MACHINE SCREW JACKS

Joyce offers Machine Screw Jacks in several designs including:
- Translating
- Keyed for non-rotation
- Keyed for traveling nut (KFTN)
- Double clevis
- Trunnion

A guide for ordering is on pages 20 and 21.
**MACHINE SCREW JACKS ORDERING INFORMATION**

**Instructions:** Select a model number from this chart.

<table>
<thead>
<tr>
<th>Miniature</th>
<th>1-Ton</th>
<th>2-Ton</th>
<th>2-Ton Reverse Base</th>
<th>3-Ton</th>
<th>5-Ton</th>
<th>10-Ton</th>
<th>15-Ton</th>
<th>20-Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>WJ250</td>
<td>WJ51</td>
<td>WJ62</td>
<td>WJ726</td>
<td>WJ63</td>
<td>WJ810</td>
<td>WJ815</td>
<td>WJ820</td>
<td></td>
</tr>
<tr>
<td>WJ500*</td>
<td>WJ201</td>
<td>WJ723</td>
<td>WJ724</td>
<td>WJ725</td>
<td>WJ815</td>
<td>WJ820</td>
<td>WJ820</td>
<td></td>
</tr>
<tr>
<td>WJ1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25-Ton</th>
<th>30-Ton</th>
<th>35-Ton</th>
<th>50-Ton</th>
<th>50-Ton Reverse Base</th>
<th>75-Ton</th>
<th>100-Ton</th>
<th>150-Ton</th>
<th>250-Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>WJ1125</td>
<td>WJ1130</td>
<td>WJ1135</td>
<td>WJ1150</td>
<td>RWJT1150</td>
<td>WJ1175</td>
<td>WJ12100</td>
<td>WJ12150</td>
<td>WJ1125*</td>
</tr>
<tr>
<td>WJ3225</td>
<td>WJ3230</td>
<td>WJ3235</td>
<td>WJ3250</td>
<td>RWJT3250</td>
<td>WJ3275</td>
<td>WJ36100</td>
<td>WJ36150</td>
<td>WJ3225*</td>
</tr>
<tr>
<td>DWJ1125*</td>
<td>DWJ1120*</td>
<td>DWJ1130*</td>
<td>DWJ1135*</td>
<td>RWJT1150</td>
<td>DWJ1175</td>
<td>DWJ12100</td>
<td>DWJ12150</td>
<td>DWJ1125*</td>
</tr>
<tr>
<td>DWJ1125*</td>
<td>DWJ1120*</td>
<td>DWJ1130*</td>
<td>DWJ1135*</td>
<td>RWJT1150</td>
<td>DWJ1175</td>
<td>DWJ12100</td>
<td>DWJ12150</td>
<td>DWJ1125*</td>
</tr>
</tbody>
</table>

**Important Note:** *Not self-locking, may lower under load. Brake motors or external locking systems are recommended.

D: Double Lead Screw

R: Reverse Base Jack, (only available on 2-ton and 50-ton jacks).

Sample Part Number: **WJT65U1N-18.50-STDX-STDX-B**

---

**Jack Configuration**

- **U**=Upright
- **I**=Inverted

**End Conditions**

- **1**=T1 (plain end)
- **2**=T2 (load pad)
- **3**=T3 (threaded end)
- **4**=T4 (male clevis)

**Jack Designs**

- **S**=Translating
- **K**=Keyed for Non Rotation
- **N**=Traveling Nut
- **D**=Double Clevis
- **A**=KFTN Trunnion*
- **T**=Trunnion*

---

**Machine Screw Jack Rise**

Rise is travel expressed in inches and not the actual screw length.

---

**Instructions:** Select a model number from this chart. **Sample Part Number: WJT65U1N-18.50-STDX-STDX-B**

---

**Left Side**

- **Shaft Code**
- (see below)
- **XXX**=Remove
- **STDX**=Standard
- **CUST**=Custom

**Right Side**

- **Shaft Code**
- (see below)
- **XXX**=Remove
- **STDX**=Standard
- **CUST**=Custom

---

**Additional Options**

- **X**=Standard Jack, no additional options
- **S**=Additional Specification Required (comment as necessary)
- **Anti-Backlash**
  - p. 181
  - p. 181
  - p. 181
- **A**=Split Nut
- **A90**=A90 Design
- **A95**=A95 Design
- **Protective Boots**
  - pp. 170-173
  - pp. 170-173
  - pp. 170-173
- **F1**=Do Not Paint
- **F2**=Epoxy Paint
- **F3**=Outdoor Paint
- **Process**
- **Motor Options**
  - M1=Less Motor
  - M2=Brake Motor
  - M3=Single Phase Motor (120VAC)
  - M4=50Hz Motor
  - M5=Special Motor
- **Grease/Seals**
  - H1=High Temperature Operation
  - H2=Food Grade
- **Screw Stops**
  - ST0=Extending
  - ST1=Retracting
  - ST2=Both

---

*Standard trunnion mounts available on 2-ton through 20-ton jacks. (See page 183)*
MACHINE SCREW JACKS

SHAFT CODES

Instructions: Select the appropriate shaft codes for both right and left hand shafts. One shaft code must be specified for each side of the jack.

Screw Stops (p. 10) and Boots (pp. 170-173)

Screw stops are optional on machine screw jacks. When specified, the closed height of the jack and/or the protection tube length may be increased.

When boots are added to machine screw jacks, the closed height of the jack may be increased.

Hand Wheels (p. 180)

HW04=4" dia
HW06=6" dia
HW08=8" dia
HW10=10" dia
HW12=12" dia

Geared Potentiometers (p. 175)

POTA=0-10V
POTB=4-20mA
POTC=0-10V
w/2 switches
POTD=4-20mA
w/2 switches
IP65 rated enclosures

Encoders (pp. 176-177)

ENCA.Absolute Encoder 0-10 VDC, programmable
ENCB.Absolute Encoder 4-20mA, programmable
ENCC.Absolute Encoder CAN Open
ENCD.Absolute Encoder SSI
ENCS.Stainless Steel Incremental Encoder 1024 PPR
ENCX.Incremental Encoder 200 PPR
ENCY.Incremental Encoder 1024 PPR

Motors for Systems and Direct Drives (pp. 178-179)

• All standard motors are 3-phase, 208-230/460 VAC or 230/460 VAC. Other motor options are available. Specify the appropriate motor size from the chart on the right.

