Side Knob BiSlide® Assembly

The Velmex Side Knob BiSlide Assembly is a unique translation stage suitable for precision vertical test stands. Smooth, precision rotary to linear motion is created using a right angle timing belt drive connected to a fine pitch lead screw. The motion allows the slide to move a payload up and down into position smoothly and precisely.

The Side Knob BiSlide Stage is constructed with hard-coat anodized, aluminum dovetail ways and smooth motion PTFE bearings; BiSlide Assemblies deliver higher rigidity for longer life and more precise movement.

The Side Knob BiSlide Stage features:
- A large 3.15 inch diameter knob with a folding crank for pinpoint control
- A zero backlash timing belt and fine pitch lead screw drive for smooth motion
- Precision lead screw constructed with rolled acme thread and hard nickel-plated for smooth, trouble-free operation and long life
- Long-life I-beam design for maximum stiffness and strength
- 45 degree opposing ways provide maximum rigidity in any direction
- High precision, lightweight offering more durability and strength
- Large carriage provides a 4.6” x 3.1” (11.7 x 7.9 cm) mounting surface for carrying a wide variety of payloads
- Corrosion resistant and impact tolerant for longer life and straight, smooth movement
- Exclusive StabiNut™ delivers a solid, low friction connection between the lead screw and carriage

The Side Knob BiSlide also has several control knob and lock placement options. The slide can be direct mounted vertically to a horizontal surface using a standard BiSlide mounting.

<table>
<thead>
<tr>
<th>Peak Load Capacity (Lift)</th>
<th>40 lbs.</th>
<th>18.1 kg</th>
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</thead>
<tbody>
<tr>
<td>Max. Dynamic Load (Thrust)</td>
<td>20 lbs.</td>
<td>9.1 kg.</td>
</tr>
<tr>
<td>Height</td>
<td>5, 10, 15 in.</td>
<td>12.7, 25.4, 38.1 cm</td>
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<tr>
<td>Width</td>
<td>3.4 in.</td>
<td>8.64 cm</td>
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<tr>
<td>Depth (including knob)</td>
<td>4.3 in.</td>
<td>10.9 cm</td>
</tr>
<tr>
<td>Carriage (L x W)</td>
<td>4.6 in. x 3.4 in</td>
<td>11.7 cm x 8.6 cm</td>
</tr>
</tbody>
</table>

Combine the travel distance with the lead screw code and the mounting code to get the specific part number.

*Travel Distance Code (standard lengths)
- 5 inches = 0050
- 10 inches = 0100
- 15 inches = 0150

Detailed drawings are on the reverse.

Side Knob BiSlide Stages MN10-0100-E01-40 on custom base (left) MN10-1050-E01-40 (right)
Side Knob BiSlide® Assembly

The Velmex Side Knob BiSlide configuration serves as a simple, easy-to-use vertical test stand. The stage aids in delivering consistent measurement results in quality control and laboratory environments.

In addition, the Side Knob BiSlide can be used for many other applications where a vertical positioning stage may be useful, such as positioning a laser or a camera.

The Side Knob Assembly is a specific configuration of Velmex’s popular, modular BiSlide positioning systems. Standard linear BiSlide systems are available in travel distances to 84 in. (215.4 cm). The systems also include tandem and belt-driven designs which can handle higher payloads and have longer maximum travel distances.