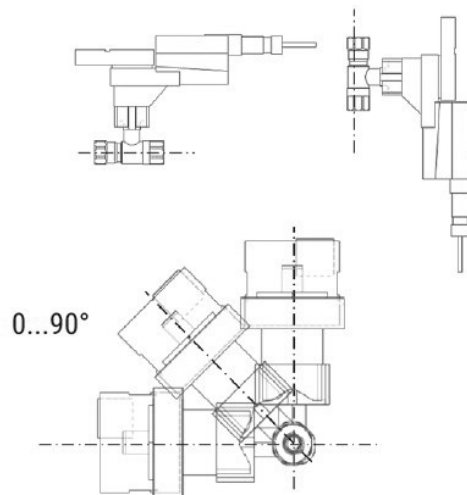


EXT Potable Water Ball Valves

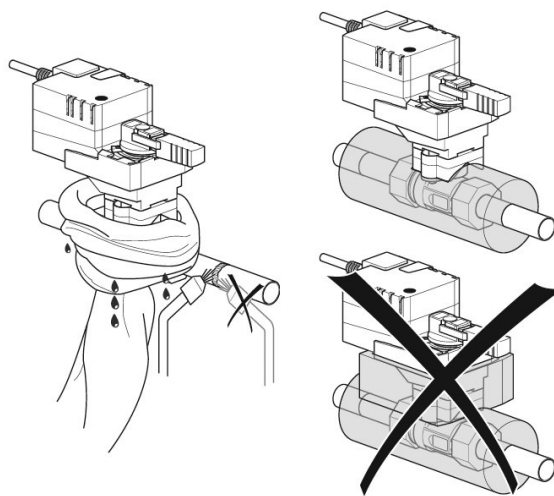
EXT-B2 Series Ball Valves

Technical Data	
Service	domestic potable water
Flow characteristic	full port
Action	90° rotation valve open CCW, valve closed CW
End fitting	female NPT, press fit
Materials:	
Body	CW510L lead free brass
Ball	CW510L lead free brass
Seats	PTFE
Stem	CW510L lead free brass
O-rings	EPDM
Pressure rating	600 psig CWP
Media temp. range	-4...212°F [-20...100°C]
Leakage	0%

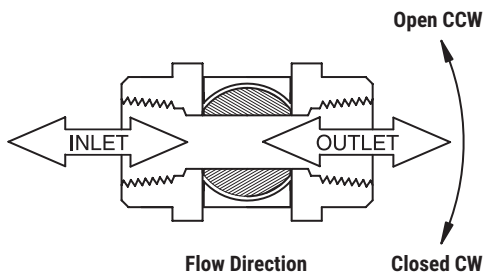
Piping/Mounting Orientation



Water Applications



Flow Pattern



NOTE:

To avoid torque increase during off season shut down, or other periods of inactivity longer than 1 month - the valve should be exercised (actuator or manually driven full open-closed cycle) at least once per month. This is necessary to avoid any application problems after an off season shut down.

Installation

1. Inspect shipping package, valve, and actuator for physical damage. If shipping damage has occurred notify appropriate carrier. Do not install.
2. If a replacement, remove existing valve, linkage and actuator from the piping system.
3. If actuator is removed, it must be reinstalled correctly. The actuator must be rotated so that the valve sits properly for close off.
4. Blow out all piping and thoroughly clean before valve installation.
5. Clean male pipe threads with wire brush and rag. If threads have been damaged or exposed to weather, running a tap or die over the threads may straighten them. Clean pipes, threads, and valve threads before installation; check for any foreign material that can become lodged in trim components. Strainers should be cleaned after initial startup. For Valves with Press Fit Connections proceed to following Press Fit Installation Instructions
6. Pipe sealing compound should be applied sparingly after cleaning and may not be applied to the two lead threads of a screwed pipe, which are innermost inside the valve. Sealing compound is to be placed on male threads only. The purpose is to lubricate the pipes when tightening.
7. Valve must be installed per the mounting drawings shown.
8. Start the connection by turning the valve or pipe by hand as far as possible. Be certain the threads mate by the "feel" of the connection.
9. Use wrenches to tighten the valve to the pipe. Do not over tighten or strip the threads. Two wrenches are necessary to avoid damaging the valve.
10. Two-way valve Normally Open or Closed configurations must be verified by examining both the mechanical drawings and the valve and actuator.

Warning!

