

# **Instruction Sheet**

102-006

EFFECTIVE: November 1, 2012

# Boiler Feed Valves (Pressure Reducing Valves) Models 329, 329-T and 335

## Dual Controls Models 334 and 334-T

SUPERSEDES: 102-006 dated January 1, 2003

Plant I.D. 001-924

## RATINGS:

Boiler Feed Valves (Reducing Valves): Maximum Fluid Temperature Maximum Supply Side Pressure Setting Range Factory Setting of System Side

**Dual Controls:** 

Maximum Fluid Temperature Maximum Supply Side Pressure Relief Valve Set to Release at 212°F (100°C) 100 psi (689 kpa) 10-25 psi (69-172 kpa) 12 psi (83 kpa)

212°F (100°C) 100 psi (689 kpa) 30 psi (207 kpa)



Caution: Boiler Feed Valves and Dual Controls should only be installed by qualified heating professionals. Consult local authorities for any code requirements in your area.

#### DESCRIPTION:

The Boiler Feed Valves are adjustable pressure reducing valves that automatically maintain system pressure. They are equipped with a FAST FILL lever that can be used to override automatic pressure regulation during purging.

- 329:  $\frac{1}{2}$ " union connection with a sweat tailpiece at inlet end and a female NPT connection at the outlet end.
- 329-T: same as 329 except the inlet union connection is threaded.
- 335:  $\frac{3}{4}$ " cast brass body with female NPT connections at body ends.

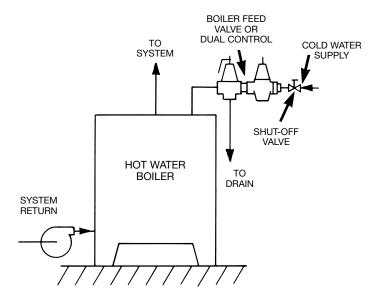
The Dual Control consists of a 329 Boiler Feed Valve with an in-line pressure relief valve connected at its outlet end.

- 334:  $\frac{1}{2}$ " union connection at inlet with a sweat tailpiece and a female NPT connection at the outlet end.
- 334-T: same as the 334 except the union end tailpiece is threaded.

### INSTALLATION:

- 1. Install the Boiler Feed Valve or the Dual Control in a horizontal position in the cold water supply pipe to the boiler.
- 2. Install a shut-off valve on the upstream side of the Boiler Feed Valve. This valve, provided for isolation purposes during maintenance, must be open at all times during operation so that the Boiler Feed Valve can maintain pressure automatically.

- 3. Flush out the supply pipe to clear it of chips, scale, dirt, etc. before connecting it to the inlet of the Boiler Feed Valve.
- 4. Connect a pipe from the bottom "DRAIN" connection of the Relief Valve in the Dual Control. Direct it to some convenient open drain, such as a floor drain or set tubs. Always obey local regulations. DO NOT install a valve of any kind in the drain pipe. The pipe must always pitch down from the valve, with no part of it above the valve, and be no smaller in size than the valve drain connection size.



#### **OPERATION:**

- 1. To fill the system, open the shut-off valve upstream of the Boiler Feed Valve. This valve must always be kept open when the system is in operation.
- 2. The FAST FILL lever must be pushed all the way over to the side of the cover slot, over the "A" on the cover flange for AUTOMATIC operation. The supply water will flow into the system until it is full and under pressure.
- 3. The Taco Boiler Feed Valves have such a high flow capacity that the FAST FILL feature is not usually needed during filling. It is supplied for use during purging of the system. By moving the lever down and to the side over the "O" on the flange of the cover (OVERRIDE position), the valve will be held open, overcoming the closing action of pressure increases against its diaphragm.
- 4. After filling and purging, the FAST FILL lever must be placed at the AUTOMATIC ("A" side) position. Under system pressure the lever will move up and be secured in the notch. The lever should not be moved during system operation. This position allows the valve to maintain normal pressure in the system automatically.

Caution: Using the FAST FILL feature with the purge valve closed can cause system over pressurization. This may cause the pressure relief to discharge water, resulting in damage to other system components or water damage to other property. Care must be taken to prevent over pressurizing the system.

- 5. The Boiler Feed Valve is factory set to deliver water to the boiler at 12 psi. To determine the required pressure if the factory setting is not sufficient to lift the water to the highest radiation, calculate the number of feet from the regulator to the top of the highest radiation. Multiply this by .43 and add 3 psi. This is the pressure needed to raise the water to the highest radiation and keep it under sufficient pressure. To increase the valve setting, loosen the locking nut on the adjusting screw at the top of the valve. Now turn the adjusting screw in (clockwise) slowly until the gauge indicates the pressure calculated. Then lock the adjusting screw with its locking nut.
- 6. The pressure relief valve of the Dual Control is nonadjustable and is set to relieve at 30 psi.

