

## **Installation Instructions: Bellows Pump Connectors**

**Piping should be lined up accurately before installing the connector. Angular, lateral, and axial misalignment, and/or torque, will cause shearing stresses. The system must be piped to eliminate misalignment at the connector.**

**Don't rotate or torque the connector to match bolt holes in the mating flanges. Piping and flanges should be installed straight and true so that the bolts are properly lined up. Flange bolts should not be used to correct system piping alignment problems.**

**Be sure the face to face opening between the mating pipe flanges is the proper dimension for the connector and that the flange faces are parallel. Tighten up the flange bolts using the criss-cross method. Don't let the connector support any weight, except itself. The system piping must be properly supported and hung. Since the connector is flexible, any extra weight will stress it.**

**Be sure to install the control rods. They can be pulled up snug (not tight) to the flange face. If the system design requires extension of the connector, leave the specified space for extension (but, no more) between the flange and the nut surface. Do not use the control rods for a piping system anchor or for piping hanger rods. The control rods are important. They restrain the connector from hyper-extending due to excessive system pressure or movement. If double nuts are used on the control rods, tighten them against each other so they won't vibrate loose.**

**Mount the connector close to the pump or equipment. If there is system vibration, the piping must be anchored immediately following the connector. When the connector is used as an expansion joint to absorb rated thermal expansion or contraction in a piping system, the adjacent piping must be properly anchored and guided. Important! Be sure to refer to the Anchoring and Guiding Instructions.**

**Don't use any cleaning agents which contain chlorides and don't use wire brushes, steel wool or other abrasives to clean the bellows. Never insulate the connector. This can prevent periodic inspection of the connector and also cause stress corrosion of the stainless steel bellows.**

**If you're doing any welding near or anywhere above the connector, cover the bellows with a chloride free, heat resistant protector to prevent arc strikes, weld spatter, etc. from damaging the stainless steel bellows.**

**After installation, but before system pressurization, remove all the shipping bars, blocks, spacers, etc. and be sure the proper hangers, guides and anchors are installed and functioning. Don't hydro-test the system at pressures greater than the rated test pressure of the connector or the anchor load design.**

**Never install a connector where its temperature or pressure ratings could be exceeded. Be sure you know the ratings of the connector and of the piping system. Do not install a connector designed for HVAC systems to carry hazardous, dangerous, or toxic substances.**