CPD Actuators

Powerful, Maintenance-Free
Roller Screw Actuators

COMPATIBLE WITH VIRTUALLY ANY SERVO
OR STEPPER MOTOR

CREATIVE SOLUTIONS TO AUTOMATION'S MOST DEMANDING CHALLENGES
CPD Series’ Unmatched Performance Advantages

Why are CPD Series actuators rated so much higher in max continuous dynamic force and max static force? First and foremost, because CMC’s patented Grooved Roller Bearing (GRB™) technology enables dramatically higher loads, higher speeds and longer life in a much smaller package. The GRBs in CMC’s actuators match the dynamic and static load capacities of the roller screws. A traditional bearing would be much too large to fit into the limited physical space of the actuator body to match the roller screw’s capabilities.

In fact, every component in a CPD actuator is uniquely designed to handle the loads of the roller screw, both in a dynamic application and in a static application.

See CMC’s Roller Screw and Grooved Roller Bearing catalogs for more detailed roller screw and bearing technical information.
CPD Series Actuators

Performance Overview

<table>
<thead>
<tr>
<th>Model</th>
<th>CPD-250</th>
<th>CPD-350</th>
<th>CPD-450</th>
<th>CPD-600</th>
<th>CPD-800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Size (inches)</td>
<td>2.5</td>
<td>3.5</td>
<td>4.5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Max Continuous Dynamic Force (lbf)</td>
<td>6,750</td>
<td>14,220</td>
<td>30,600</td>
<td>54,000</td>
<td>95,000</td>
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<tr>
<td>Max Continuous Dynamic Force (kN)</td>
<td>30</td>
<td>63</td>
<td>136</td>
<td>240</td>
<td>423</td>
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<tr>
<td>Maximum Linear Speed (in/sec)</td>
<td>40</td>
<td>39</td>
<td>39</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>Maximum Linear Speed (mm/sec)</td>
<td>1016</td>
<td>991</td>
<td>991</td>
<td>940</td>
<td>965</td>
</tr>
<tr>
<td>Minimum Standard Stroke (in)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Maximum Standard Stroke (in)</td>
<td>24</td>
<td>36</td>
<td>36</td>
<td>48</td>
<td>48</td>
</tr>
</tbody>
</table>

NOTE: These values are the performance characteristics of the actuator itself, unrelated to limitations imposed by any specific motor.