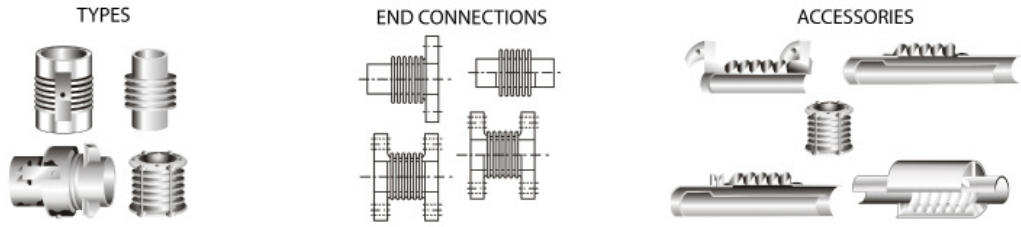


SINGLE EXPANSION JOINTS

Effective (Thrust) Area: 1358.92 in² (8771.48 cm²)

40-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	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	
40	45	12	598	16	153	14	375	3.98	0.27	10	689	24670	2592	7.8763
	3.2	305	272	406	69.5	356	170	101	6.86	11	12	441	263.6	8.0102
	45	18	622	22	177	20	399	6.8	0.79	10	413	5086	1555	4.7052
	3.2	457	283	559	80.5	508	181	173	20.1	11	7	91	158.1	4.7852
	45	24	645	28	200	26	423	9.62	1.58	10	295	1818	1111	3.3546
	3.2	610	293	711	90.9	660	192	244	40.1	11	5	33	113.0	3.4117
40	120	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	169	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.29	0.15	6	3177	128531	11964	14.2220
	8.4			406	76.8			57.2	3.81	7	57	2300	1216.7	14.4638
	120			22	207			4.01	0.45	10	1815	23983	6837	8.1269
	8.4			559	94.1			102	11.4	11	32	429	695.3	8.2650
	120			28	245			5.73	0.92	10	1271	8226	4786	5.6888
	8.4			711	111			146	23.4	11	23	147	486.7	5.7855
40	225	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	258	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.19	0.14	6	6366	258136	24028	14.7725
	15.8			406	117			55.6	3.56	7	114	4619	2443.6	15.0237
	225			22	331			3.83	0.43	10	3637	48165	13731	8.4414
	15.8			559	150			97.3	10.9	11	65	862	1396.4	8.5849
	225			28	405			5.47	0.88	10	2546	16521	9611	5.9090
	15.8			711	184			139	22.4	11	46	296	977.4	6.0095

- 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.
 45 psig Series: 125 lb Lt. Wt. FFSO.
 For 120 psig and 225 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.
 45 psig Series: 0.375-inch wall.
 120 psig Series: 0.375-inch wall.
 225 psig Series: 0.500-inch wall.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel