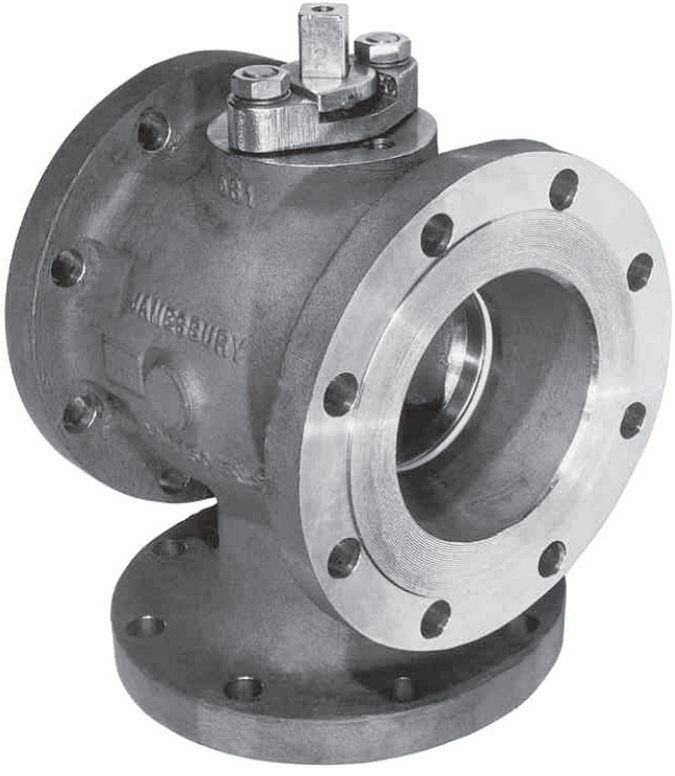
3-way flanged ball valves

Series AM150FD & AM150FB

Model A

Class 150, 2” (DN50)

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™ 2” (DN50) ASME Class 150 Standard Bore; Series AM150FD & AM150FB 3-Way Flanged Ball Valves. 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 NELES FOR MORE INFORMATION.

1.2 VALVE MARKINGS

The valve has an identification plate attached to the bonnet stud (see **Figure 1**).

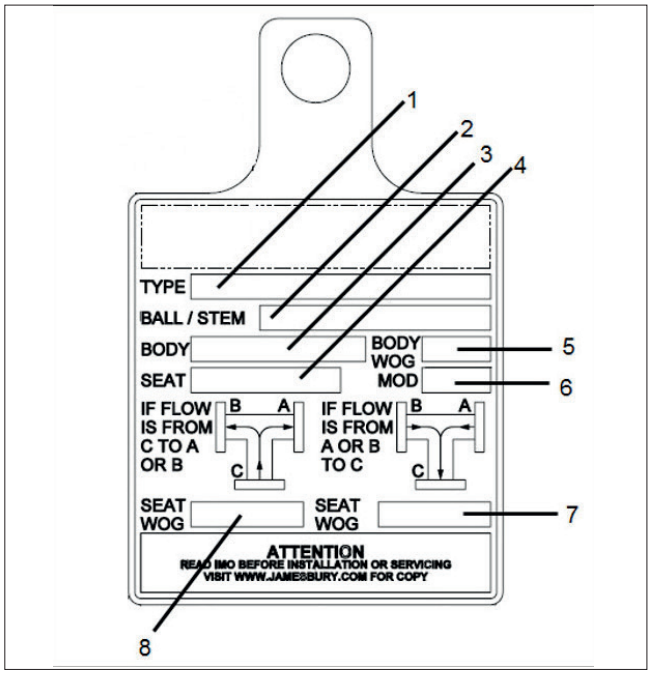


Figure 1. Identification plate

Identification plate markings:
1. Valve catalog code
2. Ball/Stem material
3. Body Material
4. Seat Material
5. Body WOG
6. Model
7. Seat WOG 2
8. Seat WOG 1

1.3 SAFETY PRECAUTIONS

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
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**).