• Refer to the “Additional Options” chart on the preceding page as needed.

• Brake motors (M2) are recommended for jacks that are not self-locking, and jacks with double lead screws.

• If the motor frequency will be varied to provide a “soft” start an inverter duty motor may be required.

Motors

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 HP</td>
<td>K</td>
</tr>
<tr>
<td>1/3 HP</td>
<td>A</td>
</tr>
<tr>
<td>1/2 HP</td>
<td>B</td>
</tr>
<tr>
<td>3/4 HP</td>
<td>C</td>
</tr>
<tr>
<td>1 HP</td>
<td>D</td>
</tr>
<tr>
<td>1-1/2 HP</td>
<td>E</td>
</tr>
<tr>
<td>2 HP</td>
<td>F</td>
</tr>
<tr>
<td>3 HP</td>
<td>G</td>
</tr>
<tr>
<td>5 HP</td>
<td>H</td>
</tr>
<tr>
<td>7-1/2 HP</td>
<td>I</td>
</tr>
<tr>
<td>10 HP</td>
<td>I</td>
</tr>
<tr>
<td>15 HP</td>
<td>J</td>
</tr>
</tbody>
</table>

Motor Mounts (pp. 178-179)

Ordering Example:

MMA=56C

Motor code from chart at left

For servo motor mounts see p. 178

Standard motor adapters are aluminum.

Mechanical Limit Switches (p. 174)

Ordering Example: LA13

Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS7-402</td>
<td>LI</td>
</tr>
<tr>
<td>LS8-402</td>
<td>LA</td>
</tr>
<tr>
<td>LS8-404</td>
<td>LB</td>
</tr>
</tbody>
</table>

Available Positions

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Side Shaft Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right Side Shaft Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of DPDT Switches (see p. 174)

NOTE:
Will always be 0 for LS7 models

• 2, 3, 5, 10, 15, and 20 ton jacks are available with positions #1, #3, and #5
• 25, 30, 35, 50, 75, 100, and 150 ton jacks are available with positions #1, #4, #7, and #8

*These positions are not standard. Contact Joyce with your requirements.
## MACHINE SCREW JACKS

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
<th>Screw Diameter (Inches)</th>
<th>Thread Pitch/Lead</th>
<th>Worm Gear Ratio</th>
<th>Worm Shaft Turns for 1&quot; Travel</th>
<th>Tare Torque (Inch Lbs.)</th>
<th>Operating Torque (Inch Lbs.)</th>
<th>Efficiency Rating % Approx.</th>
<th>Screw Torque (Inch Lbs.)</th>
<th>Basic Jack Weight (Lbs.)</th>
<th>Jack Weight per Inch Travel (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WJ250</td>
<td>250 lbs.</td>
<td>1/2</td>
<td>1/4</td>
<td>5:1</td>
<td>40</td>
<td>0.025W*</td>
<td>0.018W* @ 500 RPM</td>
<td>23.0</td>
<td>0.050W*</td>
<td>1.2</td>
<td>0.1</td>
</tr>
<tr>
<td>WJ500</td>
<td>500 lbs.</td>
<td>5/8</td>
<td>1/4</td>
<td>5:1</td>
<td>20</td>
<td>0.041W*</td>
<td>0.030W* @ 500 RPM</td>
<td>27.2</td>
<td>0.079W*</td>
<td>1.3</td>
<td>0.1</td>
</tr>
<tr>
<td>WJ1000</td>
<td>1,000 lbs.</td>
<td>5/8</td>
<td>1/4</td>
<td>5:1</td>
<td>40</td>
<td>0.030W*</td>
<td>0.051W* @ 500 RPM</td>
<td>19.9</td>
<td>0.095W*</td>
<td>1.3</td>
<td>0.1</td>
</tr>
<tr>
<td>WJ51</td>
<td>1 ton</td>
<td>3/4</td>
<td>1/4</td>
<td>5:1</td>
<td>25</td>
<td>0.038W*</td>
<td>0.056W* @ 500 RPM</td>
<td>25.0</td>
<td>0.075W*</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>WJ201</td>
<td>2 ton</td>
<td>1</td>
<td>1/4</td>
<td>5:1</td>
<td>20</td>
<td>0.041W*</td>
<td>0.028W* @ 500 RPM</td>
<td>24.2</td>
<td>0.098W*</td>
<td>15</td>
<td>0.3</td>
</tr>
<tr>
<td>(R)WJT62</td>
<td>2 ton</td>
<td>1</td>
<td>1/4</td>
<td>5:1</td>
<td>6</td>
<td>0.041W*</td>
<td>0.028W* @ 500 RPM</td>
<td>24.2</td>
<td>0.098W*</td>
<td>15</td>
<td>0.3</td>
</tr>
<tr>
<td>(R)WJT122</td>
<td>2 ton</td>
<td>1</td>
<td>1/4</td>
<td>5:1</td>
<td>12</td>
<td>0.057W*</td>
<td>0.039W* @ 500 RPM</td>
<td>33.7</td>
<td>0.139W*</td>
<td>24</td>
<td>0.4</td>
</tr>
<tr>
<td>(R)WJT242</td>
<td>3 ton</td>
<td>1</td>
<td>1/4</td>
<td>5:1</td>
<td>25</td>
<td>0.055W*</td>
<td>0.041W* @ 500 RPM</td>
<td>33.8</td>
<td>0.139W*</td>
<td>17</td>
<td>0.4</td>
</tr>
<tr>
<td>WJ63</td>
<td>3 ton</td>
<td>1</td>
<td>1/4</td>
<td>5:1</td>
<td>6</td>
<td>0.040W*</td>
<td>0.028W* @ 500 RPM</td>
<td>24.3</td>
<td>0.098W*</td>
<td>17</td>
<td>0.4</td>
</tr>
<tr>
<td>WJ123</td>
<td>3 ton</td>
<td>1</td>
<td>1/4</td>
<td>5:1</td>
<td>12</td>
<td>0.041W*</td>
<td>0.025W* @ 500 RPM</td>
<td>22.2</td>
<td>0.098W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>WJ243</td>
<td>5 ton</td>
<td>1/2</td>
<td>1/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>WJ253</td>
<td>5 ton</td>
<td>1/2</td>
<td>1/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>DWJ63</td>
<td>5 ton</td>
<td>1/2</td>
<td>2/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>DWJ243</td>
<td>5 ton</td>
<td>1/2</td>
<td>2/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>WJT65</td>
<td>5 ton</td>
<td>1/2</td>
<td>2/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>WJT125</td>
<td>5 ton</td>
<td>1/2</td>
<td>2/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>WJT245</td>
<td>5 ton</td>
<td>1/2</td>
<td>2/4</td>
<td>5:1</td>
<td>25</td>
<td>0.045W*</td>
<td>0.029W* @ 500 RPM</td>
<td>26.8</td>
<td>0.171W*</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>WJ810</td>
<td>10 ton</td>
<td>2</td>
<td>5/8</td>
<td>5:1</td>
<td>25</td>
<td>0.061W*</td>
<td>0.043W* @ 200 RPM</td>
<td>23.1</td>
<td>0.095W*</td>
<td>43</td>
<td>1.3</td>
</tr>
<tr>
<td>WJ2410</td>
<td>10 ton</td>
<td>2</td>
<td>5/8</td>
<td>5:1</td>
<td>25</td>
<td>0.061W*</td>
<td>0.043W* @ 200 RPM</td>
<td>23.1</td>
<td>0.095W*</td>
<td>43</td>
<td>1.3</td>
</tr>
<tr>
<td>WJ5210</td>
<td>10 ton</td>
<td>2</td>
<td>5/8</td>
<td>5:1</td>
<td>25</td>
<td>0.061W*</td>
<td>0.043W* @ 200 RPM</td>
<td>23.1</td>
<td>0.095W*</td>
<td>43</td>
<td>1.3</td>
</tr>
</tbody>
</table>

