Bishop-Wisecarver is excited to offer our newest version of the SlickStick linear actuator. Our entry level actuator has been re-imagined and designed with the end user’s time and ease in mind. Featuring an elegant and simplified single-piece base extrusion that allows for both easy and flexible mounting as well as internal slot for cable routing, SlickStick can just as easily be used in a DIY home project as it can be used for a dusty packaging application. We don’t want you to struggle with any of the typical challenges that come with buying an actuator anymore. SlickStick can be purchased with a motor and is equipped with an exciting and user-friendly motor mount that is capable of accepting either a NEMA 17 or a NEMA 23 motor. Aren’t you ready for an out of the box, plug and play actuated system?

- **Lower complexity** single-piece design that eliminates expensive tube grinding
- **Easy and flexible** mounting with t-slot feature on underside
- **More clearance for mounting fasteners** with taller centerline
- **Lighter weight extrusion** with internal voids for cable routing

### New Base Extrusion

- Field adjustable preload to the linear tube with fewer adjustments
- **Lower parts count** with one sliding element liner instead of four
- **Simplified travel** sensor features with integrated sensor target
- **Serviceable design** with replaceable bearing liner and lead screw nut

### Improved Carriage Design

- Reduced parts count and complexity with integrated motor mount
- **Easy motor attachment** with support for NEMA 17 and NEMA 23 frames
- Integrated sensor mount for optional end of travel home sensor
- Complete your project faster with motor ready mount

### Optimized Motor Mount

- Travel ranges from 6” to 48”
- Painless limit sensor position adjustment
- Stainless steel lead screw with 0.5” or 1.0” lead
- Excellent stiffness and rigidity in a small footprint
- Easy repair and component replacement
- Adaptable mounting for NEMA 17 or NEMA 23 motors
- Optional home and travel limit sensors
- Simplified time-saving design
Lead Screw Drive Elements
• Fully assembled and adjusted lead screw drive elements
• Reduced screw whip due to tensioned lead screw design
• High speed and long travel lengths with your choice of lead screw pitch

Travel Limit Sensors
• Reduced parts count and complexity with integrated motor mount design
• Easy motor attachment with support for NEMA 17 and NEMA 23 frames
• Integrated sensor mount for optional end of travel home sensor
• Complete your project faster with motor ready mount

Repair Kit for Service
• Field adjustable preload to the linear tube with fewer adjustments
• Lower parts count with one sliding element liner instead of four
• Simplified travel sensor features with integrated sensor target
• Serviceable design with replaceable bearing linear and lead screw nut
**SLICKSTICK (SLKA) LOAD CAPACITY**

<table>
<thead>
<tr>
<th>Load Direction</th>
<th>Metric</th>
<th>Imperial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Capacity Downward</td>
<td>$L_{A1}$</td>
<td>133N/556N</td>
</tr>
<tr>
<td>Load Capacity Upward</td>
<td>$L_{A2}$</td>
<td>133N/266N</td>
</tr>
<tr>
<td>Load Capacity</td>
<td>$L_{R}$</td>
<td>133N/556N</td>
</tr>
<tr>
<td>Pitch Moment Capacity</td>
<td>$M_{p}$</td>
<td>1.69 N-m</td>
</tr>
<tr>
<td>Yaw Moment Capacity</td>
<td>$M_{y}$</td>
<td>3.73 N-m</td>
</tr>
<tr>
<td>Roll Moment Capacity</td>
<td>$M_{r}$</td>
<td>1.36 N-m</td>
</tr>
<tr>
<td>Thurst Load</td>
<td>0.5&quot; Lead</td>
<td>227 N</td>
</tr>
<tr>
<td></td>
<td>1.0&quot; Lead</td>
<td>125 N</td>
</tr>
</tbody>
</table>

*30lbf is the maximum load capacity if the carriage is not externally supported against rolling. The higher load capacities are possible if the carriage is externally supported.

**It is recommended that offset loads be located 5 inches or less from the center of the carriage. When the loads are offset at greater distances, the carriage can vibrate during travel.