These miniature Permanent Magnet DC Stepper Motors measure 15mm in diameter and provide up to 0.56 ounce-inches of bipolar holding torque. These motors come standard in 18° step angles with a four wire connection and PIN option, and are offered in 9V or 12V voltage ratings. Customization is available for larger quantities.

<table>
<thead>
<tr>
<th>Item</th>
<th># of Wires</th>
<th># of Phases</th>
<th>Bipolar Holding Torque (oz-in)</th>
<th>Detent Torque (oz-in)</th>
<th>Bipolar Series RMS Voltage (V)</th>
<th>Current Per Phase (A)</th>
<th>Resistance Per Phase (ohms)</th>
<th>Rotor Inertia (oz-in-sec²)</th>
<th>Weight (lbs)</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSM15-180-12-12V-004A-LW4</td>
<td>4</td>
<td>2</td>
<td>0.56</td>
<td>0.14</td>
<td>12</td>
<td>0.04</td>
<td>300</td>
<td>0.000014</td>
<td>0.02</td>
<td>11.5</td>
</tr>
<tr>
<td>TSM15-180-12-12V-007A-PINS</td>
<td>4 Pins</td>
<td>2</td>
<td>0.56</td>
<td>0.14</td>
<td>12</td>
<td>0.07</td>
<td>190</td>
<td>0.000014</td>
<td>0.02</td>
<td>11.5</td>
</tr>
<tr>
<td>TSM15-180-12-5V-050A-PINS</td>
<td>4 Pins</td>
<td>2</td>
<td>0.37</td>
<td>0.08</td>
<td>5</td>
<td>0.5</td>
<td>10</td>
<td>0.000014</td>
<td>0.02</td>
<td>11.5</td>
</tr>
</tbody>
</table>

- **Step Angle Accuracy**: ±8% (Full Step, No Load)
- **Resistance Accuracy**: ±10%
- **Inductance Accuracy**: ±20%
- **Temperature Rise**: 80°C Max
- **Ambient Temperature**: -20°C to +50°C
- **100Ω Min. 500 VDC**

See page 2 for additional model types.
TSM15-180-12-12V-004A-LW4

All units are in (mm)

TSM15-180-12-12V-007A-PINS

No Photo Available

All units are in (mm)

TSM15-180-12-5V-050A-PINS

All units are in (mm)