**Important Note:** Series DWJ double lead screw jacks and WJ500 screw jacks are not self-locking. Brake motors or external locking systems are recommended.

(R): Reverse Base Jack.

*W:* Load in pounds.

Tare Torque: Initial torque to overcome seal and normal assembly drag. This value must be added to starting torque or operating torque values.

Starting Torque: Torque value required to start moving the rated load (dissipates to operating torque values once the load begins moving).

Operating Torque: Torque required to continuously raise a given load at the input RPM listed.

Note: If your actual input RPM is 20% higher or lower than the listed RPM, please refer to JAX® Online to determine actual torque values at your RPM.

Screw Torque: Torque required to resist screw rotation (Translating Design Jacks) and traveling nut rotation (Keyed for Traveling Nut Design Jacks).

Lead: The distance traveled axially in one rotation of the lifting screw.

Pitch: The distance from a point on a screw thread to a corresponding point on the next thread, measured axially.

Note: This chart is provided for reference only. For specific information such as column loading, allowable continuous travel and other performance factors please refer to JAX® Online software or contact Joyce.
## MACHINE SCREW JACKS SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (Lbs.)</th>
<th>Screw Diameter (Inches)</th>
<th>Thread Pitch/Lead</th>
<th>Worm Gear Ratio</th>
<th>Worm Shaft Turns for 1&quot; Travel</th>
<th>Tare Torque (Inch Lbs.)</th>
<th>Operating Torque (Inch Lbs.)</th>
<th>Efficiency Rating % Approx</th>
<th>Screw Torque (Inch Lbs.)</th>
<th>Basic Jack Weight (Lbs.)</th>
<th>Jack Weight per Inch Travel (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WJ815</td>
<td>15 ton</td>
<td>2 1/4</td>
<td>.500 pitch ACME 2C</td>
<td>8:1</td>
<td>16</td>
<td>.069W*</td>
<td>.047W* @ 200 RPM</td>
<td>21.1</td>
<td>.210W*</td>
<td>59</td>
<td>1.4</td>
</tr>
<tr>
<td>WJ2415</td>
<td>20 ton</td>
<td>2 1/2</td>
<td>.500 pitch ACME 2C</td>
<td>8:1</td>
<td>16</td>
<td>.075W*</td>
<td>.051W* @ 200 RPM</td>
<td>19.6</td>
<td>.227W*</td>
<td>77</td>
<td>1.9</td>
</tr>
<tr>
<td>WJ2515</td>
<td>25 ton</td>
<td>3 3/8</td>
<td>.56 pitch Sub ACME</td>
<td>11:1</td>
<td>16</td>
<td>.068W*</td>
<td>.055W* @ 200 RPM</td>
<td>18.3</td>
<td>.313W*</td>
<td>164</td>
<td>3.1</td>
</tr>
<tr>
<td>DWJ815</td>
<td>20 ton</td>
<td>2 1/2</td>
<td>.33 pitch 5/8 lead ACME</td>
<td>8:1</td>
<td>12</td>
<td>.097W*</td>
<td>.069W* @ 200 RPM</td>
<td>24.5</td>
<td>.272W*</td>
<td>146</td>
<td>3.0</td>
</tr>
<tr>
<td>DWJ2415</td>
<td>35 ton</td>
<td>3 3/4</td>
<td>.666 pitch ACME 2C</td>
<td>11:1</td>
<td>16</td>
<td>.095W*</td>
<td>.063W* @ 200 RPM</td>
<td>17.4</td>
<td>.326W*</td>
<td>240</td>
<td>3.4</td>
</tr>
<tr>
<td>DWJ3325</td>
<td>50 ton</td>
<td>4 1/2</td>
<td>.666 pitch ACME 2C</td>
<td>11:1</td>
<td>16</td>
<td>.095W*</td>
<td>.063W* @ 150 RPM</td>
<td>15.8</td>
<td>.378W*</td>
<td>387</td>
<td>6.1</td>
</tr>
<tr>
<td>WJ115</td>
<td>75 ton</td>
<td>5</td>
<td>.666 pitch ACME 2C</td>
<td>11:1</td>
<td>16</td>
<td>.107W*</td>
<td>.067W* @ 150 RPM</td>
<td>14.8</td>
<td>.416W*</td>
<td>610</td>
<td>6.5</td>
</tr>
<tr>
<td>WJ3275</td>
<td>100 ton</td>
<td>6</td>
<td>.750 pitch ACME 2C</td>
<td>12:1</td>
<td>16</td>
<td>.112W*</td>
<td>.072W* @ 90 RPM</td>
<td>13.9</td>
<td>.495W*</td>
<td>1010</td>
<td>10.0</td>
</tr>
<tr>
<td>WJ36100</td>
<td>150 ton</td>
<td>7</td>
<td>1.00 pitch ACME 2C</td>
<td>12:1</td>
<td>12</td>
<td>.134W*</td>
<td>.087W* @ 90 RPM</td>
<td>15.7</td>
<td>.599W*</td>
<td>1350</td>
<td>12.2</td>
</tr>
<tr>
<td>WJ50250</td>
<td>250 ton</td>
<td>9</td>
<td>1.00 pitch ACME 2C</td>
<td>12:1</td>
<td>12</td>
<td>.134W*</td>
<td>.087W* @ 90 RPM</td>
<td>15.7</td>
<td>.599W*</td>
<td>1350</td>
<td>12.2</td>
</tr>
</tbody>
</table>

