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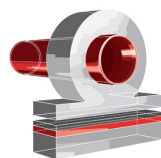
SPRING SWAY BRACE UNITS

GENERAL DESCRIPTION

incorporating

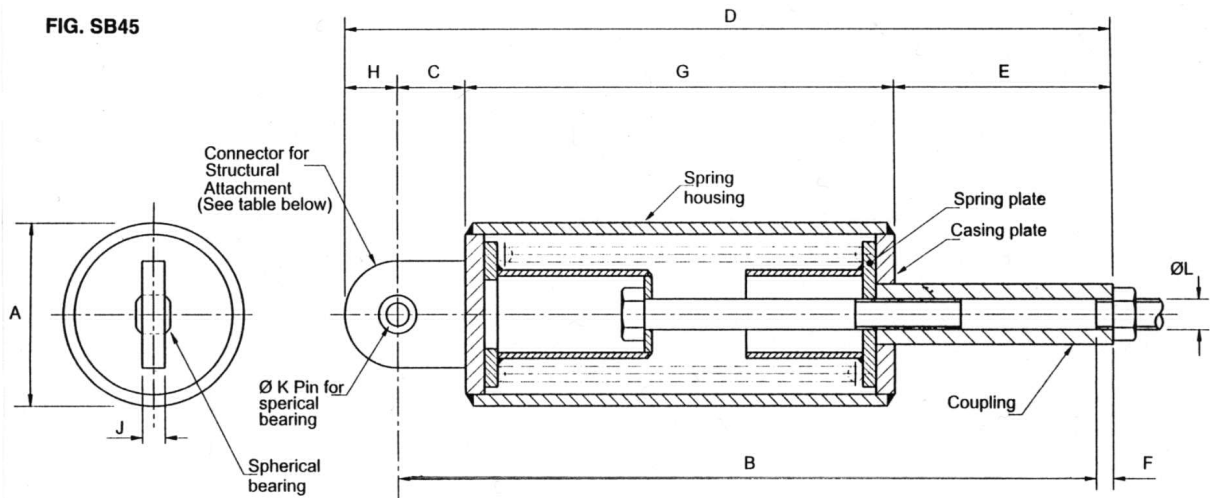
INSTALLATION INSTRUCTIONS

Rev	Date	By	Appv By	Pages	Rev
0	09.03.01	NAS	BD	-	



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SWING SWAY BRACE (FIG SB45) - GENERAL DESCRIPTION AND INSTALLATION



SPRING SWAY BRACE

Size	Pipe Size	Preload Kg	Spring Rate Kg mm	Max Force kg	L	PIN DIA K	Plate Thick J	A	Rod Take Out B	C	D	E	F	G	H	Use with Structural Attachment
1	50-90	23	0.89	90	20	12	12	115	345	42	400	100	25	225	30	
2	100-200	68	2.68	270	24	12	12	115	360	42	415	120	25	225	30	RSB 15
3	225-600	204	8.04	815	24	12	12	115	450	42	505	150	25	280	30	
4	225-600	400	16.07	1630	30	20	12	168	430	58	515	140	40	270	45	
5	225-600	614	24.48	2450	36	20	20	168	470	58	575	150	50	312	54	RSB 55
6	225-600	820	32.66	3270	36	20	20	168	520	58	625	150	50	362	54	

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 3270Kg

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.

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