

Jamesbury™ Emission-Pak™ assembly for 3-piece ball valves with ISO bonnet series 4000 model C

standard bore 1/2" – 2" (DN15 - 50)

full bore 1/2" – 1 1/2" (DN15 – 40)

Installation, maintenance and
operating instructions

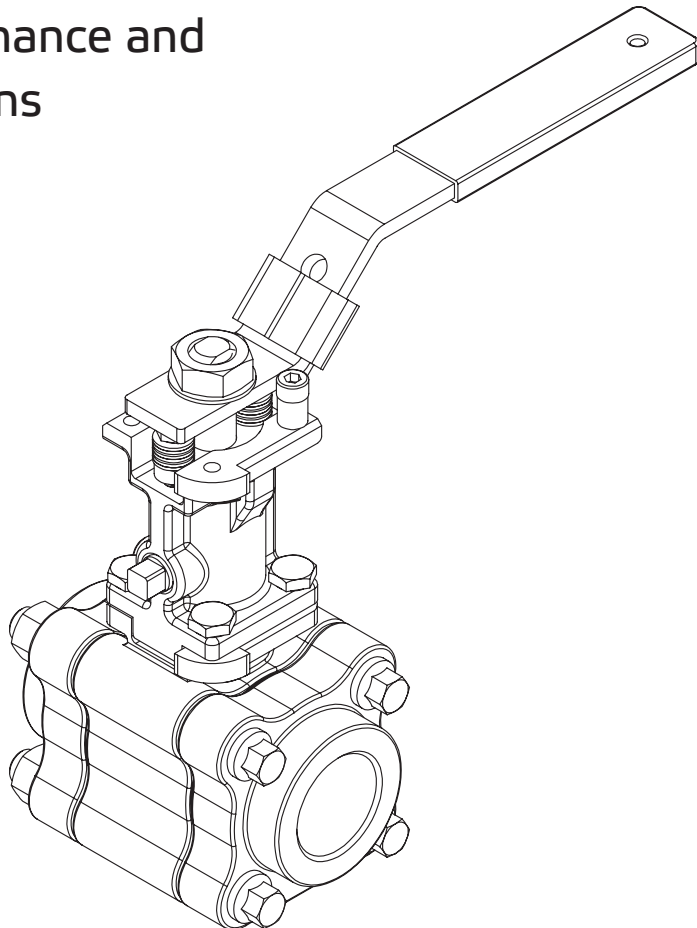


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READ THESE INSTRUCTIONS FIRST!

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

1.1 SCOPE OF THE MANUAL

This instruction manual contains important information regarding the installation, operation and maintenance of the Jamesbury™ *Emission-Pak* assemblies for 1/2" – 2" (DN15-50) Standard Bore Series 4000 and 1/2" – 1 1/2" (DN15-40) Full Bore Series 4000 Ball Valves Model C with ISO Bonnets. Please read these instructions carefully and save them for future reference.

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

DOUBLE-SEATED BALL VALVE DESIGNS, LIKE THE SERIES 4000, CAN UNDER CERTAIN CONDITIONS TRAP FLUID IN THE BALL CAVITY. RAISING THE TEMPERATURE OF THE TRAPPED FLUID CAUSES THE INTERNAL VALVE PRESSURE TO RISE. EXTREME TEMPERATURE RISE CAN BUILD UP EXCESSIVE PRESSURE WHICH COULD **LEAD TO UNCONTROLLED PRESSURE RELEASE. DAMAGE OR PERSONAL INJURY MAY RESULT.**

1.2 VALVE MARKINGS

The ASME rated valves have an identification plate attached to the underside of the body (see **Figure 1a**).

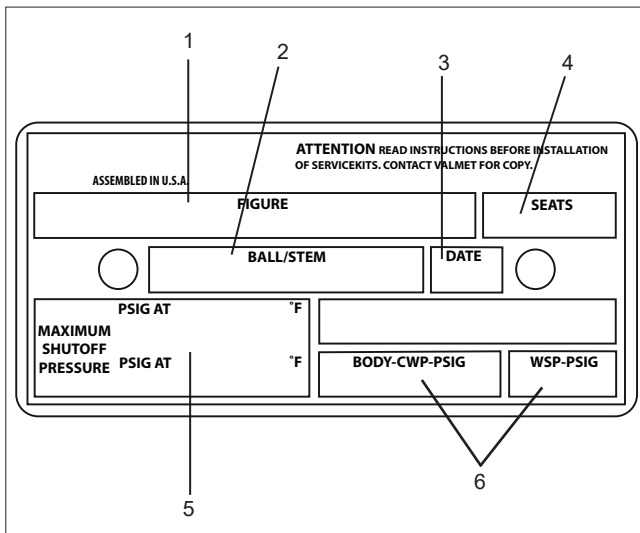


Figure 1a Identification plate

Identification plate markings:

1. Valve catalog code
2. Ball/Stem material
3. Assembly date
4. Seat Material
5. Maximum/minimum shut-off pressure/temperature
6. Maximum operating pressure

The non-ASME rated valves have information stamped/etched on the underside of the body (see **Figure 1b**).

