

# J-10 Concentric Reducer Expansion Joint

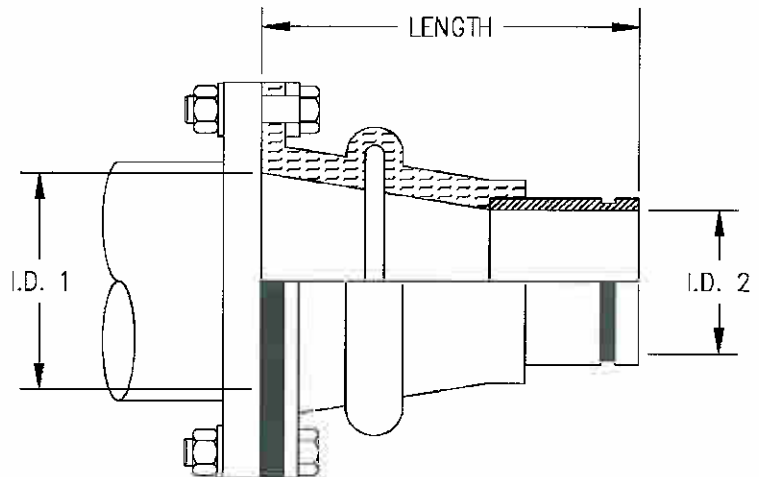
## Grooved Ends



The J-10 Concentric Reducer Expansion Joint is now available with groove ends on the downstream side.

This product is used primarily on pumps to reduce stress on pump housing, protect against start-up surges and reduce vibration. They are available in sizes shown below.

Red Valve now makes available these reducer expansion joints with one end flanged and the other end manufactured with a grooved end fitting. This adds 5% to the cost of the unit. The face-to-face dimension shown increases 25% maximum because of the length of the grooved end coupling.



### Dimensions and Movement J-10 Concentric Reducers

Joint Size I.D. 1 x I.D. 2 x Length	Open Arch Movement Capability: From Neutral Position						Filled Arch Movement Capability: From Neutral Position					
	Axial Compress	Axial Extend	Lateral Deflect	Angular Deflect	Degrees Torsion	Thrust Factor	Axial Compress	Axial Extend	Lateral Deflect	Angular Deflect	Degrees Torsion	Thrust Factor
*2 x 1 x 6	1/2"	1/4"	1/2"	18.4°	3°	12.69	1/4"	1/8"	9/32"	9.5°	1.8°	3.14
*2 x 1-1/2 x 6	1/2"	1/4"	1/2"	15.9°	3°	14.32	1/4"	1/8"	9/32"	8.1°	1.8°	3.14
2-1/2 x 2 x 6	1/2"	1/4"	1/2"	12.5°	3°	17.87	1/4"	1/8"	9/32"	6.4°	1.8°	4.97
3 x 1 x 6	1/2"	1/4"	1/2"	12.5°	3°	17.87	1/4"	1/8"	9/32"	6.4°	1.8°	7.06
3 x 2 x 6	1/2"	1/4"	1/2"	11.3°	3°	19.79	1/4"	1/8"	9/32"	5.7°	1.8°	7.06
4 x 2 x 6	1/2"	1/4"	1/2"	9.5°	3°	23.92	1/4"	1/8"	9/32"	4.8°	1.8°	12.57
4 x 2-1/2 x 6	1/2"	1/4"	1/2"	8.8°	3°	26.15	1/4"	1/8"	9/32"	4.4°	1.8°	12.57
4 x 3 x 6	1/2"	1/4"	1/2"	8.2°	3°	28.46	1/4"	1/8"	9/32"	4.1°	1.8°	12.57
5 x 4 x 6	1/2"	1/4"	1/2"	6.4°	3°	38.70	1/4"	1/8"	9/32"	3.2°	1.8°	19.63
6 x 3 x 6	1/2"	1/4"	1/2"	6.4°	3°	38.70	1/4"	1/8"	9/32"	3.2°	1.8°	28.27
6 x 4 x 6	1/2"	1/4"	1/2"	5.7°	3°	44.41	1/4"	1/8"	9/32"	2.9°	1.8°	28.27
6 x 5 x 6	1/2"	1/4"	1/2"	5.2°	3°	50.51	1/4"	1/8"	9/32"	2.6°	1.8°	28.27
8 x 4 x 6	3/4"	3/8"	1/2"	7.1°	3°	63.49	3/8"	3/16"	9/32"	3.6°	1.8°	50.27
8 x 5 x 6	3/4"	3/8"	1/2"	6.6°	3°	70.76	3/8"	3/16"	9/32"	3.6°	1.8°	50.27
8 x 6 x 6	3/4"	3/8"	1/2"	6.1°	3°	78.42	3/8"	3/16"	9/32"	3.1°	1.8°	50.27
10 x 6 x 8	3/4"	3/8"	1/2"	5.3°	3°	94.90	3/8"	3/16"	9/32"	2.8°	1.8°	78.54
10 x 8 x 6	3/4"	3/8"	1/2"	4.8°	3°	112.95	3/8"	3/16"	9/32"	2.4°	1.8°	78.54
12 x 6 x 12	3/4"	3/8"	1/2"	4.8°	3°	113.10	3/8"	3/16"	9/32"	2.4°	1.8°	113.10
12 x 8 x 10	3/4"	3/8"	1/2"	4.3°	3°	132.57	3/8"	3/16"	9/32"	2.2°	1.8°	113.10
12 x 10 x 8	3/4"	3/8"	1/2"	3.9°	3°	153.76	3/8"	3/16"	9/32"	1.9°	1.8°	113.10
14 x 8 x 14	3/4"	3/8"	1/2"	3.9°	2°	177.09	3/8"	3/16"	9/32"	1.9°	1.2°	153.94
14 x 10 x 8	3/4"	3/8"	1/2"	3.6°	2°	201.46	3/8"	3/16"	9/32"	1.8°	1.2°	153.94
14 x 12 x 8	3/4"	3/8"	1/2"	3.3°	2°	277.40	3/8"	3/16"	9/32"	1.7°	1.2°	153.94
16 x 8 x 12	3/4"	3/8"	1/2"	3.3°	2°	227.40	3/8"	3/16"	9/32"	1.7°	1.2°	201.06
16 x 12 x 8	3/4"	3/8"	1/2"	3.1°	2°	254.91	3/8"	3/16"	9/32"	1.5°	1.2°	201.06

\*Filled Arch Only

Longer face-to-face or size not listed, consult factory.