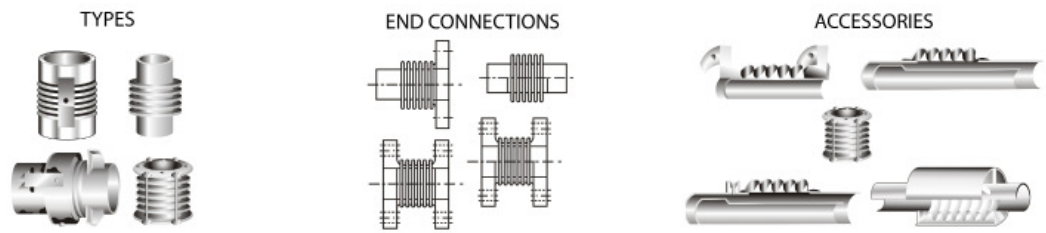


SINGLE EXPANSION JOINTS

60- / 66- / 72-INCH NOMINAL DIAMETER



D I A M E T E R	P R E S S U R E	O V E R A L L L E N G T H A N D W E I G H T						N O N - C O N C U R R E N T M O V E M E N T S			S P R I N G R A T E S			
		F L A N G E D E N D S		W E L D E N D S		C O M B I N A T I O N E N D S		A X I A L	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.	C O M P						
		PSIG	IN	LB	IN	LB	IN	LB	IN	IN	DEG	LB/IN	LB/IN	IN-LB/DEG
KG/CM ²	MM	KG	MM	KG	MM	KG	MM	MM	GRAD	KG/MM	KG/MM	N-M/GRAD	N-M/GRAD x 10 ⁵	
60	60	13	1343	16	236	15	789	2.65	0.11	5	3353	345665	28280	63.0276
	4.2	330	610	406	107	381	359	67.3	2.79	5	60	6186	2876.1	64.0991
Effective Area	3036 in ² 19,587 cm ²	21	1401	24	294	23	848	5.31	0.44	10	1677	40465	14140	31.2608
		533	637	610	134	584	385	135	11.2	11	30	724	1438.0	31.7923
		29	1459	32	353	31	906	8.14	1.03	10	1118	11736	9427	20.7850
		737	663	813	160	787	412	207	26.2	11	20	210	958.7	21.1383
66	55	13	1569	16	260	15	914	2.67	0.1	5	3694	457820	37455	83.8532
	3.8	330	713	406	118	381	415	67.8	2.54	5	66	8193	3809.2	85.2787
Effective Area	3650 in ² 23,550 cm ²	21	1633	24	324	23	978	5.45	0.41	9	1847	53595	18728	41.5901
		533	742	610	147	584	445	1.38	10.4	10	33	959	1904.6	42.2971
		29	1697	32	388	31	1043	8.17	0.94	10	1231	15544	12485	27.6527
		737	771	813	176	787	474	208	23.9	11	22	278	1269.7	28.1228
72	50	13	1775	16	283	15	1029	2.7	0.09	4	4035	591934	48428	108.8247
	3.5	330	807	406	129	381	468	68.6	2.29	5	72	10593	4925.1	110.6748
Effective Area	4321 in ² 27,877 cm ²	21	1845	24	53	23	1099	5.51	0.38	9	2017	69295	24214	53.9756
		533	839	610	160	584	500	140	9.65	9	36	1240	2462.6	54.8932
		29	1915	32	423	31	1169	8.26	0.87	10	1345	20097	16143	35.8877
		737	870	813	192	787	531	210	22.1	11	24	360	1641.7	36.4978

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.
 50-60 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.
 50-60 psig Series: 0.375-inch wall.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel