



# STOURFLEX

Technically Advanced Flexible Solutions

J&P Supplies Ltd  
Junction Road, Audnam,  
Stourbridge, West Midlands,  
DY8 4YH  
Tel: 01384 393329  
Fax: 01384 440212  
www.stourflex.co.uk

## Type JP122 Angular Expansion Joint Flanged

Now Available With Precision Fit Flexible Lagging Jackets To Suit JP122.

**Specification** Single hinged angular expansion bellows consisting of stainless steel grade 321 bellows fitted with carbon steel flanges and hinge assembly drilled to BS 4504 NP16

**Application** Stourflex single hinged angular expansion joints are used in sets of two or three and are generally installed in changes in pipework direction. They will accommodate lateral movement in only one plane. This movement occurs due to thermal expansion or contraction or building settlement. They are suitable for use on L.T.H.W. M.T.H.W., H.T.H.W., steam and other hot liquids and gases.

Maximum working temperature 300°C.  
Maximum working Pressure 16 bar at 120°C.  
Stourflex angular expansion joints should not be used at both their maximum working temperature and pressure respectively.  
Maximum test pressure = 1.5 x working pressure or 1.5 x flange rating whichever the lower.



Lagging - Stourflex are now able to offer a tailor made flexible lagging jacket to help reduce heat losses on LTHW systems and heat gains & condensation on CHW systems. Please ask for more information.

Part number	N.B. (mm)	Angulation (Degree)	Overall Length (mm)	Working Pressure @120°C (bar)	Cold Test Pressure (bar)
JP122-50-16	50	5	133	16	24
JP122-65-16	65	5	133	16	24
JP122-80-16	80	5	133	16	24
JP122-100-16	100	5	133	16	24
JP122-125-16	125	6.5	199	16	24
JP122-150-16	150	6.5	199	16	24
JP122-200-16	200	7	212	16	24
JP122-250-16	250	7	212	16	24
JP122-300-16	300	7	212	16	24

Force to angulate available on request.

Stainless steel grade 321 internal flow sleeve fitted as standard.

Where service conditions above 300°C or 16 bar exist or where additional movement is required non standard variations of the Type JP122 are available if required.

Alternative flange drillings are available.

Stourflex angular expansion joints are supplied at their maximum overall length and must not be extended. Angular expansion joints must be securely anchored and adequately guided to ensure their correct performance. Omitting anchors and guides may result in failure of the system.

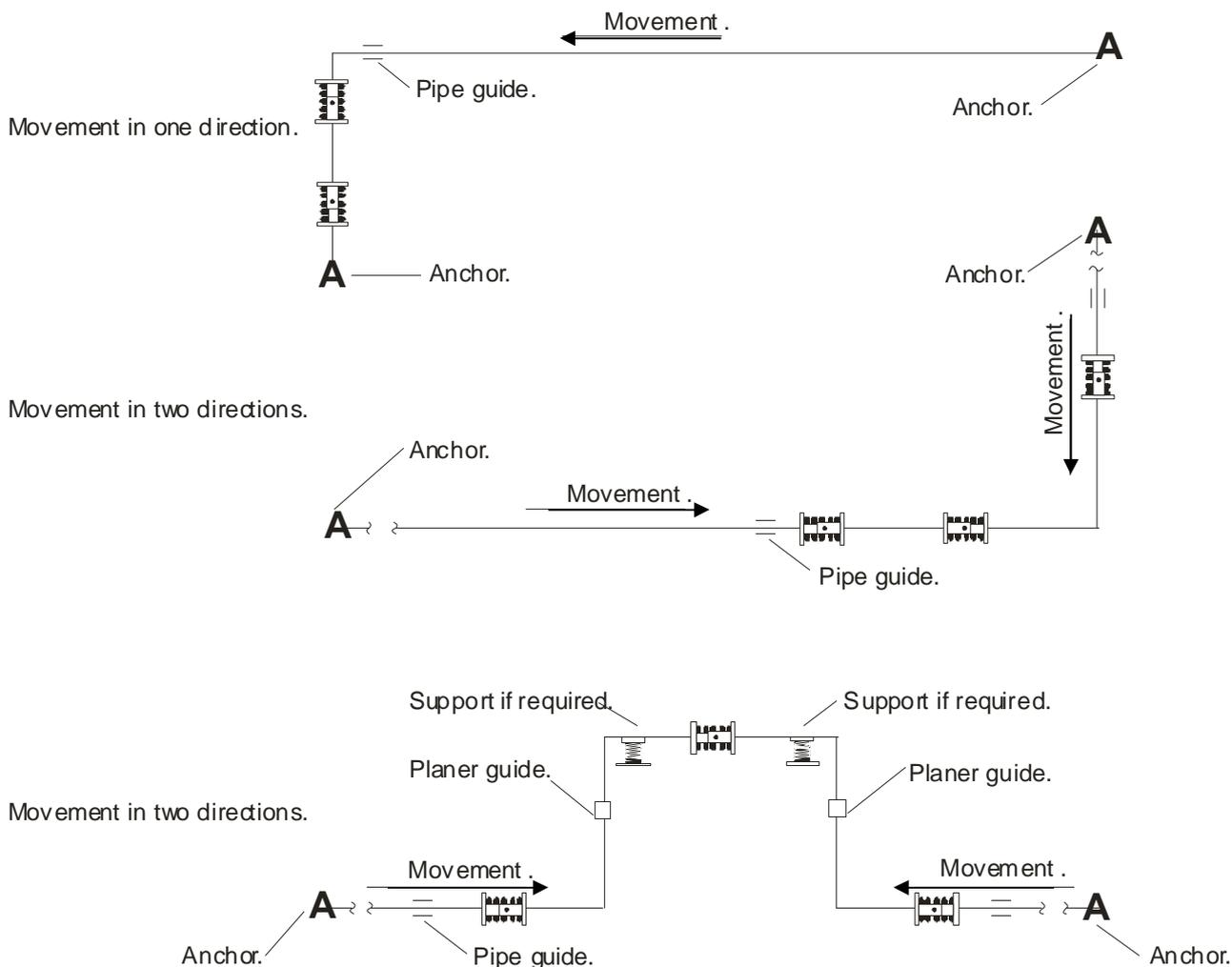
All Stourflex products should be installed in accordance with our fitting instructions.



