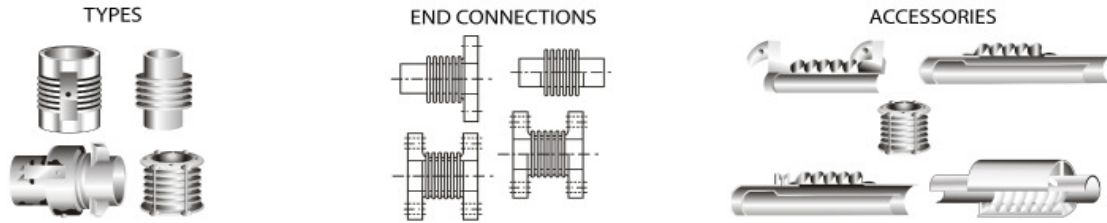


SINGLE EXPANSION JOINTS

108- / 120- / 132-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 ²	MM	KG	MM	KG	MM	KG	MM	MM	GRAD	KG/MM	KG/MM	N-M/GRAD	N-M/GRAD	
108	35	Customer to specify flange configuration Weights and O.A.L. will be furnished upon receipt of this information.	Customer to specify flange configuration Weights and O.A.L. will be furnished upon receipt of this information.	16	427	Customer to specify flange configuration Weights and O.A.L. will be furnished upon receipt of this information.	Customer to specify flange configuration Weights and O.A.L. will be furnished upon receipt of this information.	2.87	0.07	3	6079	1729417	160982	360.9530
	2.4			406	194			72.9	1.78	3	109	30949	16371.9	367.0892
Effective Area 9533 in ² 61,505 cm ²	24			532	5.74			0.28	6	3040	216177	80491	180.4765	
	610			242	146			7.11	7	54	3869	8185.9	183.5446	
120	30			16	475			8.6	0.62	9	2026	64052	53661	120.3177
	2.1			813	290			218	15.7	10	36	1146	5457.3	122.3631
Effective Area 11,723 in ² 75,632 cm ²	16			475	2.9			0.06	3	6761	2365085	220152	495.0025	
	406			216	73.7			1.52	3	121	42324	22389.6	503.4175	
132	25			24	591			5.79	0.25	5	3380	295636	110076	247.5012
	1.7			610	269			147	6.35	6	60	5291	11194.7	251.7088
Effective Area 14,139 in ² 91,219 cm ²	32			708	8.69			0.57	8	2254	87596	73384	165.0008	
	813			322	221			14.5	9	40	1568	7463.2	167.8058	
132	25	16	522	2.91	0.06	3	7442	3140065	292291	658.7047				
	1.7	406	237	73.9	1.52	3	133	56193	29726.0	669.9027				
Effective Area 14,139 in ² 91,219 cm ²	24	651	5.82	0.23	5	3721	392508	146145	329.3523					
	610	296	148	5.85	6	67	7024	14862.9	334.9513					
132	25	32	779	8.73	0.52	7	2481	116299	97430	219.5682				
	1.7	813	354	222	13.2	8	44	2081	9908.6	223.3009				

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 gimballed 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.
 Customer to specify actual flanges required.
PIPE: ASTM A285-C.
 25-35 psig Series: 0.375-inch wall.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel