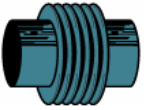
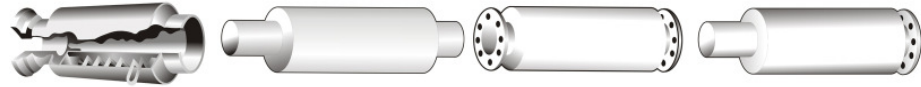


U.S. Bellows, Inc.

EXTERNALLY PRESSURIZED EXPANSION JOINTS



DOUBLE X-FLEX 150# 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/IN	IN	LB	LB	IN ²	IN	IN	
	MM	KG/MM	MM	KG	KG	CM ²	MM	MM	
12	8	922	49	691	563	180.81	18.000	13.000	C
	203	16.5	1245	314	256	82.19	457	330	
	16	461	87	1041	913	180.81	18.000	13.000	
	406	8.2	2210	473	415	82.19	457	330	
14	8	1010	49	792	612	211.83	20.000	14.000	C
	203	18.1	1245	360	278	96.29	508	356	
	16	505	87	1180	1000	211.83	20.000	14.000	
	406	9.0	2210	536	455	96.29	508	356	
16	8	962	47	950	754	270.20	24.000	16.000	D
	203	17.2	1194	432	343	122.82	610	406	
	16	481	83	1358	1162	270.20	24.000	16.000	
	406	8.8	2108	617	528	122.82	610	406	
18	8	1080	47	1002	742	331.61	24.000	16.000	D
	203	19.3	1194	455	337	150.73	610	406	
	16	540	83	1433	1173	331.61	24.000	16.000	
	406	9.7	2108	651	533	150.73	610	406	
20	8	1196	49	1435	1105	399.31	30.00	19.000	D
	203	21.4	1245	652	502	181.50	762	483	
	16	598	85	1947	1617	399.31	30.00	19.000	
	406	10.7	2159	885	735	181.50	762	483	
24	8	1430	50	1463	1023	533.55	30.00	19.000	D
	203	25.6	1270	665	465	251.61	762	483	
	16	725	86	2025	1585	553.55	30.00	19.000	
	406	13.0	2184	920	720	251.61	762	483	

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.
 150 lb ANSI B16.5 RFSO.
PIPE: ASTM A53/A106.
SHELL: ASTM A53/A106; API-5L.
RINGS: ASTM A285-C.