

2.08 | Pump Connector & Seismic Joints

Vibration Eliminator / Pump Connector

Pump Connectors are flexible metal assemblies, primarily designed to isolate vibration from pumps on both the suction and discharge sides of the pump. They help to prevent damage caused by vibration, expansion and contraction. They accept thermal expansion and reduce piping stress due to minor misalignment. Constructed of stainless steel annular corrugated metal and surrounded with a woven braid of high tensile stainless steel, these assemblies are flexible and are most suitable to withstand high pressure and temperatures.



Seismic Joints and Expansion Loops

Flexible loop applications that include thermal expansion and contraction, and/or building expansion and contraction, (singularly or in combination with seismic considerations), are engineered by the system designer to account for the cumulative movement(s) of each individual system.

Piping used in applications and locations subject to seismic conditions have their own set of unexpected random movements. The random motion common to earthquakes requires that seismic expansion joints be capable of movement in any direction. Of the 6 possible directions, axial movement of the hose in only two of them compared to four in an "L" shaped assembly. Seismic expansion joints orientation can be changed relative to the piping, further minimizing the likelihood of compressive movement.



Significant cost and safety benefits not found in Pacific Hose Flex seismic expansion joints.

- It is an inexpensive alternative to dual-tied bellows expansion joints and especially ball joints.
- During an earthquake, it protects equipment by allowing boilers, chillers, fan-coil units and other systems to move independently of the building.
- Installed at the connection also prevents nozzles from cracking or shearing off.
- A break in the gas pipework could start a fire, which can of course be devastating. This Australian Gas Approval (AGA) -certified seismic expansion joint will compensate for the movement that occurs during any seismic activity such as an earthquake.