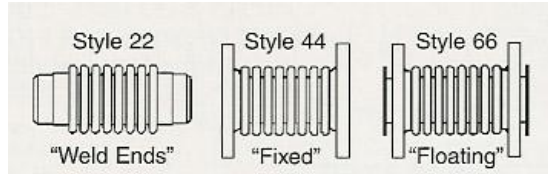


Matchless Bellows Expansion Joints-Short Style



SLP-Short Low Pressure

SMP-Short Medium Pressure

SHP-Short High Pressure

DS-Duct Short

Short Style Specification Chart

Size (In.)	Series	PSI	Style 44 & 66		Style 22		Axial		Lateral	
			O.A.L.	Weight	O.A.L.	Weight	Force (lbs./in.)	Move - ment (in.)	Force (lbs./in.)	Move - ment (in.)
2	SLP	50	6	8	6	1	180	0.8	305	0.1
	SMP	150		8		1.1	180		345	
	SHP	300		8.2		1.3	600		1050	
2-1/2	SLP	50	6	10.5	7	1.8	140	0.8	500	0.1
	SMP	150		10.5		1.9	460		1506	
	SHP	300		10.7		2	840		2525	
3	SLP	50	6	13.5	9	2.6	280	0.8	866	0.1
	SMP	150		13.7		2.7	500		944	
	SHP	300		14		2.9	1275		2610	
3-1/2	SLP	50	6	14.2	9	2.8	325	0.8	1075	0.1
	SMP	150		14.5		3	726		1400	
	SHP	300		15		3.3	1396		3152	

4	SLP SMP SHP	50 15 0 30 0	7	15.7 16 16.2	9	3.5 3.8 4	550 699 1135	0.8	1500 1550 3480	0.1
5	SLP SMP SHP	50 15 0 30 0	8	21 21.7 22.2	10	6 6.8 7.3	597 775 1500	1.3	2400 2400 7800	0.1
6	SLP SMP SHP	50 15 0 30 0	8	22.2 25.2 27	10	8.5 9.5 10	600 978 2000	1.3	2200 2700 7900	0.2 0.1 0.1
8	SLP SMP SHP	50 15 0 30 0	8	48.5 53.7 56.7	10	14.5 16 21	625 1060 2900	1.6	2608 6026 8200	0.2 0.1 0.1
10	SLP SMP SHP	50 15 0 30 0	8	53.7 58.5 63	10	20.5 22 26.8	645 1712 5065	1.6	3040 6275 11375	0.2 0.1 0.1
12	SLP SMP SHP	50 15 0 30 0	9	87 89 92	10	23 26.3 28.5	615 1428 6310	1.6	3494 6376 18830	0.1
14	SLP SMP SHP	50 15 0 30 0	9	103 107 110	12	26 27.8 30	590 1500 7302	1.6	5899 9970 21650	0.1
16	SLP SMP SHP	50 15 0 30 0	9	138 143 147	12	29 33 36	604 2100 6100	1.6	9334 14890 38115	0.1

18	SLP SMP SHP	50 15 0 30 0	10	156 161 166	12	33 39 43	615 2800 6080	1.8	11350 21455 61400	0.1
20	SLP SMP SHP	50 15 0 30 0	10	162 167 172	14	38 41 49	620 3062 6143	1.8	13600 24010 68350	0.1
22	SLP SMP SHP	50 15 0 30 0	10	205 210 214	14	40 43 47	680 3100 5000	1.8	17115 30950 71600	0.1
24	SLP SMP SHP	50 15 0 30 0	11	222 225 230	14	46 49 50	815 3400 9500	1.8	21300 42750 102700	0.1
30 36 40	DS	50	11	377 497 602	14	56 67 72	960 1100 1490	1.8	175000 248000 380000	0.2
42 46 48	DS	50	11	641 750 810	14	84 98 170	1680 1742 3600	2.0	410000 470000 500000	0.2
50 52 54	DS	25	11	900 1008 1061	14	179 210 218	2500 3215 3605	2.0	174900 318000 604000	0.2
60 66 72	DS	25	11	1347 1591 1799	14	242 283 309	4200 4400 4750	2.0	780000 1300500 2800300	0.1
84 96 108	DS	15	11	2137 3916 4200	14	395 460 491	5478 6300 7210	2.0	4610000 1210000 0 1840000 0	0.1
126 132 144	DS	15	11	4400 4700 5200	14	565 600 660	8005 8715 9430	2.0	1950000 0 2100050	0.08

									0	
									2500010	
									0	

Design movements based on 80% axial compression, 20% extension and total lateral offset

Matchless Metal Bellows Expansion Joints Data

- Metal expansion joints are primarily used to absorb movements in piping caused by thermal changes. Our designs incorporate the latest technology to produce a premium product.
- Unaflex "Matchless" expansion joint bellows are produced from fully annealed stainless steel sheet rolled into a tube and seam welded.
- Service: Units are capable of handling Vacuum to 300 PSI.
- Standard bellows: 321 stainless steel. Other alloys are available to withstand your toughest applications.
- Standard fittings: welding nipples, fixed and floating flanges.
- Standard sizes: 2" through 144".

Pressure Thrust

When a bellows is pressurized, it reacts causing a load equal to its effective area X working pressure along its longitudinal axis. These loads must be considered when designing the system arrangement and appropriate anchors.

	Eff. area		Eff. area		Eff area
Size	Sq.In.	Size	Sq.In.	Size	Sq.In.
2	6.3	18	290	52	2290
2-1/2	9.6	20	354	54	2460
3	12.0	22	426	60	3025
4	20	24	500	66	3635
5	30.0	30	775	72	4300
6	43.0	36	1090	84	5800
8	72.0	40	1350	96	7550
10	110	42	1470	108	9510
12	150	46	1775	126	13200
14	180	48	1940	132	14110
16	234	50	2125	144	16750

Temperature

Elevated temperatures reduce both rated movement and pressure capabilities. To compensate multiply both rated movement and rated pressure by the temperature compensating factor shown in the chart below.

Temperature °F	Temperature Compensating Factor	Temperature °F	Temperature Compensating Factor
Room Temp.	1.00	600	.74
200	.86	700	.70
300	.80	800	.66
400	.78	901	.62
500	.77	1000	.60