## 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.

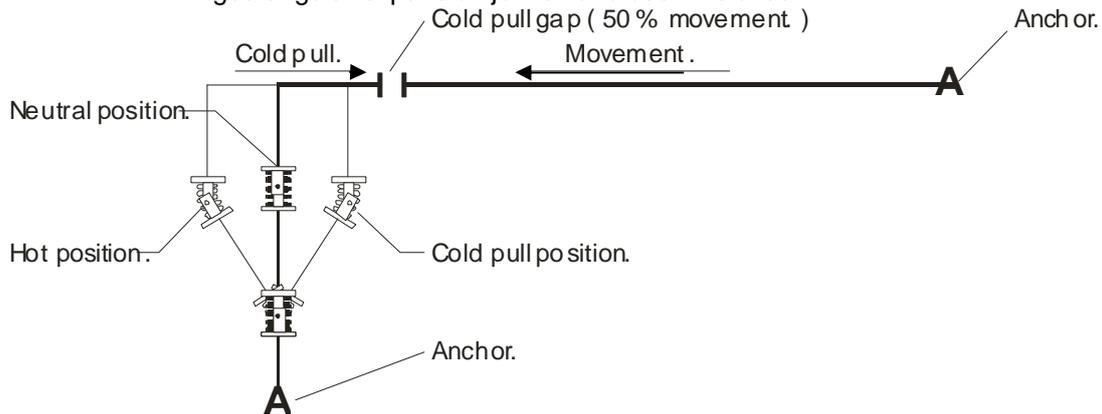
Typical examples where stainless steel single hinged angular expansion joints are used to accommodate thermal expansion in pipework.





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

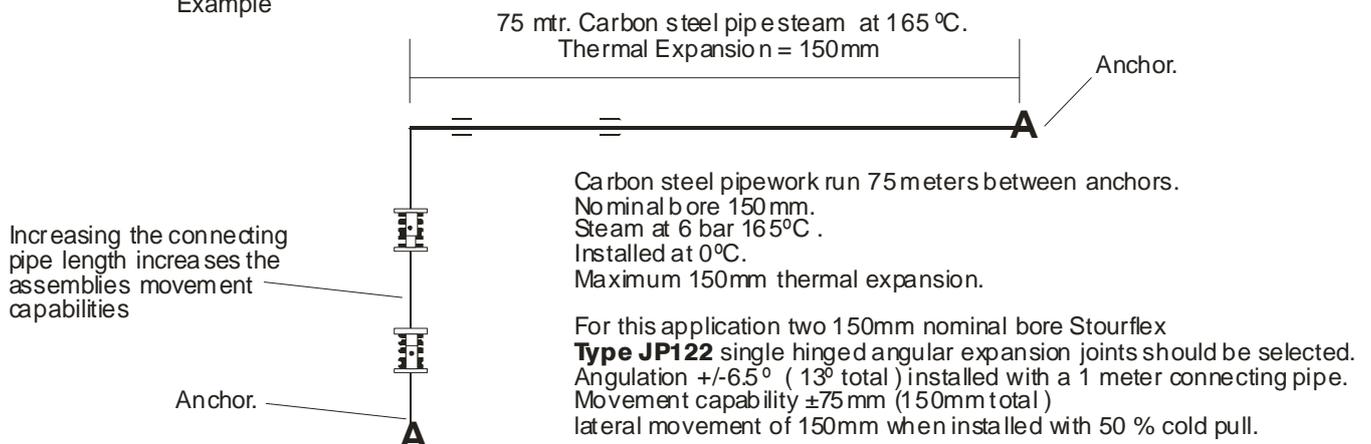
**Installation Continued** Pipework should be correctly aligned. Stainless steel single hinged angular expansion joints are used in two's or three's with connecting pipework to make up either two or three pin assemblies. When installing single hinged expansion joints along with connecting pipework the 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.