**Important Note:** Series DWJ double lead screw jacks and WJ500 screw jacks are not self-locking. Brake motors or external locking systems are recommended.

(R): Reverse Base Jack.

*W:* Load in pounds.

**Tare Torque:** Initial torque to overcome seal and normal assembly drag. This value must be added to starting torque or operating torque values.

**Starting Torque:** Torque value required to start moving the rated load (dissipates to operating torque values once the load begins moving).

**Operating Torque:** Torque required to continuously raise a given load at the input RPM listed.

**Note:** If your actual input RPM is 20% higher or lower than the listed RPM, please refer to JAX® Online to determine actual torque values at your RPM.

**Screw Torque:** Torque required to resist screw rotation (Translating Design Jacks) and traveling nut rotation (Keyed for Traveling Nut Design Jacks).

**Lead:** The distance traveled axially in one rotation of the lifting screw.

**Pitch:** The distance from a point on a screw thread to a corresponding point on the next thread, measured axially.

**Note:** This chart is provided for reference only. For specific information such as column loading, allowable continuous travel and other performance factors please refer to JAX® Online software or contact Joyce.
Machine Screw Jack Column Loading Chart


The horizontal portion of each line represents the jack’s maximum dynamic capacity. Under static conditions, these lines can be exceeded. Please contact factory for assistance.
MACHINE SCREW JACKS

250 POUND - 1/2” SCREW

Material Notes: Housing and protection tube are aluminum. Lifting screw is 304 S.S., input shaft (worm) is 416 S.S.
Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice. 

2D and 3D models available on website • Ordering information on pages 20 and 21
Material Notes: Housing and protection tube are aluminum. Lifting screw is 304 S.S. Input shaft (worm) is 416 S.S.

Note: Drawings are artist’s conception - not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

1000 POUND - 5/8" SCREW

WJ 1000

Material Notes: Housing and protection tube are aluminum. Lifting screw is 304 S.S. Input shaft (worm) is 416 S.S.

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

Typical Plan View

Material Notes: Housing and protection tube are aluminum. Lifting screw is 304 S.S. Input shaft (worm) is 416 S.S.

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

1 TON - 3/4” SCREW

WJ 51 / WJ 201

Upright

Upright traveling nut

Inverted

Inverted keyed

Typical Plan View

Material Notes: Housing and protection tube are aluminum. Lifting screw is cold drawn steel (CDS). Input shaft (worm) is CDS.

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

2 TDN - 1" SCREW

WJT 62 / DWJ 62
WJT 122 / DWJ 122
WJT 242 / DWJ 242
WJT 252

Upright

1/4 (3) BOLTS
Ø1 7/8 B.C.
Ø688
687

1 1/16
7/16
5 5/16
5 7/16
1 1/16
1 1/16
1 11/16

END CONDITIONS
(SHOWN AT MINIMUM
CLOSED DIMENSIONS)

Upright traveling nut

Ø1 1/2
1 1/16
1 1/2
Ø3 1/4
1/2
RISE + 7 5/8
4 1/8

Upright keyed

Ø1 1/2
1 1/16
1 1/2

Typical Plan View

Ø13/32 (4) HOLES
Ø3/4 SPOTFACE

Double Clevis

1/4 X 45° CHAMFER
Ø3/8
1 13/16
1 3/8

Inverted traveling nut

2 TON - 1"
SCREW

29

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

800-523-5204
sales@joycedayton.com
joycedayton.com

2D and 3D models available on website • Ordering information on pages 20 and 21
MACHINE SCREW JACKS

2 TON REVERSE BASE - 1” SCREW

RWJT 62 / DRWJ 62
RWJT 122 / DRWJ 122
RWJT 242 / DRWJ 242
RWJT 252

Typical Plan View*

Ideal for DD motor mounts or for large diameter couplings.

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

3 TON - 1" SCREW

WJ 63 / WJ 123 / WJ 243 / WJ 253
DWJ 63 / DWJ 123 / DWJ 243

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice. Minimum closed dimensions do not apply to upright keyed jacks.
MACHINE SCREW JACKS

5 TON - 1 1/2" SCREW

WJT 65 / DWJ 65
WJT 125 / DWJ 125
WJT 245 / DWJ 245
WJT 255

Note: Drawings are artist's conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

10 TON - 2" SCREW

WJ 810 / DWJ 810
WJ 2410 / DWJ 2410
WJ 2510

Inverted keyed

Inverted traveling nut

Typical Plan View

Upright

Upright traveling nut

Inverted

Inverted traveling nut

Note: Drawings are artist's conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

