



▶ *Crossed Roller Linear Slides:* High Precision

When to Use:

- ▶ Compact
- ▶ High precision
- ▶ Low coefficient of expansion
- ▶ High load capacity
- ▶ Smooth motion
- ▶ No bearing creep
- ▶ Short travel

Applications:

- ▶ Cleanroom
- ▶ Vacuum environment
- ▶ Electronic Assembly
- ▶ Fiber Optics
- ▶ Medical
- ▶ Pharmaceutical
- ▶ Semiconductor

1

Lightweight Aluminum Construction

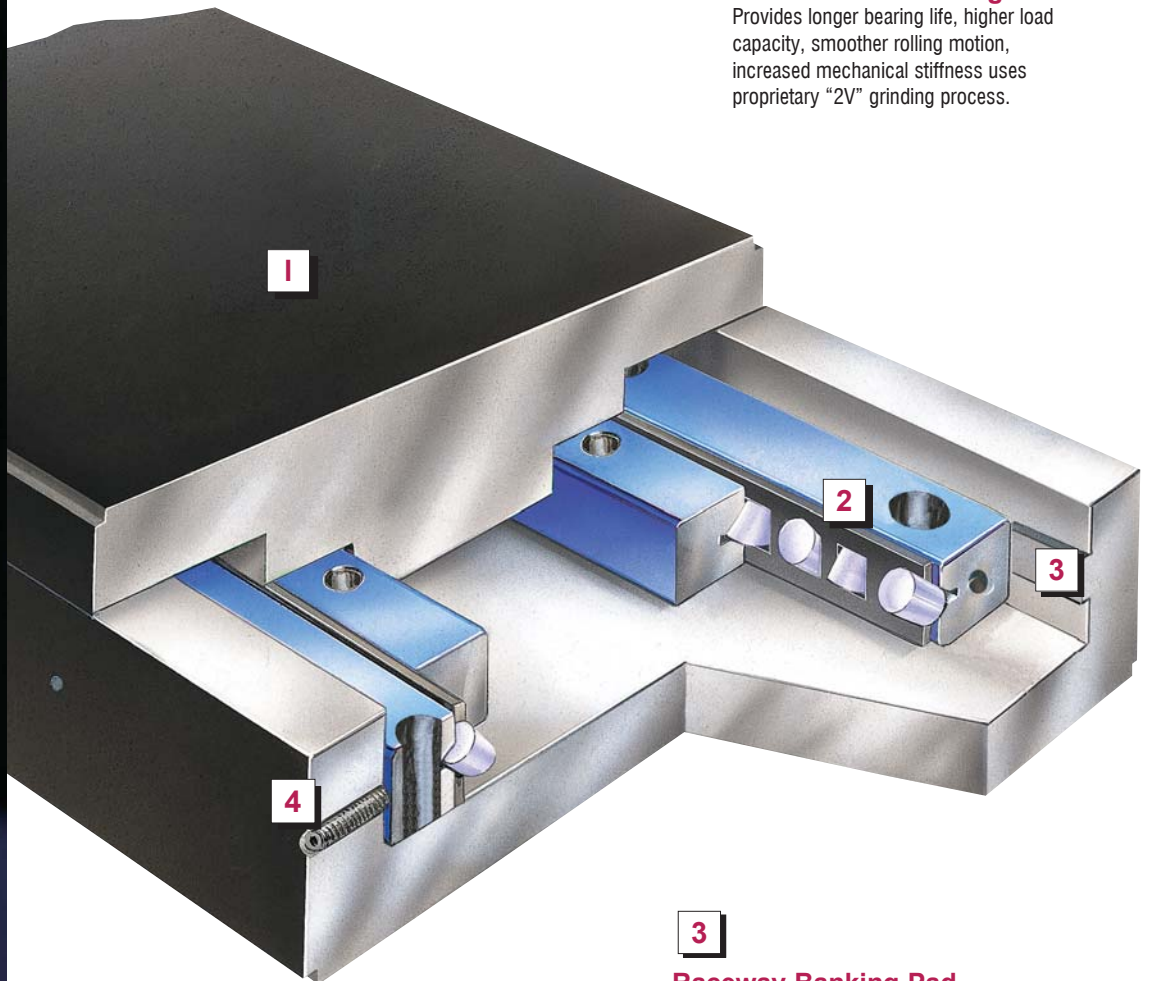
Provides corrosion resistance, or
Cast Iron Construction
Provides low co-efficient of expansion

2

Crossed Roller Design

Provides longer bearing life, higher load capacity, smoother rolling motion, increased mechanical stiffness uses proprietary "2V" grinding process.

1



3

Raceway Banking Pad

Provides a flat and straight banking point

4

Patented Preload Screws

SE Series**Width:** 50mm to 150mm**Travel:** 25mm to 400mm**Loads:** Up to 980kg**Extended Travel Slides****Options**

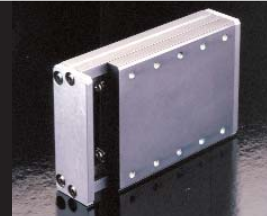
- Clean Room and Vacuum Rated
- Modifications Available
- Patented Anti-Creep Technology

106**SF Series****Width:** 50mm to 150mm**Travel:** 25mm to 150mm**Loads:** Up to 395kg**Flanged/Sealed Slides****Options**

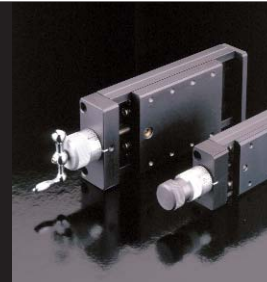
- Clean Room and Vacuum Rated
- Modifications Available
- Teflon Seals
- Patented Anti-Creep Technology

112**SP Series****Width:** 50mm to 150mm**Travel:** 25mm to 150mm**Loads:** Up to 395kg**Limited Travel Slides****Options**

- Clean Room and Vacuum Rated
- Modifications Available
- Patented Anti-Creep Technology

118**SC & SK Series****Width:** 50mm to 150mm**Travel:** 25mm to 150mm**Loads:** Up to 395kg**Crank & Knob Lead Screw Slides****Options**

- Clean Room and Vacuum Rated
- Modifications Available
- Crank or Knob Drive Mechanism
- Locking Mechanism
- Patented Anti-Creep Technology

124**SW Series****Width:** 38mm to 100mm**Travel:** 25mm to 600mm**Loads:** Up to 871kg**Double 'V' Low Profile Slides****Options**

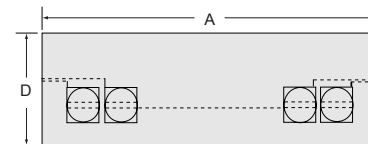
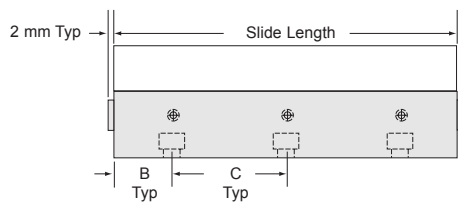
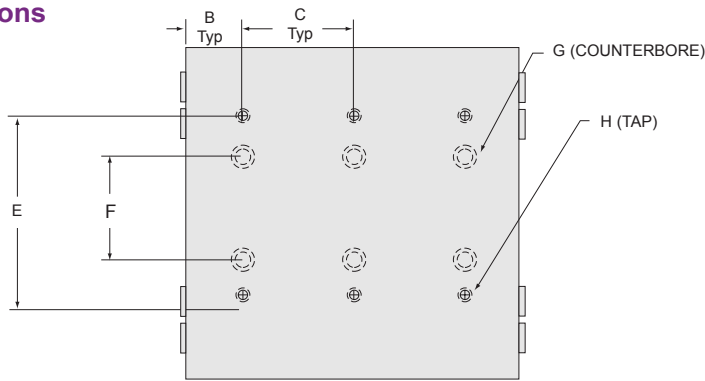
- Clean Room and Vacuum Rated
- Modifications Available
- Patented Anti-Creep Technology

130



SE Series: Extended Travel Slides

Dimensions



Straightness & Flatsness: 2 micron/25mm

| Model No. | "G" Hole | | | | | | | | | | | | | |
|-----------|-------------|------------|-----------|------|---------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|---|
| | Counterbore | | Thru Hole | | Travel | | | | | | | | | |
| | | | | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 125mm 4.92in | 150mm 5.91in | 200mm 7.87in | 300mm 11.81in | 400mm 15.75in | |
| | (mm) | (in) | (mm) | (in) | Number of "G" Holes | | | | | | | | | |
| SE050 | 8x5 dp | 0.32x0.2dp | 5 | 0.2 | 4 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | — | — |
| SE075 | 8x5 dp | 0.32x0.2dp | 5 | 0.2 | — | 6 | 8 | 8 | 8 | 8 | 8 | 8 | — | — |
| SE100 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | — | — | 4 | — | 6 | — | 8 | 8 | 8 | 8 |
| SE150 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | — | — | — | 6 | — | 8 | 8 | 8 | 8 | 8 |

| Model No. | "H" Hole | | | | | | | | | |
|-----------|---------------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|
| | Tap | Travel | | | | | | | | |
| | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 125mm 4.92in | 150mm 5.91in | 200mm 7.87in | 300mm 11.81in | 400mm 15.75in |
| | Number of "H" Holes | | | | | | | | | |
| SE050 | M4 x 0.7 x 8 dp | 4 | 6 | 8 | 10 | 12 | 14 | 18 | — | — |
| SE075 | M4 x 0.7 x 8 dp | — | 6 | 8 | 10 | 12 | 14 | 18 | — | — |
| SE100 | M5 x 0.8 x 8 dp | — | — | 4 | — | 6 | 8 | 10 | 14 | 18 |
| SE150 | M5 x 0.8 x 8 dp | — | — | — | 6 | — | 8 | 10 | 14 | 18 |



Linear & Rotary Positioning Stages

| Model No. | A | | B | | C | | D | | E | | F | |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SE050 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.71 |
| SE075 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 |
| SE100 | 100 | 3.94 | 25 | 0.98 | 50 | 1.97 | 37 | 1.46 | 80 | 3.15 | 45 | 1.77 |
| SE150 | 150 | 5.91 | 25 | 0.98 | 50 | 1.97 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 |

| Model No. | Travel | | | | | | | | | | | | | | | | | |
|-----------|--------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|------------|----------|------------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 125 (mm) | 4.92 (in) | 150 (mm) | 5.91 (in) | 200 (mm) | 7.87 (in) | 300 (mm) | 11.81 (in) | 400 (mm) | 15.75 (in) |
| | Slide Length | | | | | | | | | | | | | | | | | |
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SE050 | 50 | 1.97 | 75 | 2.95 | 100 | 3.94 | 125 | 4.92 | 150 | 5.91 | 175 | 6.89 | 225 | 8.86 | — | — | — | — |
| SE075 | — | — | 75 | 2.95 | 100 | 3.94 | 125 | 4.92 | 150 | 5.91 | 175 | 6.89 | 225 | 8.86 | — | — | — | — |
| SE100 | — | — | — | — | 100 | 3.94 | — | — | 150 | 5.91 | 200 | 7.87 | 250 | 9.84 | 350 | 13.78 | 450 | 17.72 |
| SE150 | — | — | — | — | — | — | 150 | 5.91 | — | — | 200 | 7.87 | 250 | 9.84 | 350 | 13.78 | 450 | 17.72 |

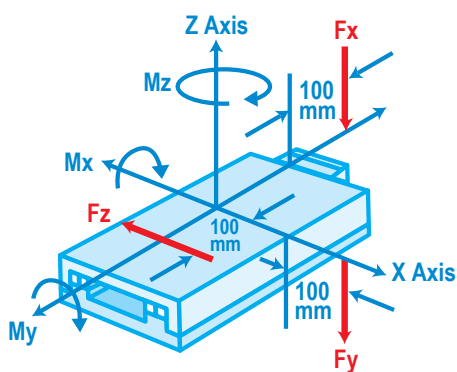
Note: When the base plate length exceeds 300mm, the "C" dimension on the base plate becomes 100mm.



