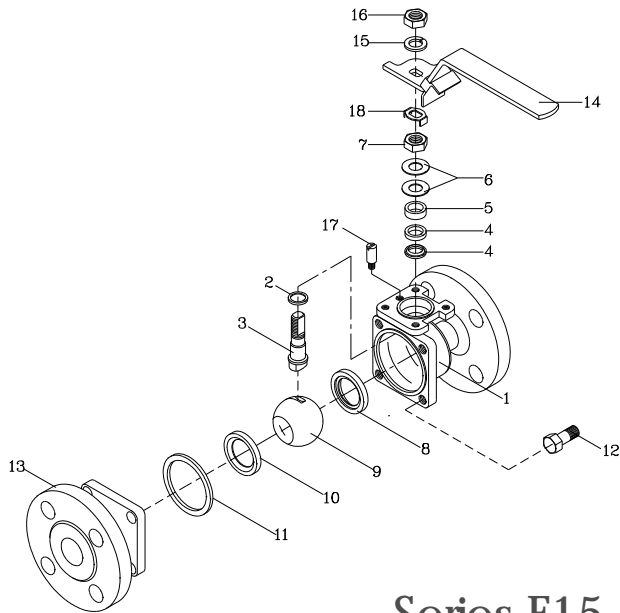


Installation, Maintenance and Operating Instructions

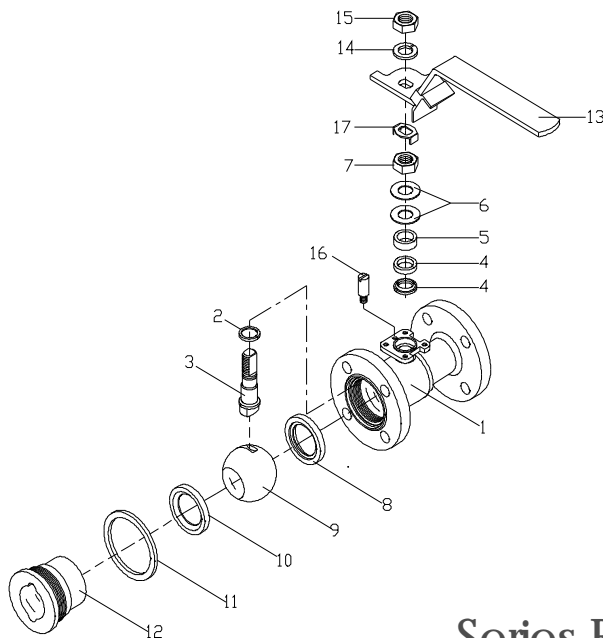
CF Ball Valves Flanged Ends



Series F15, F30

1. Body - CF8M, WCB or A20	7. Packing Nut - AISI 304	13. End Cap - CF8M, WCB or A20
2. *Thrust Washer - PTFE	8. *Seat - 15% glass RTFE	14. Lever - AISI 304
3. Stem - 316SS or A20	9. Ball - 316 SS or A20	15. Lever Washer - AISI 304
4. *Packing - PTFE	10. *Seat - 15% glass RTFE	16. Lever Nut AISI 304
5. Packing Gland - 316SS	11. *Body Seal - R-PTFE	17. Travel Stop - AISI 304
6. Spring Washers - 50 CrV4	12. Body Bolt - AISI 304	18. Packing Lock Tab - AISI 304

*Parts indicated are included with CF Service Kit



Series R15

1. Body - CF8M	7. Packing Nut - AISI 304	13. Lever - AISI 304
2. *Thrust Washer - PTFE	8. *Seat - 15% glass RTFE	14. Lock Washer - AISI 304
3. Stem - 316SS	9. Ball - 316 SS	15. Lever Nut - AISI 304
4. *Packing - PTFE	10. *Seat - 15% glass RTFE	16. Travel Stop - AISI 304
5. Packing Gland - 316SS	11. *Body Seal - R-PTFE	17. Packing Lock Tab - AISI 304
6. Spring Washers - 50 CrV4	12. End Cap - CF8M	

*Parts indicated are included with CF Service Kit

1. General

The valve may be fitted in any position in the pipework. Before installing, the pipes must be flushed clean of dirt, burrs and welding residues. The pipe must be free of tension. CF flanged ball valves have flanges drilled and faced in accordance with ANSIB16.5. Make sure that the valve and pipeline are aligned accurately. Care should be taken to assure that general stress of the pipeline is not concentrated at the ball valve.

2. Installation

Remove end connection protectors, inspect gasket contact faces on valve flanges for any scratches or defects, correct such scratches or defects with sand paper to make smooth surface and clean it. Install valve in line with either end upstream. Use the proper size flange bolts and follow standard practices of the gasket manufacturer when tightening the flange bolts. Rotation of the valve stem by 90 degree fully opens or closes the valve. Clockwise rotation opens it. On initial run, be sure to inspect for fluid leakage from the gland packing area, body-cap, coupling, flange gasket or piping flange gasket. Tighten bolting evenly if any weepage is present due to temperature fluctuations that may have occurred during shipping.

3. Disassembly

- If the valve is in line, isolate the valve from the line pressure and release the pressure from the inlet and outlet ports. NOTE: cycle the valve a couple of times to make sure there is no pressure inside body cavity.
- Before dismantling valve from the pipeline, mark them adequately with their original locations and positions of mounting to avoid confusion or mistake on subsequent remounting of valve. Remove the valve from line.
- Fully close the valve and remove the lever nut on operating lever, then remove lever or actuator.
- Remove nuts from body studs to separate the end cap from the body (Series F15, F30) or unscrew end cap with spanner type wrench inserted into the provided end cap assembly slots (Series R15).
- Remove body gasket, ball from body and seats from body and end cap.
- Remove travel stop lock plate from stem and packing gland.
- Remove stem by pressing straight downwards into the body interior.
- Remove thrust washer from the stem and stem packing from body stuffing box.

4. Assembly

- Place body and cap on clean solid surface and place seats into the body and end cap. Assemble the thrust washer on the stem and insert stem carefully into the body from inside.
- Assemble and install chevron shaped stem packing and insert gland onto the stem and slightly tighten. Set stem to close position and carefully install ball into the body and lubricate seats with light general purpose lubricant. NOTE: The ball and seats should be free of dust or any other foreign matter.
- With valve body in the vertical position, place cap over body and tighten body nuts evenly and alternately. Studs should protrude equally above the nuts. (Series F15, F30) or tighten end cap with spanner wrench after applying loctite or equal to threads (Series R15).
- Turn valve assembly upright, install travel stop, lever and lever nut, or actuator. Check for ease of operation (mis-alignment of actuators could result in increased operating torque required to operate the valve). All valves, after reassembly should be tested to insure valve performance before final acceptance.

5. Maintenance

Routine maintenance consists of tightening the stem nut 1/4 turn periodically to compensate for the wear caused by stem operation. More frequent observation is recommended under extreme services. Recommended overhaul consists of replacement of the seats and seals. Kits are available as CF Service Kit ordering example: F15FRC2 KIT