### SPRING SWAY BRACE UNITS

**GENERAL DESCRIPTION**

**INSTALLATION INSTRUCTIONS**

<table>
<thead>
<tr>
<th>Rev</th>
<th>Date</th>
<th>By</th>
<th>Appv By</th>
<th>Pages</th>
<th>Rev</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>09.03.01</td>
<td>NAS</td>
<td>BD</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

---

**dutramex**

pijpbevestigingstechniek

---

WITCH Pipe Suspension Equipment
Description

The Carpenter & Paterson spring sway brace has been designed in six sizes related to specific pipe sizes. For normal application it is permissible to select on the basis of pipe sizes and loads but when dealing with complex situations, the unit should be selected on a calculated basis.

The amount of energy required to control the pipework should be proportional to the mass of the pipework. Factors such as the amplitude, frequency or vibration, the nature of the vibration, and the angle of approach of the sway brace from the axis of movement should all be considered.

The unit comprises of a pre-loaded spring which can be extended or compressed in order to give increasing resistance in both directions.

The increase in resistance overcomes the dynamic forces generated by the equipment, thereby damping vibrations, opposite sway, and absorbing shock forces.

All units have 75mm travel in both tension and compression direction.

Standard Size range: 1 to 6
Preset Loads: 23 Kg to 820 Kg
Maximum Force: 90 Kg to 3270 Kg
**Standard Design Features**

- Compact single spring design suitable for use in a confined space.
- All units have 75mm travel in either direction.
- Vibration is opposed with an instantaneous counterforce returning the pipe to its normal position.
- A single energy-absorbing pre-loaded spring provides two way action.
- Rod coupling allows limited spring rate adjustment.
- Standard Finish – green enamel.
- SB 45 Sway Brace and Vibration Control Unit is shipped ready for installation.

**Optional Features**

1. Can be supplied galvanised with plastic coated spring.
2. Larger sizes can be custom-designed to suit clients requirements.

**Installation and Adjustment**

The Sway Brace Unit is shipped ready for installation.

The unit should always be in the neutral/zero loading position when the pipework system is Hot and operating. If it is not, the sway brace should be adjusted to the neutral position by rotating the coupling until it is in light contact with the casing plate of the unit.

When correct tension adjustments are complete, the Sway Brace exerts no forces on the piping system in its operating (Hot) position.

Under shut down conditions, the Sway Brace allows the piping systems to assume its Cold position. It exerts a nominal cold strain force equal to the pre-load force plus the amount of movement from the Hot to Cold position times the spring rate of the particular size of the Spring Sway Brace Unit.

---

**DUTRAMEX BV**

**P.O. Box 225**

4140 AE Leerdam The Netherlands

Tel. +31 (0)345 614011  
Fax  +31 (0)345 619525  
E-mail : [info@dutramex.com](mailto:info@dutramex.com)