

SINGLE GIMBAL FLANGED

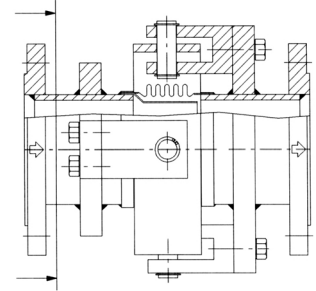
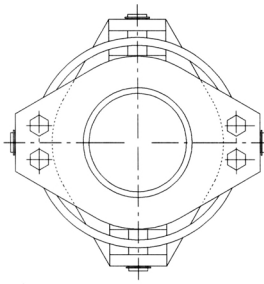
TYPE : SGF/16/002

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
 Inner Sleeve 321 Stainless Steel
 Hinge / Gimbal Carbon Steel



UNIT IDENTIFICATION:

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

SPECIFICATION

Thermosel type SGF/16/002 gimbal bellows expansion joint. High grade corrosion resistant stainless steel bellows with stainless steel bellows with carbon steel flanges drilled to BS4504-PN16. Unit supplied with integral floating gimbal ring (allows angular movement in two planes) attached by means of hinge link assembly 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	SGF/___/16/002/PN16	+ or - DEG	mm	NM/DEG
40*	48.3	SGF/0040/16/002/PN16	5	300	7.3
50*	60.3	SGF/0050/16/002/PN16	5	300	7.3
65	76.1	SGF/0065/16/002/PN16	5	300	13.5
80	88.9	SGF/0080/16/002/PN16	5	300	20.5
100	114.3	SGF/0100/16/002/PN16	5	300	40
125	139.7	SGF/0125/16/002/PN16	6.5	390	70
150	168.3	SGF/0150/16/002/PN16	6.5	390	114
200	219.1	SGF/0200/16/002/PN16	7	445	178
250	273	SGF/0250/16/002/PN16	7	480	324
300	323.9	SGF/0300/16/002/PN16	7	480	520

* Not fitted with internal flow sleeves.

Note - Spring Rate Tolerance +/- 25%

CONSTRUCTION

This expansion joint is designed with a floating gimbal structure which contains the generated pressure thrust. The gimbal structure permits angular rotation in any plane.

TYPICAL APPLICATIONS

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

GENERAL INFORMATION

This type of expansion joint is used in pipework in pairs to absorb a combination of angular and lateral movement. Alternatively they can be used with an additional angular joint (Type SHF) to create a three pin system. 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 SGF/16/002 is not suitable please contact *Pickup Bellows Ltd* to discuss the alternatives including larger sizes, higher pressures, greater movements or bespoke design.