

# Water Heater Shutoff/Thermal Expansion Control Valve Installation, Operation & Maintenance Instructions

**PATENT PENDING** 

The Apollo EXV Thermal Expansion Control Valve is a shut-off valve with provision for intermittent relief of pressure increase caused by thermal expansion. The valve can be used in lieu of an expansion tank. THIS VALVE DOES NOT REPLACE A TEMPERATURE AND PRESSURE SAFETY RELIEF VALVE.

#### INSTALLATION

The Apollo EXV is to be installed on cold water supply line. Orientation of valve shall be as shown in figure 1, with discharge relief port on downstream side of shutoff in between water heater and ball valve. Note directional arrow on valve body.

# Discharge line connection:

- A discharge line of not less than 0.245 inches (6.22 mm) internal diameter shall be attached at the outlet of the Relief Valve, so as to continually drain downward. As an alternate, an air gap device may be connected to the outlet of the Thermal Expansion Control Valve.
- The discharge line shall be run independently of the water heater relief valve
  discharge line to a suitable drain and shall terminate at least 3 inches above the
  drain, or as allowed by local code requirements. The end of the discharge line shall not be threaded.
- 3. The discharge line shall be anchored or restrained to prevent movement upon discharge.

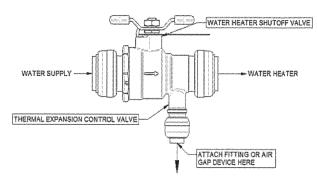


Fig. 1 - Sample Orientation

### **OPERATION**

The shutoff valve is opened by rotating the handle counterclockwise and closed by rotating the handle clockwise. The valve is in the full open position when the handle is parallel with the valve run. The valve provides continuous thermal expansion relief regardless of open or closed lever position.

## **MAINTENANCE**

Normal stem packing wear in the shut –off ball valve can be compensated for by tightening the packing gland nut. There are two nuts on the stem. The top nut retains the lever. The top nut and lever may need to be removed for easy access to the packing nut. The packing nut is the lower nut on the stem. (Wrench part number H371400 is available to ease this operation.) Tighten in 1/8 turn increments until observed leakage stops.

The control valve should be checked periodically for leakage. Leakage can be eliminated by cleaning seat periodically. If cleaning does not correct leakage, discard seat assembly and replace with appropriate repair kit listed below. Assemble to body using thread sealant.

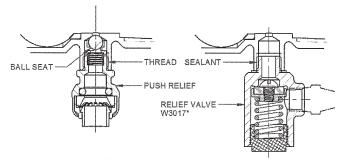


Fig. 2 - Control Valves

Repair Kits	80 PSI	100 PSI	125 PSI
Push relief	W319805	W319905	W320005
Hose barb	W3017H80	W3017H100	W3017H125
Compression	W3017C80	W3017C100	W3017C125
½"NPT/SWT	W3017T80	W3017T100	W3017T125
PEX (F1807)	W3017P80	W3017P100	W3017P125
PEX (F1960)	W3017X80	W3017X100	W3017X125

Warning: (Required by state of California)

This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.