

# TEB – Tied Expansion Bellows

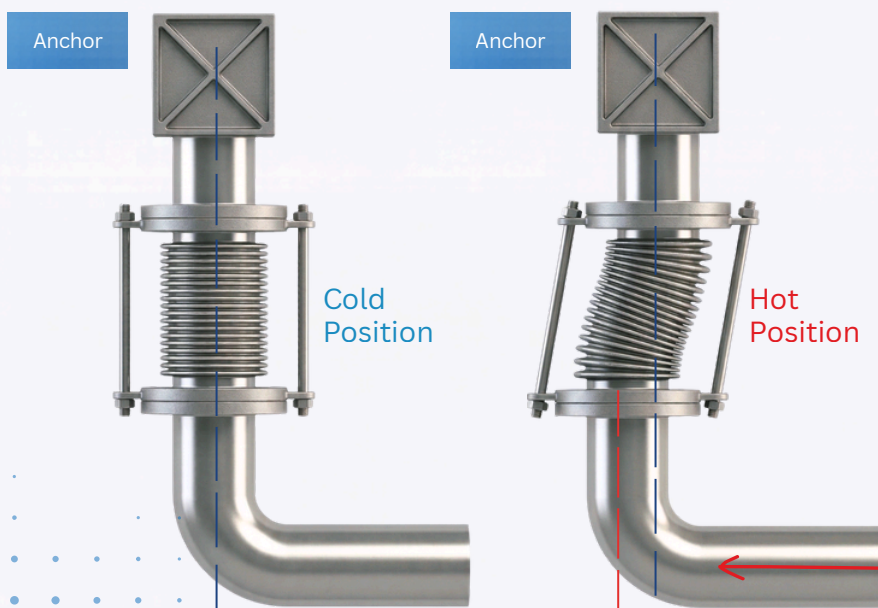
## INSTALLATION INSTRUCTIONS

The Tied Expansion Joint (TEB) is fitted with adjustable tie rods, allowing the installer to adjust the length of the assembly to suit the installation of the joint into the existing pipework.

Dismantling Joints are TEB Tied Joints that are fitted with threaded tie rods, enabling the installer to compress the joint as necessary in order to allow the removal of other pipeline equipment, such as valves, that may be present in close proximity to the pipe work.

### DO'S AND DO NOT'S FOR INSTALLATION OF TIED EXPANSION BELLOWS

- **DO** adjust the length of the joint to suit the pipework. Installation tolerance is typically  $\pm 10\text{mm}$  axial, contact us if the site adjustment is more than  $\pm 10\text{mm}$  for us to assess. Once set to suit the site gap hand tighten the outer nut onto the spherical washers and lock the outer nuts onto the washer nut.
- **DO** utilise the tie rods to compress the bellows if required to remove adjacent piping hardware.
- **DO** loosen the nuts on the back of the flanges of the Tied assembly, to allow the expansion joint to compress with the thermal expansion of the pipework (if required).
- **DO** utilise the double nuts on tie rod ends to lock them in place, preventing accidental removal of the tie rods or loosening due to vibration whilst in service.
- **DO NOT**, under any circumstances, pressurise the pipeline if the tie rods are removed from the Tied expansion bellows. Failure of the joint and damage to the pipework will occur.
- **DO NOT** remove the tie rods, or the outer nuts from the tie rods whilst the unit is installed and in service in the pipeline. The tie rods are holding the bellows thrust forces.
- **DO NOT** attempt to adjust the tie rods whilst the pipework is in service. Adjustments may only be made whilst the pipework is not pressurised or when the joint is out of the pipeline.



An Aflex Tied Expansion Bellows (TEB) allows small lateral movement without transmitting pressure thrust to the pipeline, as the tie rods contain the thrust within the assembly. It is typically used to absorb thermal expansion in pipe legs through lateral deflection. While it can also move axially or angularly, pressure thrust will be generated in those cases.

Tie rods are supplied as threaded for on-site adjustment, making them suitable for installations with variable gaps, such as pumps.