

Jamesbury™ valves 2" (DN 50) DLAUX PTFE lined unloading valve

Installation, maintenance and operating instructions



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READ THESE INSTRUCTIONS FIRST!

These instructions provide information about safe handling and operation of the valve.

If you require additional assistance, please contact the manufacturer or manufacturer's representative.

SAVE THESE INSTRUCTIONS!

Addresses and phone numbers are printed on the back cover.

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1 GENERAL

This instruction manual contains important information regarding the installation, operation and troubleshooting for the Jamesbury 2" (DN 50) DLAUX PTFE Lined Unloading Valve. Please read these instructions carefully and save them for future reference.

1.1 WARNING

FOR YOUR SAFETY, IT IS IMPORTANT THAT THE FOLLOWING PRECAUTIONS BE TAKEN PRIOR TO REMOVAL OF THE VALVE FROM THE PORTABLE CONTAINER OR BEFORE ANY DISASSEMBLY.

- EXERCISE NORMAL SAFETY PRECAUTIONS
 TO PROTECT YOURSELF AGAINST BOTH
 THE FLUID AND POSSIBLE UNRELIEVED
 PRESSURES IN THE VALVE ITSELF.
- 2. DO NOT REMOVE THE VALVE FROM A LOADED PORTABLE CONTAINER.
- 3. TURN THE VALVE FROM FULLY CLOSED TO FULLY OPEN AND BACK AGAIN TWO TIMES BEFORE REMOVAL FROM THE EMPTY PORTABLE CONTAINER. THIS RELIEVES ANY RESIDUAL PRESSURES.
- 4. AFTER REMOVAL AND BEFORE DISASSEMBLY, CYCLE THE VALVE AGAIN SEVERAL TIMES (AS IN NO. 3).

2 INSTALLATION

Refer to the ${\bf MAINTENANCE}$ Section for stem packing adjustment.

If there is weepage past the stem seals upon installation, it means the valve may have been subject to wide temperature variations in shipment. Tight sealing will be restored by a simple packing adjustment described in the **MAINTENANCE** Section.

Follow the recommended practices of the gasket manufacturer when tightening the flange bolts. Apply PTFE tape pipe sealer to the threads of the body cap and to the 2" NPT threads.

2.1 DISASSEMBLY

- 1. Read the instructions in the **WARNING** Section.
- 2. Place the valve in the open position.
- 3. Remove the handle (15), retaining ring (14), stem cup (55), indicator stop (12) and bonnet plate (9).
- 4. Pull out the stem (4) and stem seals (7).
- 5. Place the valve in the vertical position with the body cap end up.
- 6. Unscrew and remove the threaded body cap (2).
- 7. Lift the body seal (6), seat (5), liner (54), and ball (3) from the body. If these parts do not lift out easily, place the ball in the closed position, and with a piece of wood or some other soft material gently tap the ball from the end opposite the body cap. This will unseat these parts without damaging them.
- 8. Pull out both pieces of the PTFE liner (54).
- Pry the bottom seat (5) out of the body cavity. Use care to prevent damage to the seat face and sealing surface of the body.

2.2 ASSEMBLY

A good lubricant compatible with the flow medium should be applied lightly to seats, seals, ball, and stem to facilitate assembly and for ease of initial operation.

- Slide the first valve seat (5) into the body (1) to below the stem opening, and tilt it into place so that the proper surface (see picture in Figure 2) will be adjacent to the ball (3).
- Fit one half of the PTFE liner (54) into the valve body aligning the slot in the liner with the stem hole in the valve body.
- 3. Insert one stem seal (7) into the stem hole with the chamfer on the I.D. facing down.
- 4. Place the ball (3) into the valve in the open position, and adjust so that the slot faces the stem opening. Lubricate the stem (4) with a compatible lubricant and insert it. The stem should be tapped into place gently to avoid cutting the PTFE of the stem seal.
- Insert the second half of the PTFE liner into the valve body, and fit the slot of the liner around the stem.
- Position the body seal (6) against the chamfer of the PTFE liner.
 The chamfer on the I.D. of the body seal should be facing out.
- 7. Fit the second seat (5) into the machined area of the body cap (2). (see Figure 2 for proper placement of seat.)
- 8. Thread on the body cap.
- Slide the second stem seal (7), compression ring (18) and bonnet plate (9) over the stem. The chamfer on the I.D. of this stem seal should also be facing down.
- Tighten the bonnet plate (9) down with the socket head cap screws (11). Tighten the screws until they make contact with bonnet plate; then tighten another 3/4 of a turn each.
- 11. Drop the indicator stop (12) and stem cup (55) over the stem and secure them with the retaining ring (14).
- 12. Place the handle (15) on the valve stem and rotate the ball slowly with a gentle back and forth motion to build gradually to the full quarter turn. By rotating slowly, the seat lips will flow into place to maintain a permanent seal against the ball. A quick turning motion at this point may cut the seats before they have a chance to flow into place.

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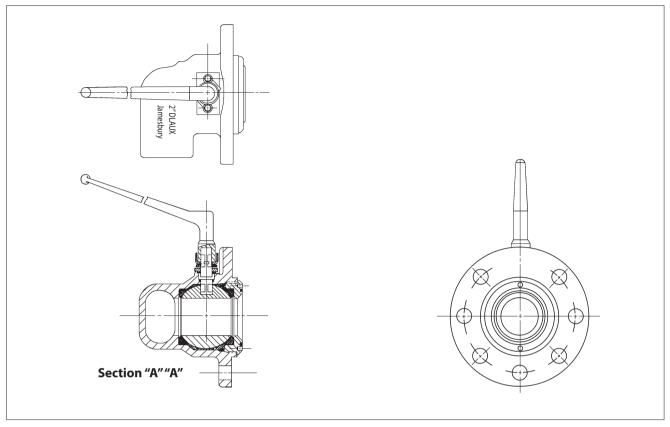


Figure 1.

3 MAINTENANCE

Good operating procedure requires periodic observation to ensure that the valve is functioning well. The frequency of observation will depend on the application.

Stem Packing Adjustment

Routine maintenance consists of tightening the two socket head screws (11) periodically to compensate for the wear caused by the stem's turning against the resilient PTFE seats. Tighten the socket head screws equally 1/2 turn. If weepage still occurs, tighten another 1/2 turn. The socket head screws should not be tightened down too severely, since this will destroy the seal by permanently deforming it.

Overhaul maintenance consists of replacing seats and seals. A standard Service Kit consisting of these parts may be obtained by contacting Metso Automation.

4 REPAIR KITS/SPARE PARTS

For further information on spare parts and service or assistance visit our web-site at **www.jamesbury.com**.

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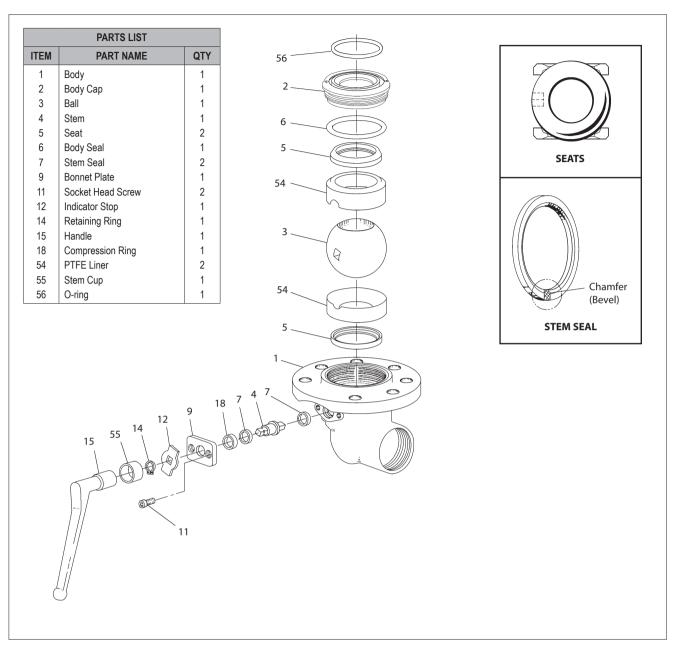


Figure 2.

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Valmet Flow Control Oy

Vanha Porvoontie 229, 01380 Vantaa, Finland. flowcontrol@valmet.com
Tel. +358 10 417 5000.
www.valmet.com/flowcontrol



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