



STOURFLEX®

J & P Supplies Ltd

Expansion Joints & Pipeline Equipment

Installation, Operation and Maintenance Instructions for Stainless Steel Single Hinged Angular Expansion Joints.

Storage.

Stainless steel single hinged angular expansion joints should be stored in a clean dry area and be protected from damage caused by other items of plant and equipment.

Inspection.

Stainless steel single hinged angular expansion joints should be inspected for any internal or external damage to the bellows convolutions and hinge assemblies.

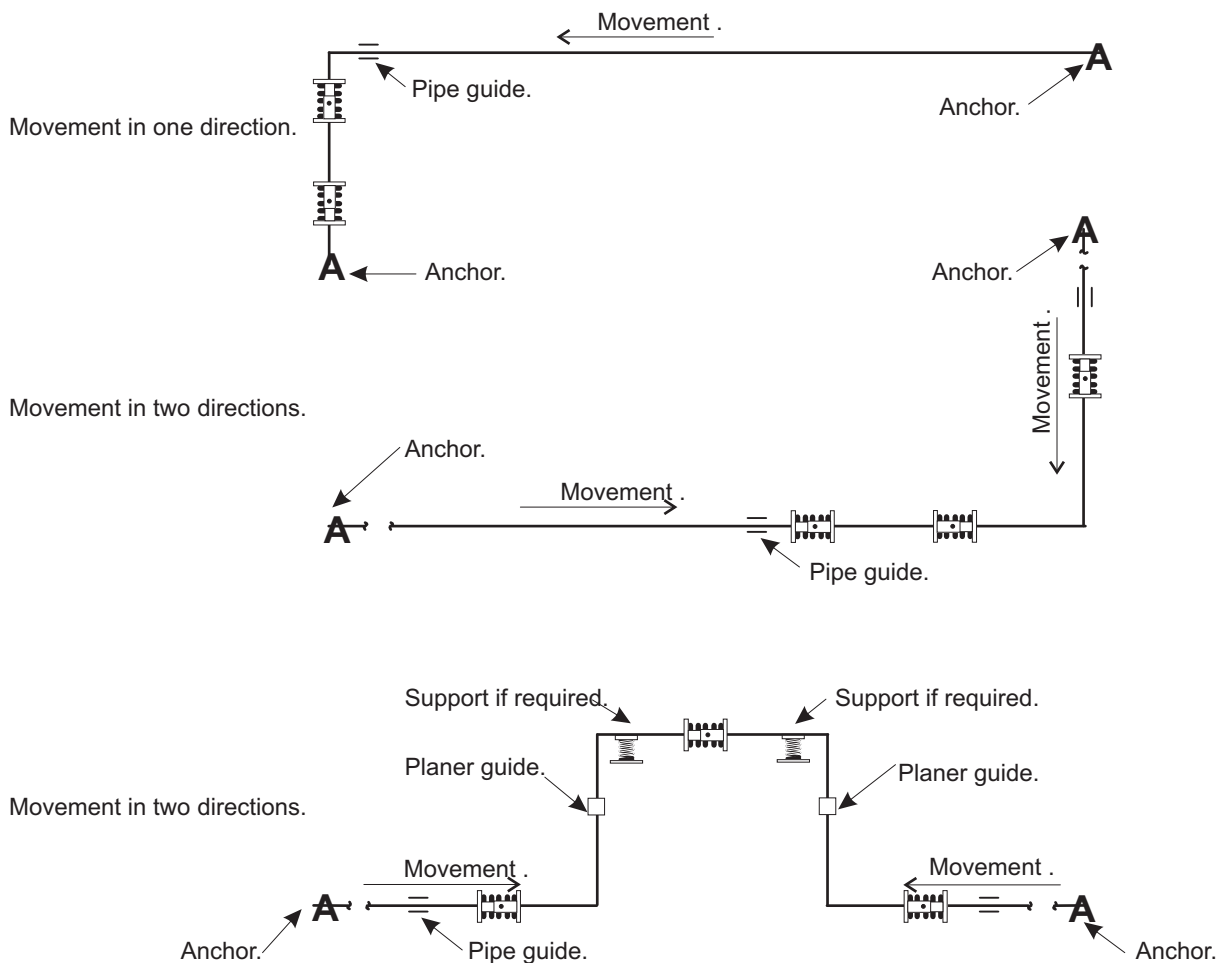
Selection.

The Stourflex range of stainless steel single hinged angular expansion joints are designed to be used on a wide range of industrial applications. Check that the correct single hinged angular expansion joint has been selected for the operating conditions that exist. Temperature, pressure and movement should all be confirmed as the wrong selection may result in failure of the system. Check that the correct number of angular single hinged expansion joints are being installed to accommodate the total amount of movement on the system.

Installation.

Stainless Steel single hinged angular expansion joints should be fitted at their correct installation length. They should not be extended or compressed. They should be fitted with hinge assemblies in the correct position to allow movement to take place. If an expansion joint has been supplied with internal flow sleeve it should be installed with the " → " in the correct flow direction. Bellows convolutions should be protected from damage during installation due to rotation or weld spatter etc. Stainless steel single hinged angular expansion joints require anchors and guides to ensure their correct performance.

Typical examples where stainless steel single hinged angular expansion joints are used to accommodate thermal expansion in pipework.





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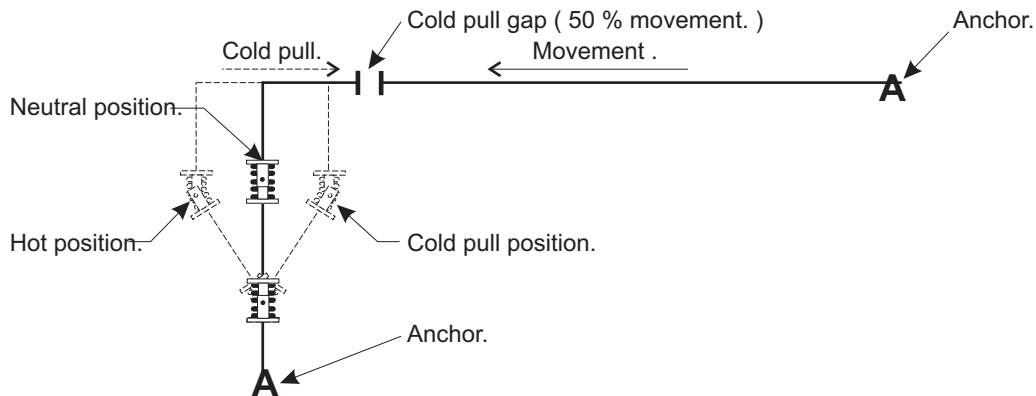
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Installation Continued.

Pipework should be correctly aligned. Stainless steel single hinged angular expansion joints are used in two's or three's with connecting pipework to make up either two or three pin assemblies. When installing single hinged expansion joints along with connecting pipework the complete assembly must be fully supported at all times. Pipework should be guided to direct movement into the single hinged angular expansion joints. Pipe guides should be installed as per specification or details given in guidance notes. If cold pull is to be applied the required gap should be left in the pipework after anchors, guides and single hinged angular expansion joints have been installed.



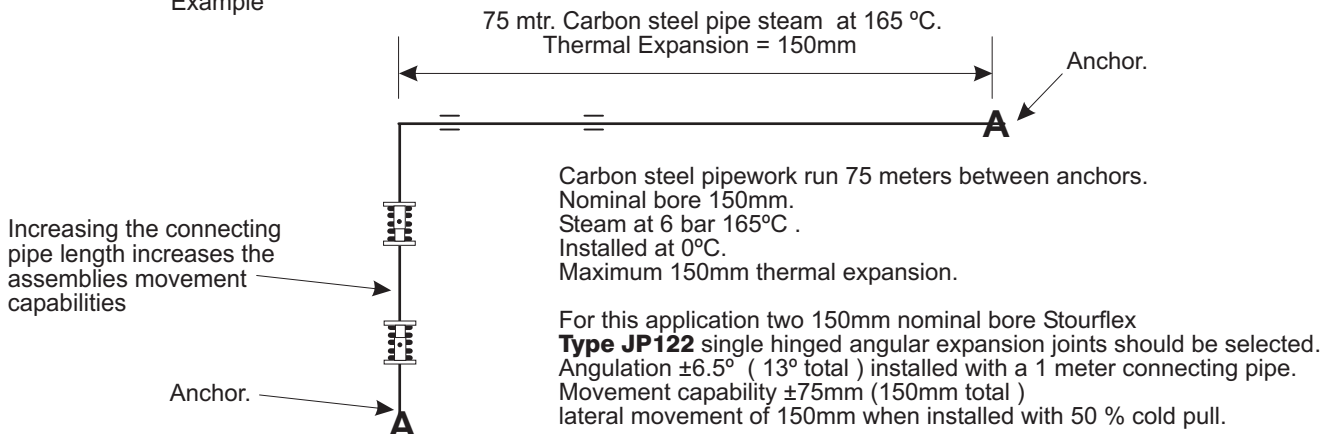
Test Pressure.

If a hydraulic pressure test is to be carried out on a system containing single hinged angular expansion joints ensure that anchors and guides have been correctly fitted before the test is carried out. Ensure that the test pressure (usually 1.5 x working pressure) does not exceed the test pressure of the single hinged angular expansion joint being installed. A visual inspection of the single hinged angular expansion joint and associated pipework should be carried out during and after the test to ensure the installation is operating correctly.

Anchoring.

Single hinged angular expansion joints must be securely anchored and adequately guided to ensure their correct performance. See guidance notes for details and calculations on anchoring of pipework. Anchors are used to divide the system into manageable sections. Anchors must be spaced to suit the single hinged angular expansion joints being installed.

Example



Maintenance

When properly installed and used at their correct operating temperature and pressure, single hinged angular expansion joints will give many years of trouble free service. However the expansion joints should be periodically inspected for signs of deterioration. Anchors and pipe alignment should also be examined. Anchor failure can result in a breakdown of the system. If insulation is to be used it should be removable to allow inspection to be carried out.