

JF-850SG Universal Settlement Joint**Description**

Two multiply stainless steel bellows connected by intermediate tube, welded to tube end and flanges and with internal sleeve and tie-rods. Designed to accommodate axial and lateral movement of pipeline in high working pressure and temperature.

Feature

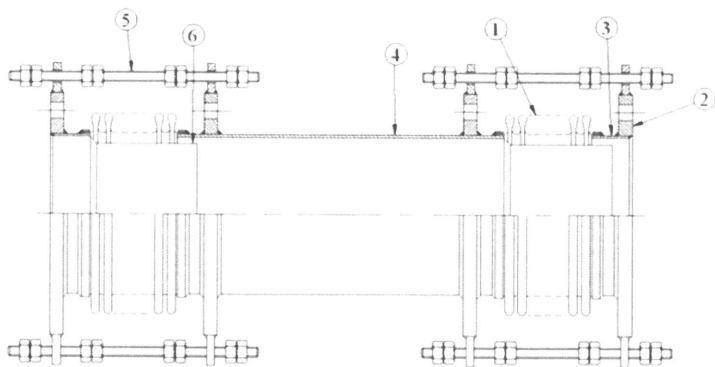
Size Range: 1" (DN25) ~ 8" (DN200)

Design Pressure: 16 bar at 20 °C (70 °F)

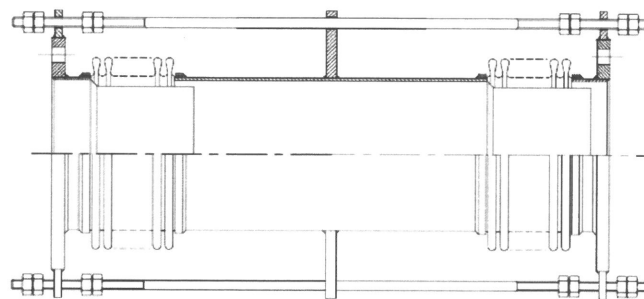
Life Cycles > 1,000 times

CONSTRUCTION

Item	Part	850SGC	Material
1	Bellows	◎	SS304/SS316
2	Flange	◎	Carbon Steel SS304/SS316
3	Tube End	◎	Carbon Steel SS304/SS316
4	Connecting Tube	◎	Carbon Steel SS304/SS316
5	Tie-Rods	◎	Carbon Steel SS304/SS316
6	Internal Sleeve	◎	SS304/SS316



Tie-rods type (two sections) : DN20 & DN25



Tie-rods type (One section) : DN32 to DN200

SPECIFICATION for BS 4504 PN16 Drilling Flanges Fitted

Nominal Bore		Bellows		Axial ±50mm Lateral ±50mm		Effective Area	Note
		O.D.	CORR.	Total Length	Axial Spring Rate	Lateral Spring Rate	
mm	inch	mm	mm	mm	N/mm	N/mm	cm ²
20	3/4	32.7	40x2	1000	7.9	0.1	6
25	1	37.5	36x2	1000	11.7	0.1	8
32	1 1/4	47.0	36x2	1000	12.7	0.1	14
40	1 1/2	57.0	32x2	1000	18.3	0.1	20
50	2	72.0	24x2	1000	27.0	0.1	32
65	2 1/2	90.0	20x2	1000	45.8	0.3	49
80	3	103.0	20x2	1000	49.9	0.5	66
100	4	138.0	15x2	1000	65.8	1.2	124
125	5	163.0	15x2	1100	72.6	1.4	177
150	6	198.0	14x2	1100	94.7	2.7	261
200	8	248.0	13x2	1100	103.0	4.6	419

JF-850SG Lateral Settlement Joint (Double multiply bellows for medium pressure)**Description**

Two multiply stainless steel bellows connected by intermediate tube, welded to tube end and flanges and with internal sleeve and tie-rods. Designed to accommodate lateral movement of pipeline in medium working pressure and temperature.