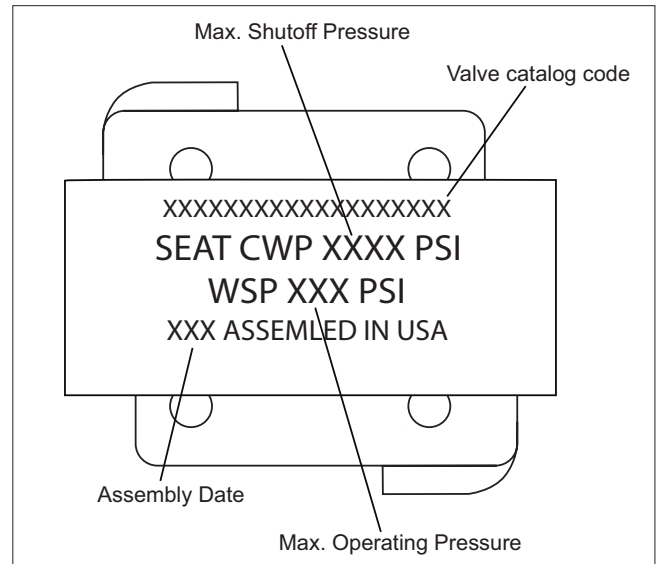


Figure 1b Body Markings

1.3 SAFETY PRECAUTIONS

WARNING

DO NOT EXCEED THE VALVE PERFORMANCE LIMITATIONS!

EXCEEDING THE PRESSURE OR TEMPERATURE LIMITATIONS MARKED ON THE VALVE OR ITS 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. CHECK THE BODY MARKINGS OR 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

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 DO THIS MAY RESULT IN DAMAGE OR PERSONAL INJURY!

WARNING

WHEN HANDLING THE VALVE OR VALVE/ACTUATOR ASSEMBLY, TAKE ITS WEIGHT INTO ACCOUNT!

NEVER LIFT THE VALVE OR VALVE/ACTUATOR ASSEMBLY BY THE ACTUATOR, POSITIONER, LIMIT SWITCH OR THEIR PIPING. PLACE LIFTING DEVICES SECURELY AROUND THE VALVE BODY. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE OR PERSONAL INJURY FROM FALLING PARTS (SEE **FIGURE 2**).

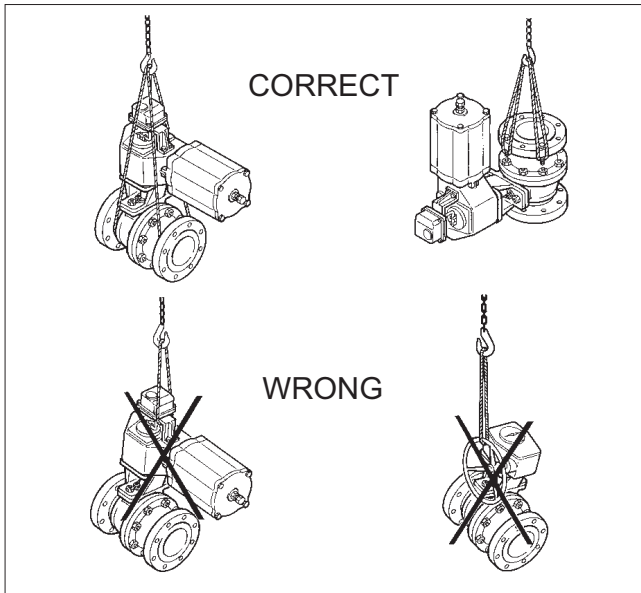


Figure 2 Lifting the valve

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

3.1 GENERAL

Remove the flow port protectors and check that the valve is clean inside. Clean valve if necessary. Place the valve in the open position.

Flush the pipeline carefully before installing the valve. Foreign objects, such as sand or pieces of welding electrodes, will damage the ball and seats.

3.2 INSTALLING IN THE PIPELINE

Screwed End Style – Use standard piping practices to install valves with threaded end caps. When tightening valve to pipe, apply wrench to end caps nearest the pipe being worked.

Weld End Style – Only valves with UHMWPE or Acetal seats must be disassembled before welding in line. A warning tag and replacement body seals are affixed to valves with these seats. VALVES WITH OTHER SEAT MATERIALS SHOULD BE WELDED IN-LINE FULLY ASSEMBLED.

1. Only a qualified person should weld, as outlined in Section IX of the ASME Boiler Construction Code.
2. Cycle the valve to the fully open position.
3. Remove or protect the handle or actuator from weld spatter or arc strikes.
4. Weld by applying a recommended 1/8" (3.2 mm) max. weld bead per pass around each end cap. **CAUTION: DO NOT** heat the center section over 350°F (176.7°C). Use a temperature stick and a wet cloth wrapped around the center section to prevent overheating.
5. For welds that require multiple passes to achieve weld size, stop after each pass and carefully monitor the valve body temperature.
6. After sufficient cooling of the valve, replace the handle or actuator.

IMPORTANT: If the body seals (6) and (18) are removed for welding, **DO NOT RE-USE THEM**. When reassembling the valve, put new seals back into the grooves. Body seal kits are provided in (**Table 4**). Tighten the body bolts to the torques listed in (**Table 1**).

TABLE 1		
Body Bolt / Hex. Nut Torque		
Valve Size Standard Port (Full Port)	Torque FT•LBS	Torque N•m
1/2" (1/2") DN 15 (DN 15)	10	13
3/4" DN 20	14	19
1" & 1-1/4" (3/4" & 1") DN 25 & 32 (DN 20 & 25)	26	35
1-1/2" & 2" (1-1/4" & 1-1/2") DN 40 & 50 (DN 32 & 40)	63	85

CAUTION: IF THE VALVE IS BEING DISASSEMBLED FOR WELDING, DO NOT CUT OR SCRATCH THE SEATS, SEALS AND SEALING SURFACES. DAMAGE TO THE SEALING SURFACES MAY CAUSE LEAKAGE.

After valve is in line, or before any testing, tighten compression plate hex head cap screws according to the **MAINTENANCE** Section.

The valve may be installed in any position and offers tightness in both directions. It is not recommended to install the valve with the stem on the underneath side because dirt in the pipeline may then enter the body cavity and potentially damage the stem packing (see **Figure 3**).

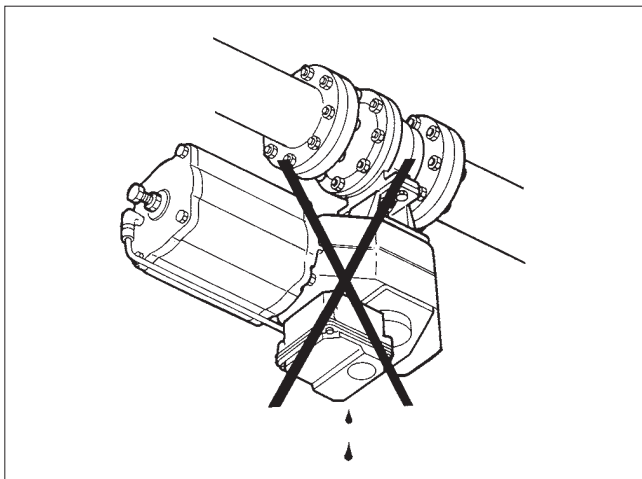


Figure 3 Avoid this mounting position

Refer to the **Section 4, MAINTENANCE** for stem seal 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. Leak-tight performance will be restored by a simple stem seal adjustment described in the **MAINTENANCE** section.

3.3 VALVE INSULATION

Jamesbury 4000 Series valves with *Emission-Pak* assemblies do NOT require insulation to function properly. If desired the valve may be insulated; however, the insulation must not continue above the upper level of the valve (see **Figure 4**).

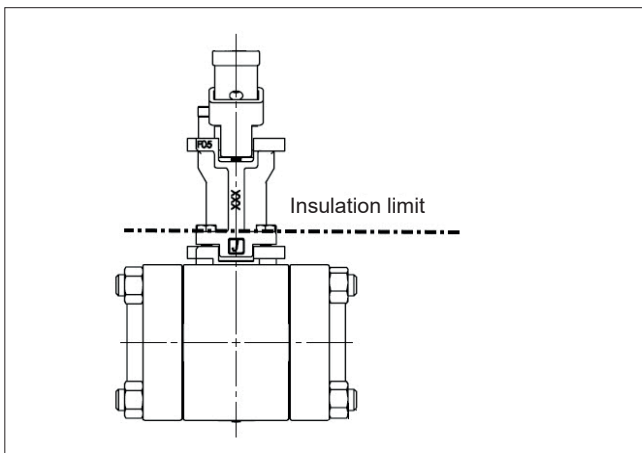


Figure 4 Insulation of the *Emission-Pak* valve assembly

3.4 ACTUATOR

WARNING

WHEN INSTALLING THE ACTUATOR ON THE VALVE, MAKE SURE THAT THE VALVE ASSEMBLY FUNCTIONS PROPERLY. INSTALLATION INFORMATION FOR VALMET ACTUATORS IS GIVEN IN THE SEPARATE ACTUATOR INSTRUCTIONS MANUALS LISTED IN **TABLE 6**.

The actuator should be installed in a manner that allows plenty of room for its removal.

The upright position is recommended for the actuator.

The actuator must not touch the pipeline, because pipeline vibration may interfere with its operation.

In certain cases it may be considered advantageous to provide additional support to the actuator. These cases will normally be associated with large actuators or where severe vibration is present. Please contact Valmet for advice.

3.5 COMMISSIONING

Ensure that there is no dirt or foreign objects left inside the valve or pipeline. Flush the pipeline carefully. Make sure that the valve is fully open when flushing.

Ensure that all nuts, fittings, and cables are properly fastened.

If so equipped, check that the actuator positioner and/or switch are correctly adjusted. To adjust any accompanying device(s) refer to the separate control equipment instruction manuals.