SE Series: Extended Travel Slides

Moment Loading

| Model No. | Travel | | F(Mx) (Load applied at 100mm off end) | | F(My) (Load applied at 100mm off side) | | F(Mz) (Load applied at 100mm off side) | |
|-----------|--------|-------|--|----------|---|----------|---|---------|
| | (mm) | (in) | (Nm) | (in lb) | (Nm) | (in lb) | (Nm) | (in lb) |
| SE050 | 25 | 0.98 | 6 | 53.10 | 10 | 88.50 | 3 | 26.55 |
| SE050 | 50 | 1.97 | 9 | 79.65 | 13 | 115.05 | 4 | 35.40 |
| SE050 | 75 | 2.95 | 12 | 106.20 | 19 | 168.15 | 7 | 177.80 |
| SE050 | 100 | 3.94 | 14 | 123.90 | 23 | 203.55 | 8 | 70.80 |
| SE050 | 125 | 4.92 | 19 | 482.60 | 26 | 230.10 | 10 | 88.50 |
| SE050 | 150 | 5.91 | 22 | 194.70 | 29 | 256.65 | 11 | 97.35 |
| SE050 | 200 | 7.87 | 27 | 238.95 | 39 | 345.15 | 15 | 132.75 |
| SE075 | 050 | 1.97 | 9 | 79.65 | 21 | 185.85 | 4 | 35.40 |
| SE075 | 075 | 2.95 | 12 | 106.20 | 31 | 274.35 | 7 | 61.95 |
| SE075 | 100 | 3.94 | 14 | 123.90 | 36 | 318.60 | 8 | 70.80 |
| SE075 | 125 | 4.92 | 19 | 168.15 | 42 | 371.70 | 10 | 88.50 |
| SE075 | 150 | 5.91 | 22 | 194.70 | 47 | 415.95 | 11 | 97.35 |
| SE075 | 200 | 7.87 | 27 | 238.95 | 62 | 548.70 | 15 | 132.75 |
| SE100 | 75 | 2.95 | 38 | 336.30 | 54 | 477.91 | 19 | 482.60 |
| SE100 | 125 | 4.92 | 63 | 557.55 | 81 | 716.85 | 32 | 283.20 |
| SE100 | 150 | 5.91 | 89 | 787.65 | 108 | 955.80 | 44 | 389.40 |
| SE100 | 200 | 7.87 | 114 | 1,008.90 | 200 | 1,770 | 57 | 504.4 |
| SE100 | 300 | 11.81 | 165 | 1,460.25 | 188 | 1,663.80 | 82 | 725.70 |
| SE100 | 400 | 15.75 | 216 | 1,911.60 | 242 | 2,141.70 | 108 | 955.80 |
| SE150 | 075 | 2.95 | 63 | 557.55 | 157 | 1,389.45 | 32 | 283.20 |
| SE150 | 150 | 5.91 | 89 | 787.65 | 029 | 1,849.65 | 44 | 389.40 |
| SE150 | 200 | 7.87 | 114 | 1,008.90 | 261 | 2,309.85 | 57 | 504.45 |
| SE150 | 300 | 11.81 | 165 | 1,460.25 | 336 | 2,973.60 | 82 | 725.70 |
| SE150 | 400 | 15.75 | 216 | 1,911.60 | 471 | 4,168.35 | 108 | 955.80 |



F_x is the load applied in the Z Axis direction, 100mm off end, causing M_x rotation around the X Axis.

F_y is the load applied in the Z Axis direction, 100mm off side, causing M_y rotation around the Y Axis.

F_z is the load applied around the Z Axis at a 100mm radius from the center, causing M_z rotation around the Z Axis.

Dynamic Load Capacity

| Model No. | Travel | | | | | | | | | | | | | | | | | |
|-----------|---------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|------------|----------|------------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 125 (mm) | 4.92 (in) | 150 (mm) | 5.91 (in) | 200 (mm) | 7.87 (in) | 300 (mm) | 11.81 (in) | 400 (mm) | 15.75 (in) |
| | Load Capacity | | | | | | | | | | | | | | | | | |
| | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) |
| SE050 | 79 | 174.2 | 105 | 231.5 | 158 | 348.3 | 184 | 405.7 | 210 | 463 | 237 | 522.5 | 316 | 696.7 | — | — | — | — |
| SE075 | — | — | 105 | 231.5 | 158 | 348.3 | 184 | 405.7 | 210 | 463 | 237 | 522.5 | 316 | 696.7 | — | — | — | — |
| SE100 | — | — | — | — | 218 | 480.6 | — | — | 327 | 720.9 | 435 | 959 | 544 | 1,199 | 762 | 1,680 | 980 | 2,161 |
| SE150 | — | — | — | — | — | — | 327 | 720.9 | — | — | 435 | 959 | 544 | 1,199 | 762 | 1,680 | 980 | 2,161 |

Weight

| Model No. | Aluminum | | Cast Iron | |
|-----------|------------------|-----------------|------------------|-----------------|
| | (kg/25mm length) | (lb/1in length) | (kg/25mm length) | (lb/1in length) |
| SE050 | 0.15 | 0.33 | 0.23 | 0.51 |
| SE075 | 0.23 | 0.51 | 0.43 | 0.95 |
| SE100 | 0.35 | 0.77 | 0.65 | 1.43 |
| SE150 | 0.60 | 1.32 | 1.28 | 2.82 |



SE Series: Configurations & Options

Options:

Multi-Axis Configurations

Various Multi-Axis configurations with brackets are available (see examples).

Calibration Option

Bayside provides laser calibrated and/or matched roller options to optimize your stage for the most demanding applications.

P.A.C.T.

Prevents crossed roller bearing creep in vertical and/or high speed applications.

Special Environment Option

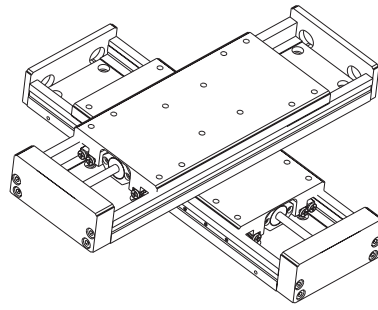
Bayside can prepare your stage for a variety of environments including:

- ▶ Vacuum
- ▶ Clean Room
- ▶ Radiation
- ▶ Food Grade

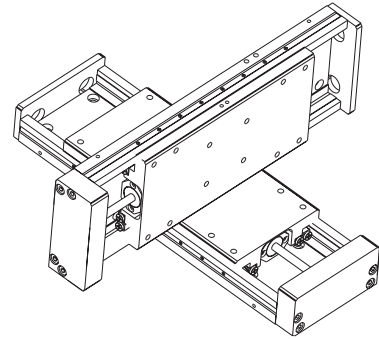
Special Lubricants

Dry lubricant suitable for environments that need a dry, permanent lubrication (e.g. vacuum rated applications).

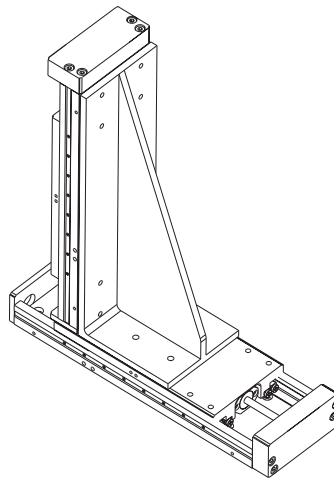
Suggested Orientations:



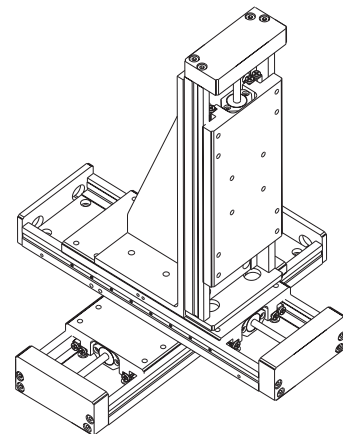
Option 1



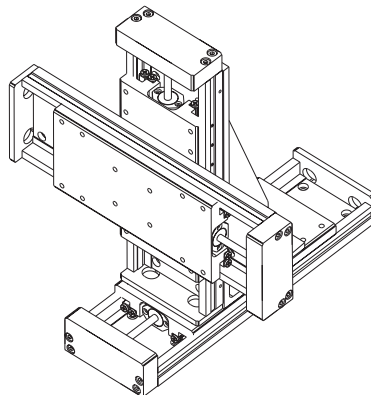
Option 2



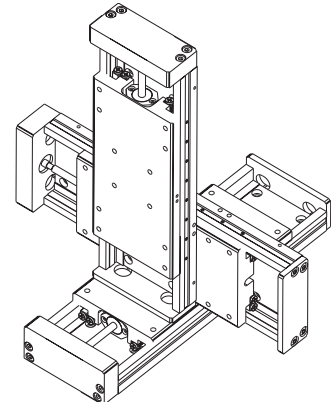
Option 3



Option 4



Option 5

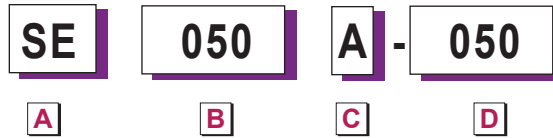


Option 6

SE Series: How to Order



Order
Numbering
Example:



| | |
|-----------|---------------------|
| A | SLIDE SERIES |
| SE | Standard Slide |

| | |
|------------|------------------------------|
| B | METRIC WIDTH OF SLIDE |
| 050 | 050 mm |
| 075 | 075 mm |
| 100 | 100 mm |
| 150 | 150 mm |

| | |
|-----------------|-----------|
| MATERIAL | |
| A | Aluminum |
| C | Cast Iron |

| | | | | |
|----------|---------------------|------------|------------|------------|
| D | SLIDE LENGTH | | | |
| | Width | | | |
| | 50 mm | 75mm | 100mm | 150mm |
| | 050 | 075 | 100 | 150 |
| | 075 | 100 | 150 | 200 |
| | 100 | 125 | 200 | 250 |
| | 125 | 150 | 250 | 350 |
| | 150 | 175 | 350 | 450 |
| | 175 | 225 | 450 | — |
| | 225 | — | — | — |

Linear & Rotary
Positioning Stages

Specifications are subject to change without notice.

