**VARIABLE SPEED LINEAR ACTUATOR MOTOR FAMILY**

**Series SLS, SBLS Stepping Linear Actuator**

Maximum Load: SLS 15 lbs., SBLS 10 lbs.

Rotor Assembly: Threaded to accept a std. 1/4"-20 5/6 ACME 2G right-hand screw (Class 2G RH)

Insulation Class: Class A (105°C)

Lead Wire: 4 leads 24 AWG (approx. 9 inches [228.6 mm])

Operation Ambient Temp: -10°C to +40°C (approx.)

Temperature Rise: 70°C max

Rotor Bearings: Ball Bearings Standard

Shaft Length: 8 inches [203.2 mm] max with travel 6.75 inches [171.45 mm]

Note: Typical data subject to change without notification

SLS and SBLS stepping linear actuators are reversible, permanent magnet types. The nut accepts a 1/4 in. diameter, 0.048 pitch Acme screw that provides linear motion for pushing, pulling, lifting, and positioning applications.

Standard 8 in. [203.2 mm] lead screws have maximum travel of 6.75 in. [171.45 mm] and a maximum thrust of 15 pounds. Screws of other lengths may be specified. Ball bearings are standard. The motors provide travel of 0.24 or 0.48 inch [0.61 or 1.22 cm] per second.

**Notes:**
- Standard SLS and SBLS motors have 4-phase, unipolar windings for 6, 12, or 24 VDC.
- Bi-polar windings may be specified.

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<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Nominal Voltage (Vdc)</th>
<th>Rotor Speed (RPM)</th>
<th>Steps/m/sec</th>
<th>Steps/cm/sec</th>
<th>Maximum Load (lbs)</th>
<th>Maximum Load (kg)</th>
<th>Shaft Length (in)</th>
<th>Shaft Length (cm)</th>
<th>Input Power (watts)</th>
<th>Winding Res. (ohms)</th>
<th>Weight (oz)</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLS</td>
<td>4014-001</td>
<td>6</td>
<td>300</td>
<td>100</td>
<td>.2</td>
<td>.51</td>
<td>15</td>
<td>6.8</td>
<td>8</td>
<td>20.32</td>
<td>11.5</td>
<td>6.3</td>
<td>10.5</td>
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<tr>
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<td>12</td>
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<td>100</td>
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<td>8</td>
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<td>11.5</td>
<td>25</td>
<td>10.5</td>
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<tr>
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<td>4014-003</td>
<td>24</td>
<td>300</td>
<td>100</td>
<td>.2</td>
<td>.51</td>
<td>15</td>
<td>6.8</td>
<td>8</td>
<td>20.32</td>
<td>11.5</td>
<td>100</td>
<td>10.5</td>
</tr>
</tbody>
</table>
The image contains a table and a diagram related to motor specifications. The table shows the switching sequence for different phases and rotations.

### Table: Switching Sequence

<table>
<thead>
<tr>
<th>Combination</th>
<th>CCW Rotation</th>
<th>CW Rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 0 1 0</td>
<td>1 0 1 0</td>
<td>0 1 0 1</td>
</tr>
<tr>
<td>1 0 0 1</td>
<td>0 1 0 1</td>
<td>1 0 1 0</td>
</tr>
</tbody>
</table>

**1 = ON, 0 = OFF**

**SWITCHING SEQUENCE**

The diagram illustrates the connection of motor phases with labels:
- **Black/White**
- **Blue/White**
- **Blue**
- **Red**
- **White**

The graph shows the thrust (lbs) against pulse rate (µsec) for two different models: SLS 4014-003 and SRLS 4028-003. The x-axis represents the linear travel (in. min-1) and the y-axis represents the thrust (lbs).