These DE-STA-CO Precision Manual Clamps are used in applications requiring a higher level of precision and repeatability over our standard clamping products. These clamps feature components manufactured to a higher level of precision and include features that make them the preferred choice for applications such as automotive prototype production jigs and locating devices.

<table>
<thead>
<tr>
<th>Model</th>
<th>Holding capacity</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>614-M</td>
<td>5000N [1125lbf]</td>
<td>5.2</td>
</tr>
<tr>
<td>670-1MBPLS</td>
<td>10680N [2400lbf]</td>
<td>5.4</td>
</tr>
<tr>
<td>675-1MBPLS</td>
<td>10680N [2400lbf]</td>
<td></td>
</tr>
<tr>
<td>690-1MBPLS</td>
<td>22240N [5000lbf]</td>
<td></td>
</tr>
<tr>
<td>695-1MBPLS</td>
<td>22240N [5000lbf]</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Precision Manual Clamps

Series 614 Product Overview

Features:
- Single hole threaded mount or side mount
- Precision hardened and ground plunger is designed for anti-rotation under torsional loads
- Locks in the extended or retracted position, internal locking in the push direction

Applications:
- Assembly
- Checking fixtures
- Locaters and positioners

Also Available:
See page 8.1 for accessories

Model 614-M

Series 614 Technical Information, Holding Capacities, Standard Clamp Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Holding Capacity</th>
<th>Weight</th>
<th>Plunger Travel</th>
<th>Plunger Thread</th>
<th>Mounting Nut (Supplied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>614-M</td>
<td>5000 N</td>
<td>1.81lb</td>
<td>1.26</td>
<td>M8</td>
<td>614-1-10</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice
Series 670, 675, 690, 695 Product Overview

Features:

• Precision clamping for high production
• Adjustable collet-type bushing minimizes radial plunger movement
• Plunger has a flat surface for anti rotation
• Pre-load nut and hold open device included

Applications:

• Assembly
• Welding

Series 670, 675, 690, 695 Technical Information, Holding Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Holding Capacity</th>
<th>Weight</th>
<th>Plunger Travel</th>
<th>Plunger Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>675-1MBPLS</td>
<td>[4.0lb] 1,81kg</td>
<td>[1.10] 28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>690-1MBPLS</td>
<td>[5000 lbf] 22240 N</td>
<td>[8.2lb] 3,72kg</td>
<td>[3.00] 76,2</td>
<td>M16</td>
</tr>
<tr>
<td>695-1MBPLS</td>
<td></td>
<td>[7.2lb] 3,27kg</td>
<td>[1.50] 38,1</td>
<td></td>
</tr>
</tbody>
</table>

This item is available upon request

The unique feature of these clamps is the collet-type bushing that can be adjusted to eliminate plunger end movement after long repeated use. The plunger also has a flat which prevents lateral movement and allows offset piloting and holding. The plunger is drilled and tapped for threaded spindles or custom fixturing. The adjustable pre-load nut (PL) can be used to lock the clamp against itself when not under pressure and therefore prevent opening when mounted vertically. The spring hold-open device (S) prevents the clamp from accidentally closing.

The mounting base (B) is supplied disassembled with the four models, to enable welding the base and the main assembly in any handle position.

Series 675 and 695 (shorter stroke) reach the over-center position only when clamping. Series 670 and 690 (longer stroke) lock in both the extended and retracted position.
## Precision Manual Clamps

### Series 670, 675, 690, 695 Standard Clamp Dimensions

**Model**  | **A** | **A1** | **A3** | **B** | **B1** | **B2** | **B3** | **C1** | **C2** | **ØD** | **ØD1** | **ØD3** | **H** | **L** | **L6** | **L9** | **SW1**
670-1MBPLS | [1.18] | [2.24] | [2.50] | [2.60] | [3.50] | [1.75] | [1.38] | [1.37] | [1.38] | [1.37] | 0.33 | 0.75 | 0.31 | [8.11] | 268 | [7.68] | 195 |
675-1MBPLS | [1.97] | [3.0] | [3.37] | [3.23] | [4.02] | [1.75] | [1.63] | [1.63] | [1.63] | [1.63] | 0.41 | 0.98 | 0.39 | [6.37] | 338 | [9.45] | 162 |
690-1MBPLS | [1.97] | [3.0] | [3.37] | [3.23] | [4.02] | [1.75] | [1.63] | [1.63] | [1.63] | [1.63] | 0.41 | 0.98 | 0.39 | [6.37] | 338 | [9.45] | 162 |
695-1MBPLS | [1.97] | [3.0] | [3.37] | [3.23] | [4.02] | [1.75] | [1.63] | [1.63] | [1.63] | [1.63] | 0.41 | 0.98 | 0.39 | [6.37] | 338 | [9.45] | 162 |

---

**Model**  | **L6** | **L9** | **SW1**
--- | --- | --- | ---
670-1MBPLS | [0.41] | 13H | 10.3 |
675-1MBPLS | 0-8 | 37 | 10.3 |
690-1MBPLS | 0-8 | 37 | 10.3 |
695-1MBPLS | 0-8 | 37 | 10.3 |

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