

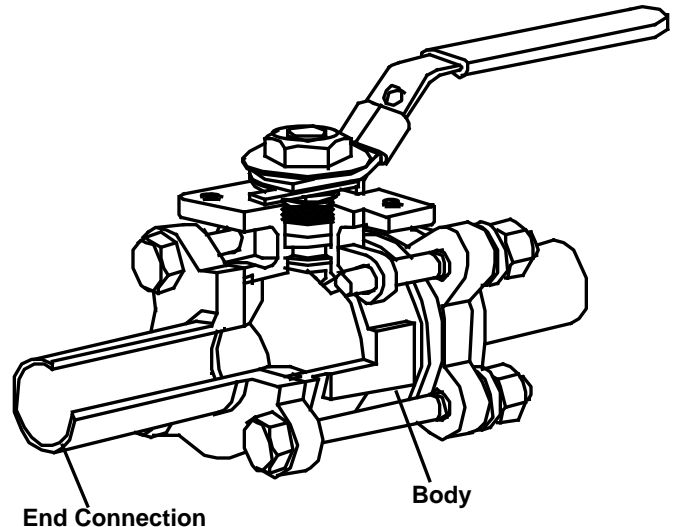
Hygienic Ball Valve Model 61

Description

The Model 61 is an all stainless steel full port, full bore hygienic ball valve, suitable for steam, liquid and gas applications.

Limiting Operating Conditions

Max. Cold Working Pressure (CWP)	1/2" & 3/4"	0-1000 psig
	1"	0-850 psig
	1-1/2"	0-520 psig
	2"	0-380 psig
	2-1/2"	0-350 psig
	3" & 4"	0-275 psig



1. Installation

Keep protective end covers in place until the time of installation. This will protect the ball surface from dirt or contaminants. Ensure the Model 61 Valve is installed on the same axis as the pipeline. Any valve stress from misalignment will have a detrimental effect and must be avoided. It is important to note that valve orientation or flow direction will not affect the performance of the Model 61. When used for steam service, it is recommended to install a trapped, drained pocket upstream of the valve. Open the valve slowly to prevent the risk of waterhammer damage.

Screwed / Orbital Tube Weld Valves

The Model 61 does not require dismantling for O.D. tube connections and threaded connections. When using orbital welding techniques, tube connections can be welded directly without affecting the internals.

Socketweld / Buttweld Valves

Prior to any welding, the following instructions must be followed:

- a. Prepare a clean working area.
- b. With the valve in the OPEN position, remove body bolts and screws.
- c. Separate pipe ends from body and remove seat rings and body seals. Place ball in part open position to assist removal of seats.
- d. Support ball to prevent ball from falling out of body, turn to CLOSED position for removal. Place all parts removed in a clean secure area.
- e. Replace two bolts, reassemble pipe ends with body in correct alignment.
- f. TACK WELD ONLY. Remove body to protect stem assembly from welding heat, then complete weld. Protect pipe ends faces from weld spatter.
- g. When cool, clean pipe end and faces. Replace ball carefully and turn to open position. Replace seat rings and seals.
- h. Ease body assembly between pipe ends, being careful neither to score faces or damage seals. Replace body bolts and nuts and tighten firmly (see Table 1 for torque values).

2. Maintenance

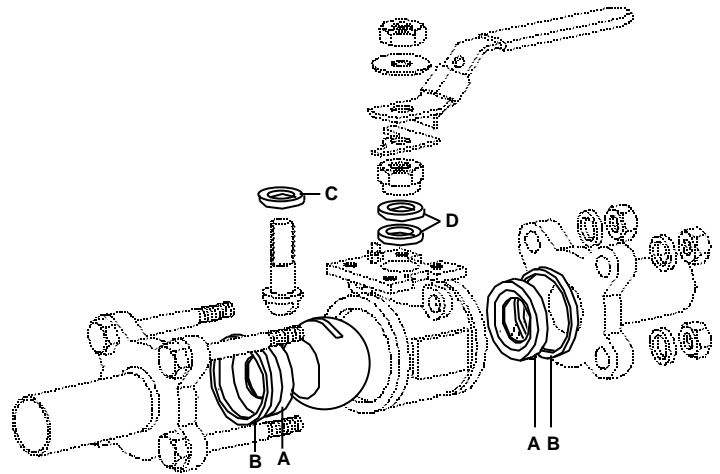
Before commencing any dismantling work, ensure that no residual pressure is present. Isolate the line and drain any remaining fluid in the line before dismantling the valve.

General

With self-wipe ball/seats, the Model 61 has trouble free life and maintenance is seldom required. If necessary, refurbishing may be carried out with relative ease. By utilizing a swing out design, the body can be accessible for inspection or maintenance. This is done by removing all but one of the upper bolts/studs and loosening the remaining bolt/stud. The body can be rotated out from the line using the remaining bolt as a hinge.

To Fit a Seat and Stem Seal Kit

- a. Swing out or remove the valve body as described previously.
- b. With the valve in the open position, remove the seat rings and body seals. Place ball in partial open position to assist removal of seats.
- c. Support ball to prevent ball falling out of body, turn CLOSED position for removal.
- d. Remove handle and stop plate. Proceed to loosen and remove the stem nut.
- e. Remove stem through inner valve body, and remove stem seals.
- f. Fit single flat stem seal over stem, and replace stem.
- g. Fit upper stem seals, with angled side of both seals facing together.
- h. Replace stem nut and torque to the value given in Table 1.
- i. Replace stop plate and handle.
- j. Replace ball.
- k. Fit seats and seals.
- l. Reposition valve body between ends, refit bolts/studs and torque to the corresponding value given in Table 1.



Available Spares

The spare parts available are shown in heavy outline on the exploded view.

Spares Description

Spare Part

Seat and Stem Seal Kit

A, B, C, D

Seat and Cavity Filler combined on all sizes

Available spare parts are shown in heavy outline. Always order spares by using the description given and by stating the size and type of ball valve, and seat material.

How to Order Spares

Always order spares by using the description given above stating seat material (RPTFE or PTFE), style of seat (standard or cavity filled), size, and type of ball valve.

Example: 1 RPTFE Seat and Stem Seal Kit for 1/2" Spirax Sarco Model 61 Hygienic Ball Valve

Table 1	Bolts/Nuts lb•ft	Stem Nuts lb•ft
1/2"	10	11
3/4"	15	30
1"	20	30
1-1/2"	25	36
2"	35	36
2-1/2"	51	40
3"	110	40
4"	110	40

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