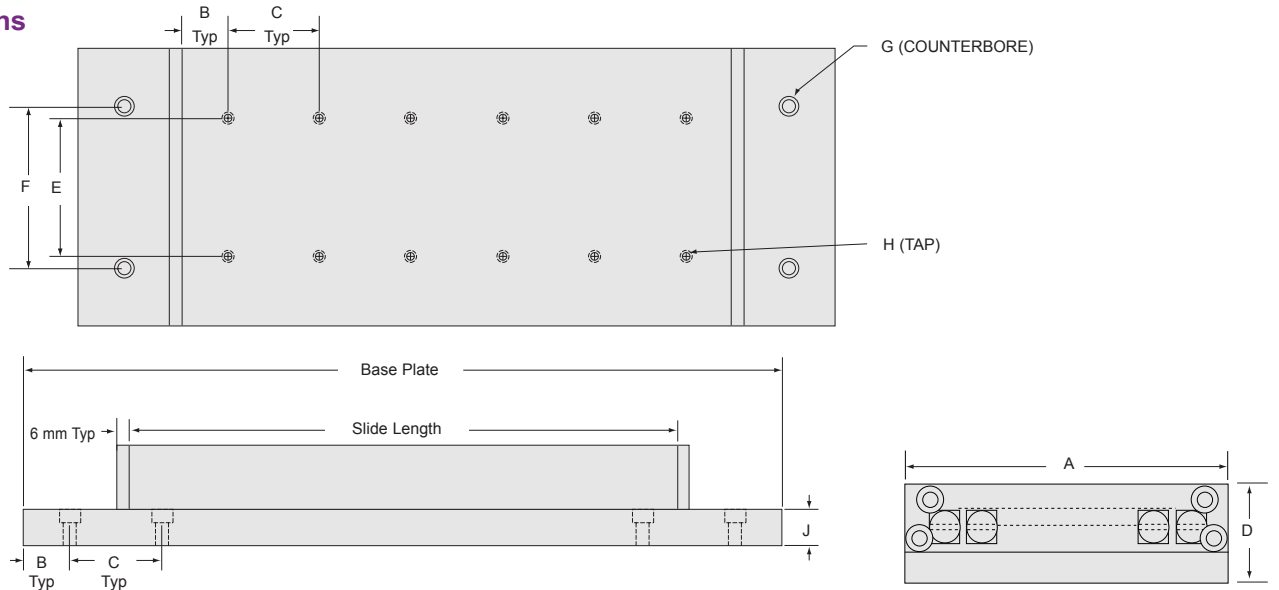
How to Order

Bayside's Crossed Roller Series are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at www.baysidemotion.com.



SF Series: Flanged/Sealed Slides

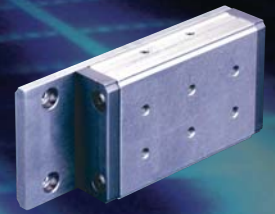
Dimensions



Straightness & Flansness: 2 micron/25mm

| Model No. | "G" Hole | | | | | | | | |
|-----------|-------------|------------|-----------|------|---------------------|----------------|----------------|-----------------|-----------------|
| | Counterbore | | Thru Hole | | Travel | | | | |
| | | | | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 150mm 5.91in |
| | (mm) | (in) | (mm) | (in) | Number of "G" Holes | | | | |
| SF050 | 8x5dp | 0.32x0.2dp | 5 | 0.2 | 4 | 4 | 4 | — | — |
| SF075 | 8x5dp | 0.32x0.2dp | 5 | 0.2 | 4 | 4 | 4 | — | — |
| SF100 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | 4 | 4 | 4 | 4 | — |
| SF150 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | — | 4 | — | 4 | 4 |

| Model No. | "H" Hole | | | | | |
|-----------|---------------------|----------------|----------------|----------------|-----------------|-----------------|
| | Tap | Travel | | | | |
| | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 150mm 5.91in |
| | Number of "H" Holes | | | | | |
| SF050 | M4 x 0.7 x 8 dp | 6 | 10 | 14 | — | — |
| SF075 | M4 x 0.7 x 8 dp | 8 | 12 | 16 | — | — |
| SF100 | M5 x 0.8 x 8 dp | 12 | 16 | 20 | 24 | — |
| SF150 | M5 x 0.8 x 8 dp | — | 8 | — | 12 | 16 |



| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | |
|-----------|--------------|------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SF050 | 75 | 2.95 | 112 | 4.41 | 25 | 0.98 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |
| SF050 | 125 | 4.92 | 187 | 7.36 | 50 | 1.97 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |
| SF050 | 175 | 6.89 | 262 | 10.31 | 75 | 2.95 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | |
|-----------|--------------|------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SF075 | 100 | 3.94 | 137 | 5.93 | 25 | 0.98 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 30 | 1.18 | 60 | 2.36 | 10.5 | 0.41 |
| SF075 | 150 | 5.91 | 212 | 8.35 | 50 | 1.97 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 30 | 1.18 | 60 | 2.36 | 10.5 | 0.41 |
| SF075 | 200 | 7.87 | 287 | 11.30 | 75 | 2.95 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 30 | 1.18 | 60 | 2.36 | 10.5 | 0.41 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | |
|-----------|--------------|-------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SF100 | 150 | 5.91 | 187 | 7.36 | 25 | 0.98 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |
| SF100 | 200 | 7.87 | 262 | 10.31 | 50 | 1.97 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |
| SF100 | 250 | 9.84 | 337 | 13.27 | 75 | 2.95 | 100 | 3.94 | 12.5 | 0.49 | 100 | 3.94 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |
| SF100 | 300 | 11.81 | 412 | 16.22 | 100 | 3.94 | 100 | 3.94 | 12.5 | 0.49 | 100 | 3.94 | 25 | 0.98 | 18 | 0.71 | 35 | 1.38 | 6.2 | 0.24 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | |
|-----------|--------------|-------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SF150 | 200 | 7.87 | 262 | 10.31 | 50 | 1.97 | 150 | 5.91 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 30 | 1.18 | 60 | 2.36 | 10.5 | 0.41 |
| SF150 | 300 | 11.81 | 412 | 16.22 | 100 | 3.94 | 150 | 5.91 | 12.5 | 0.49 | 100 | 3.94 | 32 | 1.26 | 30 | 1.18 | 60 | 2.36 | 10.5 | 0.41 |
| SF150 | 400 | 15.75 | 562 | 22.13 | 150 | 5.91 | 150 | 5.91 | 12.5 | 0.49 | 100 | 3.94 | 32 | 1.26 | 30 | 1.18 | 60 | 2.36 | 10.5 | 0.41 |

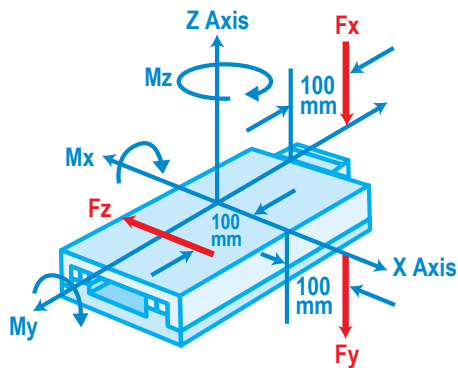
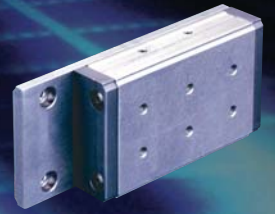
(1) When the base plate length exceeds 300mm, the "C" dimension on the base plate becomes 100mm.



SF Series: Flanged/Sealed Slides

Moment Loading

| Model No. | Travel | | F(Mx) (Load applied at 100mm off end) | | F(My) (Load applied at 100mm off side) | | F(Mz) (Load applied at 100mm off center) | |
|-----------|--------|------|--|----------|---|----------|---|----------|
| | (mm) | (in) | (Nm) | (in lb) | (Nm) | (in lb) | (Nm) | (in lb) |
| SF050 | 25 | 0.98 | 6 | 53.10 | 10 | 88.5 | 3 | 26.55 |
| SF050 | 50 | 1.97 | 9 | 79.65 | 16 | 141.60 | 6 | 53.10 |
| SF050 | 75 | 2.95 | 12 | 106.20 | 19 | 168.15 | 7 | 61.95 |
| SF075 | 25 | 0.98 | 12 | 106.20 | 31 | 274.35 | 7 | 61.95 |
| SF075 | 50 | 1.97 | 17 | 150.45 | 36 | 318.60 | 8 | 70.80 |
| SF075 | 75 | 2.95 | 19 | 168.15 | 42 | 371.70 | 10 | 88.5 |
| SF100 | 25 | 0.98 | 24 | 2,12.40 | 71 | 628.35 | 13 | 115.05 |
| SF100 | 50 | 1.97 | 29 | 2,56.65 | 78 | 690.30 | 15 | 132.75 |
| SF100 | 75 | 2.95 | 32 | 2,83.20 | 84 | 743.40 | 16 | 141.60 |
| SF100 | 100 | 3.94 | 35 | 3,09.75 | 97 | 858.45 | 19 | 168.15 |
| SF150 | 50 | 1.97 | 213 | 1,885.05 | 369 | 3,265.65 | 107 | 946.95 |
| SF150 | 100 | 3.94 | 170 | 1,504.50 | 290 | 2,566.50 | 85 | 752.25 |
| SF150 | 150 | 5.91 | 231 | 2,044.35 | 528 | 4,672.80 | 116 | 1,026.60 |



F_x is the load applied in the Z Axis direction, 100mm off end, causing M_x rotation around the X Axis.

