L-86 and L-94 series are 1/4 turn angle brass stem-ball valves designed for being connect to water pipe systems. They are used to shut off individually water supply to washing machines, dishwashers and other different water supply points to proceed to their repairing or replacement. These valves are characterized for its compact design, making easier its installation and maneuver in reduced spaces.

L-86 models, in addition to its compact design, its maneuver is vertical, making it easier to the user when the access to the handle is only possible from the top of the valve.

### Service Conditions

- **Nominal pressure:** 16 bar
- **Test pressure:** 25 bar
- **Temperature range:** Cold and hot water up to 95°C
- **Fluid:** Domestic hot water.

### SCOPE

L-86 and L-94 series are 1/4 turn angle brass stem-ball valves designed for being connect to water pipe systems. They are used to shut off individually water supply to washing machines, dishwashers and other different water supply points to proceed to their repairing or replacement. These valves are characterized for its compact design, making easier its installation and maneuver in reduced spaces.

### Technical Data

**Nominal pressure:** 16 bar  
**Test pressure:** 25 bar  
**Temperature range:** Cold and hot water up to 95°C  
**Fluid:** Domestic hot water.

** Item | Component | Material | Treatment**
---- | ----------- | ------- | --------
1 | Rosette | Stainless steel |  
2 | Supporting clip | POM |  
3 | Washer | NBR |  
4 | Handle | ABS | Chrome plated  
5 | O-ring | NBR |  
6 | Stem-ball | European Brass CW614N |  
7 | Body | European Brass CW617N | Chrome plated  

**TECNICAL SHEET 07/2015 | IP02030**

**WATER SERIES**

**L-86 & L-94 valves**

**QUALITY BY TRADITION**
COMPONENTS

L-94

<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
<th>Material</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supporting clip</td>
<td>POM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Washer</td>
<td>NBR</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Handle</td>
<td>ABS Chrome plated</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>O-ring</td>
<td>NBR</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Stem-ball</td>
<td>European Brass CW614N</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Body</td>
<td>European Brass CW617N</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Rosette</td>
<td>Stainless steel</td>
<td></td>
</tr>
</tbody>
</table>

1 According to the model

MAIN CONSTRUCTIVE FEATURES

COMPACT DESIGN, EASY INSTALLATION

Compact valves, by their dimensions, these valves are suitable when the installation is difficult because the space is reduced.

L-86 models make easier the maneuver from the top of the valve.

L-94 models need up to 20% less space to install them than L-85 models.

STEM-BALL

Stem and ball are manufactured in one piece with CW614N European brass, which increases its resistance and performance.

This original component from ARCO has been designed to reduce loss of pressure and attenuate the sound pressure, increasing the comfort of the water facilities.
**MAIN CONSTRUCTIVE FEATURES**

**LEAKTIGHTNESS**

**Internal**

The supporting clip made of POM is placed in the valve to push the NBR seat against the stem-ball.

This system can not be dismantled, avoiding improper manipulations.

**External**

A double NBR o-ring placed on the stem assures external leak tightness. This double joint system guarantees safety against external leakage, use, ageing, ...

**DIMENSIONS**

**L-86 with MASTER handle**

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 x 3/4</td>
<td>62</td>
<td>30.5</td>
<td>G 1/2A</td>
<td>G 3/4</td>
</tr>
</tbody>
</table>

G Thread ISO 228

**L-94 with NOVA handle**

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 x 3/4</td>
<td>62</td>
<td>30.5</td>
<td>G 1/2A</td>
<td>G 3/4A</td>
</tr>
</tbody>
</table>

G Thread ISO 228
**DIMENSIONS**

L-94 with DELTA handle

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 x 3/4</td>
<td>74</td>
<td>30,5</td>
<td>G 1/2A</td>
<td>G 3/4A</td>
</tr>
</tbody>
</table>

G Thread ISO 228

---

**HYDRAULIC FEATURES**

Hydraulic characteristics obtained according to EN 1267.

![Flow vs. Loss of pressure graph](image)

**INSTALLATION AND ASSEMBLY**

The installation of valves must be done with the right tool.

The tool should be adjusted to the flat sides of the body of the valve, avoiding the deformation of the zone by high pressure of the tool.

Components of the valve must not be altered. The substitution or dismantling of the handle can cause external leaks.

All quarter turn handle valves should work totally open.

---

Every product has an impact on the environment during all stages of its life-cycle, including final disposal. All components of these valves can be recycled, deposit the valve in a green or recycled point when no longer useful.

Válvulas ARCO, SL reserves the right to change our products and specifications at any time and without prior notice.