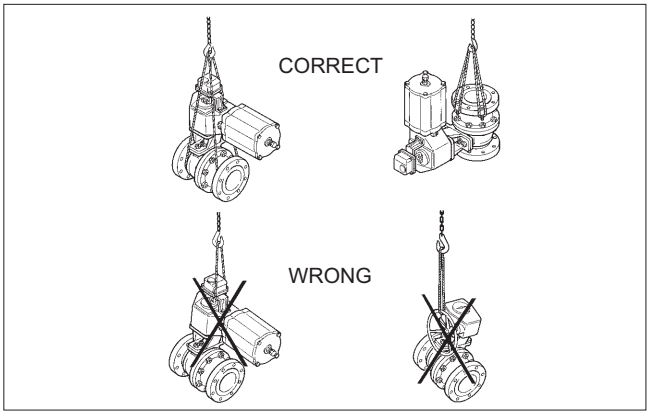


Figure 2. Lifting the valve

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.

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

WARNING

THE VALVE SHOULD BE TIGHTENED BETWEEN FLANGES USING APPROPRIATE GASKETS AND FASTENERS COMPATIBLE WITH THE APPLICATION, AND IN COMPLIANCE WITH APPLICABLE PIPING CODES AND STANDARDS. CENTER THE FLANGE GASKETS CAREFULLY WHEN FITTING THE VALVE BETWEEN FLANGES. DO NOT ATTEMPT TO CORRECT PIPELINE MISALIGNMENT BY MEANS OF FLANGE BOLTING!

The valve may be installed in any position and offers tightness in both directions. It is recommended, however, that the valve be installed with the insert facing upstream. 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**).

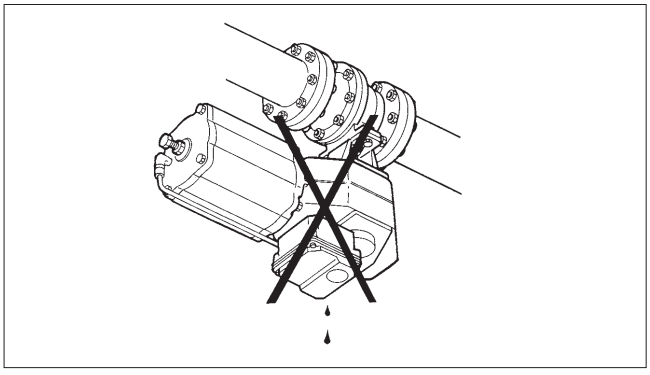


Figure 3. Avoid this mounting position

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

If necessary, the valve may be insulated. Insulation must not continue above the upper level of the valve (see **Figure 4**).

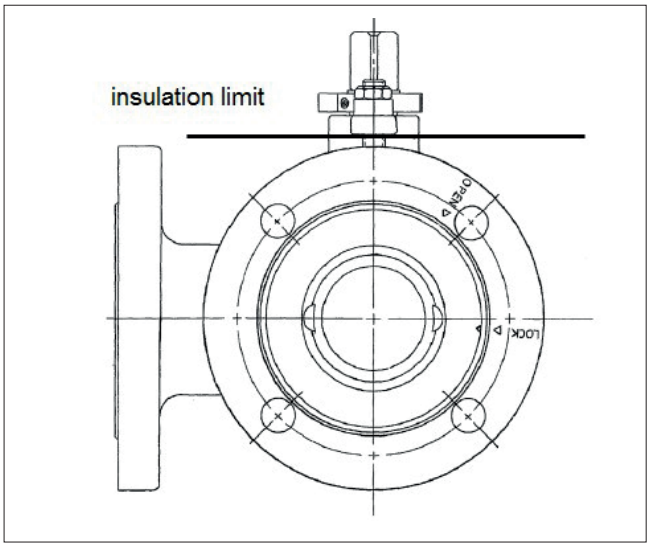


Figure 4. **Figure 4 Insulation of the valve**

3.4 ACTUATOR

WARNING

WHEN INSTALLING THE ACTUATOR ON THE VALVE, MAKE SURE THAT THE VALVE ASSEMBLY FUNCTIONS PROPERLY. INFORMATION ON ACTUATOR INSTALLATION IS GIVEN IN **SECTION 5** OR IN THE SEPARATE ACTUATOR INSTRUCTIONS.

