# **614 SERIES**

### Straight Line Action Clamps | 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:**

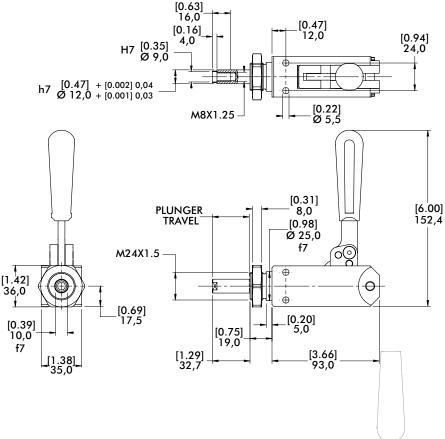
- Also Available:
- Assembly
- Checking fixtures
- Locaters and positioners

See page MC-ACC-1 for accessories



#### Technical Information | Holding Capacities | Dimensions

| Model | Max.<br>Holding<br>Capacity | Weight             | Plunger<br>Travel | Plunger<br>Thread | Mounting Nut<br>(Supplied) |
|-------|-----------------------------|--------------------|-------------------|-------------------|----------------------------|
| 614-M | [1125 lbf]<br>5000 N        | [1.81lb]<br>0,82kg | [1.26]<br>32      | M8                | 614-1-10                   |







## 670, 675, 690, 695 SERIES

#### Straight Line Action Clamps | Product Overview

#### Features:

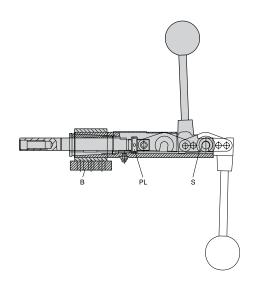
- Precision clamping for high production
- Adjustable collet-type bushing minimizes radial plunger movement
- Plunger has a flat surface for anti rotation
- Pre-load nut and hold open device included

#### **Applications:**

- Assembly
- Welding



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



| Model         | Max.<br>Holding<br>Capacity | Weight            | Plunger<br>Travel | Plunger<br>Thread |  |
|---------------|-----------------------------|-------------------|-------------------|-------------------|--|
| 670-1MBPLS    | [2400 lbf]                  | [4.2lb]<br>1,91kg | [2.25]<br>57,2    | M12               |  |
| 675-1MBPLS    | 10680 N                     | [4.0lb]<br>1,81kg | [1.10]<br>28      | M12               |  |
| 690-1MBPLS    | [5000 lbf]                  | [8.2lb]<br>3,72kg | [3.00]<br>76,2    | M16               |  |
| 695-1MBPLS(1) | 22240 N                     | [7.2lb]<br>3,27kg | [1.50]<br>38,1    | MIO               |  |

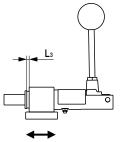
1 This item is available upon request

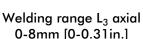
The unique feature of these clamps is the collet-type bushing that can be adjusted to eliminate plunger end movement after long repeated use. The plunger also has a flat which prevents lateral movement and allows offset piloting and holding. The plunger is drilled and tapped for threaded spindles or custom fixturing.

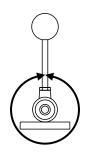
The adjustable pre-load nut (PL) can be used to lock the clamp against itself when not under pressure and therefore prevent opening when mounted vertically. The spring hold-open device (S) prevents the clamp from accidentally closing.

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.





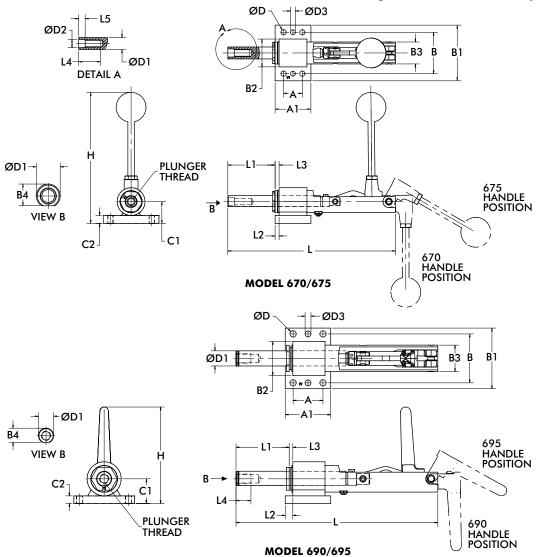


Welding range radial 360°



# 670, 675, 690, 695 SERIES

### Straight Line Action Clamps | Dimensions



| Model      | Α                     | <b>A</b> 1 | В      | В1           | B2             | В3           | В4             | <b>C</b> 1     | <b>C2</b>      | D             | <b>D</b> 1   | D2H7         | D3            |
|------------|-----------------------|------------|--------|--------------|----------------|--------------|----------------|----------------|----------------|---------------|--------------|--------------|---------------|
| 670-1MBPLS | [1.18] [2.24<br>30 57 | [2.24]     | - 1    | [3.50]<br>89 | [1.75]<br>44,5 | [1.38]<br>35 | [0.68]<br>17,3 | [1.37]<br>34,8 | [0.50]<br>12,7 | [0.33]<br>8,4 | [0.75]<br>19 | [0.51]<br>13 | [0.31]<br>7,8 |
| 675-1MBPLS |                       | 57         |        |              |                |              |                |                |                |               |              |              |               |
| 690-1MBPLS | [1.97]                | [3.00]     | [3.23] | [4.00]       | [2.25]         | [1.75]       | [0.93]         | [1.63]         | [0.50]         | [0.41]        | [1.00]       |              | [0.39]        |
| 695-1MBPLS | 50                    | 76,2       | 82     | 101,6        | 57,2           | 44,4         | 23,7           | 41,3           | 12,7           | 10,5          | 25,4         |              | 9,8           |

| Model      | Н             | L              | L1             | L2             | L3              | L4           | L5             |
|------------|---------------|----------------|----------------|----------------|-----------------|--------------|----------------|
| 670-1MBPLS | [8.11]<br>206 | [10.55]<br>268 | [2.97]<br>75,5 | [0.25]<br>6,4  | [0-0.31]<br>0-8 | [1.38]<br>35 | [0.41]<br>10,3 |
| 675-1MBPLS |               | [7.68]<br>195  | [1.74]<br>44,4 |                |                 |              |                |
| 690-1MBPLS | [6.37]<br>162 | [13.31]<br>338 | [3.69]<br>93,7 | [0.50]<br>12,7 | [0-0.31]<br>0-8 | [0.98]<br>25 |                |
| 695-1MBPLS |               | [9.45]<br>240  | [2.25]<br>57,2 | [0.38]<br>9,5  |                 |              |                |