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INSTRUCTIONS FOR INSTALLATION OF CHEMVALVE FULLY PLASTIC LINED BALL CHECK VALVES MODELS – 880-150, 880S-150, AND 880S-300

1. Flange Protection:

Remove the flange protectors, but do not remove them until the valve is ready to be installed. Flange protectors prevent damage to the gasket-sealing surface. Flange protectors should be replaced after inspection and when a valve is removed from service.

2. Gaskets:

Auxiliary TFE envelope gaskets, such as Texolon (ph.-713-466-4174 – FAX – 713-466-3721), must be used when flanging lined valves to flanges of dissimilar material. For example, similar materials would be plastic lined pipe flanged to plastic lined valves. Dissimilar materials would be steel or alloy steel pipe (such as Monel, Alloy 20, or Hastelloy) flanged to our fully lined valves. Also, if the piping is a solid plastic, and therefore, has a lower flange bolt torque requirement then the one indicated for our valves, the TFE envelope gaskets will allow the use of the lower bolt torque with our valves. Otherwise, gaskets are not required except when repeated connections and disconnections are made.

Install gaskets if necessary.

3. Required Bolt Torque Of Pipe Line Flange Bolts:

- A. Grease all bolts and nuts with a suitable grease.
- B. Finger-tighten all nuts.
- C. With a torque wrench, using a criss-cross method, tighten each bolt to the torque listed below (or in the case of solid plastic piping the torque as recommended by the pipe manufacturer if it is lower):

RECOMMENDED PIPE LINE FLANGE BOLT TORQUES FOR INSTALLATION

| PFA AND GRPFA (TEFLON) LINED VALVES | | PVDF (KYNAR) AND POLYPROPYLENE LINED VALVES | |
|--|---------------------------|--|---------------------------|
| Valve Size | Bolt Torque – Foot Pounds | Valve Size | Bolt Torque – Foot Pounds |
| 1" | 10 | 1" | 20 |
| 1.5" | 15 | 1.5" | 25 |
| 2" | 25 | 2" | 40 |
| 3" | 40 | 3" | 65 |
| 4" | 40 | 4" | 65 |
| 6" | 50 | 6" | 80 |
| 8" | 70 | 8" | 100 |

4. IMPORTANT NOTE:



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After 24 - 30 hours, or a complete temperature or pressure cycle, the torque on the flange bolts should be checked and those falling below the above recommended torques should be re-torqued. If leakage at the flange joint occurs after the bolts have been re-torqued to the recommended level, increasing above that level can be done (but not above the level recommended by the pipe manufacturer) until leakage is stopped, provided the torques are not exceeded by a factor of 1.5. If the leakage cannot be stopped, the flange joint should be disassembled and auxiliary gaskets installed per number 2 above.

5. Removal Of The Valves From The System:

Valves should not be removed from the system when their temperature exceeds the following:

PFA – Teflon – 200°F GRPFA – Teflon – 200 °F PVDF – Kynar – 150°F Polypropylene – 120°F

Each flange shall be covered with a flange protector or faceplate immediately after removal from the system regardless of the removal temperature.

6. Welding:

No welding shall be performed on the valve.

7. Testing:

Hydrostatic testing of the piping system into which our valves are installed can be conducted up to 1.5 times the maximum pressure rating of the valve at 100 degrees F.