

Jamesbury[™] 3-piece ball valves with ISO bonnet Series 4000 model B 1/2" – 2" (DN 15 – 50) Standard Bore 1/2" – 1-1/2" (DN 15 – 40) Full Bore



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Subject to change without notice.

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, operation and troubleshooting for the *Jamesbury* 1/2" - 2" (DN 15 – 50) Standard Bore, 1/2" - 1-1/2" (DN 15 – 40) Full Bore Series 4000 Model B 3-Piece Ball Valves with ISO Bonnet. Please read the instructions carefully and save them for future reference.

WARNING

FOR YOUR SAFETY, TAKE THE FOLLOWING PRECAUTIONS BEFORE REMOVING THE VALVE FROM THE LINE, OR BEFORE ANY DISASSEMBLY.

- 1. DURING REMOVAL AND DISASSEMBLY, WEAR ANY PROTECTIVE EQUIPMENT NORMALLY REQUIRED TO PROTECT AGAINST DISCHARGE OF TRAPPED FLUID.
- 2. DEPRESSURIZE THE LINE AND 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. <u>SEAT AND BODY RATINGS</u> THE PRACTICAL AND SAFE USE OF THIS PRODUCT IS DETERMINED BY BOTH THE SEAT AND BODY RATING. READ THE NAME TAG 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.

NOTE: OPTIONAL ROUND AND OVAL HANDLES ARE AVAILABLE FOR THESE VALVES IN PLACE OF LEVER HANDLES.

2. INSTALLATION

Screwed End Style - Use standard piping practices to install valves with threaded end caps. When tightening valve to pipe, <u>apply</u> wrench to end cap 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 seat materials. VALVES WITH OTHER SEAT MATERIALS SHOULD BE WELDED IN-LINE FULLY ASSEMBLED.

WARNING

WELDING AND/OR GRINDING OF STAINLESS STEEL AND OTHER ALLOY STEELS CONTAINING CHROMIUM METAL MAY CAUSE THE RELEASE HEXAVALENT CHROMIUM. HEXAVALENT CHROMIUM, CHROMIUM(VI) OR CR(VI), IS KNOWN TO CAUSE CANCER. BE SURE TO USE ALL APPROPRIATE PPE WHEN WELDING METALS CONTAINING CHROMIUM. IF YOU HAVE ANY QUESTIONS CONSULT YOUR SUPERVISOR.

- 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 splatter or arc strikes.
- 4. Weld by applying a recommended 1/8" (3.2 mm) max. weld bead per pass around each end cap. <u>CAUTION:</u> 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.
- 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 REUSE THEM.** When reassembling the valve, put new seals back into the grooves. Body seal kits are provided in (**Table 5**). Tighten the body bolts to the torques listed in (**Table 1**).

TABL	E 1	
Body Bolt / Hex	. Nut Torque	
Valve Size Full Port Size In ()	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 below.

3. MAINTENANCE

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 compression plate hex. head cap screws periodically to compensate for the wear caused by the stem turning against the stem seals. Check to make sure that the compression plate hex. head cap screws are tightened to the torque listed in **(Table 2)**. Overhaul maintenance consists of replacing seats and seals. A standard repair kit consisting of these parts may be obtained from your Valmet distributor **(see Table 8)**.

TAB Hex. Head Cap	LE 2 Screw Torque	
Valve Size Full Port Size In ()	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

3.1 DISASSEMBLY

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).

- 1. Comply fully with the instructions in the **WARNING**_Section on page one.
- 2. Be sure to cycle the valve. Leave in the open position. The body center section will not swing out in the closed position.
- 3. Remove the handle nut (16) and handle (17).
- 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 as shown in (Figure 3). 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 per (Figure 1). 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). Be careful not to damage the sealing surfaces "A" (see Figure 3) at each end of the valve.



Figure 1.

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). NOTE: On those valves with metal seats (DH seat/seal code), there is a one piece body seal (6). Body seals will be tightly compressed in their grooves. Use extreme care when prying 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 the hex. head cap screws (29), disc springs (31) and compression plate (20).
- 9. Push the stem (4) from the top into the valve body (1) and remove it through the end of the body.
- 10. Carefully pry out and discard the old stem seal (8) being careful not to damage the stem seal bore in the body. On Fire-Tite[®] valves, carefully pry out the stem bearings (13) and the secondary stem seal (7), being careful not to damage the bearing surfaces. **NOTE:** On non *Fire-Tite* valves there is only one lower stem bearing (24). Also, valves with graphite stem seals (8) have an additional upper stem bearing (10) and an anti-extrusion ring (55).

3.2 ASSEMBLY

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

- With the valve swung to the out-of-line position, insert from the inside of the body a stem bearing (13), a secondary stem seal (7), then another stem bearing (13) into the stem bore. For non-Fire-Tite valves use one stem bearing (24). See (Figure 3) and parts list (Figure 4).
- Insert the stem (4) horizontally into the body bore (threaded end first). The blade at the ball end of the stem must be vertical (see Figure 2). Guide the stem into the stem bore being careful not to scratch the bearings.



Figure 2.

- Holding the stem (4) in place from the bottom, install the stem seal (8) and the compression plate (20). For valves with graphite stem seals (8), install upper stem bearing (10) and anti-extrusion ring (55) prior to installing the stem seal (8).
- Place the disc springs (31) on top of the compression plate over the bolt holes and insert the hex. head cap screws (29) and bring them down hand tight with the disc springs. NOTE: See (Figure 4) for proper disc spring orientation.





- 5. While pressing the stem upward from inside the body, torque the hex head cap screws (29) applying the torque shown in (Table 2). Apply torque evenly alternating between the two hex head cap screws so that compression plate will be parallel with the valve body bonnet.
- 6. Align the stem blade with the ball slot. Insert the ball (3) and then rotate the stem (4) so that the ball is in the closed position.
- 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 (see Figure 4).
- Place an inner body seal (6) and an outer body seal (18) into the machined sealing groove of the body cap (2) (see Figure 3). NOTE: On those valves with metal seats (DH seat/seal code), there is a one piece body seal (6). Be certain that the groove and seal are clean.
- 9. Repeat steps 7 and 8 for assembly at the opposite end.
- 10. Turn the stem (4) so that the ball is in the full open position.
- 11. Swing the entire body assembly back into the properly aligned and interlock position between the body caps, being careful not to scratch the body seals. Body caps may have to be spread slightly to accept the body.

- 12. Close the valve.
- Bolt the valve together with lubricated body bolts (52) and hex. nuts (53). Tighten these bolts evenly and alternately. (See Table 1 for the torques.)
- 14. Attach the handle (17) and secure it with the handle nut (16) applying the torque shown in **(Table 3)**.

TABLE	Ξ 3	
Handle Nut	Torque	
Valve Size Full Port Size In ()	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





4. ACTUATOR MOUNTING

When these valves are equipped with an actuator, and the actuator is removed to service valve, proper alignment of the actuator driver and valve stem is essential when the actuator is remounted.

4.1 GENERAL

These mounting instructions describe the steps required to assemble the Jamesbury $\frac{1}{2}$ " - 2" (DN15-50) Standard Bore and $\frac{1}{2}$ " - 1 $\frac{1}{2}$ " (DN15-40) Full Bore, Series 4000 Mod B 3-Piece Ball Valves to Jamesbury and Neles actuators. Linkage kits that are needed to mount specific Jamesbury and Neles actuators to different types and sizes of Jamesbury Valves can be identified by Valmet or your authorized Valmet Distributor. These linkages can be classified into two different types, Bearing Supported Adapter and No-Play Coupling. Mounting instructions are provided for each type in this section, examples of standard Jamesbury and Neles actuator linkage types are listed in the table below.

Linkage Type	Applicable Jamesbury Actuators	Applicable Neles Actuators
Bearing Supported Adapter	MGR, QPX_/K, VPVL	B1J, B1C, M Gear
No-Play Coupling	QPX_/M, Torq-Handle	N/A

WARNING

FOR YOUR SAFETY IT IS IMPORTANT THAT THE FOLLOWING PRECAUTIONS BE TAKEN!

BEFORE INSTALLING THE VALVE AND ACTUATOR, BE SURE THE INDICATOR POINTER ON TOP OF THE ACTUATOR IS CORRECTLY INDICATING THE VALVE'S POSITION. FAILURE TO ASSEMBLE THESE TO INDICATE THE CORRECT VALVE POSITION COULD **RESULT IN DAMAGE OR PERSONAL INJURY! WHEN** INSTALLING A LINKAGE KIT OR SERVICING THE VALVE/ACTUATOR ASSEMBLY. THE BEST PRACTICE IS TO REMOVE THE ENTIRE ASSEMBLY FROM SERVICE! AN ACTUATOR SHOULD BE REMOUNTED ON THE SAME VALVE FROM WHICH IT WAS REMOVED. THE ACTUATOR MUST BE ADJUSTED FOR THE PROPER "OPEN" AND "CLOSE" POSITIONS EACH TIME IT IS REMOVED! THE LINKAGE KITS HAVE BEEN DESIGNED TO SUPPORT THE WEIGHT OF THE VALMET ACTUATOR AND RECOMMENDED ACCESSORIES. USE OF THE LINKAGE TO SUPPORT ADDITIONAL EQUIPMENT OR ADDITIONAL WEIGHT SUCH AS PEOPLE, LADDERS, ETC., MAY RESULT IN THE FAILURE OF THE LINKAGE, VALVE, OR ACTUATOR; AND MAY CAUSE DAMAGE OR PERSONAL INJURY!

4.2 VALVE PREPARATION

- 1. With the valve removed from the pipeline, turn the valve to the closed position.
- On valves with handles; remove Handle Nut (16), Handle (17), Shakeproof Washer (19), Socket Head Cap Screw (25) and Spacer (26). DO NOT loosen the Hex Head Cap Screws (29). (See Figure 4).

4.3 BRACKET PREPARATION

(SEE FIGURE A)

- 1. This step is not applicable for No-Play Coupling Type linkage kits.
- 2. Roll the bearing strip (3) about its length into a circular shape.



- 3. Slide the bearing (3) into the bracket (2) until about half of its width is protruding from the bottom of the top bracket flange.
- 4. Inspect the coupling (1) and locate the end that will engage the actuator.



Figure A Linkage Asselbly – Key Drive

- 5. Insert the actuator end of the coupling (1) from the bottom of the bracket (2) into the protruding bearing.
- Press the coupling (1) upward until the bearing (3) sits flush on the bearing shoulder of the coupling (1) and is flush with the top flange of the bracket (2). (See Figure B)



Figure B Proper Bearing Location

4.4 BRACKET ATTACHMENT TO VALVE

Bearing Supported Adapter Type Linkage Kits:

- 1. Lower the bracket/coupling assembly on the valve, aligning the slot in the bottom of the coupling (1) with the top of the valve stem.
- 2. Align the four bracket mounting screw holes with the tapped holes on the valve bonnet.
- 3. Insert the four Hex Head Cap Screws (6) and the Lockwashers (7) into the tapped holes. Tighten to values in **Table 4**.

No-Play Coupling Linkage Type Kits:

- 1. Place bracket (2) on the valve and align the four bracket mounting screw holes with the tapped holes on the valve bonnet.
- Insert the four Hex Head Cap Screws (6) and Lockwashers (7) into the tapped holes. Tighten to values in Table 4.

Table 4:	Torque to Cast/Due (No lube	ctile Body Actuators rication)	/Valves
Bolt Size	Ft-Lbs	In-Lbs	Nm
1/4"	8	96	11
5/16"	16	192	22
3/8"	27	324	37
7/16"	45	540	61
1/2"	67	804	91
9/16"	100	1200	136
5/8"	135	1620	183
3/4"	225	2700	305
7/8"	335	4020	454
1"	520	6240	705
1 1/8"	700	8400	949
1 1/4"	990	11880	1342
M6	7	84	9
M8	14	168	19
M10	28	336	38
M12	48	576	65
M16	115	1380	156
M20	225	2700	305
M30	783	9396	1062
M36	1347	16164	1826

4.5 ACTUATOR VERSUS VALVE POSITION

IMPORTANT: The actuator and valve position must agree before further assembly.

Since the valve has already been set in the closed position (Step 1 under Valve Preparation), make sure that the actuator is also in the closed position. **EXCEPTION:** If mounting a spring-return actuator in the spring-to-open operation; cycle the valve to the open position and proceed with the valve AND actuator in the open position.

4.6 COUPLING TO ACTUATOR

This step is not applicable for No-Play Coupling Type Linkage Kits (**Figure D**)

This step is not applicable for Male/Female Square Drive Actuators (**Figure C**)

Key Drive Actuators (**Figure A**): Install the key (4) into the key slot of the coupling (1). The key should be filed to closely fit into coupling and actuator keyway. If the fit is loose, apply Loctite® Keyfit or Equivalent.

4.7 BRACKET ATTACHMENT TO ACTUATOR

Bearing Supported Adapter Type Linkage Kits:

 Place the actuator onto the valve and bracket assembly, aligning holes in the bracket with the holes in the actuator, and align the actuator drive with the coupling. Install the four Hex Head Cap Screws (8) and Lockwashers (9) through the bracket and into the actuator. Apply slightly more than fingertightness to these fasteners, but **DO NOT TIGHTEN**. Cycle the actuator a couple of times, allowing the assembly to position itself for proper actuator-drive to valve-drive alignment. Tighten the four Hex Head Cap Screws (8) securing the bracket to the actuator using the values in Table 4 or 5.

Table 5: To	rque to Aluminum B	Body Actuators (No	lubrication)
Bolt Size	Ft-Lbs	In-Lbs	Nm
1/4"	6	72	8
5/16"	12	144	16
3/8"	20	240	27
7/16"	30	360	41
1/2"	50	600	68
9/16"	70	840	95
5/8"	90	1080	122
3/4"	160	1920	217
7/8"	250	3000	339
1"	360	4320	488
1 1/8"	520	6240	705
1 1/4"	700	8400	949
M6	5	60	7
M8	11	132	15
M10	22	264	30
M12	38	456	52
M16	90	1080	122
M20	170	2040	230
M30	570	6840	773
M36	950	11400	1288

No-Play Coupling Linkage Type Kits:

 Place the actuator onto the valve and bracket assembly, aligning the holes of the bracket (2) with the holes in the actuator. Install the four Hex Head Cap Screws (8) and four Lockwashers (9) through the bracket and into the actuator. Apply slightly more than finger-tightness to these fasteners but DO NOT TIGHTEN.

- If reducers (13) are present in linkage kit; place them inside the coupling halves (1) in the square side pockets. Place the two coupling halves (1) around the valve stem and actuator drive (blade side over the valve stem and square side on the actuator drive side). Fasten the two coupling halves together with Socket Head Cap Screws (10), Lockwashers (11) and Hex Nuts (12).
- 3. Tighten Hex Head Cap Screws (8) securing the bracket to the actuator using the values in **Table 4 or 5** as applicable.



Figure C Linkage Assembly – Square Drive



Figure D Linkage Assembly – No-Play Coupling

4.8 OPEN/CLOSE POSITION ADJUSTMENT

NOTE: Refer to the appropriate Installation, Maintenance, and Operating Instructions (IMO) for specific directions on how to adjust the actuator travel stops or limit switch (see **Table 6**).

Table 6: Actuato	r IMO Reference
Actuator Model	IMO#
B1C	6 BC 71
B1J	6 BJ 71
BCH	6 BCH 70
SL10	21
ST20, ST50	22
ST13MS, ST20MS	25
Quadra-Powr II (1, 2, 3)	31
Series B & C Quadra-Powr	32
PMV	36
EJ20, EJX20	41
EL20	43
EL8	44
EJ50, EJX50, EJ90, EJX90	48
MA010	63
Torq-Handle	71
Quadra-Powr QPX	215
Vane, V Series	510
SP & SP-SR	512
VPVL	553
MGR	554
LCR	11262
LCU	11263
V	12100 or 12700
ADC	14900 or 17300

The actuator travel stops should be adjusted so that there is proper ball position in the full open and full close valve positions. Use the following procedures to determine correct ball position.

Valve Open Position: With the valve in the open position (actuator is against the "OPEN" travel stop), the maximum allowable misalignment of the ball port is 1/32" (0.8mm) on either side of the ball. Do not use the seat I.D. to measure misalignment, since in many cases it is larger than the ball or body port.

Valve Close Position: With the valve in the closed position (actuator is against the "CLOSE" travel stop), make a pencil mark on the ball at the 9 o'clock and 3 o'clock locations as shown in **Figure 5**. Open the valve part way and measure dimension A. This measurement should deviate no more than $\pm 1/32$ " (0.8mm) from the given value in **Table 7** for all valves.



Figure 5. Correct Ball Position

Table	7: Dimension A for Series	4000
Valve	Size	Dimension A
Reduced Port	Full Port	Dimension A
1⁄2" (DN15)	-	3/32" (2.4mm)
3⁄4" (DN20)	1⁄2" (DN15)	1/8" (3.2mm)
1" (DN25)	3⁄4" (DN20)	3/16" (4.8mm)
1 ¼" (DN30)	1" (DN25)	1/4" (6.35mm)
1 ½" (DN40)	1 ¼" (DN30)	1/4" (6.35mm)
2" (DN50)	1 ½" (DN40)	9/32" (7.1mm)

5. REPAIR KITS/SPARE PARTS

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.valmet.com/flowcontrol/valves**.