15 TON - 2 1/4" SCREW

WJ 815 / DWJ 815
WJ 2415 / DWJ 2415
WJ 2515

Upright

Inverted

Upright traveling nut

Typical Plan View

Right Side

Left Side

Double Clevis

Inverted traveling nut

Inverted keyed

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

20 TON - 2 1/2” SCREW

WJ 820 / DWJ 820
WJ 2420 / DWJ 2420
WJ 2520

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

25 TON - 3 3/8" SCREW

WJ 1125 / DWJ 1125
WJ 3225 / DWJ 3225

Typical Plan View

Note: Drawings are artist's conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

3D TON - 3 1/2" SCREW

WJ 1130 / DWJ 1130
WJ 3230 / DWJ 3230

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

35 TON - 3 3/4” SCREW

WJ 1135
WJ 3235

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW JACKS

50 TON - 4 1/2” SCREW

WJT 1150
WJT 3250

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

FOR DOUBLE CLEVIS DESIGN
CONTACT JOYCE
MACHINE SCREW JACKS

50 TON REVERSE BASE - 4 1/2° SCREW

RWJT 1150
RWJT 3250

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
75 TON - 5" SCREW

WJ 1175
WJ 3275

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

Typical Plan View

END CONDITIONS (SHOWN AT MINIMUM CLOSED DIMENSIONS)

Typical Plan View

Right Side

Left Side

Inverted

Upright

Inverted keyed

Upright keyed

Upright traveling nut

Inverted traveling nut

Typical Plan View

2D and 3D models available on website • Ordering information on pages 20 and 21

800-523-5204
sales@joycedayton.com
joycedayton.com
Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice. Minimum closed dimensions do not apply to Upright Keyed Jacks.
MACHINE SCREW JACKS

150 TON - 7” SCREW

WJ 12150
WJ 36150

Upright

Inverted

Upright keyed

Inverted keyed

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice. Minimum closed dimensions do not apply to upright keyed jacks.

2D and 3D models available on website • Ordering information on pages 20 and 21

800-523-5204  sales@joycedayton.com  joycedayton.com

43
MACHINE SCREW JACKS

250 TON - 9" SCREW

WJ 50250

Upright

Top of Jack

18 7/8

3/4 (8 BOLTS)

Ø9 BOLT CIRCLE

19 1/2

RISE + 1/8

Ø11 3/4

Upright keyed

Top of Jack

26 1/4

28 1/2

TYPE 2 LOAD PAD

RISE + 1/8

Typical Plan View

Right Side

3/4 X 3/8 X 5 LG.
KEYWAY BOTH ENDS
Ø2 3/4 (6) HOLES

5.000
Ø2.998
BOTH ENDS

41

35

20 1/2

24

11

13

29 1/2

Inverted

Ø11 3/4

RISE + 1/8

19 1/2

BUSHING

2 3/4

11 3/4

Left Side

Inverted keyed

RISE + 3/8

26 1/4

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice. Minimum closed dimensions do not apply to upright keyed jacks.
Joyce machine screw ComDRIVEs® combine a machine screw jack, motor and gear reducer into a single compact unit. ComDRIVEs are available in 2-ton through 30-ton capacities. They provide travel speeds up to 35.1 inches per minute. ComDRIVEs with single lead screws (CD) are self-locking; those with double lead screws (DCD) may require a brake motor or external locking device to hold position.

Four standard end conditions are available and ComDRIVEs can be fitted with protective boots. Limit switches, anti-backlash devices, and other options are also available.

ComDRIVE Benefits:
• Can power an entire jacking system.
• Reduces the number of components that must be specified.
• Simplifies design.
• Reduces installation costs with only a single plate needed to mount the jack body.
• Reduces the number of couplings and shafts required in multi-jack systems.
• Standard 230/460 volt, 3-phase, 60 hertz motor included.

ComDRIVEs can be specified without the motor. The reducer flange accepts standard NEMA motor frame sizes.

Joyce can customize ComDRIVEs to meet your specifications. Ask about larger size ComDRIVEs.

Joyce offers Machine Screw ComDRIVEs in several designs including:
• Translating
• Keyed for non-rotation
• Keyed for traveling nut (KFTN)
• Double clevis
• Trunnion mount
A guide for ordering is on pages 46 and 47.
**MACHINE SCREW ComDRIVEs®**

**ORDERING INFORMATION**

**Instructions:** Select a model number from this chart.

<table>
<thead>
<tr>
<th>2-Ton</th>
<th>3-Ton</th>
<th>5-Ton</th>
<th>10-Ton</th>
<th>15-Ton</th>
<th>20-Ton</th>
<th>25-Ton</th>
<th>30-Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD62</td>
<td>CD122</td>
<td>CD63</td>
<td>CD123</td>
<td>CD65</td>
<td>CD125</td>
<td>CD810</td>
<td>CD2410</td>
</tr>
<tr>
<td>CD242</td>
<td>CD64</td>
<td>CD243</td>
<td>CD244</td>
<td>CD815</td>
<td>CD2415</td>
<td>CD820</td>
<td>CD2420</td>
</tr>
<tr>
<td>DCD62</td>
<td>DCD122</td>
<td>DCD63</td>
<td>DCD123</td>
<td>DCD242</td>
<td>DCD65</td>
<td>DCD245</td>
<td>CD810</td>
</tr>
<tr>
<td>DCD243</td>
<td>DCD63</td>
<td>DCD123</td>
<td>DCD124</td>
<td>DCD244</td>
<td>DCD65</td>
<td>DCD245</td>
<td>DCD810</td>
</tr>
<tr>
<td>DCD245</td>
<td>DCD64</td>
<td>DCD124</td>
<td>DCD125</td>
<td>DCD246</td>
<td>DCD815</td>
<td>DCD246</td>
<td>DCD820</td>
</tr>
<tr>
<td>DCD247</td>
<td>DCD65</td>
<td>DCD125</td>
<td>DCD126</td>
<td>DCD247</td>
<td>DCD820</td>
<td>DCD247</td>
<td>DCD820</td>
</tr>
<tr>
<td>DCD248</td>
<td>DCD66</td>
<td>DCD126</td>
<td>DCD127</td>
<td>DCD248</td>
<td>DCD820</td>
<td>DCD248</td>
<td>DCD820</td>
</tr>
<tr>
<td>DCD249</td>
<td>DCD67</td>
<td>DCD127</td>
<td>DCD128</td>
<td>DCD249</td>
<td>DCD820</td>
<td>DCD249</td>
<td>DCD820</td>
</tr>
</tbody>
</table>

**Important Note:** *Not self-locking, may lower under load. Brake motors or external locking systems are recommended. DCD: Double lead screw. (For 25:1 ratio contact Joyce.)*

**Sample Part Number:** CD65U2S-18.50-P1AB-STDX-B

**Jack Configuration**
- U=Upright
- I=Inverted

**End Conditions**
- T1 (plain end)
- T2 (load pad)
- T3 (threaded end)
- T4 (male clevis)

**ComDRIVE® Rise**
Rise is travel expressed in inches and not the actual screw length. When companion jacks are ordered with the ComDRIVE®, their screws are lengthened to match the ComDRIVE®.