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, extended stems, or where severe vibration is present. Please contact Neles

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 Neles *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. Neles 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 two bonnet screws (11) periodically to compensate for the wear caused by the stem's turning against the resilient PTFE seals. Loosen the bonnet nuts (10) and tighten the bonnet screws (11) equally ½ turn. If weeping still occurs, tighten another ½ turn. Retighten the bonnet nuts. Failure to retighten the bonnet nuts may allow the bonnet screws to vibrate loose.

NOTE: The bonnet screws should not be tightened down too severely, since this will destroy the seal by permanently deforming it.

WARNING

THE VALVE STEM (4) IS SEALED BY THE STEM SEALS. LOOSENING OR REMOVING BONNET SCREWS (11) WILL RELEASE PIPELINE PRESSURE TO THE ATMOSPHERE. FAILURE TO COMPLETELY REMOVE ANY PIPELINE PRESSURE PRIOR TO LOOSENING OR REMOVING BONNET SCREWS (11) COULD RESULT IN EJECTION OF STEM (4) FROM THE VALVE, DAMAGE AND/OR PERSONAL INJURY.

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

NOTE: Repair kits contain two seats (5), two O-rings (31), one body seal (6), two stem seals (7) and one stem bearing (8). The two stem seals (7) are white in color; one upper and one lower.

Refer to the Repair Kit chart (see **Table 1**).

WARNING

AS THE USE OF THE VALVE IS APPLICATION SPECIFIC, MANY FACTORS SHOULD BE CONSIDERED 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 NELES FOR MORE INFORMATION.

TABLE 1

Repair Kits

Valve	PTFE Kit	MTFE Kit	Double Block* & Bleed MTFE
2" AM150FD	RKA-6TT	RKA-6MT	RKD-2MT*
2" AM150FB	RKA-6TT	RKA-6MT	RKD-2MT*

* For BUNA-N O-Ring add '52' to the Repair Kit Number. Add '53' for VITON®.

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:

WEAR ANY PROTECTIVE CLOTHING OR EQUIPMENT NORMALLY REQUIRED WHEN WORKING WITH THE FLUID INVOLVED.

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. If the valve assembly has a split no-play (clamped) coupling, loosen the coupling screws.
4. Lift the actuator straight up in line with the valve stem until the coupling between actuator drive and valve stem is completely disengaged.
5. Place actuator in a safe location to avoid damage or personal injury.

4.3 MANUAL VALVE

1. Remove the stem nut (16), handle (15), retaining ring (14), indicator stop (12), both bonnet screws (11) &/or (13), bonnet nuts (10 and bonnet plate (9).
2. Place all disassembled handle parts in small basket or bag to prevent damage or loss.

4.4 DISASSEMBLY

Tools needed to disassemble *Jamesbury* valves may be ordered as service parts from your local Neles Distributors.

1. Read all **WARNINGS** before performing any work.
2. Be sure to cycle the valve.
3. If not done previously, remove the handle per **Section 4.3**.
4. Remove the stem (4), stem bearing (8) and stem seal (7).
5. Using proper size spanner wrench, unscrew and remove the insert (2).
6. Remove and discard the body seal (6).
7. Slowly place the valve in a vertical position (with the insert end down) on a clean soft surface such as a folded rag or piece of cardboard. The ball (3) and one seat (5) may fall out. If not, use a piece of wood or some other soft material to gently tap the ball from the non-insert end of the valve.
8. Carefully remove the bottom seat (5) (and O-ring (56) if double block and bleed) out of the body. Do not scratch the sealing surfaces in the valve body.

4.5 CHECKING PARTS

1. Clean all disassembled parts.
2. Check the stem (4) and ball (3) for damage. Pay particular attention to the sealing areas.
3. Check all sealing and gasket surfaces of the body (1) and insert (2).
4. Replace any damaged parts, including any fastener that has been stretched, corroded or heated.

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 5 or 6**; the ballooned part number, part name and quantity required.

