16 |
| | 506030PD-E | 30 in | 38 in | 1.5 in | 5 in | 10 in | — | 5 in | 5 in | 5 in | 16 |
| | 506036PD-E | 36 in | 44 in | 1.5 in | 5 in | 10 in | — | 5 in | 5 in | 5 in | 16 |
| | 506042PD-E | 42 in | 50 in | 1.5 in | 5 in | 15 in | — | 5 in | 5 in | 5 in | 16 |
| | 506048PD-E | 48 in | 56 in | 1.5 in | 5 in | 15 in | — | 5 in | 5 in | 5 in | 16 |
| | 506054PD-E | 54 in | 62 in | 1.5 in | 5 in | 15 in | 25 in | 5 in | 5 in | 5 in | 20 |
| 506060PD-E | 60 in | 68 in | 1.5 in | 5 in | 15 in | 25 in | 5 in | 5 in | 5 in | 20 | |
| Metric | 506004PD-M | 100 mm | 304,8 mm | 39,9 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506006PD-M | 150 mm | 355,6 mm | 40,3 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506008PD-M | 200 mm | 406,4 mm | 40,7 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506010PD-M | 250 mm | 457,2 mm | 41,1 mm | — | — | — | 125 mm | 125 mm | 125 mm | 8 |
| | 506012PD-M | 300 mm | 508,0 mm | 41,5 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506014PD-M | 350 mm | 558,8 mm | 66,9 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506016PD-M | 400 mm | 609,6 mm | 42,3 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506018PD-M | 450 mm | 660,4 mm | 67,7 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506020PD-M | 500 mm | 711,2 mm | 43,1 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506022PD-M | 550 mm | 762,0 mm | 68,5 mm | 125 mm | — | — | 125 mm | 125 mm | 125 mm | 12 |
| | 506024PD-M | 600 mm | 812,8 mm | 43,9 mm | 125 mm | 250 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506030PD-M | 750 mm | 965,2 mm | 120,1 mm | 125 mm | 250 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506036PD-M | 900 mm | 1117,6 mm | 46,3 mm | 125 mm | 250 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506042PD-M | 1050 mm | 1270,0 mm | — | 125 mm | 375 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506048PD-M | 1200 mm | 1422,4 mm | 48,7 mm | 125 mm | 375 mm | — | 125 mm | 125 mm | 125 mm | 16 |
| | 506054PD-M | 1350 mm | 1574,8 mm | — | 125 mm | 375 mm | 625 mm | 125 mm | 125 mm | 125 mm | 20 |
| 506060PD-M | 1500 mm | 1727,0 mm | 101,0 mm | 125 mm | 375 mm | 625 mm | 125 mm | 125 mm | 125 mm | 20 | |

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