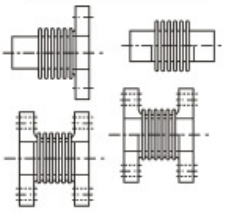
SINGLE EXPANSION JOINTS

Effective (Thrust) Area: 1947 in^2 (12,561 cm^2)

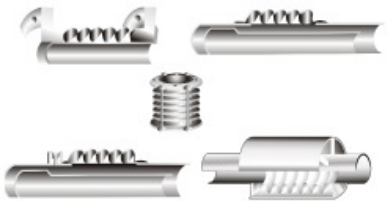
48-Inch Nominal Diameter

TYPES

END CONNECTIONS



ACCESSORIES



DIAMETER	PRESSURE	OVERALL LENGTH AND WEIGHT						NON-CONCURRENT MOVEMENTS			SPRING RATES			
		FLANGED ENDS		WELD ENDS		COMBINATION ENDS		AXIAL	LATERAL	ANGULAR	AXIAL	LATERAL	ANGULAR	TORSIONAL
		O.A.L	WT.	O.A.L	WT.	O.A.L	WT.	COMP						
	PSIG	IN	LB	IN	LB	IN	LB	IN	IN	DEG	LB/IN	LB/IN	IN-LB/DEG	IN-LB/DEG x 10^6
	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
48	35	12	891	16	179	14	535	3.29	0.15	8	670	50793	3620	15.2078
	2.5	305	405	406	81.4	356	243	83.6	3.81	8	12	909	368.2	15.4663
	35	18	923	22	212	20	567	6.11	0.53	10	361	7930	1949	8.1888
	2.5	457	420	559	96.4	508	258	155	13.5	11	6	142	198.2	8.3280
	35	22	945	26	233	24	589	7.99	0.91	10	276	3546	1491	6.2620
	2.5	559	430	650	106	610	268	203	23.1	11	5	63	151.6	6.3685
48	95	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	203	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.55	0.12	6	2744	208321	14847	24.6308
	6.7			406	92.3			64.8	3.05	7	49	3728	1509.9	25.0495
	95			22	225			4.73	0.41	10	1478	32523	7994	13.2627
	6.7			559	116			120	10.4	11	26	582	813.0	13.4882
	95			26	289			6.19	0.7	10	1130	14544	6113	10.1421
	6.7			660	131			157	17.8	11	20	260	621.7	10.3145

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 psig Series: 125 lb Lt. Wt. FFSO.
95 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.
35 psig Series: 0.375-inch wall.
95 psig Series: 0.375-inch wall.
Liners: A240-T304.
Covers: Carbon steel.
Tie Rods, Hinges, Gimbals: Carbon steel