

# Jamesbury ball valves

series 3000  
1/4" – 2" (DN 6 – 50)

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.

# 1. GENERAL

This instruction manual contains important information regarding the installation, maintenance and troubleshooting of the Jamesbury 1/4" – 2" (DN 6 – 50) series 3000 ball valves. Please read these instructions carefully and save them for future reference.

## **WARNING**

FOR YOUR SAFETY, IT IS IMPORTANT THAT THE FOLLOWING PRECAUTIONS BE TAKEN PRIOR TO INSTALLATION, ANY SERVICING OR REMOVAL OF THE VALVE FROM THE LINE OR BEFORE ANY DISASSEMBLY:

1. WEAR ANY PROTECTIVE CLOTHING OR EQUIPMENT NORMALLY REQUIRED WHEN WORKING WITH THE FLUID INVOLVED.
2. WHEN REMOVING THE VALVE FROM THE LINE, DEPRESSURIZE THE LINE AND CYCLE THE VALVE AS FOLLOWS:
  - A. PLACE THE VALVE IN THE OPEN POSITION AND DRAIN THE LINE.
  - B. CYCLE THE VALVE TO RELIEVE RESIDUAL PRESSURE IN THE BODY CAVITY BEFORE REMOVAL FROM THE LINE.
  - C. AFTER REMOVAL AND BEFORE ANY DISASSEMBLY, CYCLE THE VALVE AGAIN SEVERAL TIMES.
3. WHEN INSTALLING OR REMOVING PIPING FROM THE VALVE, PLACE A WRENCH ON THE BODY OR THE BODY CAP NEAREST THE END BEING WORKED. MAKE CERTAIN BODY CAP END OF THE VALVE DOES NOT TURN OUT OF THE VALVE BODY. (BODY/BODY CAP JOINT IS A RIGHT HAND THREAD).

## **WARNING:**

### **DO NOT EXCEED THE VALVE PERFORMANCE LIMITATIONS!**

EXCEEDING THE PRESSURE OR TEMPERATURE LIMITATIONS MARKED ON THE VALVE IDENTIFICATION PLATE MAY CAUSE DAMAGE AND LEAD TO UNCONTROLLED PRESSURE RELEASE. DAMAGE OR PERSONAL INJURY MAY RESULT.

## **WARNING:**

### **SEAT AND BODY RATINGS!**

THE PRACTICAL AND SAFE USE OF THIS PRODUCT IS DETERMINED BY BOTH THE SEAT AND BODY RATINGS. READ THE IDENTIFICATION PLATE AND CHECK BOTH RATINGS. THIS PRODUCT IS AVAILABLE WITH A VARIETY OF SEAT MATERIALS. SOME OF THE SEAT MATERIALS HAVE PRESSURE RATINGS THAT ARE LESS THAN THE BODY RATINGS. ALL OF THE BODY AND SEAT RATINGS ARE DEPENDENT ON VALVE TYPE AND SIZE, SEAT MATERIAL, AND TEMPERATURE. DO NOT EXCEED THESE RATINGS!

## **WARNING:**

AS THE USE OF THE VALVE IS APPLICATION SPECIFIC, A NUMBER OF FACTORS SHOULD BE TAKEN INTO ACCOUNT WHEN SELECTING A VALVE FOR A GIVEN APPLICATION. THEREFORE, SOME OF THE SITUATIONS IN WHICH THE VALVES ARE USED ARE OUTSIDE THE SCOPE OF THIS MANUAL.

IF YOU HAVE ANY QUESTIONS CONCERNING THE USE, APPLICATION OR COMPATIBILITY OF THE VALVE WITH THE INTENDED SERVICE, CONTACT VALMET FOR MORE INFORMATION.

## **WARNING:**

### **BEWARE OF BALL MOVEMENT!**

KEEP HANDS, OTHER PARTS OF THE BODY, TOOLS AND OTHER OBJECTS OUT OF THE OPEN FLOW PORT. LEAVE NO FOREIGN OBJECTS INSIDE THE PIPELINE. WHEN THE VALVE IS ACTUATED, THE BALL FUNCTIONS AS A CUTTING DEVICE. DISCONNECT ANY PNEUMATIC SUPPLY LINES, ANY ELECTRICAL POWER SOURCES AND MAKE SURE SPRINGS IN SPRING-RETURN ACTUATORS ARE IN THE FULL EXTENDED/RELAXED STATE BEFORE PERFORMING ANY VALVE MAINTENANCE. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE OR PERSONAL INJURY!

**NOTE:** ROUND HANDLES ARE OPTIONALLY AVAILABLE FOR THESE VALVES IN PLACE OF LEVER HANDLES.

6. THESE VALVES ARE DESIGNED FOR MANUAL USE ONLY AND ARE NOT INTENDED FOR AUTOMATION. DO NOT FABRICATE OR ADD ON ANY TYPE OF AUTOMATING ACCESSORY.

# 2. TRANSPORTATION AND STORAGE

Check the valve and the accompanying devices for any damage that may have occurred during transport.

Store the valve carefully. Storage indoors in a dry place is recommended.

Do not remove the flow port protectors until installing the valve. Move the valve to its intended location just before installation. The valve is usually delivered in the open position.

If the valve(s) are to be stored for a long duration, follow the recommendations of IMO-S1.

## 3. INSTALLATION

1. Read the **WARNING** Section.
2. If there is weepage past the stem seal upon installation, it means that valve may have been subject to wide temperature variations in shipment. Leak tight performance will be restored by a simple packing adjustment described in the **MAINTENANCE** Section. Flow through the Jamesbury Series 3000 valve can be in either direction, but the preferred way to install the valve is with the insert end upstream.
3. The Series 3000 is an end entry design with an internal insert as shown in (Figure 1). The insert contains a hex or slot drive which can be identified by looking into the end of the valve before installation. Although the Series 3000 valve may be disassembled it is not considered repairable. If valves with Monel® or Hastelloy C® trim require repair, contact the factory.

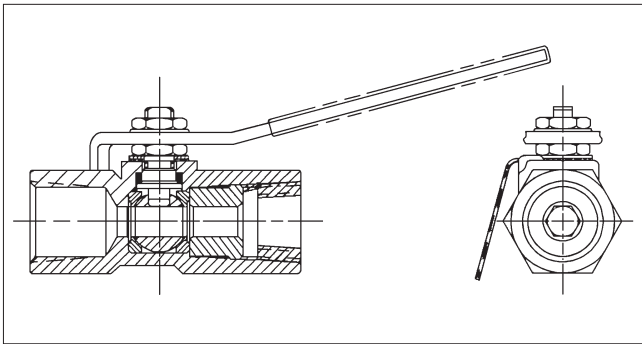


Figure 1.

## 4. MAINTENANCE

1. Read the **WARNING** Section.
2. Routine maintenance consists of tightening the lower stem nut 1/4 turn periodically to compensate for the wear caused by the stem's turning against the resilient PTFE seal. Loosen the upper stem nut before tightening the lower stem nut. Retighten the upper stem nut after tightening the lower stem nut.

Subject to change without prior notice.

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## 5. TESTING THE VALVE

### **WARNING:**

WHEN PRESSURE TESTING, EXERCISE CAUTION AND MAKE SURE ALL EQUIPMENT USED IS IN GOOD WORKING CONDITION AND APPROPRIATE FOR THE INTENDED PRESSURE.

If the valve is to be tested prior to returning to service make sure the test pressures are in accordance with an applicable standard.

When testing the valve for external tightness, keep the ball in the half open position.

If testing the valve seat tightness, please contact Valmet for advice.

### **WARNING:**

WHEN PERFORMING ANY TESTS, NEVER EXCEED THE MAXIMUM OPERATING PRESSURE OR MAXIMUM SHUT-OFF PRESSURE LISTED ON THE IDENTIFICATION PLATE!

## 6. REPAIR KITS/SPARE PARTS

For further information on spare parts and service or assistance visit our web-site at [www.valmet.com/flowcontrol](http://www.valmet.com/flowcontrol).

