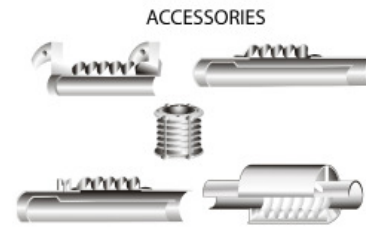
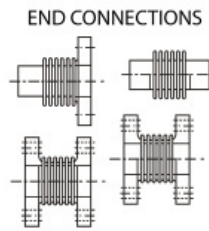


SINGLE EXPANSION JOINTS

Effective (Thrust) Area: 1110.13 in² (7160.34 cm²)

36-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	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								
36	50	12	504	16	137	14	321	3.98	0.3	10	619	18098	1902	5.7447							
	3.5	305	229	406	62.3	356	146	101	7.62	11	11	324	13.4	5.8424							
	50	18	525	22	159	20	342	6.8	0.88	10	371	3731	1141	3.4318							
	3.5	457	239	559	72.3	508	155	173	22.4	11	7	67	116.0	3.4902							
	40	24	547	28	180	26	364	9.62	1.75	10	265	1333	815	2.4467							
	2.8	610	249	711	81.8	660	165	244	44.5	11	5	24	82.9	2.4883							
36	135	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.	16	152	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.	2.25	0.16	7	2854	94308	8779	10.3761									
	9.5												406	69.1	57.2	4.06	8	51	1688	892.8	10.5525
	135												22	186	3.93	0.49	10	1631	17597	5016	5.9292
	9.5												559	84.5	99.8	12.4	11	29	315	510.1	6.0300
	135												28	220	5.61	1	10	1142	6036	3511	4.1504
	9.5												711	100	142	25.4	11	20	108	357.1	4.2210
36	250	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.	16	232	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.	2.15	0.15	7	5720	189490	17639	10.7863									
	17.6												406	105	54.6	3.81	7	102	3391	1793.9	10.9697
	250												22	298	3.77	0.47	10	3269	35357	10079	6.1636
	17.6												559	135	95.8	11.9	11	59	633	1025.0	6.2684
	250												28	364	5.38	0.95	10	2288	12127	7055	4.3145
	17.6												711	165	137	24.1	11	41	217	717.5	4.3879

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.
 40-50 psig Series: 125 lb Lt. Wt. FFSO.
 For 135 psig and 250 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.
 40-50 psig Series: 0.375-inch wall.
 135 psig Series: 0.375-inch wall.
 250 psig Series: 0.500-inch wall.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel