TAJO PRO series are manually operated metallic ball valves, with patented drive system, by its design and raw materials are intended to be used in:

- Drinking water networks.
- Plumbing networks
- Hot water networks
- Heating system
- Compressed air networks

It’s recommended to use in installations where there is a low frequency of operation of the valves. In these cases and with traditional valves, the ball lock may occur, requiring a torque of drive several times higher than required under normal operating conditions. This high torque causes small deformations that result in clearances between stem and ball, and can even exceed the limit of mechanical strength of stem, resulting in breakage.

The patented drive system of TAJO PRO minimizes these problems, giving greater security to services operation and maintenance of such facilities.

**Nominal pressure:** 40 bar
**Temperature range:** -20°C up to 140°C
**Excluding frozen**
**Fluid**
Drinking water, hot water and compressed air
<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
<th>Material</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>European Brass CW617N</td>
<td>Chrome plated</td>
</tr>
<tr>
<td>2</td>
<td>Handle nut</td>
<td>Steel</td>
<td>Geomet</td>
</tr>
<tr>
<td>3</td>
<td>Stem</td>
<td>European Brass CW614N</td>
<td>Nickel plated</td>
</tr>
<tr>
<td>4</td>
<td>Sealing gland nut</td>
<td>European Brass CW614N</td>
<td>Nickel plated</td>
</tr>
<tr>
<td>5</td>
<td>Washer</td>
<td>European Brass CW614N</td>
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<tr>
<td>6</td>
<td>Sealing gland</td>
<td>PTFE</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>O-ring</td>
<td>FKM – Viton®</td>
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</tr>
<tr>
<td>8</td>
<td>O-ring</td>
<td>NBR</td>
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<tr>
<td>9</td>
<td>Lateral</td>
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<tr>
<td>10</td>
<td>Ball</td>
<td>European Brass CW617N</td>
<td>Chrome plated</td>
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<tr>
<td>11</td>
<td>Seat</td>
<td>PTFE</td>
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<tr>
<td>12</td>
<td>Handle</td>
<td>Steel</td>
<td>Black Epoxy</td>
</tr>
<tr>
<td>13</td>
<td>Cover</td>
<td>LDPE</td>
<td>Black</td>
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</tbody>
</table>
**MAIN CONSTRUCTIVE FEATURES**

**DRIVE SYSTEM**

TAJO PRO has a drive system whereby the ball is double actuated by the poles, which provides:
- Long term maintaining of balancing of ball
- Continuous shaft alignment
- Distribution of efforts between poles of the ball
- This system doubles the safety factor maximum allowable torque of the traditional ball valves.

The handle works simultaneously on the two stems, being aligned with the axis of passage of the valve in the open position.

**BODY AND LATERAL**

Body and lateral manufactured in European brass alloy CW617N, by the mean of a hot stamping process. This process confers the following advantages against casting parts:
- Pores and bumpy texture absence
- Surfaces with better finished
- Higher mechanical endurance

**SPHERICAL CLOSURE**

Spherical closure is made in European brass alloy CW617N, ensuring a higher mechanical endurance against high pressure and maneuvers.

Its diamond mechanized and chrome plated applied on the ball surface assure a long lifespan and a smooth maneuver.
MAIN CONSTRUCTIVE FEATURES

LEAKTIGHTNESS

Internal
Internal leaktightness is assured in both directions by the PTFE seat that press against the spherical closure.

External
External leak tightness is guaranteed in the operation area by a double system:
- A FKM (Viton®) o-ring placed on the stem.
- A sealing gland made of PTFE.

The leak tightness between body and lateral is guaranteed by a threaded junction on which is applied a continuous sealing cord and an o-ring.

TAMPER-PROOF SYSTEM

TAJO PRO series is designed to work with high-temperature water, for this reason, the stem cannot be disassembled or tampered with, avoiding accidents.
# DIMENSIONS

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<tbody>
<tr>
<td>2 FF</td>
<td>126</td>
<td>205</td>
<td>96</td>
<td>G 2</td>
<td>OCT E/C 67</td>
<td>153</td>
</tr>
<tr>
<td>2 1/2 FF</td>
<td>150</td>
<td>223</td>
<td>116</td>
<td>G 2 1/2</td>
<td>OCT E/C 85</td>
<td>170</td>
</tr>
</tbody>
</table>

G thread ISO 228
HYDRAULIC FEATURES

Hydraulic features have been obtained according to European Standard EN 1267.

![Graph showing Flow vs. Loss of pressure.]

INSTALATION AND ASSEMBLY

Hold the valve from faces of the hexagons, never from the central part or its neck, that will avoid internal components deformations (in other case valve could be damaged inevitably).

The maximum valve life is obtained with the closure sphere in the full open or close position, it is recommended do not work in intermediate positions for long time periods.

Although the valve is equipped with a drive system for easy maneuvering, it is recommended an opening maneuver and closes every 3 months, this frequency should be increased to waters above 50 degrees French hardness.