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 (from identification plate)
- c. From **Figure 4**, the ballooned part number, part name and quantity required

NOTE: Repair kits include two seats (5), one stem seal (8), two stem bearings (13), one secondary stem seal (7), one stem bearing (24), two inner body seals (6) and two outer body seals (18). Consult the factory for replacement parts of valves with seat materials not listed or for special services.

			TABLE 8			
Repair Kits			Valve Size – Full Po	ort Size Shown in ()		
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)
PTFE Seats	RKN-354-TT	RKN-355-TT	RKN-356-TT	RKN-357-TT	RKN-358-TT	RKN-359-TT
Acetal Seats	RKN-354-RT	RKN-355-RT	RKN-356-RT	RKN-357-RT	RKN-358-RT	RKN-359-RT
Peek [®] Seats	RKN-354-LG	RKN-355-LG	RKN-356-LG	RKN-357-LG	RKN-358-LG	RKN-359-LG
Metal Seats	RKN-354-DH	RKN-355-DH	RKN-356-DH	RKN-357-DH	RKN-358-DH	RKN-359-DH
Xtreme [®] Seats	RKN-354-XT	RKN-355-XT	RKN-356-XT	RKN-357-XT	RKN-358-XT	RKN-359-XT
PFA Seats	RKN-354-BT	RKN-355-BT	RKN-356-BT	RKN-357-BT	RKN-358-BT	RKN-359-BT

		T/	ABLE 9			
Body Seal Kits			Valve Size – Full Po	ort Size Shown in ()		
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)
Standard – TFM + Graphite	RKN-348-TT	RKN-349-TT	RKN-350-TT	RKN-351-TT	RKN-352-TT	RKN-353-TT
Spiral Wnd – 316SS + Graphite	RKN-348-DH	RKN-349-DH	RKN-350-DH	RKN-351-DH	RKN-352-DH	RKN-353-DH
UHMWPE + Graphite	RKN-348-UU	RKN-349-UU	RKN-350-UU	RKN-351-UU	RKN-352-UU	RKN-353-UU

Acetal is a registered trademark of Dupont Co.

6. 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.

7. EU DECLARATION OF CONFORMITY

Manual and an an	EU DECLARATION OF CONF	ORMITY
Valmet Flow Control Inc	for ATEX approved valves	
Shrewsbury, MA 01545-8044		$\langle x_{x} \rangle$
USA		
*Valmet Flow Control (Jiaxing) Co.,	Ltd.	
*) Also manufactures certain series		
ELL Authorized Poprosontative: Val	mot Flow Control Ov. Vanha Ponyoontia 220, 01	380
Vantaa, Finland. Contact details: +	<u>358 10 417 5000</u>	
This declaration of conformity is issu	ued under the sole responsibility of the manufact	urer.
Product: Jamesbury Threaded	d/Welded End & Flanged Ball valves	
Type: 1/4" – 2" 4000 & Elim	ninator Series (**	
1/2" – 24" 7000 & 90	00 Series (**	
ATEX group and ca	tegory: 🕼 ll 2 GD, II 3 GD	
Ex GAS:	Ex h IIC 85°CTmax Gb/Gc	
EX DUST:	EXTENDED TOS CT(TIMAX) DD/DC	ax= valve max. temperature in name plate
** Dependent on valve code design	ation.	
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.I. 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 techn	ical files are archived by Notified Body number (0537
ATEX 2014/34/EU Annex VIII techn The object of the declaration descri	ical files are archived by Notified Body number (bed above is in conformity with the relevant Unic)537 n harmonisation legislation:
ATEX 2014/34/EU Annex VIII techn The object of the declaration descri PED 2014/68/EU	ical files are archived by Notified Body number (bed above is in conformity with the relevant Unic Valve	0537 n harmonisation legislation:
ATEX 2014/34/EU Annex VIII techn The object of the declaration descri PED 2014/68/EU ATEX 2014/34/EU	ical files are archived by Notified Body number (bed above is in conformity with the relevant Unic Valve Non-elec	0537 on harmonisation legislation: ctrical equipment
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