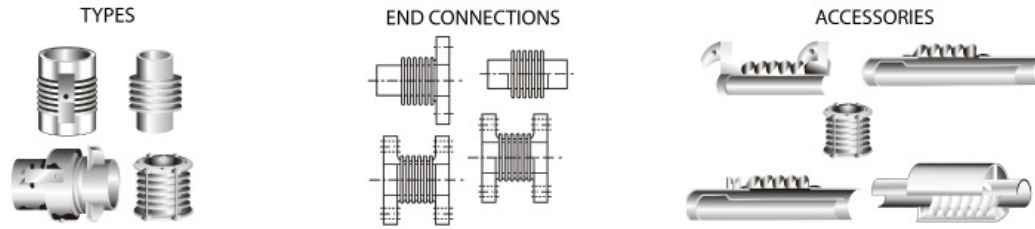


SINGLE EXPANSION JOINTS

34-INCH NOMINAL DIAMETER

Effective (Thrust) Area: 995 in² (6420 cm²)



D I A M E T E R	P R E S S U R E	O V E R A L L L E N G T H A N D W E I G H T						N O N - C O N C U R R E N T M O V E M E N T S			S P R I N G R A T E S			
		F L A N G E D E N D S		W E L D E N D S		C O M B I N A T I O N E N D S		A X I A L	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	
34	50	12	462	16	130	14	296	3.98	0.32	10	584	15302	1608	4.8409
	3.5	305	210	406	59.1	356	135	101	8.13	11	10	274	163.5	4.9232
	50	18	482	22	150	20	316	6.8	0.93	10	350	3155	965	2.8919
	3.5	457	219	559	68.2	508	144	173	23.6	11	6	56	98.1	2.9411
	40	24	503	28	170	26	336	9.62	1.85	10	250	1127	689	2.0618
	2.8	610	229	711	77.3	660	153	244	47	11	4	20	70.1	2.0968
34	135	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	143	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.25	0.17	7	2693	79749	7423	8.7452
	9.5			406	65			57.2	4.32	8	48	1427	754.9	8.8938
	135			22	176			3.93	0.52	10	1539	14880	4242	4.9972
	9.5			559	80			99.8	13.2	11	28	266	431.4	5.0822
	135			28	208			5.62	1.05	10	1077	5104	2969	3.4981
	9.5			711	94.5			143	26.7	11	19	91	301.9	3.5575
34	275	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		16	219	Customer to specify flange configuration. Weights and O.A.L. will be furnished upon receipt of this information.		2.12	0.16	7	5397	160280	14920	9.0951
	19.3			406	99.5			53.8	4.06	8	97	2868	1517.4	9.2498
	275			22	281			3.71	0.49	10	3084	29907	8525	5.1972
	19.3			559	128			94.2	12.4	11	55	535	867.0	5.2856
	344			24	344			5.3	0.99	10	2159	10258	5968	3.6381
	19.3			610	156			135	25.1	11	39	184	606.9	3.6999

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 275 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.
 275 psig Series: 0.500-inch wall.
LINERS: A240-T304.
COVERS: Carbon steel.
TIE RODS, HINGES, GIMBALS: Carbon steel