Our typical custom engineered options include:

- Extended Ambient Temperature Ratings
- Custom Winding Configurations
- Special Electromagnetic Design Platforms
- Specialized Military Coatings
- Corrosion Resistant Materials
- Food Grade Materials
- Custom Bearings
- Witness Testing
- IP 67 Sealing
More solutions from us equals more success for you.

At MTI-Torque Systems, we have always believed in giving you more choices. After all, your application is unique, so the servomotor you choose for it should be unique too. While the competition stacks their shelves with motors and hardware, we pack ours with engineered solutions. The truth is, our shelf contains just about any type of solution you could require, from simple integration components such as brakes, encoders and tachometers, to elaborate breakthrough designs.

Our typical standard integration options include:

A) Custom Connectors
   Connector Locations
   Cabling

B) Multiple Standard Winding Configurations
   Matched Windings
   Thermostats

C) Standard & Custom Shaft Configurations

D) Hall Sensors
   Standard and Custom
   Encoders
   Resolver
   Tachometers
   Brakes

E) Standard Flange Mounting
   NEMA Mounting
   IEC Mounting
   Multiple Gearhead Options

Features:
- Standard Metric, NEMA and special mounting/shaft configurations
- Optional encoder line counts up to 5,000 ppr available for all configurations
- Segmented stator lamination technology contained in a high efficiency heat transfer capsule
- Complete conformance to UL/CUL and CE Standards across the entire product line
- External hardware is 300 series Stainless Steel, including casing and spring on shaft seal

Benefits:
- Specialized machinery designs can install or retrofit servomotor with little or no restrictions
- Multiple configurations accommodate flexible design considerations
- Performance enhancement and feature convenience that allows Torque Systems motors to be incorporated into a broader range of applications
- Four sizes – 60mm, 85mm, 110mm and 140mm a continuous stall torque range .5Nm (4.4 lb–in.) to 27.5Nm (243 lb – in.).
High Energy Brushless Servomotor Platforms

Key
- Continuous Duty
- Intermittent Duty

Standard Design Features:
- High Energy Neodymium Magnets
- CE/UL/CUL Compliant
- Multiple Winding Availability
- IP 67 Construction
- Clean Operating, Low Maintenance Brushless Design

Rigid Application Development Process:
- Application Review
- Motion Profile Analysis
- Magnetic FEA 3D Modeling & Computer Simulation
- Prototype Design
- Performance Verification

Platform T060
Multiple Standard and Custom Windings Available

<table>
<thead>
<tr>
<th>Platform Number</th>
<th>Rated Power</th>
<th>Cont. Stall Torque</th>
<th>Peak Torque</th>
<th>Rotor Inertia**</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0601</td>
<td>247 W</td>
<td>4.4 lb-in</td>
<td>22 lb-in</td>
<td>2.10 lb-in-sec2</td>
</tr>
<tr>
<td>T0602</td>
<td>410 W</td>
<td>7.7 lb-in</td>
<td>39 lb-in</td>
<td>4.40 lb-in-sec2</td>
</tr>
<tr>
<td>T0603</td>
<td>476 W</td>
<td>10.5 lb-in</td>
<td>52 lb-in</td>
<td>5.90 lb-in-sec2</td>
</tr>
<tr>
<td>T0604</td>
<td>504 W</td>
<td>12.4 lb-in</td>
<td>62 lb-in</td>
<td>7.00 lb-in-sec2</td>
</tr>
</tbody>
</table>

Platform T085
Multiple Standard and Custom Windings Available

<table>
<thead>
<tr>
<th>Platform Number</th>
<th>Rated Power</th>
<th>Cont. Stall Torque</th>
<th>Peak Torque</th>
<th>Rotor Inertia**</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0851</td>
<td>967 W</td>
<td>17.7 lb-in</td>
<td>57 lb-in</td>
<td>6.40 lb-in-sec2</td>
</tr>
<tr>
<td>T0852</td>
<td>1536 W</td>
<td>31.2 lb-in</td>
<td>103 lb-in</td>
<td>11.60 lb-in-sec2</td>
</tr>
<tr>
<td>T0853</td>
<td>1941 W</td>
<td>43.4 lb-in</td>
<td>144 lb-in</td>
<td>16.30 lb-in-sec2</td>
</tr>
<tr>
<td>T0854</td>
<td>2059 W</td>
<td>53.1 lb-in</td>
<td>180 lb-in</td>
<td>20.40 lb-in-sec2</td>
</tr>
</tbody>
</table>

