

Installation:**General information for on-site installation**

- The ball valve may be fitted in any position on the pipeline.
- Before installing the valves, the pipes must be flushed clean of dirt, burrs and welding residues to prevent damage to the seats and ball surface.
- The pipeline must be free of tension.
- Please consider that turbulences (i.e. created by piping bow) generate hydro dynamic forces increasing the operating torque of the valve. We recommend installing the valve minimum 5 x DN after pipe fittings.

Installation of threaded ball valves

- Use conventional sealant, such as hemp core, PTFE, etc. on the threads.
- Apply wrench on the hexagon end of the valve only.
Tightening by using the valve body or handle can seriously damage the valve.
- For applications where screwed end valves are back-welded on site, these valves must be dismantled according to instructions for weld end valves.

Installation of weld-end valves

- Tack-weld the valve on the pipe in four points on both end caps, with the ball valve in open position.
Ball valves with extended butt-weld ends allow direct welding to the pipeline provided that the temperature in the area of the sealings do not exceed 200°C.
For ball valves with short butt-weld ends, proceed with next steps:
- Dismount the valve body.
Secure seats from falling with tape.
- Finish welding both end caps on the pipe.
- When cooled down, clean both end caps and body surface.
- Swing the body back in position and replace the bolts.
Tighten all nuts slightly. This operation is very important to keep body and end caps perfectly parallel, thus, preventing distortion of the end caps.
- Tighten diagonally opposite the body bolts evenly.
- Check proper operation of the valve.

Installation of ball valves with flange connection

- Use conventional flat seals for flanges. Pay attention to select proper sealing material (EPDM, PTFE ...) resistant to the medium.

Storage:

InterApp ball valves should always be stored free from dust and humidity.

Disposal:

Please notice that some residues could remain in the inner of the valve and that they might be dangerous for people or the environment. Therefore, the valve has to be handled with the corresponding caution. After its use, the valve has to be disposed of according to the state of the art and under consideration of the environment.

Maintenance:**1 Cleaning**

- **Caution:**
Ball valves can trap fluids in ball cavity when it is in closed position. If the valve has been used to control hazardous media, it must be decontaminated before disassembly.
It is recommended that the following steps be taken for safe removal and reassemble.
- Relieve the line pressure.
- Place the valve in half-open position and flush the line to remove any hazardous material from valve.
- All persons involved in the removal and disassembly of the valve should wear the proper protective clothing.
- Place the valve in closed position.

2 Disassembly

- Maintenance of parts is easy, even if the valve is installed in the line. By removing one body bolt and loosening the others, valve body can be swung out.
- But for better handling (especially for changing stem seals) we recommend to dismantle the valve body.

3 Changing the ball, ball seats, body seals and stem seals for stainless steel ball valves

- **Changing ball, ball seats and body seals**
Remove body seals, balls seats and ball (ball must be in closed position!!!).
Inspect the ball closely for scratches, if any, the ball should be replaced.
- **Changing stem seals**
Dismantle actuator or handlever. Remove the following parts.
BVH23: Gland nut and stem seal.
BVA23, BVP23, BVE23: Gland nut, bevel washer, gland ring and stem seal.
Move out the stem from body.
- **Reassembly:**
Assemble the ball valve in reverse order by using new seals and if necessary a new ball.
Swing the body back to original position and tighten diagonally opposite the body bolts evenly.
Mount actuator or handlever.
Check proper operation of the valve.

