

Before beginning installation, ensure that all piping and components are free from contaminants, debris, and any foreign materials that may compromise sealing performance.

Examine gasket seating surfaces for damage such as scratches, pits, or gouges exceeding ASME PCC-1 guidelines. Surface roughness should not surpass 250 AARH. Damaged surfaces must be machined within flange tolerances or replaced if machining is not feasible.

Achieve bolt tension through a calibrated torque wrench or suitable hydraulic tools. Alternatives such as load-indicating fasteners may be employed to ensure uniform stress distribution, which is critical to effective sealing performance.



Installation Procedures:

1. Thoroughly inspect the gasket kit box contents, ensuring all components are correct and free from damage, and that the material is as specified and not damaged.
2. Prepare the bolts and nuts by cleaning threads and applying a suitable anti-seize or lubricant to ensure smooth assembly.
3. Align the flange faces to achieve parallelism and concentricity within a tolerance of 0.010 inches — avoid applying external stress or force.
4. Insert two drift pins in opposite directions through diametrically opposite holes to properly align the bolt pattern.
5. Verify flange alignment by testing the fit of the isolating sleeves. They should slide in easily—do not force sleeves into misaligned flanges as this may damage the insulation material.

INSTALLATION INSTRUCTIONS ... Continued

6. Install the bolt assemblies as follows:

- Thread a nut partway onto one end of each stud, exposing at least two full threads.
- Slide on a steel washer, insulating washer, and sleeve. Insert the stud through the flange.
- On the opposite side, add the remaining insulating washer, steel washer, and nut. Hand tighten.



For F-Type gaskets

Insert the gasket once the lower half of the flange is partially assembled, using the bolts to support it.



For E-Type gaskets

Hold the gasket in place between flanges and insert a minimum of two bolts through the gasket's holes to secure positioning.

7. Repeat the bolt assembly process for all remaining positions around the flange.

8. Start torquing bolts following a crisscross (star) pattern: apply 20% of final torque to the first two bolts at opposite sides. Replace drift pins with bolt assemblies, then torque all bolts in the same pattern to 20% of the specified final value.

9. Increase torque to 50–60% of the final torque value, repeating the star pattern sequence for all bolts.

10. Apply the full torque value using the same sequence. Ensure all fasteners are fully tightened with no further nut rotation.

11. For systems operating at high pressure or temperature, re-torque all fasteners post-startup to compensate for any initial relaxation or creep.

