

INSTALLATION

Unpacking:

Units are shipped FOB factory and the title passes to the customer when the carrier signs for the receipt of the unit. In the event damages occur during shipment, it is the responsibility of the customer to notify the carrier immediately and to file a damage claim.

Check all orders for completeness against the packing list. Notify Griffco Valve Inc. immediately if any deficiencies are found.

The carton should contain:

- 1 Backpressure valve or Pressure Relief valve
- 1 Instruction Manual
- Accessories as ordered

Installation:

As a general rule, installation should follow the layout as outlined in the “TYPICAL INSTALLATION” drawing.

Back Pressure Valve:

Generally, the back pressure valve can be installed anywhere in the discharge line, provided there is some downstream pressure at the dosage point. If there is no downstream pressure the back pressure valve should be installed at the dosage point to prevent siphoning and drainage of the chemical line. The valve can be installed either vertically or horizontally. The flow must be across the valve in the direction of the arrow. All **GRIFFCO** valves are factory set at 50 psi, unless

otherwise specified. Field adjustment is possible with the adjustment screw.

Back pressure valve performance will be enhanced with the installation of a pulsation dampener to smooth out the discharge / suction cycles of the pump. Thus, the diaphragm is free to float inside the valve chamber, minimizing the wear on the stress points of the diaphragm. Pulsation dampeners will also reduce the pressure drop across the valve by reducing peak flows. Backpressure valves should be installed downstream of the dampener. For most applications diaphragm type dampeners are required. Generally speaking 5 to 10% dampening is sufficient. Consult with your pump manufacturer to get his recommendations.

Pressure Relief Valve:

3 Port Valves:

Installation should be made as close to the chemical pump discharge valve as possible, without any equipment, especially shut-off valves, between the valve and the pump. Direction of flow must be across the valve; however the side of entry is not important. The valve can be installed either vertically or horizontally. The relief port is on the bottom of the valve.

2 Port 180° Valves:

Installation of a tee should be made as close to the chemical pump discharge valve as possible, without any equipment, especially shut-off valves, between the valve and the pump. The flow can travel at 90° or 180° through the tee, with the relief valve connected to the 3rd port of the tee. Direction of relief flow must be in the direction of the arrow on the valve.

2 Port 90° Valves:

Installation of a tee should be made as close to the chemical pump discharge valve as possible, without any equipment, especially shut-off valves, between the valve and the pump. The flow can travel at 90° or 180° through the tee, with the relief valve connected to the 3rd port of the tee. Direction of relief flow must be in the side of the valve with the relief port being on the bottom.

The optimum installation for any relief valve is to vent the relief port back to the chemical tank, or directly to a containment area. However if this is not possible, the relief port can be piped back into the suction side of the pump. This will apply the suction head to the relief port. To compensate, divide the NPSH by 4 and add this pressure to the relief valve setting. Do not put a shut off valve in the relief line.

All **GRIFFCO** valves are factory set at 50 psi, however field adjustment is possible with the adjustment screw.

Important Precautions:

- Do not over tighten the connection piping.
- It is not recommended threading metal pipe or pipe fittings into plastic valves.
- Care should be taken when applying thread sealant to pipe threads not to use excessive amounts as the sealant could break free and get lodged between the valve seat and the diaphragm causing the valve to weep.
- Check to ensure that the valve bolts are tight.
- Do not bottom out the adjustment screw.

TYPICAL INSTALLATION

