



## INSTRUCTIONS

1. See additional "Bronze connector installation" steps for SBV-SW.
2. Inspect the product for hose damage, end fitting damage, frayed braid wires and overall structural integrity.
3. If any damage is found, the V-connector must be replaced. Otherwise, proceed to the next step.
4. Ensure the space matches the overall length of the V-connector. For expansion compensation applications, the V-connector can be installed pre-compressed or pre-extended only if the full range of motion that will be encountered is in one direction.
5. Larger connectors are supplied with shipping bars attached for maintaining proper design length.
6. V-connectors can be installed in a variety of positions. The standard position is has the 90 degree elbow hanging downward. For steam applications, a drain port and plug needs to be specified and installed into the bottom of the 90 degree elbow. This allows the condensate to be drained. Horizontal installation is recommended to avoid condensate buildup. Alternately, the elbow can be installed pointing upward for better natural drainage into the surrounding piping.
7. The elbow should be supported for sizes larger than 1 1/2" when installed in any position other than the standard position to avoid sagging or torquing. An eyelet is provided at the elbow for support by hanger rod or cables. Use cable support for vibration isolated piping systems.
8. Pipe hanger rods on both sides of the seismic V-connector should be at least 1 ft. in length in order to allow the 90 degree elbow to move back and forth 1/4" as the loop flexes. Shorter hanger rods are allowed when the installation is done with vibration isolation spring hangers.
9. Make sure that the piping on both sides of the seismic V-connector is adequately guided and anchored. The transferred motion should be an axial motion in a straight direct line along piping centerline which is in line with the seismic V-connector. See below table for spring forces of V-connectors for different sizes. Pressure thrust forces do not need to be considered since the V-connector will not impose pressure thrust onto the system. Approximate spring forces for the V and U connector are as follows:

### Spring Forces

1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
35 lbs	41 lbs	46 lbs	65 lbs	68 lbs	82 lbs	87 lbs

3"	4"	5"	6"	8"	10"	12"
93 lbs	127 lbs	214 lbs	228 lbs	312 lbs	345 lbs	399 lbs

Note: The figures above reflect the total force required to deflect the V-connectors' full rated movement, pressurized to 150 PSIG for 1/2" through 10" and 100 PSIG for 12".

10. Extreme care must be taken to cross tighten the bolts frequently so the assembly doesn't get pulled past its designed limits.
11. Remove shipping bars after installation if there are any.
12. Inspect V-connector with routine maintenance and inspections of the piping system it's connected to against the damages and failures listed in step #2.
13. Replace seismic V-connectors after any seismic activity.