

SINGLE HINGE FLANGED

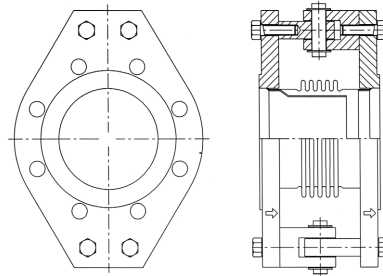
TYPE : SHF/16/002

DESIGN CONDITIONS

Max. working pressure 16 Bar g.
 Temperature Range -20 to 400°C
 Test Pressure 24 Bar g.
 Design Code EJMA

CONSTRUCTION MATERIALS

Bellows 321 Stainless Steel
 Flanges Carbon Steel, Zinc Plated
 Inner Sleeve 321 Stainless Steel
 Hinges Carbon Steel, Zinc Plated



UNIT IDENTIFICATION:

Manufacturer, Size, Country of Origin, Date Stamp, Type No.

SPECIFICATION

Thermosel type SHF/16/002 restrained angular movement bellows expansion joint. High grade stainless steel bellows with carbon steel zinc plated flanges drilled to BS4504-PN16. Unit supplied with integral carbon steel zinc plated hinge bracketry incorporating angular limit safety mechanism complete with stainless steel internal flow sleeves. Designed to EJMA (Expansion Joint Manufacturing Association).

TECHNICAL DATA

NOMINAL SIZE	PIPE DIAMETER O.D	PART NUMBER	ALLOWABLE ANGULATION	OVERALL LENGTH	ANGULAR SPRING RATE
mm	mm	SHF/___/16/002/PN16	+ or - DEG	mm	NM/DEG
40*	48.3	SHF/0040/16/002/PN16	5	140	7.3
50*	60.3	SHF/0050/16/002/PN16	5	140	7.3
65*	76.1	SHF/0065/16/002/PN16	5	140	13.5
80	88.9	SHF/0080/16/002/PN16	5	140	20.5
100	114.3	SHF/0100/16/002/PN16	5	140	40
125	139.7	SHF/0125/16/002/PN16	6.5	200	70
150	168.3	SHF/0150/16/002/PN16	6.5	200	114
200	219.1	SHF/0200/16/002/PN16	7	240	178
250	273	SHF/0250/16/002/PN16	7	250	324
300	323.9	SHF/0300/16/002/PN16	7	250	520

* Not fitted with internal flow sleeves.

Note - Spring Rate Tolerance +/- 25%

CONSTRUCTION

This expansion joint is designed to permit angular rotation in one plane only by the use of high tensile pins through hinge plates, bolted to the flanges. The hinges and pins are designed to restrain the thrust of the expansion joint due to internal pressure.

TYPICAL APPLICATIONS

Angular bellows are suitable to take pipework movement due to thermal expansion/contraction and/or building settlement. Typical service includes LTHW, MTHW, HPHW and steam.

GENERAL INFORMATION

This type of expansion joint is used in sets of two or three or with gimbal expansion joints (eg. SGF type). Guides should be positioned to allow freedom of movement of the pipework and also prevent sag and pressure deflection. Cold draw can be applied on installation. Recommendations contained in our literature on correct installation of expansion joints should be followed. Particular care should be taken during installation to make sure that flow arrows are in the right direction.

ALTERNATIVES

Where an SHF/16/002 is not suitable please contact *Pickup Bellows Ltd* to discuss the alternatives including larger sizes, higher pressures, greater movements or bespoke design.