Feature

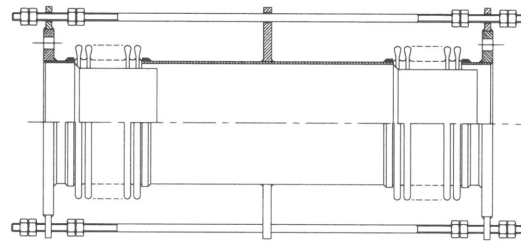
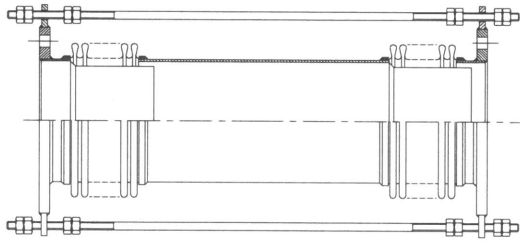
Size Range: 3/4" (DN20) ~ 24" (DN600)

Design Pressure: 16bar at 200 °C (390 °F)

Life Cycles > 1,000 times

CONSTRUCTION

Item	Part	850SG	Material
1	Bellows	☉	SS304/SS316
2	Internal Sleeve	☉	SS304/SS316
3	Tube End	☉	Carbon Steel/SS304/SS316
4	Seal Ring	☉	SS304/SS316
5	Flange	☉	Carbon Steel/SS304/SS316
6	Bolts	☉	Carbon Steel/SS304
7	Nuts	☉	Carbon Steel/SS304

**SPECIFICATION for BS 4504 PN16 Drilling Flanges Fitted**

Nominal Bore		Bellows		Lateral ±50mm		Lateral ±75mm		Lateral ±100mm		Lateral ±150mm		Effective Area	Note
		O.D.	CORR.	Total Length	Lateral Spring Rate	Total Length	Lateral Spring Rate	Total Length	Lateral Spring Rate	Total Length	Lateral Spring Rate		
mm	inch	mm	mm	mm	N/mm	mm	N/mm	mm	N/mm	mm	N/mm	cm ²	
20	3/4	32.7	5	500	0.4	600	0.3	750	0.1	1000	0.1	6	
25	1	37.5	5	500	0.4	600	0.3	750	0.1	1000	0.1	8	
32	1 1/4	47.0	5	500	0.8	650	0.4	800	0.2	1050	0.1	13	
40	1 1/2	57.0	5	550	1.1	700	0.6	850	0.3	1150	0.2	20	
50	2	72.0	5	550	2.1	700	1.0	850	0.6	1150	0.3	32	
65	2 1/2	90.0	5	550	4.8	700	2.3	850	1.4	1150	0.6	49	
80	3	103.0	5	600	5.5	800	2.4	950	1.5	1300	0.7	66	
100	4	136.6	5	650	9.6	850	4.5	1050	2.6	1400	1.3	122	
125	5	162.0	5	750	9.8	950	5.2	1150	3.2	1600	1.4	176	
150	6	196.0	6	750	17.1	950	8.9	1150	5.4	1600	2.4	258	
200	8	246.0	6	800	23.4	1000	12.7	1250	7.2	1700	3.4	415	
250	10	308.0	7	800	49.1	1050	22.9	1300	13.2	1750	6.4	658	
300	12	360.0	7	850	55.1	1100	27.2	1350	16.1	1850	7.6	909	
350	14	416.8	4	850	94.0	1100	45.3	1350	26.5	1850	12.3	1171	
400	16	472.4	5	900	156.5	1100	87.4	1350	50.4	1850	22.9	1516	
450	18	523.2	5	950	184.6	1200	95.5	1450	58.1	1950	28.0	1887	
500	20	580.0	4	1000	201.8	1300	98.7	1600	58.3	2100	30.3	2324	
600	24	681.6	5	1050	254.9	1350	126.7	1650	75.5	2150	39.6	3274	

Other movements, sizes, and pressure expansion joint available on request