F_y is the load applied in the Z Axis direction, 100mm off side, causing M_y rotation around the Y Axis.

F_z is the load applied around the Z Axis at a 100mm radius from the center, causing M_z rotation around the Z Axis.

Dynamic Load Capacity

| Model No. | Travel | | | | | | | | | |
|-----------|---------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 150 (mm) | 5.91 (in) |
| | Load Capacity | | | | | | | | | |
| | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) |
| SF050 | 79 | 174 | 132 | 291 | 158 | 348 | — | — | — | — |
| SF075 | 158 | 348 | 184 | 406 | 210 | 463 | — | — | — | — |
| SF100 | 289 | 637 | 316 | 697 | 342 | 754 | 395 | 87 | — | — |
| SF150 | — | — | 736 | 1,623 | — | — | 872 | 1,922 | 1,090 | 2,403 |

Weight

| Model No. | Aluminum | | Cast Iron | |
|-----------|--------------------|-----------------|--------------------|-------------------|
| | (kg / 25mm length) | (lb/1in length) | (kg / 25mm length) | (lb / 1in length) |
| SF050 | 0.13 | 0.29 | 0.28 | 0.62 |
| SF075 | 0.2 | 0.44 | 0.5 | 1.10 |
| SF100 | 0.3 | 0.66 | 0.75 | 1.65 |
| SF150 | 0.6 | 1.32 | 1.6 | 3.53 |



SF Series: Configurations & Options

Options:

Multi-Axis Configurations

Various Multi-Axis configurations with brackets are available (see examples).

Calibration Option

Bayside provides laser calibrated and/or matched roller options to optimize your stage for the most demanding applications.

P.A.C.T.

Prevents crossed roller bearing creep in vertical and/or high speed applications.

Special Environment Option

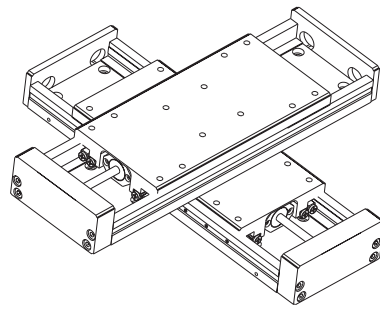
Bayside can prepare your stage for a variety of environments including:

- ▶ Vacuum
- ▶ Clean Room
- ▶ Radiation
- ▶ Food Grade

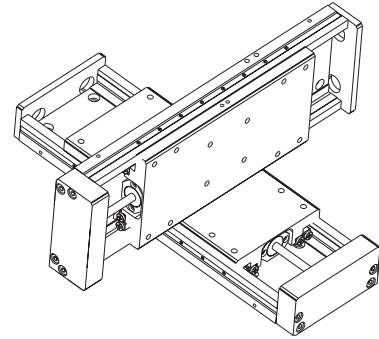
Special Lubricants

Dry lubricant suitable for environments that need a dry, permanent lubrication (e.g. vacuum rated applications).

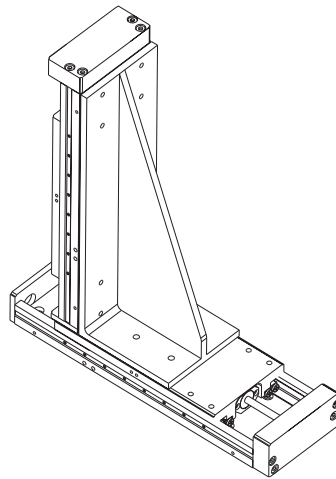
Suggested Orientations:



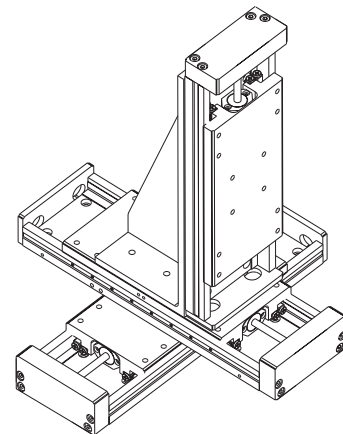
Option 1



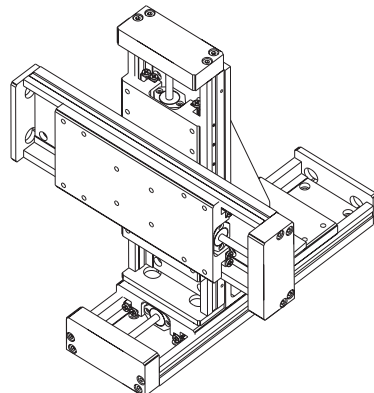
Option 2



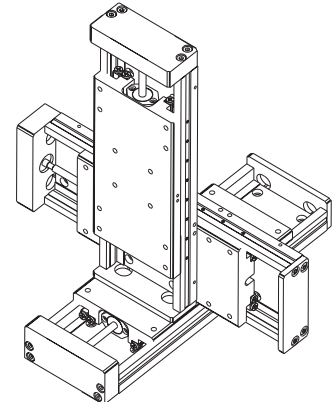
Option 3



Option 4

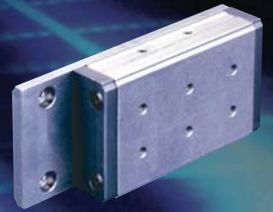


Option 5



Option 6

SF Series: How to Order



Order
Numbering
Example:

| | | | | |
|-----------|------------|----------|---|------------|
| SF | 050 | A | - | 075 |
| A | B | C | | D |

| | |
|----------|------------------------|
| A | SLIDE SERIES |
| | SF Sealed Slide |

| | |
|----------|------------------------------|
| B | METRIC WIDTH OF SLIDE |
| | 050 050 mm |
| | 075 075 mm |
| | 100 100 mm |
| | 150 150 mm |

| | |
|----------|--------------------|
| C | MATERIAL |
| | A Aluminum |
| | C Cast Iron |

| | | | | |
|----------|---------------------|--------------|------------|------------|
| D | SLIDE LENGTH | | | |
| | | Width | | |
| | 50 mm | 75mm | 100mm | 150mm |
| | 075 | 100 | 150 | 200 |
| | 125 | 150 | 200 | 300 |
| | 175 | 200 | 250 | 400 |
| — | — | 300 | — | |

Linear & Rotary
Positioning Stages

Specifications are subject to change without notice.

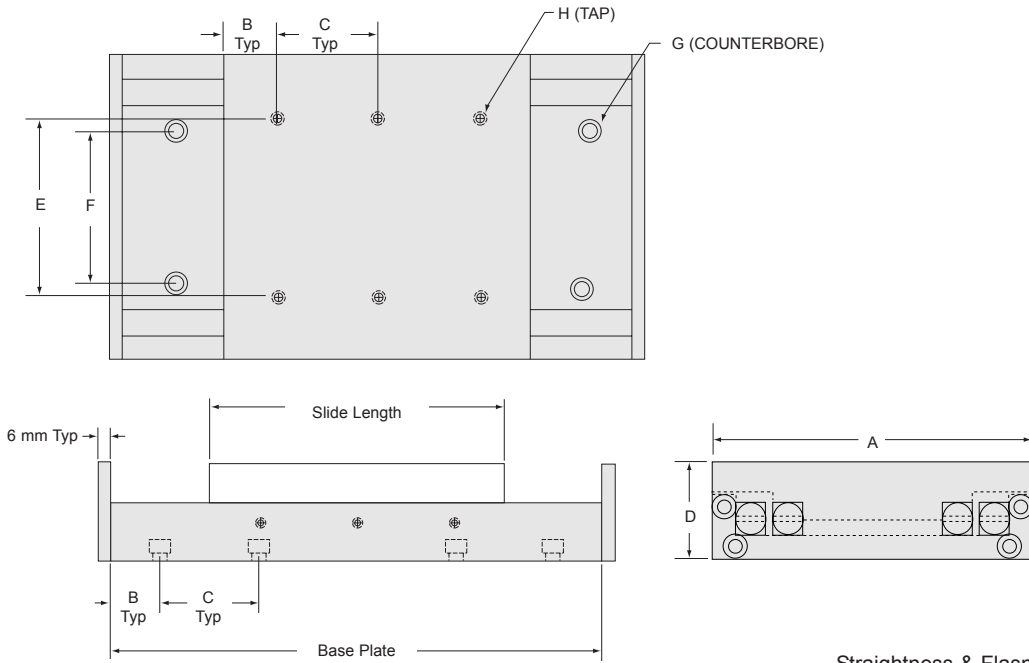
How to Order

Bayside's Crossed Roller Series are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at www.baysidemotion.com.



SP Series: Limited Travel Slides

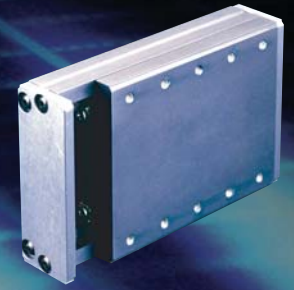
Dimensions



Straightness & Flawsness: 2 micron/25mm

| Model No. | "G" Hole | | | | | | | | |
|-----------|----------------------------|------------|--------------------------|------|----------------|----------------|----------------|-----------------|-----------------|
| | Counterbore (mm) (in) | | Thru Hole (mm) (in) | | Travel | | | | |
| | | | | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 150mm 5.91in |
| | Number of "G" Holes | | | | | | | | |
| SP050 | 8x5dp | 0.32x0.2dp | 5 | 0.2 | 6 | 8 | 8 | — | — |
| SP075 | 8x5dp | 0.32x0.2dp | 5 | 0.2 | 8 | 8 | 8 | — | — |
| SP100 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | 8 | 8 | 8 | 8 | — |
| SP150 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | — | 8 | — | 8 | 8 |

| Model No. | "H" Hole | | | | | |
|-----------|---------------------|----------------|----------------|----------------|-----------------|-----------------|
| | Tap | Travel | | | | |
| | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 150mm 5.91in |
| | Number of "H" Holes | | | | | |
| SP050 | M4 x 0.7 x 8 dp | 4 | 6 | 8 | — | — |
| SP075 | M4 x 0.7 x 8 dp | 6 | 8 | 10 | — | — |
| SP100 | M5 x 0.8 x 8 dp | 10 | 12 | 14 | 16 | — |
| SP150 | M5 x 0.8 x 8 dp | — | 6 | — | 8 | 10 |



| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | |
|-----------|--------------|------|-------------|------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SP050 | 50 | 1.97 | 75 | 2.95 | 25 | 0.98 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.70 |
| SP050 | 75 | 2.95 | 125 | 4.92 | 50 | 1.97 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.70 |
| SF050 | 100 | 3.94 | 175 | 6.89 | 75 | 2.95 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.70 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | |
|-----------|--------------|------|-------------|------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SP075 | 75 | 2.95 | 100 | 3.94 | 25 | 0.98 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 |
| SP075 | 100 | 3.94 | 150 | 5.90 | 50 | 1.97 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 |
| SP075 | 125 | 4.92 | 200 | 7.87 | 75 | 2.95 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | |
|-----------|--------------|------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SP100 | 125 | 4.92 | 150 | 5.91 | 25 | 0.98 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 |
| SP100 | 150 | 5.91 | 200 | 7.87 | 50 | 1.97 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 |
| SP100 | 175 | 6.89 | 250 | 9.84 | 75 | 2.95 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 |
| SP100 | 200 | 7.87 | 300 | 11.81 | 100 | 3.94 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | |
|-----------|--------------|------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SP150 | 150 | 5.91 | 200 | 7.87 | 50 | 1.97 | 150 | 5.91 | 12.5 | 0.49 | 25 | 0.98 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 |
| SP150 | 200 | 7.87 | 300 | 11.81 | 100 | 3.94 | 150 | 5.91 | 12.5 | 0.49 | 100 | 3.94 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 |
| SP150 | 250 | 9.84 | 400 | 15.75 | 150 | 5.91 | 150 | 5.91 | 12.5 | 0.49 | 100 | 3.94 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 |