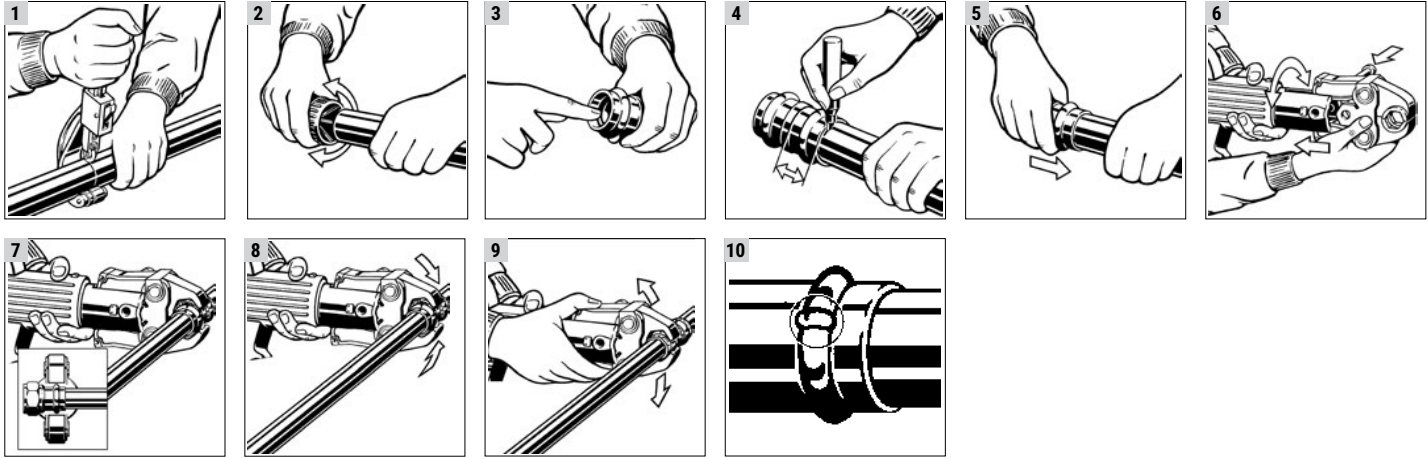
Valve should not be used for combustible gas applications. Gas leaks and explosions may result. Do not install in systems which exceed the ratings of the valve.

- Avoid installations where valve may be exposed to excessive moisture, corrosive fumes, vibration, high ambient temperatures, elements, or high traffic areas with potential for mechanical damage.
- Valve assembly location must be within ambient ratings of actuator.
- The valve assembly will require heat shielding, thermal isolation, or cooling if combined effect of medium and ambient temperatures – conduction, convection, and radiation – is above 122°F for prolonged time periods at the actuator.
- Strainers should be installed before coil and valve.
- Visual access must be provided. Assembly must be accessible for routine scheduled service. Contractor should provide unions for removal from line and isolation valves.
- Avoid excessive stresses. Mechanical support must be provided where reducers have been used and the piping system may have less structural integrity than full pipe sizes.
- Sufficient upstream and downstream piping runs must be provided to ensure proper valve capacity and flow response. Five diameters in each direction are recommended.
- Life span of valve is dependent on maintaining non-damaging conditions. Poor water treatment or filtration, corrosion, scale, other particulate can result in damage to trim components. A water treatment specialist should be consulted.
- Normal thread engagement between male pipe thread and valve body should be observed. Pipe run that is in too far will damage the valve.

EXT-B2 Series Ball Valves

Instruction Manual

71867-00001



For Hard Copper and Soft Copper Tubing

- 1 Cut the tube square using a displacement-type cutter or fine toothed saw.
Note: Cut tubing a minimum of 4" away from the contact area of the vise to prevent possible damage to the tubing in the press area.
- 2 Deburr inside and outside of the tube to the proper insertion depths to prevent cutting sealing element.
- 3 Check the sealing element for correct fit. Do not use oils or lubricants.

- 4 Mark the proper insertion depth as indicated by the Insertion Depth Chart. Improper insertion depth may result in an improper seal.

Insertion Depth Chart	
Tube Size (in)	Insertion Depth (in)
1/2	3/4
3/4	7/8
1	7/8

i Copper tubing must be free of surface imperfections, including metal stamped print lines, before a Press fitting is installed.

- 5 While turning slightly, slide press fitting onto tubing to the marked depth. End of tubing must contact stop.
- 6 Insert appropriate press fit jaw into the press tool and push in, holding pin until it locks in place.
- 7 Open the jaw and place at right angle on the fitting. Visually check insertion depth using mark on tubing.

Warning!
 Keep extremities and foreign objects away from press tool during pressing operation to prevent injury or incomplete press.

- 8 Hold trigger on press tool until press jaws have fully engaged the fitting. Jaws will automatically release after a full press is made.
- 9 After pressing, open the jaw and remove the press tool.

Unpressed connections are located by pressurizing the system with air or water.