

FLO-PAC LLC

INSTALLATION INSTRUCTIONS

SOLDER CONNECTIONS

If the *Flo-Pac* component is provided with a union tailpiece, remove from the component as well as the O-ring. Use accepted industry standards to clean the copper tubing and sweat fittings. Apply flux evenly to both surfaces. If the component is a ball valve, place in the closed position. Do not apply heat to the valve body or access ports. Do not exceed the temperature rating of the component. Use soft solder only. Overheating the valve can damage O-rings, seals, and Teflon seats and result in leaks. <u>Use of a heat sink is required</u>. After the pipe and components have cooled, replace the O-ring and hand tighten the union nut. Holding the component securely, tighten the union approximately an additional quarter turn. *Do not over tighten*.

THREADED CONNECTIONS

Threaded connections should be made according to accepted industry standards using approved pipe sealant (pipe dope or tape). *Flo-Pac* threaded components are tapered NPT type. If the *Flo-Pac* component is provided with a union tailpiece, remove from the component. Thread the tailpiece with union nut to the pipe and the component to the other end of the pipe. Tighten up both the tailpiece and the component with a socket wrench making sure that the accessories (P/T ports, vents, drain valves, etc.) are in the proper position. Next, hand tighten the union if so equipped. Holding the component securely, tighten approximately an additional quarter turn. When installing a threaded valve body, place a wrench on the flats of the fixed end (not the body) while tightening to the pipe. Failure to follow this procedure can result in a leak between the fixed end and the valve body. Excessive use of jointing material combined with high tightening forces can generate high hoop stresses in female thread components. *Do not over tighten*.

UNION NUT CONNECTION

All *Flo-Pac* union bodies and tailpieces have tool flats for tightening. If the union end(s) are to be soldered, removed the O-ring from the groove prior to heating. After the connections have been made to the pipe, replace the O-ring and hand tighten the union. Holding the union to the tailpiece, securely tighten the union nut approximately a quarter of a turn. *Do not over tighten*.

PTV / PT PORT

Safety Instructions

- 1. Seals are made of EPDM (Nordel). EPDM may be used with hot or cold water. EPDM is resistant to glycol, alcohol, phosphates, esters, ketones, and detergents. Do not use with petroleum products, hydrocarbon solvents and/or oils, chlorinated hydrocarbons turpentine.
- 2. Always wear eye protection when using PTV or PT ports.
- 3. Attach drain hose to hose barb connection for collecting water or water vapor from the PTV.
- 4. Always use a pressure gauge with a rating greater than the pressure in system.
- 5. Recommended for use in hydronic systems only.
- 6. Not recommended for use on gas, steam or high temperature hot water systems.



Operation

Venting

- Rotate valve body 1/2 turn or until you hear air escape.
 Caution: Because water and water vapor can vent with system air, and may cause damage or personal injury, it is a good practice to use a drain hose to direct the flow from the vent hole into a suitable container. See Warning Below
- 2. Close Valve when venting is completed.

Temperature/Pressure Reading

- 1. Hold valve body in place to prevent rotation.
- 2. Remove cap slowly and look and listen for leaks. See Warning Below
- 3. Remove any foreign material from entrance hole.
- 4. Select either the pressure or temperature device to be used. Examine probe and remove any burrs. Apply silicone grease to probe especially for first time use. Insert probe slowly with twisting motion. As soon as the necessary readings and adjustments are made, remove probe and replace cap. Note: If probe is left inserted in valve for any extended period of time and then removed, the valve seal will leak until seal regains its "memory". This is especially true of low pressures and temperatures applications.
- 5. Always replace cap after use.

Maintenance

- 1. If device leaks persistently, replace it.
- 2. Keep debris out of plugs and keep caps on.

WARNING: If piping system contains hot liquids under pressure, caution must be used to avoid contact with face, eyes or skin. If these instructions are not adhered to, serious injuries or death may result.

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