## Flo-Tite, Inc.

## Installation – Maintenance Manual Tri-Pro Series (#HPF40, #HPF50)

- 1. Use: Maximum results and long valve life can be maintained under normal working conditions and in accordance with Flo-Tite's pressure/temperature and corrosion data. During shipment, storage, and in operation, the valve should be fully open or fully closed. Do not use in intermediate positions without knowledge of flow and pressure drop.
- 2. Operation: The opening and closing of the valve is done by turning the handle a ¼ turn. (90 degrees)

Valve in open position, the handle is in line with valve or pipe.

Valve in closed position, the handle is across the pipe.

Automated valves should be checked for alignment of actuator shaft and valve stem. Severe stem seal damage will result if alignment is improper.

Stem seal adjustment: If slight leakage is noted at stem, straighten lock washer tab, tighten stem nut to flatten the Bellville Washers, back stem nut off ¼ turn, secure lock washer tab.

- 3. Disassembly & Cleaning Procedures: Caution! Ball valves can trap pressurized fluids in ball cavity when closed. If the valve has been used to control hazardous media, it must be decontaminated before disassembly. It is recommended that the following steps are taken for safe removal and reassembly.
  - A. Relieve the line pressure.
  - B. Place valve in half-open position and flush the line to remove any hazardous material from valve.
  - C. All persons involved in the removal and disassembly of the valve should wear the proper protective clothing, such as face shield, glove, apron, etc.
- 4. General Information For On-Site Installation: The valve may be fitted in any position on the pipeline. Before installing the valves, the pipes must be flushed clean of dirt, burrs and welding residues, or you will damage the seats and ball surface. The pipe must be free of tension.

- 5. Installation Of Threaded Valves: (on threaded lines, the valve can be screwed on, without the use of union as the 3-pc construction makes the valve ends free by removing all bolts.)

  Use conventional sealant, such as hemp core, Teflon, etc. Apply wrench only on the hexagon valve end being tightened. Tightening by using the valve body or handle or the opposite end connector can seriously damage the valve. In some applications, screwed valves are back-welded on site. Use care to ensure valve body remains below 140 F throughout the seal welding process, or disassemble as per instructions for weld end valves.
- 6. Installation Of Extended Weld End Valve: Butt-weld and socket-weld valves with extended weld ends do not require disassembly for installation welding. Simply open the valve, ensure the ball is in the full open position, and perform normal welding procedures, using care to ensure that the valve body does not reach a temperature above 300 F.

Bolt Tightening Specification: The body bolts of the valve should be tightened evenly. Tighten one bolt snugly, then the one diagonally across. Repeat for the other bolts, bringing them all down tightly in sequence.

Bolt Torque: ½" 140 In Lbs ¾" 210 In Lbs 1" 210 In Lbs 1 ¼" 550 In Lbs 1 ½" 550 In Lbs 2" 550 In Lbs