4.6 ASSEMBLY

It is advisable to replace seats and seals if complete disassembly and reassembly become necessary. Refer to the Repair Kit chart (see **Table 1**). A good lubricant, compatible with the flow media, **MUST** be applied lightly to the seats, seals, ball and stem to facilitate assembly and ease on initial operation of the valve.

Clean all valve components if not done previously.

Re-inspect all components for damage before reassembling the valve. Look for damage to the seating areas, stem, body and insert; and look for wear in the bearing areas. Replace any damaged parts.

Carefully clean and polish the ball (3) sealing surface: It should be free of all scratches and grooves.

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.

1. Slide the valve seat (5) sidewise into the body (1) to below the bonnet opening, and tilt it into place so that the proper surface (note drawing) will be adjacent to the ball (3), being careful not to cut the seat on the corners of the body. If double block and bleed seats are used, lubricate O-ring (31) and place ring in seat before assembling in body. This will keep O-ring in place during assembly.
2. **Ball Assembly - AM150FD**
   Place the ball (3) into the valve with one port facing the insert flange “A” and the second port facing the third flange “C”, and the ball slot facing the bonnet opening. Insert the stem (4) as a temporary means of holding the ball. Be sure that the “L” shaped groove on the stem face is indicating that the ball ports are facing the “A” and “C” flange. Turn the ball 90° clockwise. This provides a closed ball face for inserting the insert seat. Proceed to Step 3.

   Ball Assembly - AM150FB
   Place the ball (3) into the valve with one port facing the insert flange “A” and the second port facing the third or bottom port “C”, and the ball slot facing the bonnet opening. Insert stem (4) as a temporary means of holding the ball. Be sure that the groove in the top of the stem face is pointing toward the “A” flange (See **Figure 2**) indicating that the ball ports are facing the “A” and “C” flanges. Turn the ball 90° clockwise. This provides a closed ball face for inserting the insert seat. Proceed to Step 3.
3. Insert the second seat (5) with the proper surface facing the ball. If double block and bleed seats are used, assemble same way as body seats in Step 1 above. Insert the body seal (6) with the chamfer away from the ball.
4. Wipe a liberal amount of lubricant on the body seal and threads of the body and insert (2).
5. Place the insert into the body, and screw down until flush.
6. Place handle on the valve stem and rotate the ball slowly with a gentle back and worth motion to build gradually to the full quarter turn. By rotating slowly, the seat lips will assume permanent seal shape against the ball. A fast turning motion at this point may cut the seat before it has a chance to form a proper seal. Leave the valve in the closed position. (Stem arrow parallel to the “A” and “B” ports).

7. Remove the handle and stem, and insert the stem seal (7) with the chamfer down.
8. **Stem Assembly - AM150FD**
   The top of the stem contains a “L” shaped groove that gives a visual port indication. From step 2, the ball was left with the ball ports facing the “B” and “C” ports. It is very important that the stem is assembled with one leg of the “L” facing the body “B” port and the other leg facing the body “C” port. This indicated that the valve ball in open to the “B” and “C” ports.

   Stem Assembly – AM150FB
   The top of the stem contains a flow arrow. From step 2, the ball was left with the ball ports “A” and “B” closed. Assemble the stem so that with port “A” on your right the arrow is pointing towards you, parallel to the “A” and “B” flange on the body. This indicates that the valve ball is closed to ports “A” and “B” and open to the “C” port, (See **Figure 6**).
9. Tap the stem gently into place to avoid cutting the stem seal.
10. Drop the stem bearing (8) onto the stem (4).
11. **Bonnet Plate, Indicator Stop Assembly – AM150FD**
    Place a bonnet screw (11) through each of the holes in the bonnet plate (9) and fit over the stem. Replace the *Jamesbury* tag around one screw. Screw the bonnet nuts (10) onto the bonnet screws, 2/3 of the screws’ length. Tighten the bonnet plate (9) down with the screws until the screw head contacts the plate, then tighten another ¾ of a turn. Tighten the bonnet nuts until they contact the bonnet face. Noting the word ‘bottom’ drop the indicator stop (12) so that a counter-clockwise handle rotation will close ports “B” to” C” and open port “A” to “C”. Fit the retaining ring (14) to the stem to secure the indicator stop.