**Left Side Shaft Code**
- XXXX=Remove
- STDX=Standard
- CUST=Custom
- For optional shaft codes, see page 47.

**Right Side Shaft Code**
- XXXX=Remove
- STDX=Standard
- CUST=Custom
- For optional shaft codes, see page 47.

**Jack Designs**
- S=Translating
- K=Keyed for Non Rotation
- N=Traveling Nut
- D=Double Clevis
- A=KFTN Trunnion
- T=Trunnion

*Standard trunnion mounts available on 2-ton through 20-ton jacks. (See page 183)*

---

custom products are available • Contact Joyce with your requirements

joycedayton.com

sales@joycedayton.com

800-523-5204
MACHINE SCREW ComDRIVEs® SHAFT CODES

**Instructions:** Select the appropriate shaft codes for both right and left hand shafts. One shaft code must be specified for each side of the ComDRIVE®.

**Screw Stops (p. 10) and Boots (pp. 170-173)**
Extending and retracting screw stops are standard on ComDRIVEs. When boots are added to ComDRIVEs, the closed height of the unit may be increased.

**Mechanical Counters (p. 180)**
CNTG=0.001” Increments
Note: Contact Joyce for availability and options.

**Encoders (pp. 176-177)**
ENCA=Absolute Encoder 0-10 VDC, programmable
ENCB=Absolute Encoder 4-20mA, programmable
ENCC=Absolute Encoder CAN Open
ENCD=Absolute Encoder SSI
ENCX=Stainless Steel Incremental Encoder 1024 PPR
ENCY=Incremental Encoder 1024 PPR

**ComDRIVE Reducers (pp. 49-57)**

**Ordering Example: P2AC**
Motor code from chart at right

<table>
<thead>
<tr>
<th>Mounting Positions</th>
<th>Code</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Left Side</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaft Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Right Side</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaft Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ratio**
5:1 Code A
7.5:1 Code B
10:1 Code C
15:1 Code D
Special Ratio Code X

All standard motors are 3-phase, 208-230/460 VAC or 230/460 VAC. Other motor options are available including international voltages, and single phase AC. Specify the appropriate motor size from the chart above. Refer to the “Additional Options” chart on the preceding page as needed. Brake motors are required for ball screw ComDRIVEs®. Contact Joyce for options that are not listed.

**Geared Potentiometers (p. 175)**
POTA=0-10V
POTB=4-20mA
POTC=0-10V w/2 switches
POTD=4-20mA w/2 switches
IP65 rated enclosures

**Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS7-402</td>
<td>LT</td>
</tr>
<tr>
<td>LS8-402</td>
<td>LA</td>
</tr>
<tr>
<td>LS8-404</td>
<td>LB</td>
</tr>
</tbody>
</table>

**Available Positions**

<table>
<thead>
<tr>
<th>1</th>
<th>2*</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6*</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Side Shaft Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right Side Shaft Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• 2, 3, 5, 10, 15, and 20 ton ComDRIVEs are available with positions #1, #3, and #5.
• 25 and 30 ton ComDRIVEs are available with positions #1, #4, #7 and #8.
• These positions are not standard. Contact Joyce with your requirements.

The horizontal portion of each line represents the jack's maximum dynamic capacity. Under static conditions, these lines can be exceeded. Please contact factory for assistance.
### MACHINE SCREW ComDRIVEs® SPECIFICATIONS

#### 2 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD62</th>
<th>CD122</th>
<th>CD242</th>
<th>DCD62</th>
<th>DCD122</th>
<th>DCD242</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>13.88</td>
<td>9.50</td>
<td>7.04</td>
<td>6.94</td>
<td>4.75</td>
<td>3.47</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>1/2 HP</td>
<td>1,865</td>
<td>2,650</td>
<td>3,350</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>1/2 HP</td>
<td>2,875</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>3/4 HP</td>
<td>4,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD63</th>
<th>CD123</th>
<th>CD243</th>
<th>DCD63</th>
<th>DCD123</th>
<th>DCD243</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>13.88</td>
<td>9.50</td>
<td>7.04</td>
<td>6.94</td>
<td>4.75</td>
<td>3.47</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>1/3 HP</td>
<td>1,910</td>
<td>2,700</td>
<td>3,555</td>
<td>4,790</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>1/2 HP</td>
<td>2,920</td>
<td>4,095</td>
<td>5,380</td>
<td>4,000</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>3/4 HP</td>
<td>4,430</td>
<td>6,000</td>
<td>6,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD65</th>
<th>CD125</th>
<th>CD245</th>
<th>DCD65</th>
<th>DCD125</th>
<th>DCD245</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>20.81</td>
<td>10.56</td>
<td>5.28</td>
<td>2.64</td>
<td>7.04</td>
<td>3.52</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>1 HP</td>
<td>3,760</td>
<td>6,980</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>1 1/2 HP</td>
<td>5,755</td>
<td></td>
<td>5085</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 HP</td>
<td>7,750</td>
<td></td>
<td></td>
<td>6,045</td>
<td></td>
</tr>
</tbody>
</table>

