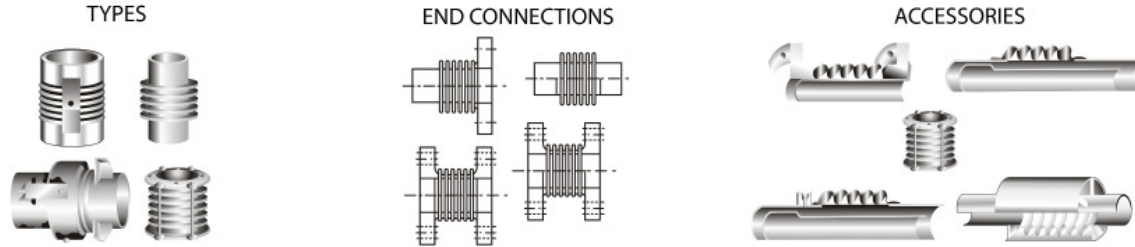


SINGLE EXPANSION JOINTS

14-INCH NOMINAL DIAMETER

Effective (Thrust) Area: 184.96 in² (1193 cm²)



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	
14	80	12	190	16	50	14	120	2.9	0.49	10	459	2639	234	0.4418
	5.6	305	86.4	406	22.7	356	54.5	73.7	12.4	11	8	47	23.8	0.4493
	65	18	198	22	57	20	127	5.27	1.55	10	262	503	133	0.2531
	4.6	457	90	559	25.9	508	57.7	134	39.4	11	5	9	13.5	0.2574
	30	24	205	28	64	26	134	8.14	3.46	10	183	169	93	0.1767
	2.1	610	93.2	711	29.1	660	60.9	207	87.9	11	3	3	9.5	0.1797
14	225	12	393	16	52	14	222	1.25	0.16	9	2509	24470	1281	0.9569
	15.8	305	179	406	23.6	356	101	31.8	4.06	10	45	438	130.3	0.9731
	225	18	404	22	64	20	234	2.5	0.65	10	1255	3059	641	0.4784
	15.8	457	184	559	29.1	508	106	63.5	16.5	11	22	55	65.2	0.4866
	350	24	449	28	108	26	279	3.72	1.46	10	1682	1834	864	0.3374
	24.6	610	204	711	49.1	660	127	94.5	37.1	11	30	33	87.9	0.3431

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.
 30-80 psig Series: 150 lb ANSI B16.5 RFSO.
 225-350 psig Series: 300 lb ANSI B16.5 RFSO
 Plate flanges and angle flanges available for low pressure systems. Please refer to page 32.
PIPE: ASTM A53/A106.
 30-80 psig Series: Std. Wt. Pipe.
 225-350 psig Series: Std. Wt. Pipe.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel