Quadrant Valve & Actuator Engineering Specification

Number: IOM- 2

Date: 1/10/2001

Title: 2-Piece SOLDER-END IOM, for:

20-NP (CxC) 20-BP/BS (CxC)

I. Initial Inspection

A. Remove valve from packaging; remove thread protectors and discard, if so equipped.
B. Inspect Solder Ends for any damage caused in shipment or handling.
C. Confirm Valve Size is correct for installation.

II. Installation

A. Inspect Copper Tubing to be soldered to valve ends, insure that tubing ends are damage-free.
B. Move valve handle to full open position.
CAUTION: Soldering valve into system with handle in any other position than FULL OPEN will case permanent seat damage.
C. With steel wool, or other similar material, remove all corrosion and other material from first 2" of copper tubing to be soldered to valve and valve solder-end ports.
D. We recommend that the "tailpiece" (Part # 2) end of the valve be installed on the high-pressure side, towards the pressure-generating source.
E. Apply appropriate flux/paste to both valve solder end ports and tubing ends.
F. Wrap a rag that has been soaked with water around outside of valve body, near center of valve. Be careful not to wet solder ends
G. Install tubing into each side of valve.
H. Apply heat to one side of valve at valve body/tubing interface while holding solder at body/tubing interface. REMOVE heat as soon as solder runs and fills tubing/valve port clearance.
I. Let valve body COOL after first solder end is complete.
J. Use same method to install tubing into alternate valve NPT port.

NOTE: Quadrant 2-Piece Solder End Valves are designed to be used with solders with melt temperatures below 385 degrees F. Use of higher melt temperature solders require special precautions to prevent seat/seal damage.

III. Operation:

A. After Installation, confirm handle has adequate clearance by rotating 90 degrees from open to closed position and back to open.
B. All Quadrant ball valves are designed for on-off operation only. DO NOT attempt to "throttle" with Quadrant ball valves, unless they are specifically designed for and tagged "FOR THROTTLING SERVICE".
C. If application is in STEAM PIPING, be cautious when operating valve-handle will be HOT!

IV. Initial Pressurization of System

A. Upon initial pressurization of piping system, check all connections for leaks and correct if required.
B. Once system reaches "Steady State" conditions of operating pressure and operating temperature, it will be necessary to make initial stem packing adjustment. Tighten Part #5, "Stem Packing Nut" to 20-25 in-lbs on ¼"-3/4" sizes, and 35-40 in-lbs on 1"-2" sizes.

V. Maintenance

A. Quadrant Ball Valves require no maintenance other than periodic stem packing adjustment in applications where many cycles of on-off operation occur on a weekly basis.
B. In high-cycle applications, check stem packing area regularly to confirm there is no leakage from stem packing. If leakage occurs, follow step #IV-B to correct.

VI. Repair

A. None of the Quadrant Ball Valves listed are field repairable or shop rebuildable.