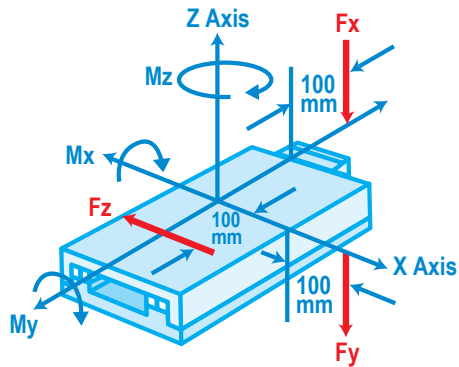
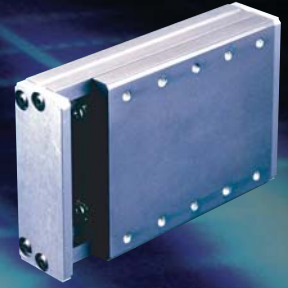
(1) When the base plate length exceeds 300mm, the "C" dimension on the base plate becomes 100mm.



SP Series: Limited Travel Slides

Moment Loading

| Model No. | Travel | | F(Mx) (Load applied at 100mm off end) | | F(My) (Load applied at 100mm off side) | | F(Mz) (Load applied at 100mm off center) | |
|-----------|--------|------|--|----------|---|----------|---|----------|
| | (mm) | (in) | (Nm) | (in lb) | (Nm) | (in lb) | (Nm) | (in lb) |
| SP050 | 25 | 0.98 | 6 | 53.1 | 10 | 88.50 | 3 | 26.55 |
| SP050 | 50 | 1.97 | 9 | 79.65 | 16 | 141.60 | 6 | 53.10 |
| SP050 | 75 | 2.95 | 12 | 106.20 | 19 | 168.15 | 7 | 61.95 |
| SP075 | 25 | 0.98 | 12 | 106.20 | 31 | 274.35 | 7 | 61.95 |
| SP075 | 50 | 1.97 | 17 | 150.45 | 36 | 318.60 | 8 | 70.80 |
| SP075 | 75 | 2.95 | 19 | 168.15 | 42 | 371.70 | 10 | 88.50 |
| SP100 | 25 | 0.98 | 24 | 212.40 | 71 | 628.35 | 13 | 115.05 |
| SP100 | 50 | 1.97 | 29 | 256.65 | 78 | 690.30 | 15 | 132.75 |
| SP100 | 75 | 2.95 | 32 | 283.20 | 84 | 743.40 | 16 | 141.60 |
| SP100 | 100 | 3.94 | 35 | 309.75 | 97 | 858.45 | 19 | 168.15 |
| SP150 | 50 | 1.97 | 213 | 1,885.05 | 369 | 3,265.65 | 107 | 946.95 |
| SP150 | 100 | 3.94 | 170 | 1,504.50 | 290 | 2,566.50 | 85 | 752.25 |
| SP150 | 150 | 5.91 | 231 | 2,044.35 | 528 | 4,672.80 | 116 | 1,026.60 |



F_x is the load applied in the Z Axis direction, 100mm off end, causing M_x rotation around the X Axis.

F_y is the load applied in the Z Axis direction, 100mm off side, causing M_y rotation around the Y Axis.

F_z is the load applied around the Z Axis at a 100mm radius from the center, causing M_z rotation around the Z Axis.

Dynamic Load Capacity

| Model No. | Travel | | | | | | | | | |
|-----------|---------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 150 (mm) | 5.91 (in) |
| | Load Capacity | | | | | | | | | |
| | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) |
| SP050 | 79 | 174.20 | 132 | 291.06 | 158 | 348.39 | — | — | — | — |
| SP075 | 158 | 348.39 | 184 | 405.72 | 210 | 463.05 | — | — | — | — |
| SP100 | 289 | 637.25 | 316 | 696.78 | 342 | 754.11 | 395 | 870.98 | — | — |
| SP150 | — | — | 736 | 1,622.88 | — | — | 872 | 1922.76 | 1090 | 2,403.45 |

Weight

| Model No. | Aluminum | | Cast Iron | |
|-----------|--------------------|-------------------|--------------------|-------------------|
| | (kg / 25mm length) | (lb / 1in length) | (kg / 25mm length) | (lb / 1in length) |
| SP050 | 0.13 | 0.29 | 0.23 | 0.51 |
| SP075 | 0.18 | 0.39 | 0.43 | 0.95 |
| SP100 | 0.28 | 0.62 | 0.63 | 1.39 |
| SP150 | 0.50 | 1.10 | 1.30 | 2.87 |



SP Series: Configurations & Options

Options:

Multi-Axis Configurations

Various Multi-Axis configurations with brackets are available (see examples).

Calibration Option

Bayside provides laser calibrated and/or matched roller options to optimize your stage for the most demanding applications.

P.A.C.T.

Prevents crossed roller bearing creep in vertical and/or high speed applications.

Special Environment Option

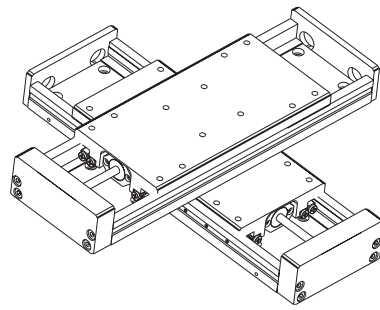
Bayside can prepare your stage for a variety of environments including:

- ▶ Vacuum
- ▶ Clean Room
- ▶ Radiation
- ▶ Food Grade

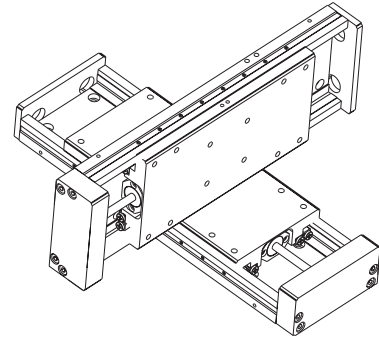
Special Lubricants

Dry lubricant suitable for environments that need a dry, permanent lubrication (e.g. vacuum rated applications).

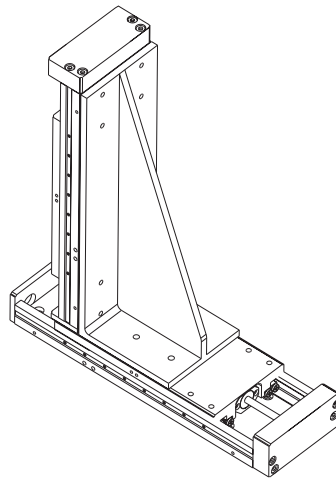
Suggested Orientations:



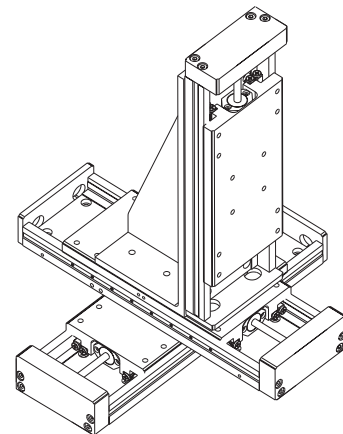
Option 1



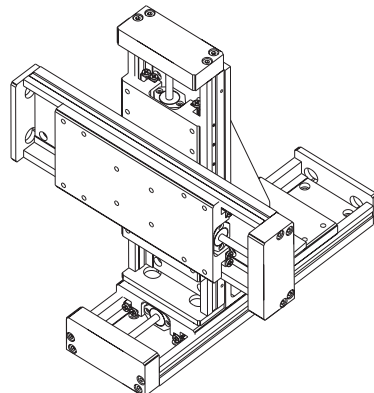
Option 2



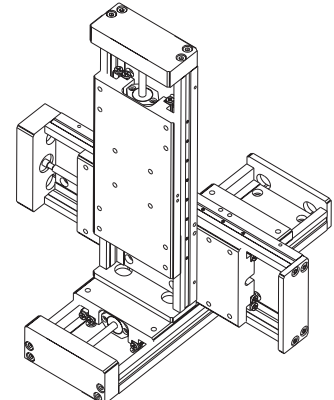
Option 3



Option 4

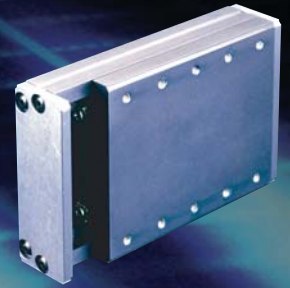


Option 5



Option 6

SP Series: How to Order



Order
Numbering
Example:

| | | | |
|-----------|------------|------------|------------|
| SP | 050 | A - | 075 |
| A | B | C | D |

| | | |
|----------|---------------------|-------------------|
| A | SLIDE SERIES | |
| | SP | Positioning Slide |

| | | |
|----------|------------------------------|--------|
| B | METRIC WIDTH OF SLIDE | |
| | 050 | 050 mm |
| | 075 | 075 mm |
| | 100 | 100 mm |
| | 150 | 150 mm |

| | | |
|----------|-----------------|-----------|
| C | MATERIAL | |
| | A | Aluminum |
| | C | Cast Iron |

| | | | | | |
|----------|--------------------|--------------|------------|------------|------------|
| D | BASE LENGTH | Width | | | |
| | | 50 mm | 75mm | 100mm | 150mm |
| | 075 | 100 | 150 | 200 | 200 |
| | 125 | 150 | 200 | 300 | 300 |
| | 175 | 200 | 250 | 400 | 400 |
| | — | — | 300 | — | — |

Linear & Rotary
Positioning Stages

Specifications are subject to change without notice.

