At Moog, we understand the challenges that machine builders face when designing machines that demand higher performance and faster operation. Facilitating the design process to achieve greater efficiency in an industrial environment is critical. Moog works with our customers to provide expert motion control solutions that consistently deliver world-class performance, design flexibility and reliability.

Machine builders across industries have identified the need to achieve faster cycle times to increase productivity and machine throughput. Performance of traditional electric systems have been limited by high inertias. The Moog Maximum Dynamic (MD) Brushless Servo Motor Series has been developed to overcome these challenges.

The MD Series Servo Motor addresses the need for higher dynamics through increased angular acceleration which delivers higher performance. The electromagnetic design has exceptional overload capacity which results in an increase in the effective torque available to accelerate and decelerate the load. This functionality coupled with low rotor inertias enables higher dynamics and improved cycle times.

The comprehensive range of MD Series Servo Motors, combined with the ability to seamlessly integrate with existing applications helps reduce the need for redesign; thereby redefining the possibilities for greater performance, design flexibility and reliability.

This MD Servo Motor Series is an ideal choice for machine builders looking for “best-in-class” servo motors with low inertia and high dynamics. Moog Servo Drives can further optimize machine performance and ensure smooth integration.

**ADVANTAGES**

- Higher dynamics delivers higher performance
- Increases productivity
- Wide motor range for rapid machine design
- Seamless integration into existing infrastructure
- Customization for application specific requirements

**KEY APPLICATION MARKETS**

- Plastics machinery
- Die casting machinery
- Metal forming machinery and presses
- Food, pharmaceutical and packaging machinery
- Other general industrial machinery
### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Units</th>
<th>Natural cooling</th>
<th>Liquid cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum torque</strong> $M_{\text{max}}$</td>
<td>Nm (lbf in)</td>
<td>10 to 2,012 (88.5 to 17,807)</td>
<td>64.2 to 2,012 (568 to 17,807)</td>
</tr>
<tr>
<td><strong>Continuous stall torque</strong> $M_O$</td>
<td>Nm (lbf in)</td>
<td>2.2 to 629 (19.5 to 5,567)</td>
<td>46 to 1,034 (407 to 9,152)</td>
</tr>
<tr>
<td><strong>Rated torque</strong> $M_N$</td>
<td>Nm (lbf in)</td>
<td>1.5 to 575 (13.3 to 5,089)</td>
<td>45 to 1,003 (398 to 8,877)</td>
</tr>
<tr>
<td><strong>Rated speed</strong> $n_N$</td>
<td>r/min</td>
<td>5,500 to 1,400</td>
<td>5,500 to 1,400</td>
</tr>
<tr>
<td><strong>Rated power</strong> $P_N$</td>
<td>kW (hp)</td>
<td>0.85 to 34.6 (1.1 to 46)</td>
<td>9.35 to 60.4 (12.5 to 81)</td>
</tr>
<tr>
<td><strong>Rotor inertia</strong> $J$</td>
<td>kg cm² ($10^{-4}$ lbf in s²)</td>
<td>0.78 to 1,985 (6.9 to 17,569)</td>
<td>10.8 to 1,985 (96 to 17,569)</td>
</tr>
</tbody>
</table>

**Position transducer options**

- Resolver or encoder

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Moog has offices around the world. For more information or the office nearest to you, contact us online.

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www.moog.com/industrial

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Moog Servo Drives are matched to the MD Series Servo Motors for optimized system performance.