Platform T110
Multiple Standard and Custom Windings Available

<table>
<thead>
<tr>
<th>Platform Number</th>
<th>Rated Power</th>
<th>Cont. Stall Torque</th>
<th>Peak Torque</th>
<th>Rotor Inertia**</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1101</td>
<td>1543 W</td>
<td>43.3 lb-in</td>
<td>106 lb-in</td>
<td>12.00 lb-in-sec2</td>
</tr>
<tr>
<td>T1102</td>
<td>2628 W</td>
<td>75.2 lb-in</td>
<td>194 lb-in</td>
<td>21.90 lb-in-sec2</td>
</tr>
<tr>
<td>T1103</td>
<td>3175 W</td>
<td>99.1 lb-in</td>
<td>264 lb-in</td>
<td>29.80 lb-in-sec2</td>
</tr>
<tr>
<td>T1104</td>
<td>3722 W</td>
<td>125 lb-in</td>
<td>333 lb-in</td>
<td>37.60 lb-in-sec2</td>
</tr>
</tbody>
</table>

Platform T140
Multiple Standard and Custom Windings Available

<table>
<thead>
<tr>
<th>Platform Number</th>
<th>Rated Power</th>
<th>Cont. Stall Torque</th>
<th>Peak Torque</th>
<th>Rotor Inertia**</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1402</td>
<td>5500 W</td>
<td>122.00 lb-in</td>
<td>420 lb-in</td>
<td>47.50 lb-in-sec2</td>
</tr>
<tr>
<td>T1403</td>
<td>5780 W</td>
<td>164.00 lb-in</td>
<td>529 lb-in</td>
<td>71.00 lb-in-sec2</td>
</tr>
<tr>
<td>T1404</td>
<td>6200 W</td>
<td>204.00 lb-in</td>
<td>840 lb-in</td>
<td>95.00 lb-in-sec2</td>
</tr>
<tr>
<td>T1405</td>
<td>6930 W</td>
<td>250.00 lb-in</td>
<td>1044 lb-in</td>
<td>118 lb-in-sec2</td>
</tr>
</tbody>
</table>

The MDM-5000 internal component design integrates superbly into customer equipment where size and weight are important considerations. The MDM-5000’s superior torque density provides a compact design that easily fits into your equipment, reducing overall size and maximizing rate and position accuracy. Molded in place stator construction maximizes design in flexibility - either molded into typical cylindrical housings or into unique equipment housings that demand specific dimensional requirements. Easier design means you don’t have to compromise your design to fit our motors.
### Nominal Motor Dimensions

<table>
<thead>
<tr>
<th>Platform</th>
<th>Frame Length (mm)</th>
<th>Frame square length (mm)</th>
<th>Shaft extension (mm)</th>
<th>Shaft Diameter (mm)</th>
<th>End Bell Connector Width to Motor End (mm)</th>
<th>End Bell Connector Height to Motor End (mm)</th>
<th>End Bell Connector Width to Motor End (mm)</th>
<th>End Bell Connector Height to Motor End (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0601</td>
<td>112</td>
<td>58</td>
<td>2.28</td>
<td>19.5</td>
<td>17</td>
<td>14</td>
<td>55</td>
<td>30.5</td>
</tr>
<tr>
<td>T0602</td>
<td>131</td>
<td>58</td>
<td>2.28</td>
<td>19.5</td>
<td>17</td>
<td>14</td>
<td>55</td>
<td>30.5</td>
</tr>
<tr>
<td>T0603</td>
<td>150</td>
<td>58</td>
<td>2.28</td>
<td>19.5</td>
<td>17</td>
<td>14</td>
<td>55</td>
<td>30.5</td>
</tr>
<tr>
<td>T0604</td>
<td>169</td>
<td>66</td>
<td>2.28</td>
<td>19.5</td>
<td>17</td>
<td>14</td>
<td>55</td>
<td>30.5</td>
</tr>
</tbody>
</table>

### Notes:
- Additions including brakes, resolvers, rear shaft extensions, and seals will increase overall length.
- Shaft extension includes motor face pilot.
- Connectors, connector housings, and mounting flanges may increase overall envelope dimensions.
- Nema and IEC mounting standards available.
- Motor dimensions subject to change.

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**RoHS COMPLIANT**

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