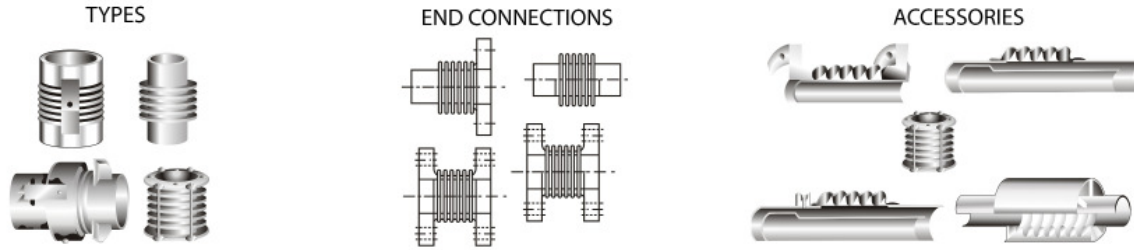


SINGLE EXPANSION JOINTS

10-INCH NOMINAL DIAMETER

Effective (Thrust) Area: 112.55 in² (725.95 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	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
10	100	12	94	16	37	14	66	2.74	0.62	10	427	1374	132	0.1975
	7.0	305	42.7	406	16.8	356	30	69.6	15.7	11	8	25	13.4	0.2009
	60	18	99	22	43	20	71	5.08	2.01	10	256	273	79	0.1174
	4.2	457	45	559	19.5	508	32.3	129	51.1	11	5	5	8.0	0.1194
	30	24	104	28	48	26	76	7.58	4.27	10	183	96	57	0.0835
	2.1	610	47.3	711	21.8	660	34.5	193	108	11	3	2	5.8	0.0849
10	275	12	172	15	40	14	106	1.23	0.23	10	2254	10547	699	0.4100
	19.3	305	78.2	381	18.2	356	48.2	31.2	5.84	11	40	189	71.1	0.4170
	275	18	180	21	48	20	114	2.3	0.82	10	1214	1592	376	0.2199
	19.3	457	81.8	533	21.8	508	51.8	58.4	20.8	11	22	28	38.2	0.2236
	325	24	213	27	80	26	147	3.4	1.78	10	1673	1023	523	0.1604
	22.8	610	96.8	686	36.4	660	66.8	86.4	45.2	11	30	18	53.2	0.1631

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.
 30-100 psig Series: 150 lb ANSI B16.5 RFSO.
 275-325 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.
 30-100 psig Series: Std. Wt. Pipe.
 275-325 psig Series: Std. Wt. Pipe.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel