



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 JP120 Lateral Expansion Joint Flanged.

Now Available With Precision Fit Flexible Lagging Jackets To Suit JP120.

Specification Double tied lateral expansion joint consisting of two stainless steel grade 321 bellows welded to carbon steel centre tube fitted with carbon steel oval flanges and tie bar assembly drilled to BS 4504 NP16.

Application Stourflex double tied expansion joints are generally installed in changes in pipework direction and will accommodate lateral movement in one or two planes. 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.



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.

Maximum working temperature 300°C.
Maximum working Pressure 16 bar at 120°C.
Stourflex lateral 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.

| Part number | N.B. (mm) | Total Movement (+/-mm) | Overall Length (mm) | Working Pressure @120°C (bar) | Cold Test Pressure (bar) |
|--------------|-----------|------------------------|---------------------|-------------------------------|--------------------------|
| JP120-40-16 | 40 | 50 | 750 | 16 | 24 |
| JP120-50-16 | 50 | 50 | 750 | 16 | 24 |
| JP120-65-16 | 65 | 50 | 750 | 16 | 24 |
| JP120-80-16 | 80 | 50 | 850 | 16 | 24 |
| JP120-100-16 | 100 | 50 | 850 | 16 | 24 |
| JP120-125-16 | 125 | 50 | 950 | 16 | 24 |
| JP120-150-16 | 150 | 50 | 950 | 16 | 24 |
| JP120-200-16 | 200 | 50 | 950 | 16 | 24 |
| JP120-250-16 | 250 | 50 | 1050 | 16 | 24 |
| JP120-300-16 | 300 | 50 | 1100 | 16 | 24 |

Lateral spring rates 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 JP120 are available on request.

Alternative flange materials and specifications are available on request.

Stourflex lateral expansion joints are supplied at their maximum overall length and must not be extended. Lateral 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.

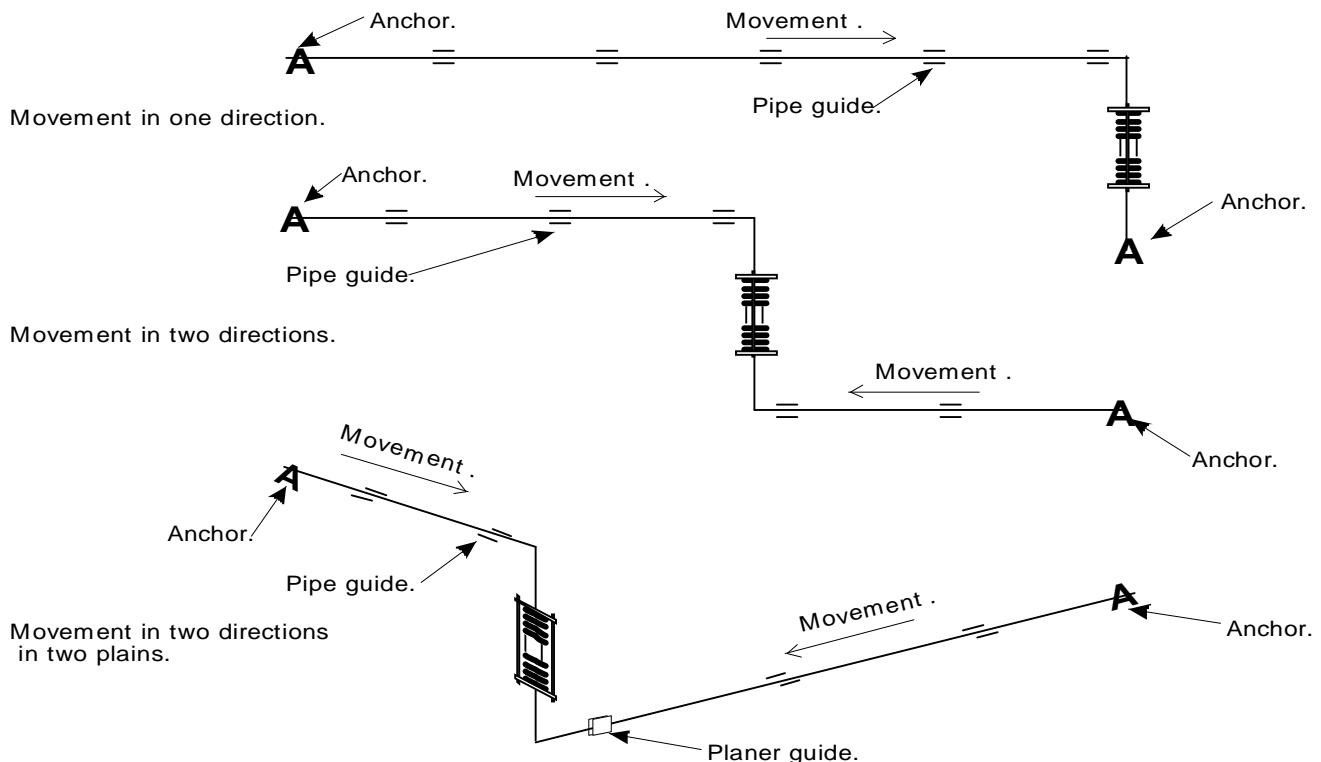
All Stourflex products should be installed in accordance with our fitting instructions.



Installation, Operation and Maintenance Instructions for Double Tied Stainless Steel Lateral Expansion Joints

- Storage** Double tied stainless steel lateral expansion joints should be stored in a clean dry area and be protected from damage caused by other items of plant and equipment. Care should also be taken in transporting lateral expansion joints to prevent damage to the bellows
- Inspection** Double tied stainless steel lateral expansion joints should be inspected for any internal or external damage to the bellow's convolutions.
- Selection** The Stourflex range of Double Tied stainless steel lateral expansion joints are designed to be used on a wide range of industrial applications. Check that the correct lateral 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 lateral expansion joints are being installed to accommodate the total amount of movement on the system.
- Installation** When lifting or moving double tied stainless steel lateral expansion joints into position they must be fully supported over their entire length. During installation they must be fully supported over their entire length to prevent damage to the bellows convolutions caused by excess movement. Lateral expansion joints are normally installed in changes in pipework direction. Lateral expansion joints should be fitted at their correct installation length. They should not be extended or compressed. Cold pull can be applied as and when required. If a lateral expansion joint has been supplied with internal flow sleeves, 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. Lateral expansion joints require anchors and guides to ensure their correct performance. For further details on the use of lateral expansion joints see guidance notes.

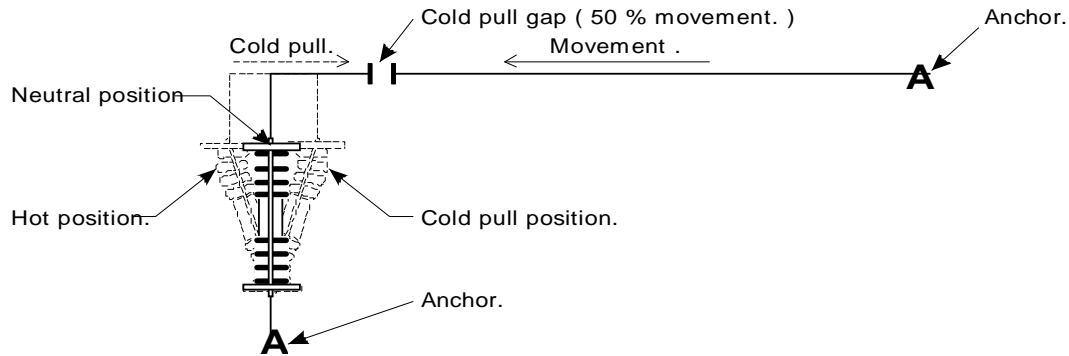
Typical examples where double tied stainless steel lateral expansion joints are used to accommodate thermal expansion in pipework.





Installation, Operation and Maintenance Instructions for Double Tied Stainless Steel Lateral Expansion Joints Continued

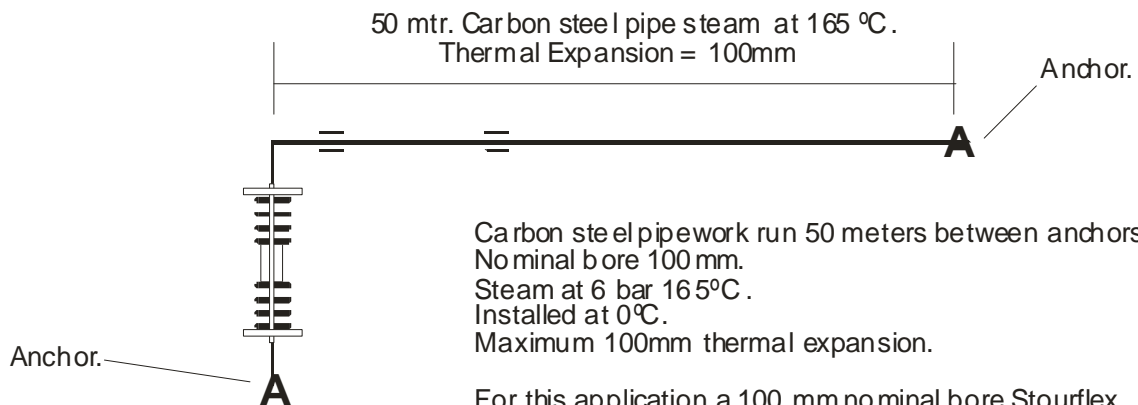
Installation Continued Pipework should be correctly aligned with guides being installed to prevent buckling whilst allowing movement to be directed into the axial expansion joint. Details are given below for 1st and 2nd guide spacing. Remaining pipe guides should be installed as per specification or details given in guidance notes.



Test Pressure If a hydraulic pressure test is to be carried out on a system containing lateral 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 lateral expansion joint being installed. A visual inspection of the double tied lateral expansion joint and associated pipework should be carried out during and after the test to ensure the installation is operating correctly.

Anchoring Double tied lateral 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 lateral expansion joints being installed.

Example



For this application a 100 mm nominal bore Stourflex **Type JP120** double tied stainless steel lateral expansion joint should be selected. Movement capability +/-50mm (100mm total) lateral movement.

Maintenance When properly installed and used at their correct operating temperature and pressure, double tied stainless steel lateral 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.