

Table 2
Pressure and Force Data/Series 3500 Externally Pressurized Expansion Joints

Nominal Size (NPS)	Effective Area (square inches)	Tabulated Force (pounds) for Individual Pressure						
		50 psig	100 psig	150 psig	200 psig	250 psig	300 psig	450 psig
2	8.2	408	817	1225	1633	2042	2451	3690
2 1/2	10.6	533	1067	1599	2133	2666	3200	4770
3	13.7	685	1369	2054	2738	3423	4107	6165
4	22.7	1135	2269	3404	4538	5673	6807	10215
5	35.3	1763	3526	5288	7051	8814	10577	15885
6	50.3	2513	5027	7540	10053	12566	15080	22635
8	80.5	4026	8052	12077	16103	20129	24155	36225
10	115	5773	11547	17320	23093	28867	34640	54750
12	164	8228	16456	24684	32912	41140	49368	73800
14	206	10300	20599	30899	41199	51498	61798	92700
16	258	12901	25802	38702	51603	64504	77405	116100
18	318	15905	31810	47715	63620	79525	95430	143100
20	390	19529	39057	58586	78114	97643	117171	175500
24	541	27059	54119	81178	108238	135297	162357	243450
1	2	3	4	5	6	7	8	9

Table 3
Intermediate Pipe Guide Spacing /Series 3500 Externally Pressurized Expansion Joints

Nominal Size (NPS)	150 psig Design (See pages 8 & 9)			300 psig Design (See pages 10 & 11)				
	System Pressure (psig)			System Pressure (psig)				
	50	100	150	50	100	150	200	300
2	24	18	15	21	17	14	13	11
2 1/2	29	23	19	26	21	18	16	14
3	38	29	25	31	26	22	20	17
4	46	35	29	39	31	27	24	21
5	48	38	33	41	34	30	27	23
6	58	45	38	50	41	36	32	27
8	78	60	50	70	56	47	42	35
10	100	75	63	90	71	60	53	44
12	115	85	70	103	80	67	59	49
14	108	83	70	99	79	67	60	50
16	121	92	77	112	88	75	66	55
18	132	100	84	123	96	81	72	60
20	146	109	90	127	100	85	75	63
24	167	123	102	147	114	97	86	71
1	2	3	4	5	6	7	8	9

Note:

- (1) The values listed are the center to center distance measured in feet.
- (2) Pipe guide spacing is a function of the expansion joint spring rate and effective area. The tabulated values are for Series 3500 expansion joints at the system design pressure listed.
- (3) The pressures listed are design values. Guide spacing has been calculated for the test pressure (1.5 X design).
- (4) Refer to Catalog 1004 for complete details on Hyspan Series 9500 Pipe Guides and their application.