

Universal Tied Expansion Joints

MWL & MFL Series

DESCRIPTION

This model is made up of two bellows joined together by a central pipe and a system of tie rods able to withstand the thrust produced by the internal pressure.

This model is used to absorb lateral movements in all planes. In addition and with a special design and/or positioning of the tie rods system this type may be used to absorb some axial and angular movements*.

The tie rods are provided in sets of two or more, equally distributed around the circumference of the expansion joint. When the Expansion Joint is supplied with 2 tie rods at 180 degrees, the expansion joint is free to deflect angularly and laterally. With three or more tie rods only lateral deflections are possible.

The amount of lateral deflection depends on the amount of angulation each bellows can absorb and the length of the central pipe. The amount of lateral deflection capability can be increased or decreased by simply changing the length of the spool pipe and the thermal expansion of the central pipe is taken by the bellows elements.

FEATURES

- Absorbs lateral movements in all planes
- Restrains pressure thrust
- Adequate anchors and guides must be provided



MWL
Universal Lateral Tied Expansion Joint with welding ends.



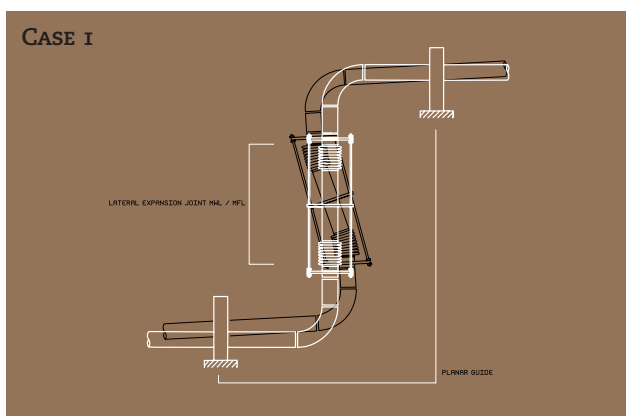
MFL
Universal Lateral Tied Expansion Joint with flanged ends.

TYPE	SERIES	PRESSURE THRUST RESTRAIN	MOVEMENTS		
			AXIAL	LATERAL	ANGULAR
Universal Tied	MWL	YES	NO*	SINGLE-PLANE	SINGLE-PLANE
	MFL			YES	NO**
				MULTI-PLANE	MULTI-PLANE
				YES	NO**

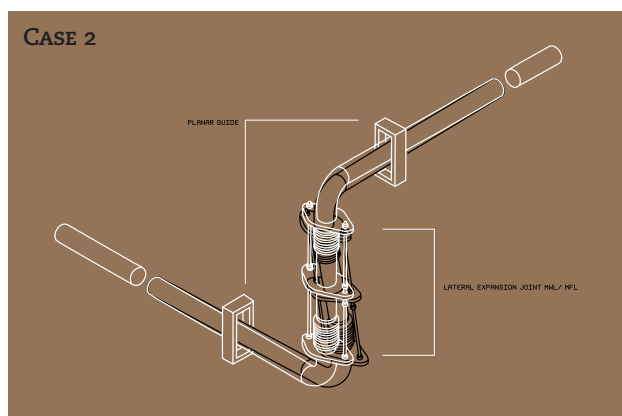
* some axial movements may be absorbed with a specific design

** some angular movement can be absorbed providing 2 tie rods at 180 degrees only

TYPICAL APPLICATIONS MWL & MFL SERIES



This case illustrates how one MWL or MFL Expansion Joint can be used to absorb the thermal Expansion in a Z-shaped section of piping which only occurs in one plane.



This case shows how an MWL or an MFL Expansion Joint can be used to absorb the thermal Expansion in a Z-shaped section of piping which occurs in three different directions. The fact that this type of Expansion Joint is capable of absorbing lateral movements in more than one direction means that two horizontal pipes can form any angle in that plane.

