

# Installation Instructions for Braided Flexible Metal Pump Connectors

## SERVICE CONDITIONS:

⇒ Make sure the braided connector rating for temperature, and movements match the system requirements. Contact the manufacturer for advice if the system requirements exceed those of the selected unit. Check to make sure the hose and braid selected is chemically compatible with the process fluid or gas.

## ALIGNMENT:

⇒ Hose and braid used for vibration purposes are normally not designed to make up for piping misalignment errors. Piping should be lined up within 1/8". Misalignment reduces the rated movements of the braided pump connector, which can induce severe stress and reduce service life.

## ANCHORING:

⇒ Solid anchoring is required whenever the pipeline changes direction and should be located as close as possible to anchor points. It is possible to install two braided connectors in a pipe system to achieve greater flexibility. Greater movements are achieved by installing the braided connectors at right angles to one another which are located between two anchor points.

## PIPE SUPPORT:

⇒ Piping must be supported by hangers or anchors so braided connector does not carry any pipe weight.

## ATTACHMENT METHOD:

⇒ **Flange Attachment** – Flange to flange (takeout) dimension of braided connector must match the installation breech opening. Install connector against mating pipe flanges with bolts inserted so that bolt heads are against connector flange. Flange holes of connector and adjacent pipe flanges should be aligned properly. Do not force braided connector to match the bolt holes of the mating flanges. This can cause torsion on the connector convolutions and will reduce its capability during operation and may cause premature failure.

Install gaskets between metal to metal seals. Tighten bolts in stages by alternating around the flange. Torque bolts sufficiently to assure leak free operation at hydrostatic test pressure

⇒ **Threaded Alignment** – Install braided connector at its neutral length. Make sure fit-up allows for static face to face of braided connector. Braided connector threads and adjacent pipe threads/unions must be cleaned and free of sediment. Apply plumber's tape or pipe dope to threaded ends to ensure a positive seal when braided connector is installed in piping system. Install braided connectors to loose union/female ends and tighten per industry standards. NOTE: When installing union ends to connector, it is important not to induce torque to unit. When connector is subjected to torsional stresses, reduced operating life or failure will occur.

⇒ **Sweat End Attachments** – Make sure male ends of braided connector are clean and free of any foreign sediment. Also, check to make sure female ends of adjacent pipe are clean and free of any sediment. Install braided connector in such a manner to eliminate any torque that may be imposed during fit-up. Solder per industry standards.

## STORAGE:

⇒ Ideal storage is in a warehouse. If storage must be outdoors, place on a wooden platform to keep braided connectors from coming in contact with exposed ground. Keep connectors in original packaging until installation if possible.

## ADDITIONAL TIPS:

- ⇒ If braided connectors are to be installed underground, or will be submerged in water, contact the manufacturer for specific recommendations.
- ⇒ Check the tightness of flanges or unions two or three weeks after installation and retighten if necessary.
- ⇒ If welding near a braided connector, cover unit with weld blanket to keep weld splatter from damaging braid cover.

**WARNING:** Braided connectors may operate in pipelines or equipment carrying fluids and/or gases at elevated temperatures and pressures that may transport hazardous materials. Precautions should be taken to protect personnel in the event of leakage or splash. Braided connectors should not be installed in areas where inspection is impossible. Make sure proper drainage is available in the event of leakage when operating personnel are not available.