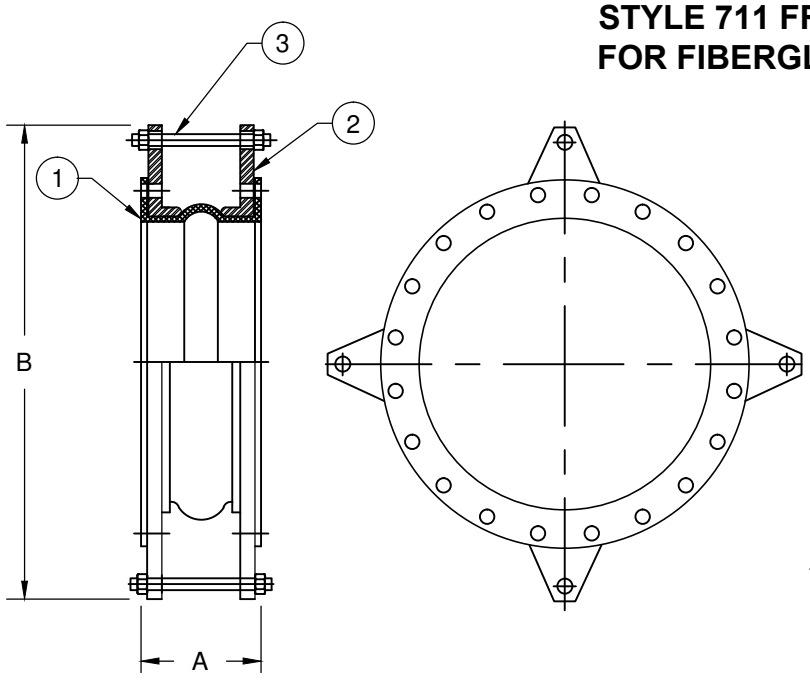
# STYLE 711 FRP WIDE ARCH EXPANSION JOINT FOR FIBERGLASS AND PLASTIC PIPE




**NOTE:**
THIS FLEXIBLE JOINT SHOULD BE INSTALLED THE LENGTH SHOWN ON DRAWING. PIPING AND EQUIPMENT CONNECTED BY THIS FLEXIBLE JOINT SHOULD BE ANCHORED AND GUIDED. NOT INTENDED FOR TORSION.

| ITEM | NAME | MATERIAL |
|---|---|---|
| 1 | BODY | EPDM |
| 2 | RETAINING RING | POWDER COATED C/S |
| 3 | CONTROL ROD GALVANIZED | C/S |

***MAXIMUM WORKING TEMPERATURE: 230°***

| PIPE SIZE | NO. OF CONTROL RODS |
|---|---|
| 2" - 5" | 3 |
| 6" - 10" | 4 |
| 12" - 24" | 6 |

| | | | | | | MOVEMENT CAPABILITY AND FORCES @ 0 PSI * | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QTY. | SIZE (NPS) | A F/F (IN.) | B (IN.) | PRESSURE (PSIG) | VACUUM (IN. HG.) | COMPRESSION | | ELONGATION | | LATERAL | | ANGULAR | EFFECTIVE AREA (SQ IN.) | WEIGHT (LB) |
| | | | | | | 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" | 10 | 40" | 150 | 10 | 2 | 1070 | 7/8 | 1417 | 1-1/8 | 1022 | | 695 | 120 |

***CALCULATING ANCHOR/THRUST LOADS:**
MULTIPLY THE GREATER OF THE MAXIMUM SYSTEM TEST PRESSURE OR OPERATING PRESSURE TIMES THE EFFECTIVE AREA TO OBTAIN THE FORCE THAT WILL BE EXERTED BY THE PRESSURIZED EXPANSION JOINT ON THE ADJACENT PIPING. ANCHORS MUST BE STRONGER THAN THIS FORCE IF THE JOINT IS TO COMPRESS AND COMPENSATE FOR THE PIPE'S THERMAL EXPANSION. PIPE GUIDES WILL BE NECESSARY TO DIRECT MOVEMENT OF THE PIPE'S EXPANSION.

****DUE TO UNEVEN LOADING OF TIE RODS FACTORY MUST BE CONSULTED.**

CUSTOMER:_____

PROJECT:_____

ENGINEER:_____

| | |
|---|---|
| REV. | RR MATERIAL CHANGED - RS 5/19/20 |
| REV. | 24" F/F UPDATED DATE 04/12/2012 |

Metraflex for pipes in motion
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| | | | |
|---|---|---|---|
| DESCRIPTION: | STYLE 711 FRP WIDE ARCH EXPANSION JOINT | | |
| DRAWN BY: | MIR | DATE: | 04/12/2012 |
| APPROVED: | MIR | DATE: | 04/12/2012 |
| SCALE: NONE | DRAWING NUMBER: 711 FRP | | |