



VALVE AND FLOW CONTROL SPECIALISTS
SERVICE AND RELIABILITY

Expansion Joints Metal Bellows

Type TFF / TWW Tied Single Metal Expansion Joints

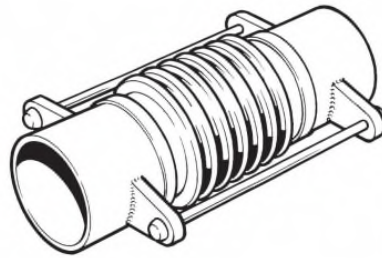
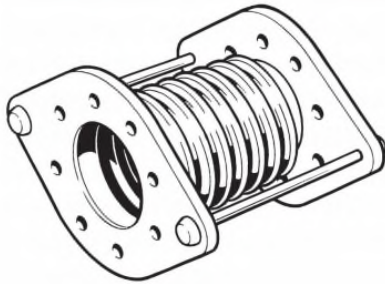
Description

A single metal bellows element fitted with flanges, floating flanges or pipe weld ends, with movement control tie rods attached to the joint hardware. The joint is generally fitted with welded (fixed in place) tie rod washers as movement restraining stops, or alternatively can be with threaded rod as the tie rod utilising adjustable nuts as the movement restraining stops. This latter method is generally referred to as jacking rods (i.e. JFF Joints).

This joint is used to absorb small amounts of lateral deflection and/or piping misalignment thus relieving stresses on attached pipework or equipment and can also be used as a vibration eliminator provided the vibration is in the lateral plane not the axial plane.

Movement Capability

Suitable for small lateral (offset) movements controlled by the tie rods.



Standards

Manufactured to the guidelines laid down in the Standards of the Expansion Joint Manufacturers Association Inc. (EJMA).

Pressure Rating – standard joints

4, 10 and 20 bars – subject to pressure capability of attached hardware.

Bore Size Range - standard

50 – 1500mm

Product Code

Type TFF	- fixed flanges both ends
Type TWW	- pipe weld ends both ends
Type TFW	- flange one end, weld end the other
Type TFV	- fixed flange one end, floating (swivel) flange the other

Pipework System Notes

Tie rod hardware is attached to contain pressure thrust forces and in general main anchors are not required.

For further details please contact your local VCS office ensuring you have all the engineering and system requirements.

VALVE AND FLOW CONTROL SPECIALISTS
E-mail sales@valveandflowcontrolspecialists.com