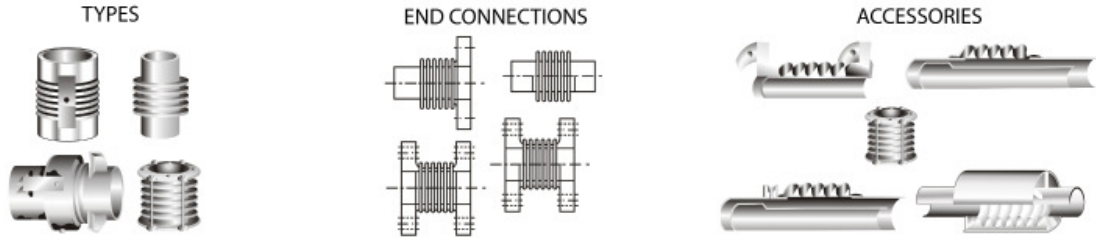


84- / 96-INCH NOMINAL DIAMETER



D I A M E T E R	P R E S S U R E	OVERALL LENGTH AND WEIGHT						NON-CONCURRENT MOVEMENTS			SPRING RATES			
		FLANGED ENDS		WELD ENDS		COMBINATION ENDS		AXIAL	L A T E R A L	A N G U L A R	A X I A L	L A T E R A L	A N G U L A R	T O R S I O N A L
		O.A.L	WT.	O.A.L	WT.	O.A.L	WT.							
		PSIG	IN	LB	IN	LB	IN	LB	IN	IN	DEG	LB/IN	LB/IN	IN-LB/DEG
KG/CM <sup>2</sup>	MM	KG	MM	KG	MM	KG	MM	MM	GRAD	KG/MM	KG/MM	N-M/GRAD	N-M/GRAD	
84	45	14	2089	16	332	15	1210	2.82	0.09	4	4716	820804	76404	169.9604
	3.1	356	950	406	151	381	550	71.6	2.29	4	84	14689	7770.3	172.8497
Effective Area		22	2171	24	414	23	1292	5.65	0.35	8	2358	102601	38202	84.9802
16,781 in <sup>2</sup>		559	987	610	188	584	587	144	8.89	8	42	1836	3885.1	86.4249
108,264 cm <sup>2</sup>		30	2252	32	495	31	1374	8.47	0.79	10	1572	30400	25468	56.6535
		762	1024	813	225	787	625	215	20.1	11	28	544	2590.1	57.6166
96	40	14	3400	16	378	15	1889	2.73	0.07	3	5398	1387244	113494	257.6974
	2.8	356	1546	406	172	381	859	69.3	1.78	4	97	24825	11542.3	262.0783
Effective Area		22	3494	24	471	23	1982	5.56	0.29	7	2699	162399	56747	127.8144
19,743 in <sup>2</sup>		559	1588	610	214	584	901	141	7.37	7	48	2906	5771.2	129.9873
125,632 cm <sup>2</sup>		30	3587	32	565	31	2076	8.35	0.67	10	1799	47100	37831	84.9823
		762	1630	814	257	787	944	212	17	11	32	843	3847.4	86.4270

GENERAL NOTES

1. Rated life cycle at 650°F is 3000 cycles for any one tabulated movement.
2. To combine axial, lateral and angular movements, please refer to page 43.
3. To increase cycle life or movements, please refer to graph on page 42.
4. Rated bellows extension is equal to rated axial movement. Provided bellows is precompressed the amount of design extension. Installed O.A.L. will decrease by the amount of precompression.
5. Maximum test pressure: 1.5 X rated working pressure.
6. Bellows rated for 650°F: See page 31 for appropriate flange temperature/pressure ratings.
7. Torsional spring rate data provided only for modeling expansion joints on computer stress programs. Please consult factory for allowable torsional loadings.
8. Overall lengths and weights for unrestrained expansion joints only. Consult factory for information regarding tied, hinged, or gimbal expansion joints.
9. Pressure thrust load applied to adjacent pipe anchors/equipment when unrestrained expansion joints are used.

MATERIALS

**BELLOWS:** A240-T304. Alternate materials available upon request. Refer to page 33.  
**FLANGES:** ASTM A105.  
 40-45 psig Series: 125 lb Lt. Wt. FFSO. Plate flanges and angle flanges available for low pressure systems. Please refer to page 32.  
**PIPE:** ASTM A285-C.  
 40-45 psig Series: 0.375-inch wall.  
**LINERS:** A240-T304.  
**COVERS:** Carbon steel.  
**TIE RODS, HINGES, GIMBALS:** Carbon steel