    Bonnet Plate, Indicator Stop Assembly – AM150FB
    Place the machine screw (13) through the bonnet plate hole nearest the bent up portion of the plate and then put the remaining screw (11) in the other hole. Screw the bonnet nuts (10) onto the bonnet screws, 2/3 of the screws’ length. Replace the *Jamesbury* tag around screw (11). With the body’s “A” port on your right, place the machine screw (13) into the bottom bonnet hole and remaining screw (11) in the top hole, (See **Figure 6**). Tighten the bonnet plate down with the screws until the screw heads make contact with the plate, then tighten another ¾ turn. Tighten the bonnet nuts (10) until the contact the bonnet face. Place the indicator stop (12) over the stem with the pointed part set into the bonnet plate slot.
12. Attach the handle (15) and secure it with the stem nut (16).

4.7 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 Neles for advice.

WARNING

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

5. ACTUATOR MOUNTING

IMPORTANT: When these valves are equipped with an actuator and the actuator is removed to service the valve, **PROPER ALIGNMENT OF THE ACTUATOR DRIVER AND VALVE STEM IS ESSENTIAL WHEN THE ACTUATOR IS REMOUNTED**. In the case of valves and actuators connected with a split no-play (clamped) coupling, tighten the coupling bolts before final tightening of the valve bracket bolts. In the case of valves and actuators with solid, loose-fit couplings, the actuator should be positioned on the valve without any side loading of the coupling in both the open and closed positions before final tightening of the valve bracket bolts.

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 NELES 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!

5.1 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 3**).

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:

a. Valve catalog code from identification plate,

b. If the valve is serialized – the serial number (from identification plate)

c. From **Figure 5 or 6**, the ballooned part number, part name and quantity required.

TABLE 3

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 Neles Distributor for copies of these instructions	

2” AM150FD FLANGED BALL VALVE

Parts		
Item No.	Part Name	Qty.
1	Body	1
2	Insert	1
3	Ball	1
4	Stem	1
5	Seat	2
6	Body Seal	1
7	Stem Seal	1
8	Stem Bearing	1
9	Bonnet Plate	1
10	Bonnet Nuts	2
11	Bonnet Screw	2
12	Indicator Stop	1
14	Retaining Ring	1
15	Handle	1
16	Stem Nut	1
17	I.D. Tag	1
31	O-Ring	2