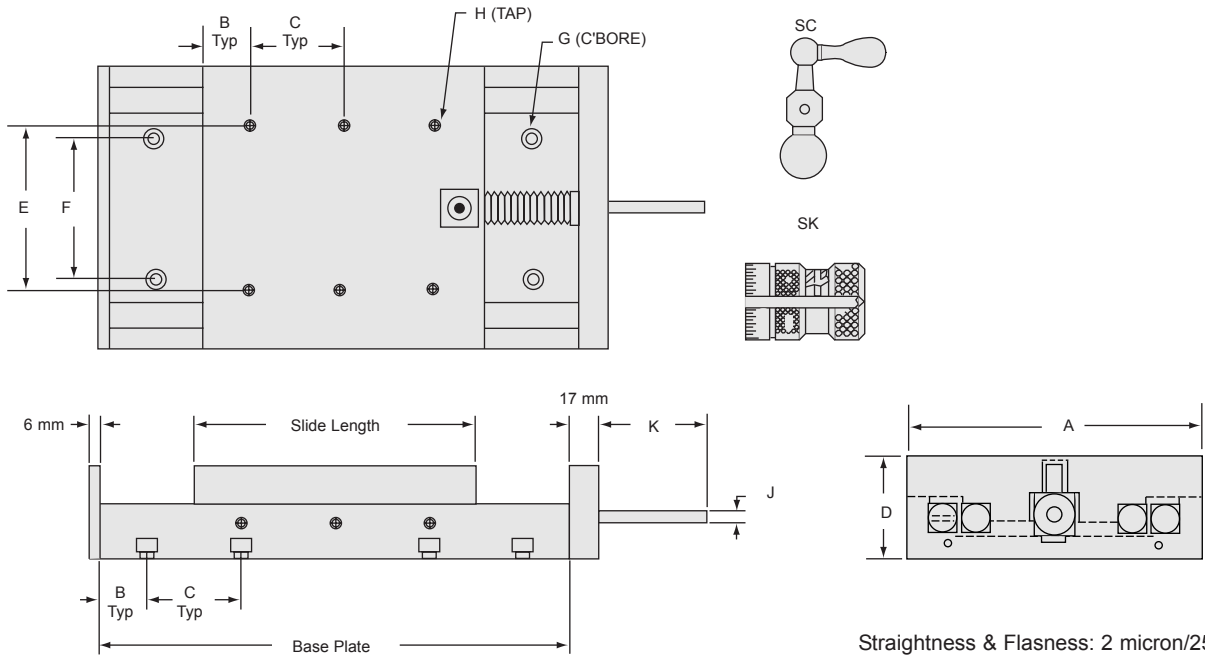
How to Order

Bayside's Crossed Roller Series are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at www.baysidemotion.com.



SC & SK Series: Crank & Knob Lead Screw

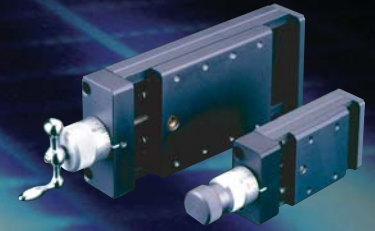
Dimensions



Straightness & Flatsness: 2 micron/25mm

| Model No. | "G" Hole | | | | | | | | |
|-----------|---------------------|------------|-----------|------|----------------|----------------|----------------|-----------------|-----------------|
| | Counterbore | | Thru Hole | | Travel | | | | |
| | (mm) | (in) | (mm) | (in) | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 150mm 5.91in |
| | Number of "G" Holes | | | | | | | | |
| SC/SK050 | 8x5dp | 0.32x0.2dp | 5 | 0.2 | 6 | 8 | 8 | — | — |
| SC/SK075 | 8x5dp | 0.32x0.2dp | 5 | 0.2 | 8 | 8 | 8 | — | — |
| SC/SK100 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | 8 | 8 | 8 | 8 | 8 |
| SC/SK150 | 9.75x5dp | 0.38x0.2dp | 6 | 0.24 | 8 | 8 | 8 | 8 | 8 |

| Model No. | "H" Hole | | | | | |
|-----------|-----------------|---------------------|----------------|----------------|-----------------|-----------------|
| | Tap | Travel | | | | |
| | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 150mm 5.91in |
| | | Number of "H" Holes | | | | |
| SC/SK050 | M4 x 0.7 x 8 dp | 4 | 6 | 8 | — | — |
| SC/SK075 | M4 x 0.7 x 8 dp | 6 | 8 | 10 | — | — |
| SC/SK100 | M5 x 0.8 x 8 dp | 10 | 12 | 14 | 16 | — |
| SC/SK150 | M5 x 0.8 x 8 dp | — | 6 | — | 16 | 20 |



| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | | K | |
|-----------|--------------|------|-------------|------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SC/SK-050 | 50 | 1.97 | 75 | 2.95 | 25 | 0.98 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.70 | 4.75 | 0.18 | 33 | 1.30 |
| SC/SK-050 | 75 | 2.95 | 125 | 4.92 | 50 | 1.97 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.70 | 4.75 | 0.18 | 33 | 1.30 |
| SC/SK-050 | 100 | 3.94 | 175 | 6.89 | 75 | 2.95 | 050 | 1.97 | 12.5 | 0.49 | 25 | 0.98 | 25 | 0.98 | 35 | 1.38 | 18 | 0.70 | 4.75 | 0.18 | 33 | 1.30 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | | K | |
|-----------|--------------|------|-------------|------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SC/SK-075 | 75 | 2.95 | 100 | 3.94 | 25 | 0.98 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 | 4.75 | 0.18 | 33 | 1.30 |
| SC/SK-075 | 100 | 3.94 | 150 | 5.90 | 50 | 1.97 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 | 4.75 | 0.18 | 33 | 1.30 |
| SC/SK-075 | 125 | 4.92 | 200 | 7.87 | 75 | 2.95 | 075 | 2.95 | 12.5 | 0.49 | 25 | 0.98 | 32 | 1.26 | 60 | 2.36 | 30 | 1.18 | 4.75 | 0.18 | 33 | 1.30 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | | K | |
|-----------|--------------|------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SC/SK-100 | 125 | 4.92 | 150 | 5.90 | 25 | 0.98 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 | 4.75 | 0.18 | 38 | 1.50 |
| SC/SK-100 | 150 | 5.90 | 200 | 7.87 | 50 | 1.97 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 | 4.75 | 0.18 | 38 | 1.50 |
| SC/SK-100 | 175 | 6.89 | 250 | 9.84 | 75 | 2.95 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 | 4.75 | 0.18 | 38 | 1.50 |
| SC/SK-100 | 200 | 7.87 | 300 | 11.81 | 100 | 3.94 | 100 | 3.94 | 12.5 | 0.49 | 25 | 0.98 | 37 | 1.45 | 80 | 3.15 | 55 | 2.16 | 4.75 | 0.18 | 38 | 1.50 |

| Model No. | Slide Length | | Base Length | | Travel | | A | | B | | C ⁽¹⁾ | | D | | E | | F | | J | | K | |
|-----------|--------------|------|-------------|-------|--------|------|------|------|------|------|------------------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SC/SK-150 | 150 | 5.90 | 200 | 7.87 | 25 | 0.98 | 150 | 5.91 | 12.5 | 0.49 | 25 | 0.98 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 | 4.75 | 0.18 | 53 | 2.09 |
| SC/SK-150 | 200 | 7.87 | 300 | 11.81 | 100 | 3.94 | 150 | 5.91 | 12.5 | 0.49 | 100 | 3.94 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 | 4.75 | 0.18 | 53 | 2.09 |
| SC/SK-150 | 250 | 9.84 | 400 | 15.75 | 150 | 5.90 | 150 | 5.91 | 12.5 | 0.49 | 100 | 3.94 | 50 | 1.97 | 125 | 4.92 | 90 | 3.54 | 4.75 | 0.18 | 53 | 2.09 |

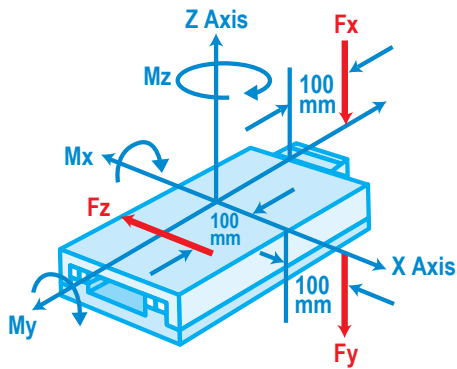
(1) Note: When the base plate length exceeds 300mm, the "C" dimension on the base plate becomes 100mm.



SC & SK Series: Crank & Knob Lead Screw

Moment Loading

| Model No. | Travel | | F(Mx) (Load applied at 100mm off end) | | F(My) (Load applied at 100mm off side) | | F(Mz) (Load applied at 100mm off center) | |
|-----------|--------|------|--|----------|---|----------|---|----------|
| | (mm) | (in) | (Nm) | (in lb) | (Nm) | (in lb) | (Nm) | (in lb) |
| SC/SK050 | 25 | 0.98 | 6 | 53.10 | 10 | 88.50 | 3 | 26.55 |
| SC/SK050 | 50 | 1.97 | 9 | 79.65 | 16 | 141.60 | 6 | 53.10 |
| SC/SK050 | 75 | 2.95 | 12 | 106.20 | 19 | 168.15 | 7 | 61.95 |
| SC/SK075 | 25 | 0.98 | 12 | 106.20 | 31 | 274.35 | 7 | 61.95 |
| SC/SK075 | 50 | 1.97 | 17 | 150.45 | 36 | 318.60 | 8 | 70.80 |
| SC/SK075 | 75 | 2.95 | 19 | 168.15 | 42 | 371.70 | 10 | 88.50 |
| SC/SK100 | 25 | 0.98 | 24 | 212.40 | 71 | 628.35 | 13 | 115.05 |
| SC/SK100 | 50 | 1.97 | 29 | 256.65 | 78 | 690.30 | 15 | 132.75 |
| SC/SK100 | 75 | 2.95 | 32 | 283.20 | 84 | 743.40 | 16 | 141.60 |
| SC/SK100 | 100 | 3.94 | 35 | 309.75 | 97 | 858.45 | 19 | 168.15 |
| SC/SK150 | 50 | 1.97 | 213 | 1,885.05 | 369 | 3,265.65 | 107 | 946.95 |
| SC/SK150 | 100 | 3.94 | 170 | 1,504.50 | 290 | 2,566.50 | 85 | 752.25 |
| SC/SK150 | 150 | 5.91 | 231 | 2,044.35 | 528 | 4,672.80 | 116 | 1,026.60 |



F_x is the load applied in the Z Axis direction, 100mm off end, causing M_x rotation around the X Axis.

