

# APOLLO<sup>®</sup>

## INSTALLATION, OPERATION AND MAINTENANCE GUIDE

### FOR APOLLO 3-Way Diversion Valves:

70-600 SERIES

70-900 SERIES

76-600 SERIES



## \*\*\*\* CAUTION \*\*\*\*

**BEFORE INSTALLATION:** Ensure that the component materials of the Valve are compatible with the media, with regard to corrosiveness, pressure, and temperature. Valves must be installed in piping systems that comply to the applicable portions of A.N.S.I. B31 Standard. Special considerations must be taken with respect to pipe line expansions and contractions and the media expansions and contractions within the piping system.

**NOTE: THIS IS A DIVERSION VALVE,** open port pressure must exceed closed port pressure.

### THREADED END INSTALLATION

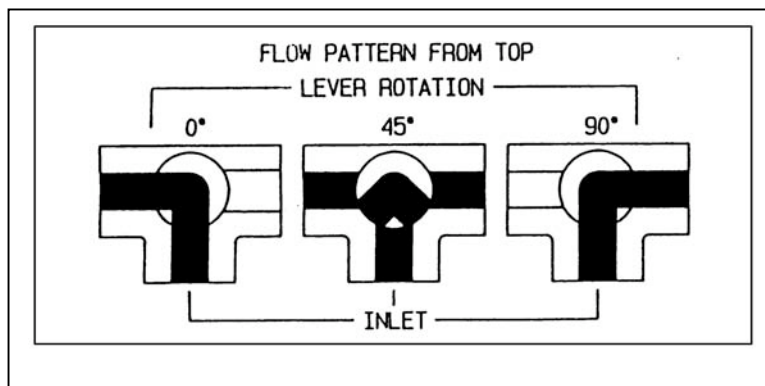
1. Pipe connections to be threaded into these valves should be accurately threaded, clean and free of foreign material or metal shavings.
2. TFE pipe tape is recommended for use as the pipe joint sealant, especially in stainless steel valves.
3. Use two wrenches when making the pipe joint. Apply one wrench on the hex pads nearest the joint being tightened to prevent breaking the retainer-to-body seal.

### SOLDER END INSTALLATION

1. Piping connections to be soldered into these valves should be cut square and then cleaned with an appropriate cleaner or flux.
2. These valves are designed to be soft soldered. Apply heat with the flame directed AWAY from the center of the valve body. Excessive heat can harm the TFE seats and packing. **SOLDERING TEMPERATURE NOT TO EXCEED 500°F.** Adjust packing after joints are cool.

### OPERATION

The valve levers are marked showing proper flow direction in respect to lever position at extreme end of lever travel.



## MAINTENANCE

Normal stem packing wear can be compensated for by tightening the packing gland screw clockwise. If all of the adjustment to the packing gland screw has been made, remove the lever and packing gland screw and add one or two replacement bearings on top of the old packing. Reassemble the lever and packing gland screw.

**CAUTION:** Do not disassemble Valve while under pressure nor with entrapped hazardous fluids therein.

General repair of the valve can be made by:

1. Remove Valve from system. Turn Valve lever to position shown on exploded view. (Clockwise)
2. Remove retainer by turning counterclockwise.
3. Remove top seat.
4. Push ball out of body with finger.
5. Remove lever nut by turning counterclockwise. Lever assembly can then be lifted off stem.
6. Remove packing gland screw by turning counterclockwise and push stem down into body to remove.
7. Remove all seats and seals. To facilitate removal of the stem packing, cut with knife.
8. Replace all seats and seals as furnished in the Service Kit. Inspect the ball and stem for excessive wear or damage and replace if necessary.
9. Reverse the above procedure to reassemble. Make certain to install the lever, ball, and stem in the position shown in the exploded view. Use Loctite Hydraulic Sealant or equal on the retainer threads.

**NOTE: VALVES IN OXYGEN SERVICE CAN ONLY BE SEALED WITH A COMPATIBLE SEALANT.**

**NOTE:** Always test Valve and system before putting the system into service.

- A. RETAINER
- B. BODY SEAL (1-1/4" – 2" SIZES)
- C. SEAT
- D. BALL
- E. STEM
- F. BEARING
- G. BODY
- H. PACKING
- I. GLAND SCREW
- J. LEVER / GRIP ASSEMBLY
- K. WASHER (1-1/2" – 2" S.S. ONLY)
- L. LEVER NUT

