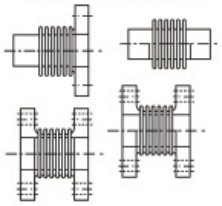
SINGLE EXPANSION JOINTS

18-Inch Nominal Diameter

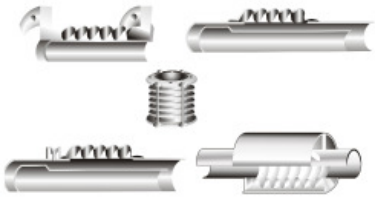
Effective (Thrust) Area: 293.95 in^2 (1896 cm^2)

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
18	75	12	134	18	67	15	101	3.49	0.57	10	476	2938	386	0.7533
	5.3	305	60.9	457	30.5	381	45.9	88.6	14.5	11	9	53	39.3	0.7
	50	18	144	24	77	21	110	5.93	1.59	10	297	690	241	0.4688
	3.5	457	65.5	610	35	533	50	151	40.4	11	5	12	24.5	0.4768
	25	24	153	30	86	27	119	8.81	3.27	10	216	261	175	0.3403
	1.8	610	69.5	762	39.1	686	54.1	224	83.1	11	4	5	17.8	0.3461
18	200	12	279	15	70	14	174	1.42	0.16	9	2787	35476	2265	1.7567
	14.1	305	127	381	31.8	356	79.1	36.1	4.06	10	50	635	2304	1.7866
	200	18	293	21	84	20	189	2.72	0.59	10	1501	5260	1219	0.9406
	14.1	457	133	533	38.2	508	85.9	69.1	15	11	27	94	124.0	0.9566
	175	24	308	27	99	26	203	4.07	1.31	10	1027	1654	834	0.6422
	12.3	610	140	686	45	660	92.3	103	33.3	11	18	30	84.8	0.6531
18	400	12	527	13	78	13	302	0.99	0.09	6	7834	176001	6400	2.5583
	28.1	305	240	330	35.5	330	137	25.1	2.29	7	140	3150	650.9	2.6018
	400	18	555	19	106	19	331	2.18	0.41	10	3563	16529	2909	1.1629
	28.1	457	252	483	48.2	483	150	55.4	10.4	11	64	296	295.8	1.1827
	400	24	584	25	135	25	359	3.37	0.99	10	2305	4478	1882	0.7525
	28.1	610	265	635	61.4	635	163	85.6	25.1	11	41	80	191.4	0.7652

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.
25-75 psig Series: 125 lb ANSI B16.5 RFSO.
175-200 psig Series: 150 lb ANSI B16.5 RFSO.
400 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.
25-75 psig Series: Std. Wt. Pipe.
175-200 psig Series: Std. Wt. Pipe.
400 psig Series: Std. Wt. Pipe
Liners: A240-T304.
Covers: Carbon steel.
Tie Rods, Hinges, Gimbals: Carbon steel