4. MAINTENANCE

4.1 GENERAL

Although *Jamesbury* valves are designed to work under severe conditions, proper preventative maintenance can significantly help to prevent unplanned downtime and in real terms reduce the total cost of ownership. Valmet recommends inspecting valves at least every five (5) years. The inspection and maintenance frequency depends on the actual application and process condition. Routine maintenance consists of tightening the hex head cap screws (29) in (**Figure 6**) periodically to compensate for stem seal wear. Tighten the hex head cap screws (29) to the torque values listed in **Table 2**.

TABLE 2		
Hex. Head Cap Screw Torque		
Valve Size Standard Port (Full Port)	Torque IN•LBS	Torque N•m
1/2" & 3/4" (1/2") DN 15 & 20 (DN 15)	15	1.7
1" & 1-1/4" (3/4" & 1") DN 25 & 32 (DN 20 & 25)	20	2.3
1-1/2" & 2" (1-1/4" & 1-1/2") DN 40 & 50 (DN 32 & 40)	32	3.6

Overhaul maintenance consists of replacing seats and seals. A standard repair kit consisting of these parts may be obtained through your authorized Valmet distributor.

NOTE: Repair kits include stem bearings (13), secondary stem seal (7), seats (5), body seal (6), stem seals (104), *Emission-Pak* body seal (105) and *Emission-Pak* body gasket (106). Refer to the Repair Kit chart (see **Table 4**).

WARNING

FOR YOUR SAFETY IT IS IMPORTANT THE FOLLOWING PRECAUTIONS BE TAKEN PRIOR TO REMOVAL OF THE VALVE FROM THE PIPELINE OR BEFORE ANY DISASSEMBLY:

1. WEAR ANY PROTECTIVE CLOTHING OR EQUIPMENT NORMALLY REQUIRED WHEN WORKING WITH THE FLUID INVOLVED.
2. DEPRESSURIZE THE PIPELINE AND CYCLE THE VALVE AS FOLLOWS:
 - A. PLACE THE VALVE IN THE OPEN POSITION AND DRAIN THE PIPELINE.
 - B. CYCLE THE VALVE TO RELIEVE RESIDUAL PRESSURE IN THE BODY CAVITY BEFORE REMOVAL FROM THE PIPELINE.
 - C. AFTER REMOVAL AND BEFORE ANY DISASSEMBLY, CYCLE THE VALVE AGAIN SEVERAL TIMES.

4.2 ACTUATED VALVE

It is generally most convenient to detach the actuator and its auxiliary devices before removing the valve from the pipeline. If the valve package is small or if it is difficult to access, it may be more practical to remove the entire assembly.

NOTE: To ensure proper reassembly, observe the position of the actuator and positioner/limit switch with respect to the valve before detaching the actuator.

WARNING

ALWAYS DISCONNECT THE ACTUATOR FROM ITS POWER SOURCE, PNEUMATIC, HYDRAULIC OR ELECTRICAL, BEFORE ATTEMPTING TO REMOVE IT FROM THE VALVE!

WARNING

DO NOT REMOVE A SPRING-RETURN ACTUATOR UNLESS A STOP-SCREW IS CARRYING THE SPRING FORCE!

1. Detach the air supply, electrical supply, hydraulic supply and control signal cables or pipes from their connectors.
2. Unscrew the actuator mounting bracket screws.
3. Lift the actuator straight up in line with the valve stem until the coupling between actuator drive and valve stem is completely disengaged.
4. Place actuator in a safe location to avoid damage or personal injury.

4.3 DISASSEMBLY

NOTE: If complete disassembly becomes necessary; it is recommended to replace all seats and seals. Refer to the Repair Kit chart (see **Table 4**).

The Series 4000 ball valve is designed to be serviced in or out of the line. The following instructions are for in-line disassembly. (For bench disassembly, which may be more convenient, follow a similar sequence).

NOTE: Always use original OEM parts to make sure that the valve functions properly.

1. Follow the steps in all the **WARNING** sections above before performing any work on the valve.
2. Open and close the valve and leave in the closed position.
3. If handle is installed, remove handle nut (16), lockwasher (19) and handle (17).
4. Loosen all four body bolts (52). Remove three from the valve. Leave the remaining bolt in place with the hex nut (53) backed off at least 1/4" (6.4 mm).
5. For positive alignment and ease of in-line assembly, each end cap is interlocked approximately 1/16" (1.6 mm) into the body per (**Figure 5**). To overcome this feature during in-line disassembly it is necessary to separate each cap at least 1/8" (3.2 mm) from the body. Sharply rap body and caps with a block of wood or plastic mallet to break loose body seal. Spread end caps and swing the body out of the line. If pipe does not allow simple spreading, remove the remaining body bolt and rotate center section. This will improve access to the end cap flange for ease of spreading. Swing the valve body (1) out from between the end cap (2), **BEING CAREFUL NOT TO DAMAGE ANY SEALING SURFACES**.
6. Turn the stem (4) so that the valve is fully closed. Remove the inner body seals (6) and outer body seals (18) and the seats (5). Body seals will be tightly compressed in their grooves. Use extreme care when taking them out. Damage such as scratches to the bottom of the groove will cause leaks. If the seats are not easily removed, gently tap the ball (3) with a piece of wood or other soft material.
7. Remove the ball (3)
8. Remove hex head cap screws (29), disc springs (31) and compression plate (20).
9. Remove the hex head cap screws (102) and remove *Emission-Pak* housing (101) from body (1).
10. From the *Emission-Pak* housing remove stem (4), stem bearings (13), secondary stem seal (7), bearing strip (109), stem seals (104) and lantern ring (103), **BEING CAREFUL NOT TO DAMAGE ANY SEALING SURFACES**.
11. Carefully remove and discard *Emission-Pak* body seal (105) and *Emission-Pak* body gasket (106), **BEING CAREFUL NOT TO DAMAGE ANY SEALING SURFACES**.

4.4 CHECKING PARTS

1. Clean all disassembled parts.
2. Check the stem (4) and ball (3) for damage. Pay particular attention to the sealing and bearing areas.
3. Check all sealing and gasket surfaces of the body (1), *Emission-Pak* housing (101) and body caps (2).
4. With a wire brush, clean threads of body bolts (52), body bolt nuts (53) and hex head cap screws (102) of foreign material, such as paint, thread locker, grime and commodity. Inspect the threads for damage or defects with appropriate ring or plug gauge. Repair any out-of-tolerance threads, or replace in-kind. Check that nut can be run up and down entire usable portion of the threads. See **Figure 6**.
5. Replace any bolting where the threads are damaged, or have been heated, stretched or corroded.
6. Replace any damaged parts.

NOTE: When ordering spare parts, always include the following information:

- a. Valve catalog code from Identification plate,
- b. If the valve is serialized – the serial number (stamped on the valve body),
- c. From **Figure 6**, the ballooned part number, part name and quantity required.

4.5 ASSEMBLY

It is advisable to replace seats and all seals if complete disassembly and reassembly become necessary. Refer to the Repair Kit chart (see **Table 4**).

NOTE: Repair Kits contain replacement seals for Fire-Tite® and non-Fire-Tite constructions.

The following instructions are for in-line assembly. For bench disassembly, which may be more convenient, follow a similar sequence by holding the valve in a vise by one body cap. Use care not to cut or scratch the seats, seals or sealing surface.

1. Clean all valve components if not done previously.
2. Re-inspect all components for damage before reassembling the valve. Look for damage to the sealing areas, stem, body, *Emission-Pak* housing and body caps. Look for wear in the bearing areas. Replace any damaged parts.
3. Carefully clean and polish the ball (3) sealing surface: It should be free of all scratches and grooves.
4. If the ball is slightly damaged, it may be possible to smooth the sealing surface with crocus cloth or equivalent. If deep scratches are present, replace the ball.
5. Place the bearing strip (109) on stem (4). For *Fire-Tite* valves slide the one stem bearings (13), the secondary stem seal (7), and the second stem bearings (13) onto the stem (4). (See **Figure 6** for proper orientation). For non-*Fire-Tite* valves slide stem bearing (24) onto stem.
6. Insert stem subassembly into the *Emission-Pak* housing (101). Install one set of V-ring packing (104) over the stem as shown in (**Figure 8**). Slide lantern ring (103) over the stem and the second set of V-ring packing (104).
7. Hold the stem in place and slide compression plate (20) over stem.

8. Place disc springs (31) on the hex head cap screws (29). Proper disc spring orientation is shown in (**Figure 7**). Install the hex head cap screws, with springs, through the holes in the compression plate, and thread them into the *Emission-Pak* housing hand tight.
9. Place body seal (105) and body gasket (106) in the body counterbore as shown in (**Figure 6**).
10. Insert the *Emission-Pak* subassembly into the body, being careful to not pinch body gasket (106). Insert four hex head cap screws (102) through the *Emission-Pak* housing and into the threaded holes in the body. Tighten the four screws to the torque values in (**Table 5**). Apply the torque evenly, alternating in a criss-cross pattern.
11. While pulling the stem (4) outward, tighten the hex head cap screws (29) to the torque values in (**Table 2**). Apply the torque evenly, alternating between the two screws so that the compression plate (20) remains parallel with the *Emission-Pak* housing bonnet.
12. Align the stem to the ball slot. Insert the ball (3) so that the internal stem blade fits into the ball slot (ball in closed position).
13. Working at either end of the body (1), place a seat (5) into the body. Fit it snugly against the closed ball.

NOTE: The sealing surface of the seat is toward the ball per (**Figure 5**).

14. Place an inner body seal (6) and an outer body seal (18) into the machined sealing groove of the body cap (2) per (**Figure 5**).
15. Repeat steps 13 and 14 for assembly at the opposite end.
16. Turn the stem so that the ball is in the full open position.
17. Swing the entire body assembly back into the properly aligned and interlocked position between the body caps, being careful not to scratch the body seals. Body caps may have to be spread slightly to accept body.
18. Close the valve.
19. Bolt the valve together with the lubricated body bolts (52) and hex nuts (53). Tighten these bolts evenly and alternately to the torque values listed in (**Table 1**).
20. If so equipped, install the handle (17), lockwasher (19) and handle nut (16). Tighten handle nut to the torque values listed in (**Table 3**).

TABLE 3		
Handle Nut Torque		
Valve Size Standard Port (Full Port)	Torque FT•LBS	Torque N•m
1/2" & 3/4" (1/2") DN 15 & 20 (DN 15)"	9	12
1" & 1-1/4" (3/4" & 1") DN 25 & 32 (DN 20 & 25)"	23	31
1-1/2" & 2" (1-1/4" & 1-1/2") DN 40 & 50 (DN 32 & 40)"	33	45

21. Cycle the valve slowly with a gentle back and forth motion building gradually to the full quarter turn. By cycling slowly, the seat lips will seat against the ball. Take care to avoid scratching the ball O.D.

22. If the valve was actuated, ensure proper reassembly. Confirm the position of the actuator and positioner/limit switch with respect to the valve as noted in **Section 4.2**.

WARNING

WHEN AN ACTUATOR IS REMOUNTED ON THE VALVE, IT IS ALWAYS NECESSARY TO READJUST ACTUATOR TRAVEL STOPS TO ENSURE PROPERLY SETTING THE BALL IN THE OPEN AND CLOSED POSITIONS.

4.6 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!

5. REPAIR KITS

Standard repair kits are listed in (**Tables 4**). When ordering repair kits for your valve refer to **Section 1.2**, Valve Markings and check area "3" on your valve's identification plate to determine the correct seat material for your valve.

6. SERVICE / SPARE PART

We recommend that valves be directed to our service centers for maintenance. The service centers are equipped to provide rapid turn-around at a reasonable cost and offer new valve warranty with all reconditioned valves.

NOTE: When sending goods to the service center for repair, do not disassemble them. Clean the valve carefully and flush the valve internals. Include the material safety datasheet(s) (MSDS) for all media flowing through the valve. Valves sent to the service center without MSDS datasheet(s) will not be accepted.

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

NOTE: When ordering spare parts, always include the following information:

- Valve catalog code from identification plate,
- If the valve is serialized – the serial number (from identification plate),
- From **Figure 6**, the ballooned part number, part name and quantity required.

TABLE 6	
Actuator Installation, Maintenance and Operating Instructions	
Actuator	IMO
QPX	215
VPVL	553
B1C	6 BC 71
B1J	6 BJ 71
BCH	6 BCH 70
M	549
ADC	I4400, I4500 or I4600
ESR	I7016
I	I6500, I6600 or I6700
LCR	I1262
LCU	I1263
Q6	I1227 or I1383
QX	I3000
V	I2100, I2475, I2500, I2700 or I5500
TORQ-HANDLE®	71
Contact your authorized Valmet Distributor for copies of these instructions	

7. CONSTRUCTION AND VALVE CODES

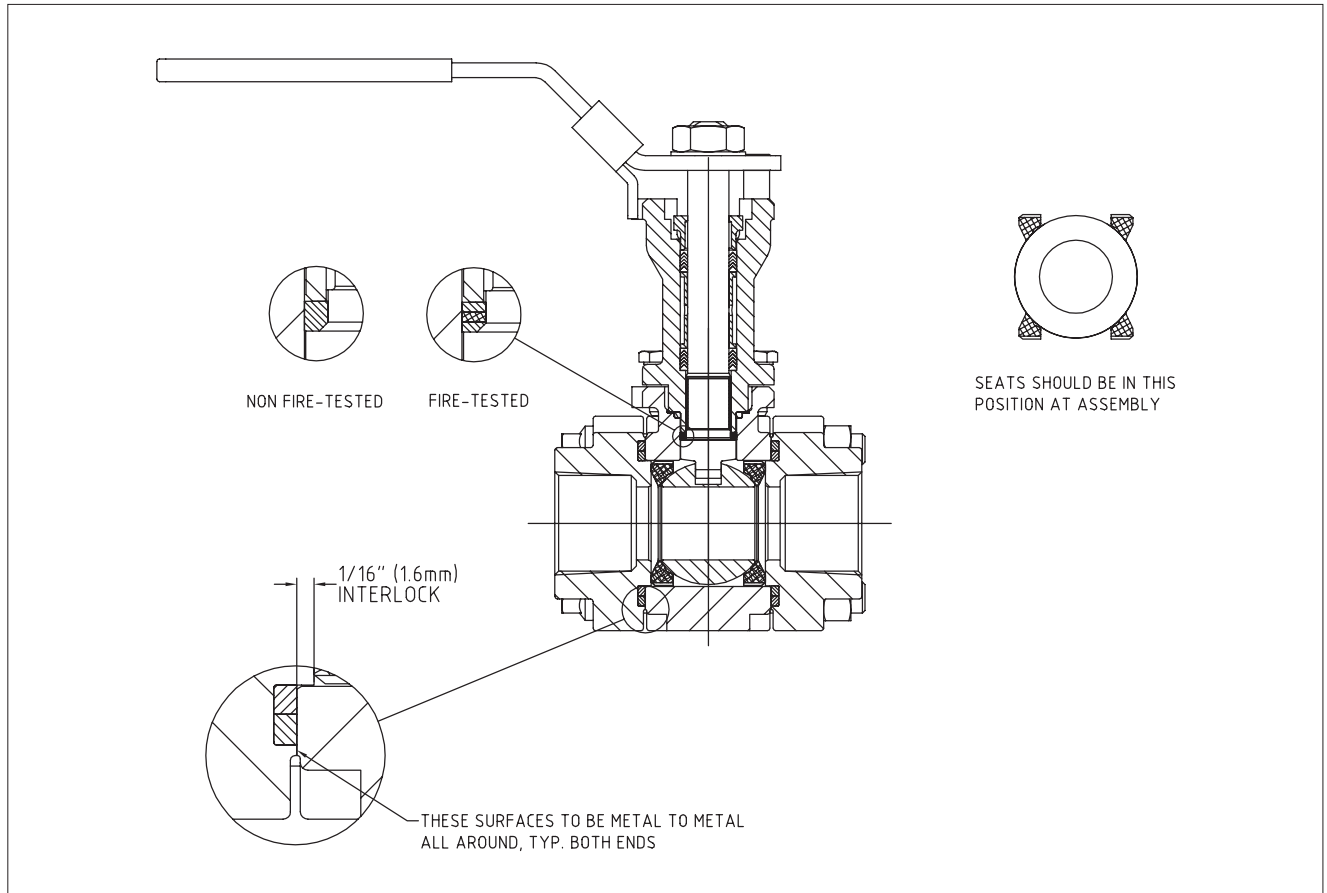


Figure 5

TABLE 4						
Repair Kits	Valve Size – Standard Bore (Full Bore)					
Valve Size	1/2" (1/2") DN 15 (DN 15)	3/4" DN 20	1" (3/4") DN 25 (DN 20)	1-1/4" (1") DN 32 (DN 25)	1-1/2" (1-1/4") DN 40 (DN 32)	2" (1-1/2") DN 50 (DN 40)
Xtreme® Seats	RKN-406XT	RKN-407XT	RKN-408XT	RKN-409XT	RKN-410XT	RKN-411XT
PTFE Seats	RKN-406TT	RKN-407TT	RKN-408TT	RKN-409TT	RKN-410TT	RKN-411TT
PEEK® Seats	RKN-406LG	RKN-407LG	RKN-408LG	RKN-409LG	RKN-410LG	RKN-411LG
PFA Seats	RKN-406BT	RKN-407BT	RKN-408BT	RKN-409BT	RKN-410BT	RKN-411BT

TABLE 5		
Emission-Pak Housing Cap Screw (102) to Body (1) Torque – Ft•lbs (N•m)		
Bolt Material	M5 1/2" – 3/4"	1/4-20 1" – 2"
B7, K-monel	6 (8)	10 (13)
B8	6 (8)	9 (12)
B7M, B8M	5 (7)	8 (11)

