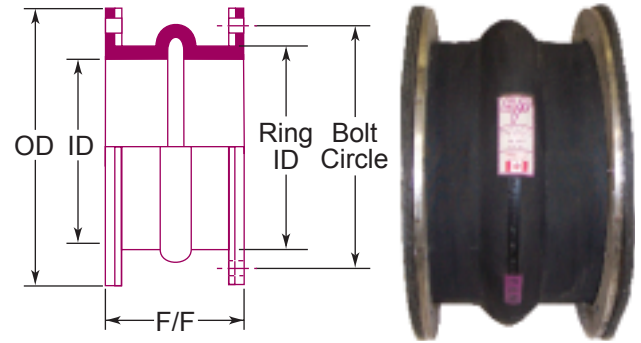


# SJ-21

## EXPANSION JOINT

The SJ-21 is the industry standard spool-type expansion joint. The SJ-21 is available in configurations

from zero to four arches - depending on movement requirements - and 3 standard pressure ratings in a variety of elastomers. This hand-built expansion joint can be adapted to the most unusual or difficult applications. Available options include filled arches to eliminate settling of solids in the arch, Teflon liners for severe chemical service, soft cuff ends for slip-on installation, and concentric or eccentric tapered ends for connecting different pipe sizes.



ID (in)	Flange OD (in)	Bolt Circle (in)	Number of Holes	Diameter Holes (in)	Ring ID	F/F per Arch (in)				Pressure (psi)			Compression (in)	Extension (in)	Lateral (in)	Est. Joint Weight (lb)	Est. Rings Weight (lb)
										SR	LP	HP					
*1	4 1/4	3 1/8	4	5/8	2 3/8	6	10	12	14	165	15	200	1/4	1/8	1/4	2	2.25
*1 1/4	4 5/8	3 1/2	4	5/8	2 5/8	6	10	12	14	165	15	200	1/4	1/8	1/4	2.5	2.25
*1 1/2	5	3 7/8	4	5/8	2 7/8	6	10	12	14	165	15	200	1/4	1/8	1/4	3	3
2	6	4 3/4	4	3/4	3 5/8	6	10	12	14	165	15	200	1/2	1/4	1/2	4	4
2 1/2	7	5 1/2	4	3/4	4 1/8	6	10	12	14	165	15	200	1/2	1/4	1/2	4.5	4.5
3	7 1/2	6	4	3/4	4 5/8	6	10	12	14	165	15	200	1/2	1/4	1/2	5.5	6
4	9	7 1/2	8	3/4	5 7/8	6	10	12	14	165	15	200	1/2	1/4	1/2	8	7.5
5	10	8 1/2	8	7/8	6 7/8	6	10	12	14	165	15	200	1/2	1/4	1/2	9	8
6	11	9 1/2	8	7/8	7 7/8	6	10	12	16	165	15	200	1/2	1/4	1/2	11	9
8	13 1/2	11 3/4	8	7/8	9 7/8	6	10	14	16	140	15	190	3/4	3/8	1/2	15	12
10	16	14 1/4	12	1	12 1/8	8	12	14	16	140	15	190	3/4	3/8	1/2	23	16
12	19	17	12	1	14 1/2	8	12	14	16	140	15	190	3/4	3/8	1/2	34	22
14	21	18 3/4	12	1 1/8	16 1/2	8	12	16	20	85	15	130	1-1/16	9/16	1/2	40	25
16	23 1/2	21 1/4	16	1 1/8		8	12	16	20	65	15	110	1-1/16	9/16	1/2	47	27
18	25	22 3/4	16	1 1/4	20 1/2	8	12	16	20	65	15	110	1-1/16	9/16	1/2	56	29
20	27 1/2	25	20	1 1/4	22 5/8	8	12	16	20	65	15	110	1-1/16	9/16	1/2	67	35
22	29 1/2	27 1/4	20	1 3/8	24 5/8	10	14	18	22	65	15	110	1-1/16	9/16	1/2	70	44
24	32	29 1/2	20	1 3/8	26 5/8	10	14	18	22	65	15	110	1-1/16	9/16	1/2	79	46
26	34 1/4	31 3/4	24	1 3/8	28 7/8	10	14	18	22	55	15	90	1-1/16	9/16	1/2	100	50
28	36 1/2	34	28	1 3/8	30 7/8	10	14	18	22	55	15	90	1-1/16	9/16	1/2	102	58
30	38 3/4	36	28	1 3/8	32 7/8	10	14	18	22	55	15	90	1-1/16	9/16	1/2	117	55
34	43 3/4	40 1/2	32	1 5/8	37	10	14	18	22	55	15	90	1-1/16	9/16	1/2	112	91
36	46	42 3/4	32	1 5/8	39	10	14	18	22	55	15	90	1-1/16	9/16	1/2	143	99
40	50 3/4	47 1/4	36	1 5/8	43	10	14	18	22	55	15	90	1-1/16	9/16	1/2	173	108
42	53	49 1/2	36	1 5/8	45 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	193	110
44	55 1/4	51 3/4	40	1 3/4	47 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	198	136
48	59 1/2	56	44	1 5/8	51 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	211	154
50	61 3/4	58 1/4	44	1 7/8	53 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	240	163
54	66 1/4	62 3/4	44	2	57 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	265	185
56	68 3/4	65	48	2	59 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	288	203
60	73	69 1/4	52	2	63 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	309	215
62	75 3/4	71 3/4	52	2	65 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	325	230
66	80	76	52	2	69 1/4	12	14	18	24	55	15	80	1-1/16	9/16	1/2	350	255
72	86 1/2	82 1/2	60	2	75 1/4	12	14	18	24	45	15	70	1-1/16	9/16	1/2	385	300
78	93	88 3/4	60	2 1/8	81 1/4	12	14	18	24	45	15	70	1-1/16	9/16	1/2	410	325
84	99 3/4	95 1/2	64	2 1/4	87 1/2	12	14	18	24	45	15	70	1-1/16	9/16	1/2	435	350
96	113 1/4	108 1/2	68	2 1/2	99 3/8	12	16	18	24	45	15	70	1-1/16	9/16	1/2	485	400
102	120	114 1/2	72	2 5/8	-	12	16	20	24	45	15	70	1-1/16	9/16	1/2	535	450
108	126 3/4	120 3/4	72	2 5/8	-	12	16	20	24	45	15	70	1-1/16	9/16	1/2	585	500

1. - Lengths shown are for new design. Replacement parts should be ordered to the exact F/F dimension. \*Items are not normally supplied in multiple "open" arches, as squirm can occur. Minimum length of "face to face" can be reduced by eliminating the arch. Number of arches required depends upon anticipated total movement of the expansion joint.

2 - Multiple arch movement = single arch movement x number of arches. "Filled Arch" construction reduces movement by 50%. \*Items are normally furnished with filled arches and movement shown should be reduced accordingly.

3 - Flange dimensions shown are in accordance with 125/150 pound standards of ANSI B16.1, B16.5, AWWA C-207 Table 3 Class E; AWWA C-207 Table 1 and 2 Class D. Retaining ring width is 3/8" in all sizes. Flange thickness is EVR standard.

4 - Flange drilling is also available in all international standards or custom applications. For more information, contact EVR.

**Notes:** Control unit assemblies are recommended for all applications. To ensure correct length, customer should provide width of mating flange or flange specification.

\*Items are normally furnished with filled arches and movement shown should be reduced accordingly.