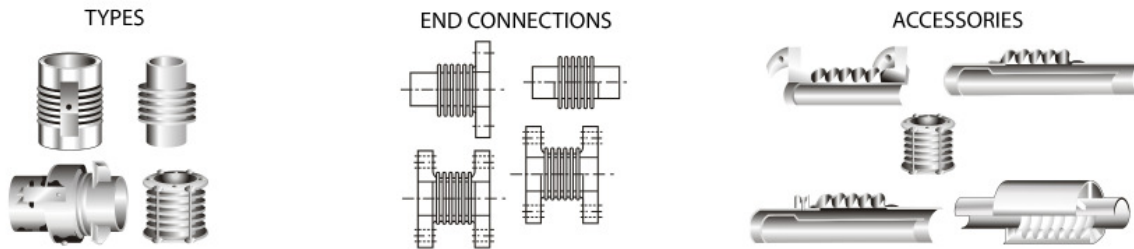


SINGLE EXPANSION JOINTS

Effective (Thrust) Area: 30.36 in² (195.82 cm²)

5-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 C O M P	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 x 10 ⁵	
5	100	6	31	12	12	9	22	1.17	0.2	10	277	1641	23	0.0319
	7.0	152	14.1	305	5.45	229	10	29.7	5.08	11	5	29	2.3	0.0325
	85	9	32	15	13	12	23	2.28	0.75	10	147	226	12	0.0168
	6.0	229	14.5	381	5.91	305	10.5	57.9	19.1	11	3	4	1.2	0.0171
	35	12	34	18	14	15	24	3.76	1.85	10	100	69	8	0.0114
	2.5	305	15.5	457	6.36	381	10.9	95.5	47	11	2	1	0.8	0.0116
5	275	6	57	10	12	8	35	0.39	0.04	7	2320	33633	196	0.0963
	19.3	152	25.9	254	5.45	203	15.9	9.91	1.02	8	42	602	19.9	0.0980
	275	9	59	13	14	11	36	1.01	0.27	10	892	2070	75	0.0373
	19.3	229	26.8	330	6.36	279	16.4	25.4	6.86	11	16	37	7.6	0.0380
	235	12	61	16	15	14	38	1.66	0.71	10	552	500	47	0.0232
	16.5	305	27.7	406	6.82	356	17.3	42.2	18	11	10	9	4.8	0.0235

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.
 35-100 psig Series: 150 lb ANSI B16.5 RFSSO.
 235-275 psig Series: 300 lb ANSI B16.5 RFSSO
 Plate flanges and angle flanges available for low pressure systems. Please refer to page 32.
PIPE: ASTM A53/A106.
 35-100 psig Series: Std. Wt. Pipe.
 235-275 psig Series: Std. Wt. Pipe.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel