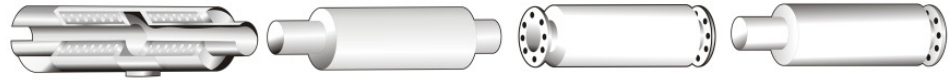


**U.S. Bellows, Inc.**  
**EXTERNALLY PRESSURIZED EXPANSION JOINTS**

**SINGLE X-FLEX  
300# DESIGN**



S I Z E	AXIAL MOVEMENT	SPRING RATE	O.A.L	WEIGHT		EFF AREA	SHELL O.D.	ANCHOR FOOT HEIGHT	ANCHOR FOOT TYPE
				FLANGED ENDS	WELD ENDS				
				IN	LB				
MM	KG/MM	MM	KG	KG	CM <sup>2</sup>	MM	MM		
12	4	1854	30	563	333	181.96	18.000	PLEASE CONSULT FACTORY REGARDING ANCHOR FOOT USAGE ON SINGLE X-FLEX	
	102	33.2	762	256	151.36	82.71	457		
	8	927	49	763	533	181.96	18.000		
	203	16.6	1245	347	242.27	82.71	457		
14	4	2028	30	695	365	213.07	20.000		
	102	36.3	762	316	165.91	96.85	508		
	8	1014	49	919	589	213.07	20.000		
	203	18.1	1245	418	267.73	96.85	508		
16	4	1770	30	836	456	271.60	24.000		
	102	31.7	762	380	207.27	123.45	610		
	8	885	48	1078	698	271.60	24.000		
	203	15.8	1219	490	317.27	123.45	610		
18	4	1986	26	948	448	333.16	24.000		
	102	35.5	660	431	203.64	151.44	610		
	8	993	30	1211	711	333.16	24.000		
	203	17.8	762	550	323.18	151.44	610		
20	4	2200	31	1338	708	401.01	30.00		
	102	39.4	787	608	322	182.28	762		
	8	1100	49	1645	1015	401.01	30.00		
	203	19.7	1245	748	461	182.28	762		
24	4	2630	32	1594	644	555.55	30.00		
	102	47.1	813	725	293	252.52	762		
	8	1315	50	1936	986	555.55	30.00		
	203	23.5	1270	880	448	252.52	762		

**GENERAL NOTES**

1. Rated life cycle at 650°F is 1000 cycles for full rated movement shown above.
2. To increase cycle life, please refer to graph on page 93.
3. Expansion joint is capable of taking 10% of rated movement as extension, with remaining 90% as axial compression.
4. Maximum test pressure: 1.5 X rated working pressure.
5. Bellows rated for 650°F: See page 31 for appropriate flange temperature/pressure ratings.
6. Maximum installation misalignment is ±1/4-inch axial and 1/16-inch lateral.

**MATERIALS**

**BELLOWS:** A240-T304. Alternate materials available upon request. Refer to page 33.  
**FLANGES:** ASTM A105.  
 300 lb ANSI B16.5 RF50.  
**PIPE:** ASTM A53/A106.  
**SHELL:** ASTM A53/A106; API-5L.  
**RINGS:** ASTM A285-C.