8. EXPLODED VIEW AND PART LIST

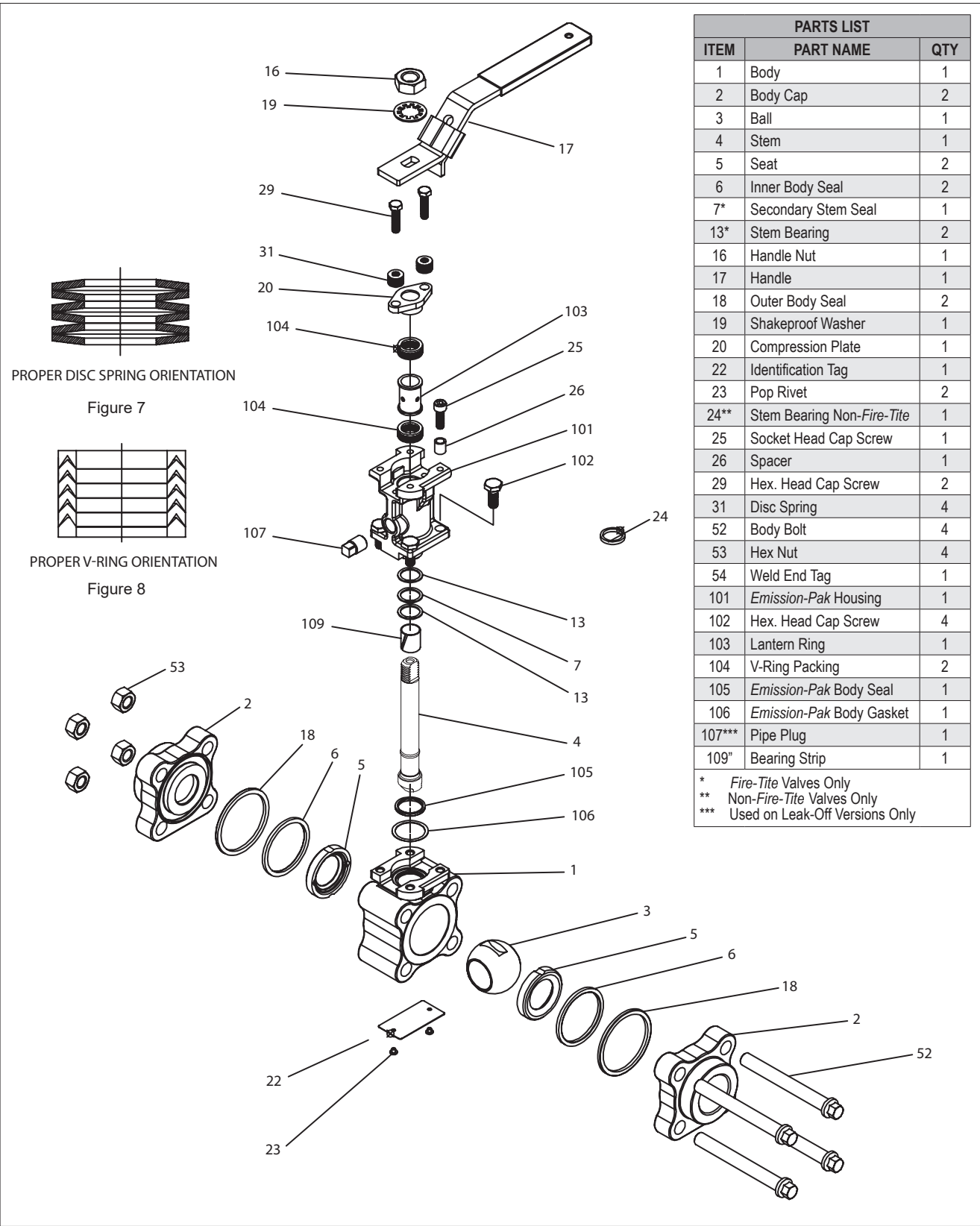


Figure 6

9. CE AND ATEX MARKING

When applicable, the valve meets the requirements of the European Directive 2014/68/EU relating to pressure equipment, and has been marked according to the Directive.

When applicable, the valve meets the requirements of the European Directive 2014/34/EU relating to equipment and protective systems intended for use in potentially explosive atmospheres, and has been marked according to the Directive.

Refer to EU Declaration of Conformity below, for product details.

10. EU DECLARATION OF CONFORMITY



EU DECLARATION OF CONFORMITY

for ATEX approved valves



Manufacturer:
Valmet Flow Control Inc.
Shrewsbury, MA 01545-8044
USA

*Valmet Flow Control (Jiaxing) Co., Ltd.
Jiaxing, China

*) Also manufactures certain series

EU Authorised Representative: Valmet Flow Control Oy, Vanha Porvoontie 229, 01380
Vantaa, Finland. Contact details: [+358 10 417 5000](tel:+358104175000)

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Product:	Jamesbury Threaded/Welded End & Flanged Ball valves		
Type:	1/4" – 2" 4000 & Eliminator Series (**) 1/2" – 24" 7000 & 9000 Series (**)		
ATEX group and category:  II 2 GD, II 3 GD			
Ex GAS: Ex h IIC 85°C...Tmax Gb/Gc			
Ex DUST: Ex h IIIC T85°C...T(Tmax) Db/Dc			
Tmax= valve max. temperature in name plate			

(** Dependent on valve code designation.

Manufacturer's certificates:

Standard / Directive	Notified Body and NoBo number	Certificate No.
ISO 9001:2015	LRQA (Certification body)	10531829
PED 2014/68/EU Module H	DNV Business Assurance Italy S.r.l. 0496	142306-2013-CE-FIN-ACCREDIA
ATEX 2014/34/EU Annex IV	DNV Product Assurance AS Norway 2460	Presafe 18 ATEX 91983Q Issue 6

ATEX 2014/34/EU Annex VIII technical files are archived by Notified Body number 0537

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

PED 2014/68/EU	Valve
ATEX 2014/34/EU	Non-electrical equipment

Main components:

Valve:
The valve is suitable for service up to PED Cat III
Valve design standard: ASME B16.34

Installation, Maintenance and Operating instructions manual (IMO) must be followed before installation in order to ensure proper and safe mounting and usage of equipment.

The product above is manufactured in compliance with the applicable European directives and technical specifications/standards EN10204:3.1. The product is in conformity with the customer order.

Instrumentation and accessories having equal protection concept, level and performance specification with the original can be presumed to be in conformity with this Declaration of Conformity.

Protection from e.g. static electricity caused by the process or connected equipment must be considered by the user (EN 60079-14 § 6). EN 60079-19 applies for modifications.

Non-electrical equipment is according EN 80079-37:2016 and EN 80079-36:2016. The actual surface temperature of non-electrical equipment is depended on the process and ambient conditions (EN 80079-36:2016 § 6.2.5 and 6.2.7). The protection from high or low temperature must be considered by the end user before put into service.

The product does not possess any residual risk according to hazard analysis conducted under the applicable directives providing that the procedures stated by the IMO are followed and the product is used under conditions mentioned in the technical specifications.

Documents with digital and/or e-signature conveyed by Valmet Flow Control conform to the Regulation (EU) No 910/2014 as well as the national code on e-signatures. In order to secure the integrity of the document, the authenticity of the sender, and indisputableness of the dispatch the identification is covered by individual ID codes, passwords, and by regularly changing passwords. The authorization to sign documents is based on organizational position and/or is task related. The impartial third party in the company bestows the access right with predefined authorities to particular databases.

Shrewsbury 10.9.2024

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