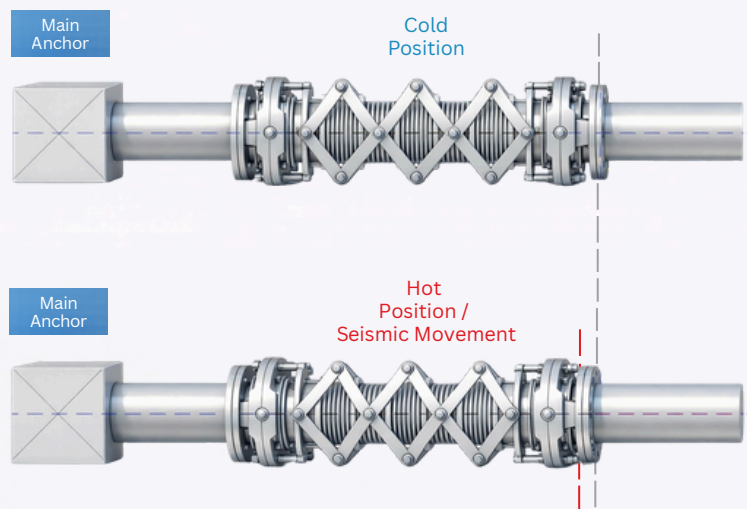


GEB PANTO – Gimbal Pantagraph Bellows Assembly

INSTALLATION INSTRUCTIONS

- Verify the Aflex serial number plate is securely attached, legible, and accessible. Do not remove it, removal voids the warranty. The serial number links to materials, weld procedures, welders, and [MDR records](#).
- Inspect the expansion joint (bellows, hardware, shipping bars) for damage. Transit damage may affect joint length—report immediately. Do not attempt repairs without manufacturer approval (voids warranty).
- Do not remove shipping bars before installation. If they cause issues, contact Aflex. Welded/pipe-end bellows typically have no shipping bars; pipe-end units are packed to prevent length changes.
- Ensure the pipe gap matches the joint size and alignment (unless otherwise specified in the datasheet).
- Use lifting lugs or lift from hardware only. Do not lift from the bellows or shipping bars
- Install flow-lined joints in the correct direction (as indicated on shipping bar stickers).
- Ensure mating flanges are correctly aligned. Torsion stress causes premature failure and is not covered by warranty.
- After installation (bolting or welding), remove shipping bars before hydrotesting or pressurisation, they are not designed to restrain [Pressure Thrust](#)
- Do not exceed the design pressure listed on the datasheet.
- Ensure tie rods (if fitted) are installed before service. Remove shipping bars after installation, but do not remove or modify tie rods, they restrain pressure thrust. Modifications void warranty.
- Aflex does not provide flange bolting torque values, refer to the relevant flange standard.
- For any issues or questions during installation, [contact us](#) Aflex immediately.



An Aflex Gimbal Pantagraph Bellows combines a central pantagraph section with gimbal bellows at each end. The gimbals allow lateral movement, while the pantagraph provides high axial flexibility.

The pantagraph arms evenly distribute axial movement across the bellows, improving stability, reducing stress points, and increasing service life. This design is ideal for applications with combined axial and lateral movement, including seismic conditions such as buildings and bridges. As an unrestrained assembly, it generates pressure thrust, so proper anchoring and guiding in accordance with EJMA standards is essential.