F_y is the load applied in the Z Axis direction, 100mm off side, causing M_y rotation around the Y Axis.

F_z is the load applied around the Z Axis at a 100mm radius from the center, causing M_z rotation around the Z Axis.

Dynamic Load Capacity

| Model No. | Travel | | | | | | | | | |
|-----------|---------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 150 (mm) | 5.91 (in) |
| | Load Capacity | | | | | | | | | |
| | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) |
| SC/SK050 | 79 | 174.20 | 132 | 291.06 | 158 | 348.39 | — | — | — | — |
| SC/SK075 | 158 | 348.39 | 184 | 405.72 | 210 | 463.05 | — | — | — | — |
| SC/SK100 | 289 | 637.25 | 316 | 696.78 | 342 | 754.11 | 395 | 870.98 | — | — |
| SC/SK150 | — | — | 736 | 1,622.58 | — | — | 872 | 1,922.76 | 1,090 | 2,403.45 |

Weight

| Model No. | Aluminum | | Cast Iron | |
|-----------|--------------------|-------------------|--------------------|-------------------|
| | (kg / 25mm length) | (lb / 1in length) | (kg / 25mm length) | (lb / 1in length) |
| SC/SK050 | 0.13 | 0.29 | 0.28 | 0.62 |
| SC/SK075 | 0.20 | 0.44 | 0.45 | 0.99 |
| SC/SK100 | 0.28 | 0.62 | 0.68 | 1.50 |
| SC/SK150 | 0.55 | 1.21 | 1.43 | 3.15 |



SC & SK Series: Configurations

Options:

Multi-Axis Configurations

Various Multi-Axis configurations with brackets are available (see examples).

Calibration Option

Bayside provides laser calibrated and/or matched roller options to optimize your stage for the most demanding applications.

P.A.C.T.

Prevents crossed roller bearing creep in vertical and/or high speed applications.

Special Environment Option

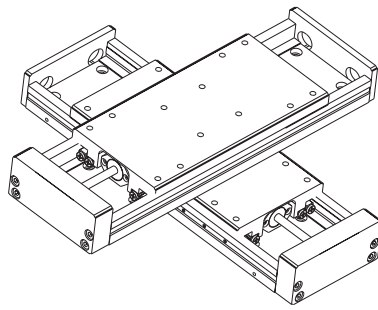
Bayside can prepare your stage for a variety of environments including:

- ▶ Vacuum
- ▶ Clean Room
- ▶ Radiation
- ▶ Food Grade

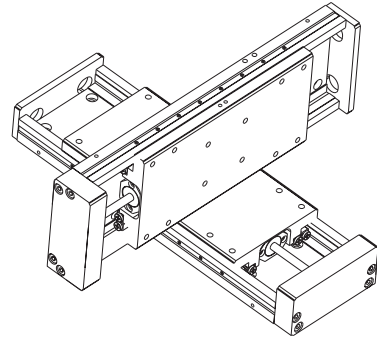
Special Lubricants

Dry lubricant suitable for environments that need a dry, permanent lubrication (e.g. vacuum rated applications).

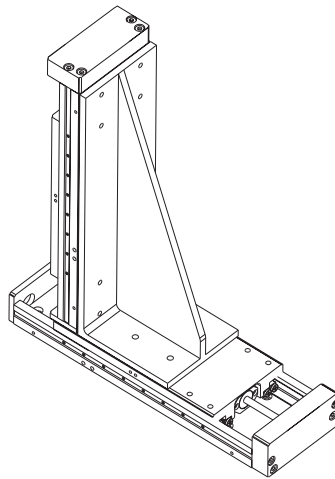
Suggested Orientations:



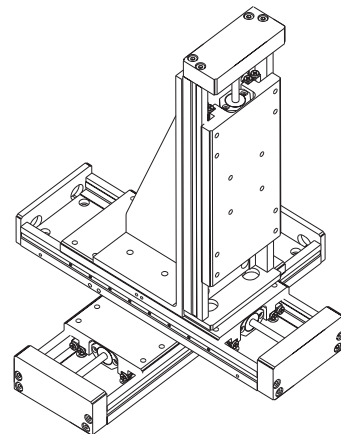
Option 1



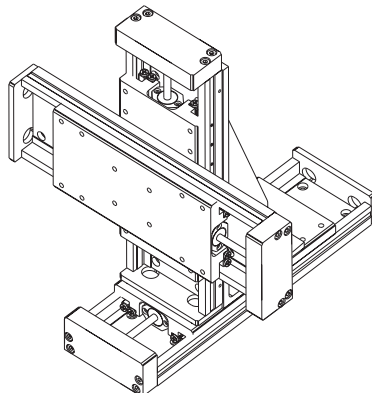
Option 2



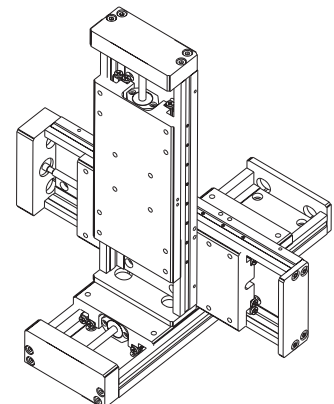
Option 3



Option 4

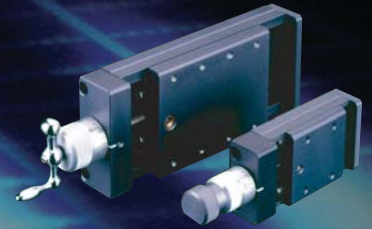


Option 5



Option 6

SC & SK Series: How to Order



Order
Numbering
Example:

| | | | | |
|-----------|------------|----------|---|------------|
| SC | 050 | A | - | 075 |
| A | B | C | | D |

| | |
|-----------|------------------------|
| A | SLIDE SERIES |
| SC | Crank Lead Screw Slide |
| SK | Knob Lead Screw Slide |

| | |
|------------|------------------------------|
| B | METRIC WIDTH OF SLIDE |
| 050 | 050 mm |
| 075 | 075 mm |
| 100 | 100 mm |
| 150 | 150 mm |

| | |
|----------|-----------------|
| C | MATERIAL |
| A | Aluminum |
| C | Cast Iron |

| | | | | |
|----------|--------------------|------------|------------|------------|
| D | BASE LENGTH | | | |
| | Width | | | |
| | 50 mm | 75mm | 100mm | 150mm |
| | 075 | 100 | 150 | 200 |
| | 125 | 150 | 200 | 300 |
| | 175 | 200 | 250 | 400 |
| | — | — | 300 | — |

Linear & Rotary
Positioning Stages

Specifications are subject to change without notice.

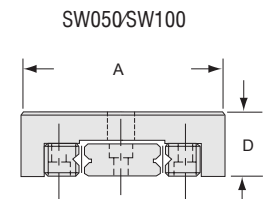
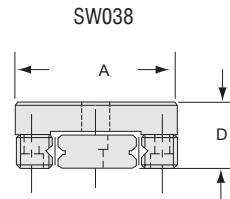
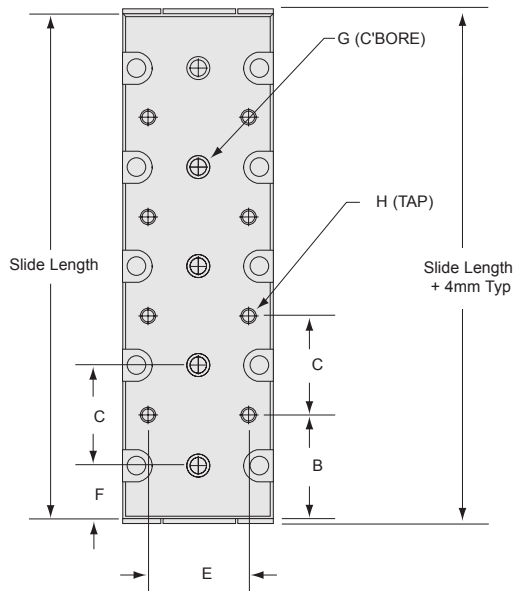
How to Order

Bayside's Crossed Roller Series are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at www.baysidemotion.com.



SW Series: Double "V" Low Profile Slides

Dimensions



Straightness & Flaws: 2 micron/25mm

| "G" Hole | | | | | | | | | | | | |
|-----------|-----------------------|-----------|---------------------|------|---------------------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|
| Model No. | Counterbore (mm) (in) | | Thru Hole (mm) (in) | | Travel | | | | | | | |
| | | | | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 125mm 4.92in | 150mm 5.91in | 200mm 7.87in | 400mm 15.75in |
| | | | | | Number of "G" Holes | | | | | | | |
| SW38 | 6x3.2dp | 0.24x13dp | 3.65 | 0.14 | 2 | 3 | 4 | 5 | 6 | 7 | — | — |
| SW050 | 6x3.2dp | 0.24x13dp | 3.65 | 0.14 | 2 | 3 | 4 | 5 | 6 | 7 | — | — |
| SW100 | 6x3.2dp | 0.24x13dp | 3.65 | 0.14 | — | — | — | 2 | — | — | 3 | 5 |

| "H" Hole | | | | | | | | | | |
|-----------|-----------------|---------------------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|--|
| Model No. | Tap | Travel | | | | | | | | |
| | | 25mm 0.98in | 50mm 1.97in | 75mm 2.95in | 100mm 3.94in | 125mm 4.92in | 150mm 5.91in | 200mm 7.87in | 400mm 15.75in | |
| | | Number of "H" Holes | | | | | | | | |
| SW038 | M4 X 0.7 X 8 dp | 4 | 6 | 8 | 10 | 12 | 14 | 18 | — | |
| SW050 | M4 x 0.7 x 8 dp | 4 | 6 | 8 | 10 | 12 | 14 | 18 | — | |
| SW100 | M4 X 0.7 X 8 dp | — | — | — | 6 | — | — | 12 | 18 | |



| Model No. | A | | B | | C | | D | | E | | F | |
|-----------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SW038 | 038 | 1.496 | 12.5 | 0.49 | 25 | 0.98 | 16 | 0.63 | 15 | 0.59 | 12.5 | 0.49 |
| SW050 | 050 | 1.968 | 12.5 | 0.49 | 25 | 0.98 | 16 | 0.63 | 20 | 0.787 | 12.5 | 0.49 |
| SW100 | 100 | 3.94 | 25 | 0.98 | 50 | 1.968 | 32 | 1.26 | 50 | 1.968 | 50 | 1.968 |