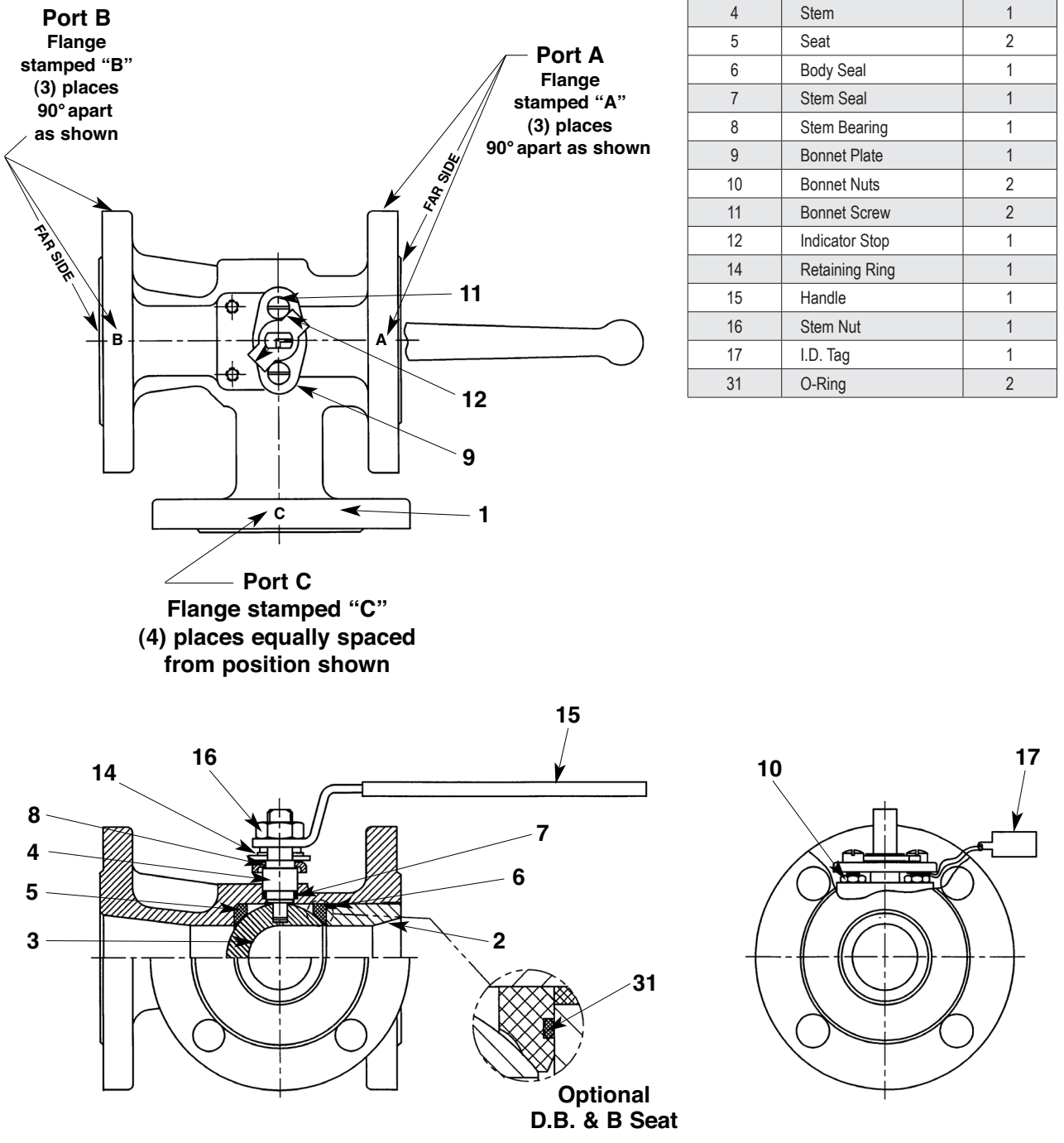
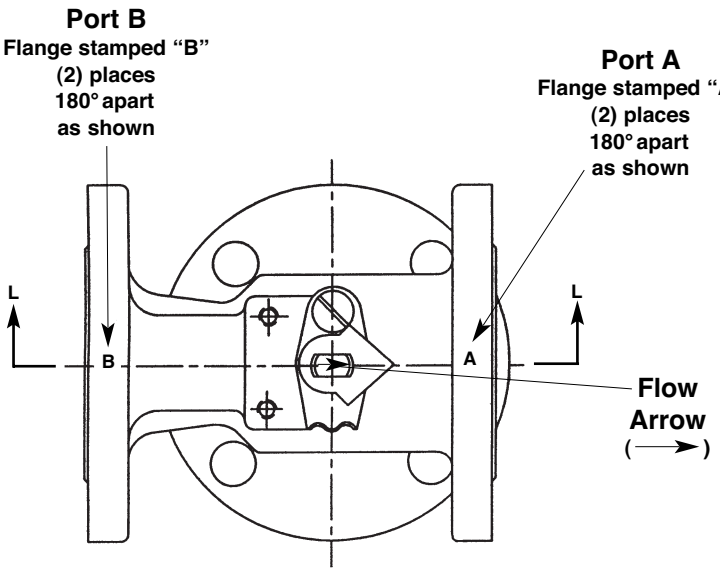
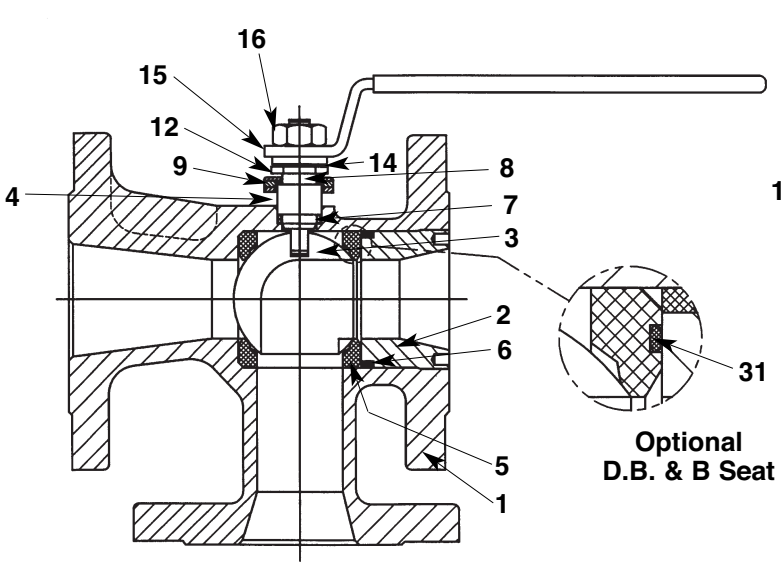