#### 10 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD810</th>
<th>CD2410</th>
<th>DCD810</th>
<th>DCD2410</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>20.81</td>
<td>10.56</td>
<td>6.94</td>
<td>3.52</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>1 HP</td>
<td>3,680</td>
<td>7,070</td>
<td>9,000</td>
</tr>
<tr>
<td></td>
<td>1/2 HP</td>
<td>5,760</td>
<td></td>
<td>14,090</td>
</tr>
<tr>
<td></td>
<td>2 HP</td>
<td>7,840</td>
<td></td>
<td>19,165</td>
</tr>
<tr>
<td></td>
<td>3 HP</td>
<td>12,150</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>5 HP</td>
<td>18,515</td>
<td>30,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

#### 15 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD815</th>
<th>CD2415</th>
<th>DCD815</th>
<th>DCD2415</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>20.81</td>
<td>10.56</td>
<td>6.94</td>
<td>3.52</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>1 HP</td>
<td>3,140</td>
<td>6,200</td>
<td>7,535</td>
</tr>
<tr>
<td></td>
<td>1/2 HP</td>
<td>5,035</td>
<td></td>
<td>12,085</td>
</tr>
<tr>
<td></td>
<td>2 HP</td>
<td>6,925</td>
<td></td>
<td>16,620</td>
</tr>
<tr>
<td></td>
<td>3 HP</td>
<td>10,850</td>
<td>20,425</td>
<td>26,040</td>
</tr>
<tr>
<td></td>
<td>5 HP</td>
<td>18,515</td>
<td>30,000</td>
<td>16,010</td>
</tr>
</tbody>
</table>

#### 20 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD820</th>
<th>CD2420</th>
<th>DCD820</th>
<th>DCD2420</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>20.81</td>
<td>10.56</td>
<td>6.94</td>
<td>3.52</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>1 HP</td>
<td>2,715</td>
<td>5,570</td>
<td>6,520</td>
</tr>
<tr>
<td></td>
<td>1 1/2 HP</td>
<td>4,475</td>
<td></td>
<td>10,745</td>
</tr>
<tr>
<td></td>
<td>2 HP</td>
<td>6,235</td>
<td></td>
<td>14,965</td>
</tr>
<tr>
<td></td>
<td>3 HP</td>
<td>9,880</td>
<td></td>
<td>18,785</td>
</tr>
<tr>
<td></td>
<td>5 HP</td>
<td>17,000</td>
<td></td>
<td>40,000</td>
</tr>
</tbody>
</table>

#### 25 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD1125</th>
<th>CD3225</th>
<th>DCD1125</th>
<th>DCD3225</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>20.79</td>
<td>10.55</td>
<td>6.93</td>
<td>3.52</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>3 HP</td>
<td>9,050</td>
<td>17,165</td>
<td>20,390</td>
</tr>
<tr>
<td></td>
<td>5 HP</td>
<td>15,700</td>
<td>29,420</td>
<td>35,390</td>
</tr>
<tr>
<td></td>
<td>7 1/2 HP</td>
<td>23,330</td>
<td>45,755</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>10 HP</td>
<td>32,625</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>15 HP</td>
<td>49,410</td>
<td></td>
<td>60,000</td>
</tr>
</tbody>
</table>

#### 30 Ton Model Number

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>CD1130</th>
<th>CD3230</th>
<th>DCD1130</th>
<th>DCD3230</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
<td>7/12</td>
</tr>
<tr>
<td>Travel Speed IPM</td>
<td>20.82</td>
<td>10.57</td>
<td>6.94</td>
<td>3.52</td>
</tr>
<tr>
<td>Lifting Capacity, Lbs.</td>
<td>3 HP</td>
<td>9,435</td>
<td>17,540</td>
<td>21,260</td>
</tr>
<tr>
<td></td>
<td>5 HP</td>
<td>16,100</td>
<td>29,815</td>
<td>36,280</td>
</tr>
<tr>
<td></td>
<td>7 1/2 HP</td>
<td>24,335</td>
<td>46,170</td>
<td>54,840</td>
</tr>
<tr>
<td></td>
<td>10 HP</td>
<td>33,040</td>
<td>60,000</td>
<td>60,000</td>
</tr>
<tr>
<td></td>
<td>15 HP</td>
<td>49,845</td>
<td></td>
<td>60,000</td>
</tr>
</tbody>
</table>

**Important Note:** DCD models may lower under load. Brake motors or external locking systems are recommended.

---

2D and 3D models available on website • Ordering information on pages 46 and 47

800-523-5204  
sales@joycedayton.com  
joycedayton.com
MACHINE SCREW ComDRIVEs®

2 TON - 1" SCREW

CD 62 / DCD 62
CD 122 / DCD 122
CD 242 / DCD 242

Upright

Rise + 13/16

Ω 3/8

Ω 1 21/32

4 1/8

6 7/16

1 1/16

Ω 4 1/4

5/8-18 UNF 2A

1/4 x 45° Chamfer

CD 62 / DCD 62
CD 122 / DCD 122
CD 242 / DCD 242

Upright traveling nut

Rise + 8 5/8

Ω 3/8

Ω 1 1/2

4 1/8

Ω 3 1/4

Ω 1 1/2

Ω 1 7/32

Ω 13/32 (4) Holes on A Ω 3 B.C.

Inverted traveling nut

Rise + 5 1/8

Ω 3/8

Ω 1 1/2

4 1/8

Ω 3 1/4

Ω 1 7/32

Ω 13/32 (4) Holes on A Ω 2 3/8 B.C.

Inverted

Rise + 9/16

Ω 3/8

Ω 2 1/2

3 3/4

2 5/8

5/16

Ω 3 1/4

Ω 500.458

4 1/16

Inverted keyed

1 3/16

1 1/16 x 1 3/16

Ω 13/32 (4) Holes on A

Ω 3 B.C.