Linear & Rotary Positioning Stages

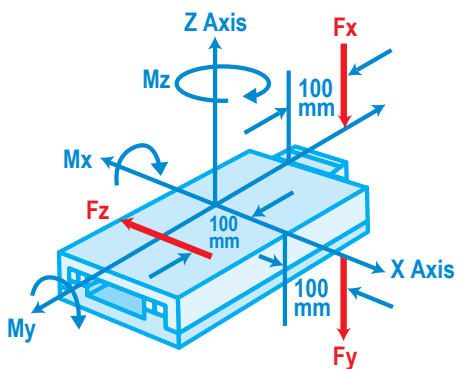
| Model No. | Travel | | | | | | | | | | | | | | | |
|-----------|--------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|------------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 125 (mm) | 4.92 (in) | 150 (mm) | 5.91 (in) | 200 (mm) | 7.87 (in) | 300 (mm) | 11.81 (in) |
| | Slide Length | | | | | | | | | | | | | | | |
| | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| SW038 | 50 | 1.968 | 75 | 2.95 | 100 | 3.94 | 125 | 4.92 | 150 | 5.9 | 175 | 6.89 | 225 | 8.86 | — | — |
| SW050 | 50 | 1.968 | 75 | 2.9 | 100 | 3.94 | 125 | 4.92 | 150 | 5.9 | 175 | 6.89 | 225 | 8.86 | — | — |
| SW100 | — | — | — | — | — | — | 150 | 5.9 | — | — | — | — | 300 | 11.8 | 600 | 23.6 |



SW Series: Double "V" Low Profile Slides

Moment Loading

| Model No. | Travel | | F(Mx) (Load applied at 100mm off end) | | F(My) (Load applied at 100mm off side) | | F(Mz) (Load applied at 100mm off center) | |
|-----------|--------|-------|--|---------|---|---------|---|---------|
| | (mm) | (in) | (Nm) | (in lb) | (Nm) | (in lb) | (Nm) | (in lb) |
| SW038 | 25 | 0.98 | 3 | 26.5 | 4 | 35.4 | 2 | 17.7 |
| SW038 | 50 | 1.97 | 5 | 44.3 | 6 | 53 | 3 | 26.5 |
| SW038 | 75 | 2.95 | 6 | 53 | 8 | 70.5 | 4 | 35.4 |
| SW038 | 100 | 3.94 | 9 | 79.6 | 9 | 79.6 | 4 | 35.4 |
| SW038 | 125 | 4.92 | 9 | 79.6 | 10 | 88.5 | 5 | 44.3 |
| SW038 | 150 | 5.91 | 10 | 88.5 | 11 | 97 | 6 | 53 |
| SW050 | 25 | 0.98 | 6 | 53 | 7 | 62 | 3 | 26.5 |
| SW050 | 50 | 1.97 | 9 | 79.6 | 12 | 106 | 6 | 53 |
| SW050 | 75 | 2.95 | 11 | 97 | 14 | 124 | 7 | 62 |
| SW050 | 100 | 3.94 | 16 | 142 | 16 | 142 | 8 | 70.5 |
| SW050 | 125 | 4.92 | 19 | 168 | 21 | 186 | 11 | 97 |
| SW050 | 150 | 5.91 | 21 | 186 | 23 | 204 | 12 | 106 |
| SW100 | 50 | 1.97 | 38 | 336 | 66 | 584 | 33 | 292 |
| SW100 | 100 | 3.94 | 63 | 558 | 88 | 779 | 44 | 389 |
| SW100 | 150 | 5.91 | 89 | 788 | 110 | 974 | 55 | 487 |
| SW100 | 200 | 7.87 | 114 | 1,009 | 132 | 1,168 | 70 | 620 |
| SW100 | 400 | 15.75 | 165 | 1,460 | 176 | 1,558 | 95 | 841 |



F_x is the load applied in the Z Axis direction, 100mm off end, causing M_x rotation around the X Axis.

F_y is the load applied in the Z Axis direction, 100mm off side, causing M_y rotation around the Y Axis.

F_z is the load applied around the Z Axis at a 100mm radius from the center, causing M_z rotation around the Z Axis.

Dynamic Load Capacity

| Model No. | Travel | | | | | | | | | | | | | | | |
|-----------|---------------|-----------|---------|-----------|---------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|------------|
| | 25 (mm) | 0.98 (in) | 50 (mm) | 1.97 (in) | 75 (mm) | 2.95 (in) | 100 (mm) | 3.94 (in) | 125 (mm) | 4.92 (in) | 150 (mm) | 5.91 (in) | 200 (mm) | 7.87 (in) | 300 (mm) | 11.81 (in) |
| | Load Capacity | | | | | | | | | | | | | | | |
| | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) | (kg) | (lb) |
| SW038 | 44 | 97 | 73 | 161 | 87 | 192 | 102 | 225 | 114 | 251 | 127 | 280 | — | — | — | — |
| SW050 | 79 | 174 | 132 | 291 | 158 | 348 | 184 | 406 | 237 | 523 | 263 | 580 | — | — | — | — |
| SW100 | — | — | — | — | — | — | 435 | 960 | — | — | — | — | 653 | 1,440 | 871 | 1,920 |

Weight

| Model No. | Aluminum | |
|-----------|------------------|-----------------|
| | (kg/25mm length) | (lb/1in length) |
| SW038 | 0.08 | 0.18 |
| SW050 | 0.09 | 0.20 |
| SW100 | 0.30 | 0.66 |



SW Series: Configurations & Options

Options:

Multi-Axis Configurations

Various Multi-Axis configurations with brackets are available (see examples).

Calibration Option

Bayside provides laser calibrated and/or matched roller options to optimize your stage for the most demanding applications.

P.A.C.T.

Prevents crossed roller bearing creep in vertical and/or high speed applications.

Special Environment Option

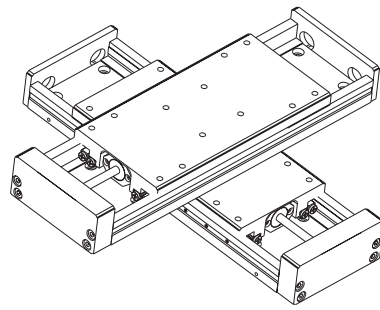
Bayside can prepare your stage for a variety of environments including:

- ▶ Vacuum
- ▶ Clean Room
- ▶ Radiation
- ▶ Food Grade

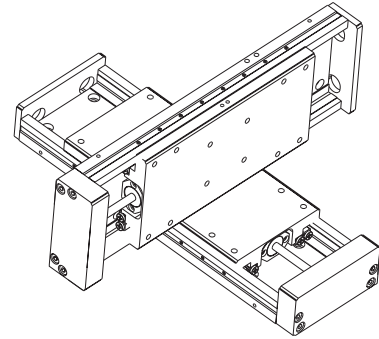
Special Lubricants

Dry lubricant suitable for environments that need a dry, permanent lubrication (e.g. vacuum rated applications).

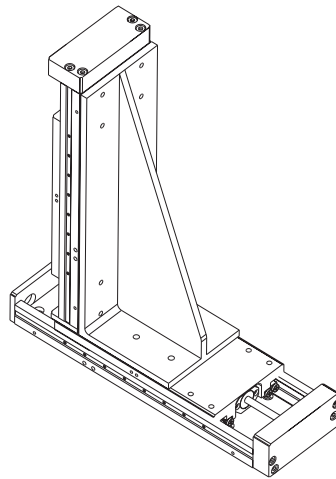
Suggested Orientations:



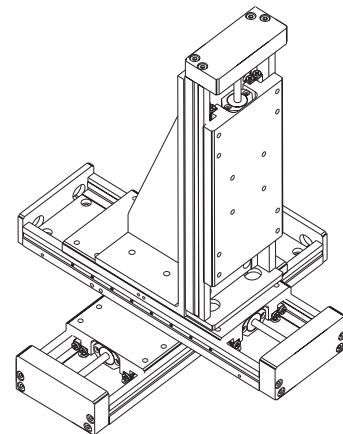
Option 1



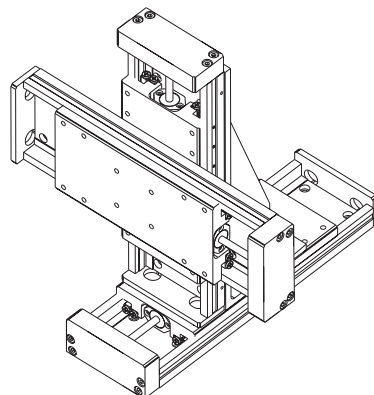
Option 2



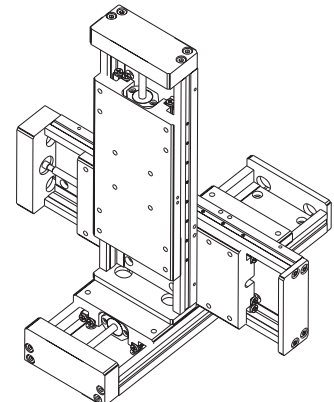
Option 3



Option 4



Option 5

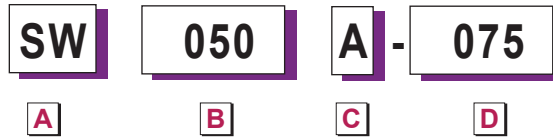


Option 6

SW Series: How to Order



Order
Numbering
Example:



| | |
|----------|-----------------------------|
| A | SLIDE SERIES |
| | SW Low Profile Slide |

| | |
|----------|------------------------------|
| B | METRIC WIDTH OF SLIDE |
| | 038 038 mm |
| | 050 050 mm |
| | 100 100 mm |

| | |
|----------|-------------------|
| C | MATERIAL |
| | A Aluminum |

| | | | |
|----------|---------------------|------------|------------|
| D | SLIDE LENGTH | | |
| | Width | | |
| | 38 mm | 50mm | 100mm |
| | 050 | 050 | 150 |
| | 075 | 075 | 300 |
| | 100 | 100 | 600 |
| | 125 | 125 | — |
| | 150 | 150 | — |
| | 175 | 175 | — |
| | 225 | 225 | — |

Linear & Rotary
Positioning Stages

Specifications are subject to change without notice.

How to Order

Bayside's Crossed Roller Series are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at www.baysidemotion.com.