

SEISMIC GIMBALS

Expansion Joints

The seismic gimbals expansion joints are designed to handle movements in all directions.

This type of expansion joints have a pair of gimbal joints on each end to absorb the movements which are occur because of earthquake and ground settlements.

Advantages

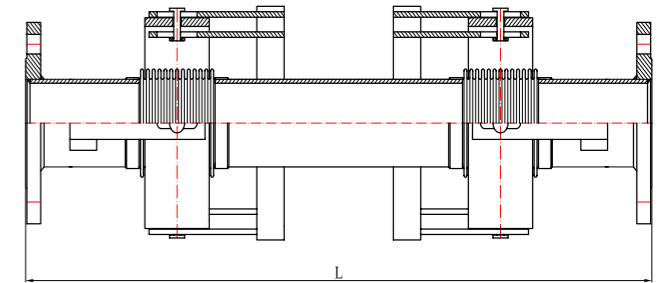
- » Seismic expansion joints with gimbals are to absorb lateral and axial movements of both thermal and seismic origin
- » Lateral expansion level is directly related to bellow size and the length of the middle pipe
- » Designed for pressure thrust acting as a safety device
- » High movement capacity and resistance to high temperatures and chemicals
- » Rotating flange, fixed flange or welding neck connection types are available

Applications

- » Hot & Cold water pipelines
- » Fire fighting systems
- » Superheated water
- » Steam and condensate pipelines
- » Industrial applications
- » Marine & Exhaust systems
- » HVAC lines

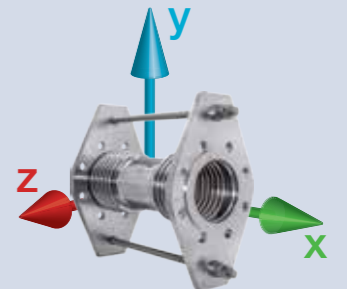
DESIGN VALUES

DN	32 – 250
Bellows Material	304, 316, 321
Balance of Material	Carbon Steel, Stainless Steel
Design Pressure	16 barg
Design Temperature	400°C



Nominal Diameter (DN)	Type 1				Type 2			
	Movements (mm)			Length (L)	Movements (mm)			Length (L)
	Axial x (+/-)	Lateral y (+/-)	Lateral z (+/-)	(mm)	Axial x (+/-)	Lateral y (+/-)	Lateral z (+/-)	(mm)
32 1 1/4"	50	100	100	750	50	200	200	750
40 1 1/2"	50	100	100	790	50	200	200	790
50 2"	50	100	100	790	50	200	200	790
65 2 1/2"	50	100	100	940	50	200	200	940
80 3"	50	100	100	940	50	200	200	940
100 4"	50	100	100	940	50	200	200	990
125 5"	50	100	100	940	50	200	200	1090
150 6"	50	100	100	1100	50	200	200	1200
200 8"	50	100	100	1130	50	200	200	1330
250 10"	50	100	100	1130	50	200	200	1430

Please consult with our technical department for different working conditions and design parameters.
Movements are non-concurrent



In addition to thermal movements in pipe lines, there are mechanical movements due to earthquakes, ground settlements and landslides. These type of movements can cause significant damage to the piping systems in dilatation points of buildings, pipe junctions between vessels and boilers.

These mechanical movements can be absorbed by using seismic expansion joints.