Figure 5.

2” AM150FB FLANGED BALL VALVE

Parts		
Item No.	Part Name	Qty.
1	Body	1
2	Insert	1
3	Ball	1
4	Stem	1
5	Seat	2
6	Body Seal	1
7	Stem Seal	1
8	Stem Bearing	1
9	Bonnet Plate	1
10	Bonnet Nuts	2
11	Bonnet Screw	1
12	Indicator Stop	1
13	Flat Head Screw	1
14	Retaining Ring	1
15	Handle	1
16	Stem Nut	1
17	I.D. Tag	1
31	O-ring	2





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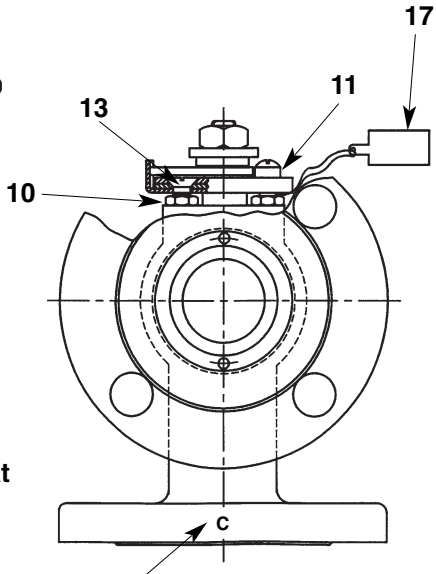

Figure 6.

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 of the scope of this manual. If you have any questions concerning the use, application or compatibility of the valve with the intended service, contact Neles for more infromation.

JAMESBURY BRAND 3-WAY FLANGED BALL VALVE, SERIES AM & DM

1	2	3	4	5	6	7	8	9
4”	AM	150	FB	2TR	DBB	2236	MT	52

1	VALVE SIZE (inch / mm)
INCHES	2, 3, 4, 6, 8, 10, 12
DN	50, 80, 100, 150, 200, 250, 300

2	BODY STYLE
	inches (DN)
AM	2” - 4” (DN50 - 10)
DM	6” - 12” (DN150-300)

3	BODY RATING
150	ASME Class 150

4	PORTS
FB[1]	Bottom ported flanged body
FD[2]	Side ported flanged body

5	CONFIGURATION
-	Basic Design
2TR	2 position valve with dual porter ball
3TR	3 position valve with dual ported ball

6	Special
DBB	Double block and bleed seats

7	BODY / TRIM MATERIAL
2236	Carbon steel body / 316 stainless steel trim
3600	316 stainless steel body / 316 stainless steel trim

8	SEAT / SEAL MATERIAL
TT	PTFE seat / PTFE seals
MT	Filled PTFE Seat / PTFE seals

9	O-RiNG / STEM SELECTION
2” thru 8”	
52	Buna N
53	Viton
6” thru 12”	
AO	Buna N with operating stem
DO	Viton with operating stem

1 2” - 8” only
2 Not available with 2TR / 3TR Configuration

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Tel. +358 10 417 5000.
www.valmet.com/flowcontrol