

# RUBBER EXPANSION JOINTS

- LITERATURE
  - SUBMITTALS/SPECS
  - DRAWINGS
  - INSTALL INSTRUCTIONS
  - O&M MANUALS
  - WHITE PAPERS
- CASE STUDIES**

## RUBBER EXPANSION JOINTS AND PUMP CONNECTORS

### 711FRP Expansion Joint for Plastic, FRP, Fiberglass, ABS, CPVC, HDPE and Glass Piping

**Protect piping and components, isolate vibration and compensate for pipe movement**

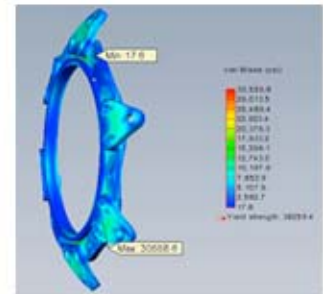
The 711FRP was developed to solve a problem unique to most non-metallic pipe. Brittle components and large coefficients of expansion.

Designed specifically to isolate vibration and compensate for pipe movement the 711FRP's integral gusset plates minimize stress on the mating flange. Large, wide arch geometry, with external body support accounts for the extremely low spring rates.

- Integral Gusset Plates: eliminate point loading on mating flanges
- Multiple Tie Rods: distribute thrust load
- Full Faced Flanges: low, even sealing force
- Wide Arch Construction: 1-3/4 to 2 inches of axial compression
- "L" shaped back up flanges: external body reinforcement allows for a more flexible joint
- EPDM or Butyl are standard: other elastomer materials are available




FEA: Used to confirm stress levels of mating flanges.



[Back To Rubber Expansion Joint Page](#)

### 711FRP Expansion Joint Data

SIZE (NPS)	A F/F (IN.)	B (IN.)	PRESSURE (PSIG)	VACUUM (IN. HG.)	MOVEMENT CAPABILITY AND FORCES @ 0 PSI*							EFFECTIVE AREA (SQ. IN.)	WEIGHT (LB)
					COMPRESSION		ELONGATION		LATERAL		ANGULAR		
					MAX DEFL (IN.)	SPRING RATE (LB/IN.)	MAX DEFL (IN.)	SPRING RATE (LB/IN.)	MAX DEFL (IN.)	SPRING RATE (LB/IN.)	MAX DEFL (DEG.)		
2"	6	8-1/2"	150	10	1-3/4	126	3/4	160	3/4	213	**	14	7
2-1/2"	6	9-3/8"	150	10	1-3/4	160	3/4	200	3/4	227	**	17	9
3"	6	10"	150	10	1-3/4	189	3/4	240	3/4	253	**	21	10
4"	6	11-1/8"	150	10	1-3/4	257	3/4	333	3/4	280	**	36	11
5"	6	13"	150	10	1-3/4	314	3/4	413	3/4	333	**	50	14
6"	6	14"	150	10	1-3/4	383	3/4	493	1	370	**	66	18
8"	6	16-1/2"	150	10	1-3/4	423	3/4	547	1	450	**	101	25
10"	8	19"	150	10	1-3/4	531	3/4	693	1	480	**	145	36
12"	8	22"	150	10	1-3/4	554	3/4	733	1	570	**	199	48
14"	8	28"	150	10	2	595	7/8	766	1-1/8	667	**	260	60
16"	8	32"	150	10	2	635	7/8	823	1-1/8	773	**	329	68
18"	8	33"	150	10	2	715	7/8	926	1-1/8	853	**	403	77
20"	8	36"	150	10	2	795	7/8	1029	1-1/8	951	**	482	77
24"	8	40"	150	10	2	1070	7/8	1417	1-1/8	1022	**	695	120



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