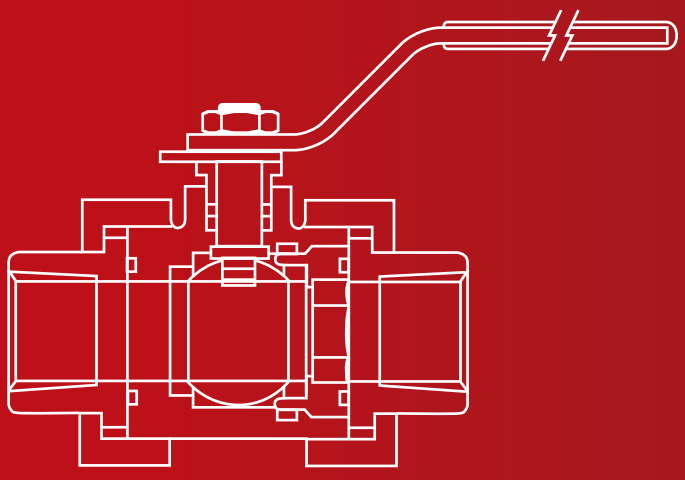
INSTALLATION, OPERATION, & MAINTENANCE GUIDE

CARBON STEEL & STAINLESS STEEL BALL VALVES

5 Piece, Double Union End, Threaded & Socket Weld Connection



MODELS

T-CS-2002N-DUE

S-CS-2002N-DUE

T-SS-2002N-DUE

S-SS-2002N-DUE

IMPORTANT

For safe and proper operation, please read the enclosed installation, operation, and maintenance instructions prior to using any Jomar Valve product. Save this document for reference.

Only qualified personnel should undertake the procedures outlined in this document. Jomar Valve, its agents, representatives, and employees assume no liability for the use of these procedures. These procedures are offered as suggestions only.

Note that failure to follow the enclosed instructions may damage the product and/or void any applicable warranties.

I P: 586.268.1220 I F: 586.979.8615 I JOMARVALVE.COM

Carbon Steel & Stainless Steel Ball Valves

5 Piece, Full Port, Threaded & Socket Weld Connection, Double Union End, Stainless Steel Trim, 3000 WOG

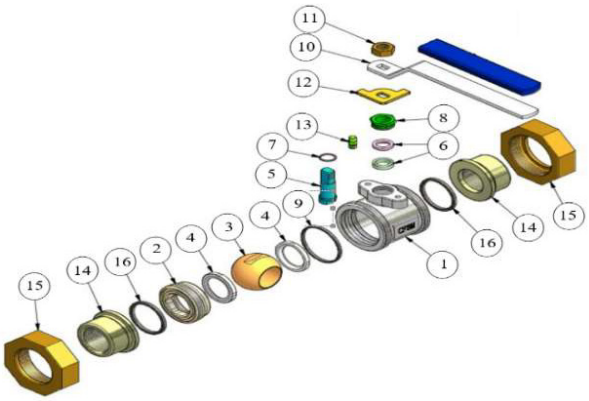
Models: T-CS-2002N-SS-DUE, S-CS-2002N-SS-DUE, T-SS-2002N-DUE, S-SS-2002N-DUE

T-CS-2002N-SS-DUE

T-SS-2002N-DUE

S-CS-2002N-SS-DUE

S-SS-2002N-DUE



INSTALLATION

Threaded Connection

1. The 2002N series valve may be installed for flow in either direction. Use standard piping practices when installing valves with threaded parts. When tightening the valve to the pipe, apply the wrench to the wrench flats, nearest the pipe that is being worked.
2. When installing the above valves, be sure that the threads on the mating pipe are free from any dirt, burrs or excessive grit.
3. Be sure that any thread sealants used are not so excessively applied to the pipe threads that the valve seats, ball and/or cavity become in contact with the thread sealant.

Socket Weld Connection

Only a qualified installer should be welding any piping products as per outlined in Section IX of the ASME Boiler Construction Cod. For stainless steel valves, use E316L welding rods.

1. Turn the valve to the fully open position.
2. Remove the valve handle or the valve actuator.
3. Weld by applying a 1/8” weld, 360° around each end cap.
   CAUTION: Do not over-heat the center section of the valve over 350°F. If disassembly of the valve isn’t possible, use a wet cloth, wrapped around the center section of the valve to prevent overheating.
4. After sufficient cooling of the valve, install the handle or the actuator back onto the valve.

OPERATION

1. The 2002N series valve should be used under the temperature and pressure constraints as per the specification sheet located at https://www.jomarvalve.com/product/ball-valves/.
2. Any operation outside of the recommended temperature and pressure charts may/will cause leakage or other problems.

MAINTENANCE

Periodically observe the valve to be sure of proper performance. More frequent observation is recommended under extreme operating conditions. Routine maintenance consists of tightening the stem nut quarter-turn periodically to compensate for the wear caused by the stem’s turning against the resilient stem packing seal.

MATERIALS

No.	Part
1	Body
2	Body Insert
3	Ball
4	Seat (2)
5	Stem
6	Packing (2)
7	Stem Seal
8	Packing Gland
9	Body Seal
10	Handle
11	Handle Nut
12	Stop Plate
13	Lock Pin
14	Tail Piece (2)
15	Union Nut (2)
16	Union Seal (2)

TORQUE

Size	Body Insert Torque	Maximum Operating Torque
1/4”	1350	40
3/8”	1350	40
1/2”	1350	75
3/4”	1670	120
1”	1980	150
1-1/4”	4850	250
1-1/2”	5400	350
2”	6000	475

DISASSEMBLY

NOTE: If complete disassembly becomes necessary, replacement of all seats and seals is recommended.

1. Turn the valve to the fully closed position. Remove the handle nut, handle, stop plate, locking pin, and packing gland.
2. Unscrew the union nuts, tail pieces, and union seals on each side of the valve.
3. Unscrew and remove body insert and body seal.
4. If the ball and seats do not fall from the body when the valve is in the fully closed position, gently tap the ball from the spacer on the opposite end with a soft material.
5. Press the steam from the top into the valve body and remove it through the body.
6. Remove the steam seal and stem packing.

ASSEMBLY

1. Air-blast the valve body. Insert the stem seal into the stem. Then insert into the stem bore and up out the top of the valve.
2. Place a wrench through the body on the bottom of the stem blade to hold the stem stationary. Then, install the stem packing and gland into the stem and tighten the gland until snug.
3. Align the stem blade inside the valve body with the ball. Insert the ball and rotate the stem to the fully closed position.
4. Working at either end of the valve body, place a seat into the valve body. Push the seat snugly against the closed ball.
5. Place a union seal into the machined seal groove of the body. Be certain the groove and seal are clean.
6. Repeat step 4 and 5 for assembly of opposite end of valve.
7. Turn the ball one revolution at least once.
8. Place the handle, and handle nut over the stem. Tighten the handle until snug.
9. Cycle the valve slowly twice to ensure permanent position of the ball between the two seats.

⚠ WARNING:

For your safety, it is important that the following precautions be taken prior to 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. De-pressurize 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 removing the valve from the line.
   C. After removal and before any disassembly, cycle the valve again several times.

3. This valve is not to be used for unstable gases, H_2SO_4, HF, HCl, and other dangerous fluids. If you have questions regarding the used fluid, please contact Jomar Valve at csr@jomar.com or 586.268.1220.

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