Ω 3/4 Spotface

NOTE: FOR LIFTING CAPACITIES SEE PAGE 49

Typical Plan View

Left Side

Right Side

Reduction Shown
Rotated 180° From Plan View

End Conditions Shown at
Minimum Closed Dimensions

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

joycedayton.com
sales@joycedayton.com
800-523-5204

2D and 3D models available on website • Ordering information on pages 46 and 47
3 TDN - 1" SCREW

CD 63 / DCD 63
CD 123 / DCD 123
CD 243 / DCD 243

**Note:** Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

**MACHINE SCREW ComDRIVEs®**

800-523-5204

2D and 3D models available on website • Ordering information on pages 46 and 47

sales@joycedayton.com joycedayton.com

**CD 63**
- **UPRIGHT**
  - Ø 0.253
  - 7/8
  - 6 1/4
  - RISE + 1 1/8
  - Ø 0.213

- **UPRIGHT TRAVELING NUT**
  - Ø 0.253
  - 1
  - 3 13/16
  - RISE + 8 9/16
  - Ø 0.213

- **INVERTED TRAVELING NUT**
  - Ø 0.253
  - 2
  - RISE + 5 7/16
  - Ø 0.171

- **INVERTED**
  - RISE + 13/16
  - 3 13/16
  - 5 1/16

**CD 123**
- **END CONDITIONS SHOWN AT MINIMUM CLOSED DIMENSIONS**
  - Ø 0.171

- **TYPE 1** PLAIN END
  - TYPE 2 LOAD PAD
  - TYPE 3 THREADED END
  - TYPE 4 MALE CLEVIS END

- **REDUCER SHOWN** Rotated 180° From Plan View
  - ø 0.550
  - RISE + 1 7/16

- **Typical Plan View**
  - 1/8 x 1/16 x 1/16 LG. KEYWAY
  - 2 1/16
  - 3 1/8
  - 2 3/8
  - 3 11/16

**CD 243**
- **FOR UPRIGHT KEYED JACKS** ADD 1 INCH TO THE MINIMUM CLOSED DIMENSIONS

- **1/8 x 45° CHAMFER**
  - Ø 5/8

- **2 TON - 1" SCREW**

- **3 TON - 1" SCREW**

**Note:** For lifting capacities see page 49

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW ComDRIVEs®

5 TON - 1 1/2" SCREW

CD 65 / DCD 65
CD 125 / DCD 125
CD 245 / DCD 245

Upright

Upright traveling nut

Inverted traveling nut

Inverted

NOTE: FOR LIFTING CAPACITIES SEE PAGE 49

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

joycedayton.com sales@joycedayton.com 800-523-5204

2D and 3D models available on website • Ordering information on pages 46 and 47
MACHINE SCREW ComDRIVEs®

10 TON - 2" SCREW

CD 810 / DCD 810
CD 2410 / DCD 2410

Upright

Upright traveling nut

Inverted traveling nut

Inverted

REDUCER DIMENSIONS

<table>
<thead>
<tr>
<th>HP</th>
<th>1</th>
<th>1 1/2</th>
<th>2</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8 11/32</td>
<td>8 29/32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>11 21/32</td>
<td>13 17/32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1 3/4</td>
<td>2 5/8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3 3/8</td>
<td>4 7/16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>8 7/16</td>
<td>11 11/16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>2 3/4</td>
<td>3 7/8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>4 15/32</td>
<td>4 15/32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>3 1/16</td>
<td>1 5/8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>4 15/16</td>
<td>5 3/4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>3 11/32</td>
<td>4 5/16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Typical Plan View

Note: For lifting capacities see page 49

Note: Drawings are artist's conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW ComDRIVEs®

15 TON - 2 1/4" SCREW

CD 815 / DCD 815
CD 2415 / DCD 2415

Upright

Upright traveling nut

Inverted traveling nut

Inverted

Typical Plan View

Reducer Shown Rotated 180°

From Plan View

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

Note: For lifting capacities see page 49
MACHINE SCREW ComDRIVEs®

2D and 3D models available on website • Ordering information on pages 46 and 47

CD 820 / DCD 820
CD 2420 / DCD 2420

20 TON - 2 1/2” SCREW

Upright

Upright traveling nut

Inverted traveling nut

Inverted

REDUCER DIMENSIONS

Typical Plan View

Left Side

Right Side

NOTE: FOR LIFTING CAPACITIES SEE PAGE 49

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.
MACHINE SCREW ComDRIVEs®

25 TON - 3 3/8" SCREW

CD 1125 / DCD 1125
CD 3225 / DCD 3225

Upright

Upright traveling nut

Inverted traveling nut

Inverted

REDUCER DIMENSIONS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CD/DDC 1125</th>
<th>CD/DDC 3225</th>
<th>CD/DDC 1125</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATIO</td>
<td>5:1</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>HP</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>A</td>
<td>9 1/2&quot;</td>
<td>9 1/16&quot;</td>
<td>11 1/16&quot;</td>
</tr>
<tr>
<td>B</td>
<td>13 1/8&quot;</td>
<td>13 1/8&quot;</td>
<td>16 3/8&quot;</td>
</tr>
<tr>
<td>C</td>
<td>2 5/16&quot;</td>
<td>3 1/4&quot;</td>
<td>4 1/4&quot;</td>
</tr>
<tr>
<td>D</td>
<td>4 7/16&quot;</td>
<td>5 1/2&quot;</td>
<td>6 1/2&quot;</td>
</tr>
<tr>
<td>E</td>
<td>11 9/16&quot;</td>
<td>12 3/4&quot;</td>
<td>15 3/4&quot;</td>
</tr>
<tr>
<td>F</td>
<td>3 9/16&quot;</td>
<td>4 1/2&quot;</td>
<td>5 1/4&quot;</td>
</tr>
<tr>
<td>G</td>
<td>5 1/2&quot;</td>
<td>5 1/2&quot;</td>
<td>5 1/2&quot;</td>
</tr>
<tr>
<td>H</td>
<td>0</td>
<td>1/2</td>
<td>1 1/4</td>
</tr>
<tr>
<td>J</td>
<td>4 1/16&quot;</td>
<td>6 3/4&quot;</td>
<td>7 1/4&quot;</td>
</tr>
<tr>
<td>K</td>
<td>3 11/32&quot;</td>
<td>4 5/16&quot;</td>
<td>6 1/8&quot;</td>
</tr>
</tbody>
</table>

Typical Plan View

Note: Drawings are artist’s conception — not for certification; dimensions are subject to change without notice.

joycedayton.com
2D and 3D models available on website • Ordering information on pages 46 and 47
sales@joycedayton.com
800-523-5204