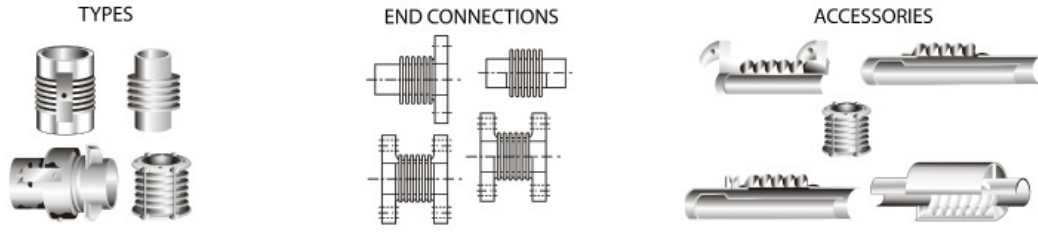


**SINGLE EXPANSION JOINTS**

Effective (Thrust) Area: 886.47 in<sup>2</sup> (5717.73 cm<sup>2</sup>)

**32-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.							
		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 x 10 <sup>5</sup>	
32	50	12	440	16	122	14	281	3.98	0.34	10	549	12811	1346	4.0372
	3.5	305	200	406	55.5	356	128	101	8.64	11	10	229	136.9	4.1059
	50	18	459	22	141	20	300	6.8	0.98	10	329	2641	808	2.4118
	3.5	457	209	559	64.1	508	136	173	24.9	11	6	47	82.2	2.4528
	35	24	478	28	160	26	319	9.62	1.96	10	235	944	577	1.7195
	2.5	610	217	711	72.7	660	145	244	49.8	11	4	17	58.7	1.7487
32	135	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	135	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.26	0.18	8	2531	66771	6215	7.2947
	9.5			406	61.4			57.4	4.57	9	45	1195	632.1	7.4168
	135			22	165			3.96	0.55	10	1446	12459	3552	4.1684
	9.5			559	75			101	14	11	226	223	361.2	4.2393
	135			28	196			5.66	1.13	10	1013	4273	2486	2.9179
	9.5			711	89.1			144	28.7	11	18	76	252.8	2.9675
32	290	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	206	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.11	0.17	7	5074	134238	12495	7.5907
	20.4			406	93.6			53.6	4.32	8	91	2402	1270.7	7.7197
	290			22	265			3.7	0.51	10	2900	25047	7140	4.3375
	20.4			559	120			94	13	11	52	448	726.1	4.4113
	290			28	323			5.28	1.05	10	2030	8591	4998	3.0363
	20.4			711	147			134	26.7	11	36	154	508.3	3.0879

- GENERAL NOTES**
- Rated life cycle at 650°F is 3000 cycles for any one tabulated movement.
  - To combine axial, lateral and angular movements, please refer to page 43.
  - To increase cycle life or movements, please refer to graph on page 42.
  - 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.
  - Maximum test pressure: 1.5 X rated working pressure.
  - Bellows rated for 650°F: See page 31 for appropriate flange temperature/pressure ratings.
  - Torsional spring rate data provided only for modeling expansion joints on computer stress programs. Please consult factory for allowable torsional loadings.
  - Overall lengths and weights for unrestrained expansion joints only. Consult factory for information regarding tied, hinged, or gimbal expansion joints.
  - 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.  
 35-50 psig Series: 125 lb Lt. Wt. FFSSO.  
 For 135 psig and 290 psig Series: Customer to specify actual flanges required.  
 Plate flanges and angle flanges available for low pressure systems. Please refer to page 32.  
**PIPE:** ASTM A285-C.  
 35-50 psig Series: 0.375-inch wall.  
 135 psig Series: 0.375-inch wall.  
 290 psig Series: 0.500-inch wall.  
**LINERS:** A240-T304.  
**COVERS:** Carbon steel.  
**TIE RODS, HINGES, GIMBALS:** Carbon steel