

# Super-Flex™ Rubber Expansion Joints

Unaflex® rubber expansion joints provide relief from stresses caused by thermal expansion and contraction in pipelines.

## Style 1000

Super-Flex style 1000 rubber expansion joints provide double arch movements using a single low profile wide arch. Manufactured using tier industry technology, the style 1000 expansion joint is designed to provide greater strength and pressure capabilities. Made with a combination of woven polyester fabric and reinforced to create optimal performance characteristics. Style 1000 are hand-wrapped to allow for design variations including offsets, non-standard face to face dimensions, multi-arch configurations, and special flanges or drillings.



1000

## Style 1100

If customized options are not needed, the Super-Flex style 1100 rubber expansion joints are designed to be a lower cost option Super-Flex expansion joint. The movements and benefits are like those of style 1000 expansion joints. The cover has been formulated with an ozone and temperature resistant compound which prevents the expansion joint from cracking.



1100

| Joint Size I.D. | Expansion Joint Measurements |        |       |       |       | Style 1000 Max. PSI | Style 1100 Max. PSI | Movements   |            |             | Weights        |                 |                    |
|-----------------|------------------------------|--------|-------|-------|-------|---------------------|---------------------|-------------|------------|-------------|----------------|-----------------|--------------------|
|                 | A                            | B      | C     | D     | E     |                     |                     | Axial Comp. | Axial Ext. | Trav. Defl. | Joint Wt./Lbs. | Ret. Rings/Lbs. | Control Units/Lbs. |
| 1/2             | 1/2                          | 7/8    | 1     | 1 3/4 | 3/8   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 1              | 1 1/2           | 6                  |
| 3/4             | 1/2                          | 7/8    | 1     | 1 3/4 | 3/8   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 1 1/2          | 2               | 6                  |
| 1               | 9/16                         | 7/8    | 1     | 1 3/4 | 3/8   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 2              | 2 1/4           | 6                  |
| 1 1/4           | 9/16                         | 7/8    | 1 1/8 | 1 3/4 | 7/16  | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 2 1/2          | 2 1/2           | 6                  |
| 1 1/2           | 9/16                         | 7/8    | 1 1/8 | 1 3/4 | 7/16  | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 3              | 3               | 6                  |
| 2               | 9/16                         | 29/32  | 1 1/4 | 1 3/4 | 1/2   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 4              | 4               | 7                  |
| 2 1/2           | 9/16                         | 29/32  | 1 1/4 | 1 3/4 | 1/2   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 4 1/2          | 5 1/2           | 7                  |
| 3               | 9/16                         | 29/32  | 1 1/4 | 1 3/4 | 1/2   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 5 1/2          | 6               | 7                  |
| 4               | 9/16                         | 7/8    | 1 1/4 | 1 3/4 | 1/2   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 8              | 7 1/2           | 8                  |
| 5               | 9/16                         | 7/8    | 1 1/4 | 1 3/4 | 1/2   | 225                 | 225                 | 1 3/4       | 3/4        | 3/4         | 9              | 8               | 8                  |
| 6               | 5/8                          | 1      | 1 1/4 | 1 3/4 | 1/2   | 225                 | 225                 | 1 3/4       | 3/4        | 1           | 11             | 9               | 9                  |
| 8               | 3/4                          | 1      | 1 1/2 | 1 3/4 | 5/8   | 225                 | 225                 | 1 3/4       | 3/4        | 1           | 15             | 12              | 12                 |
| 10              | 3/4                          | 1 5/32 | 1 1/2 | 1 3/4 | 11/16 | 225                 | 225                 | 1 3/4       | 3/4        | 1           | 23             | 16              | 16                 |
| 12              | 3/4                          | 1 5/32 | 1 1/2 | 1 3/4 | 11/16 | 225                 | 225                 | 1 3/4       | 3/4        | 1           | 34             | 22              | 16                 |
| 14              | 7/8                          | 1 5/32 | 2     | 1 3/4 | 3/4   | 225                 | 225                 | 1 3/4       | 3/4        | 1           | 40             | 25              | 20                 |
| 16              | 7/8                          | 1 5/32 | 2     | 1 3/4 | 3/4   | 160                 | 160                 | 1 3/4       | 3/4        | 1           | 47             | 27              | 20                 |
| 18              | 7/8                          | 1 5/32 | 2     | 1 3/4 | 3/4   | 160                 | 160                 | 1 3/4       | 3/4        | 1           | 56             | 29              | 21                 |
| 20              | 1                            | 1 5/32 | 2     | 1 3/4 | 25/32 | 130                 | 130                 | 1 3/4       | 3/4        | 1           | 67             | 35              | 21                 |
| 22              | 1                            | 1 5/32 | 2     | 1 3/4 | 25/32 | 130                 | -                   | 1 3/4       | 3/4        | 1           | 70             | 44              | 32                 |
| 24              | 1                            | 1 5/32 | 2     | 1 3/4 | 25/32 | 130                 | 130                 | 1 3/4       | 1          | 1           | 79             | 46              | 32                 |
| 26              | 1                            | 1 3/16 | 2 1/4 | 1 3/4 | 13/16 | 110                 | -                   | 1 3/4       | 1          | 1           | 100            | 50              | 32                 |
| 28              | 1                            | 1 3/16 | 2 1/4 | 1 3/4 | 13/16 | 110                 | -                   | 1 3/4       | 1          | 1           | 102            | 55              | 32                 |
| 30              | 1                            | 1 3/16 | 2 1/4 | 1 3/4 | 13/16 | 95                  | 100                 | 1 3/4       | 1          | 1           | 117            | 58              | 32                 |
| 34              | 1                            | 1 3/16 | 2 1/4 | 1 3/4 | 13/16 | 95                  | -                   | 1 3/4       | 1          | 1           | 122            | 91              | 43                 |
| 36              | 1                            | 1 3/16 | 2 1/4 | 2 1/4 | 13/16 | 90                  | 100                 | 2 1/4       | 1          | 1           | 143            | 99              | 43                 |
| 40              | 1                            | 1 3/16 | 2 1/4 | 2 1/4 | 13/16 | 90                  | -                   | 2 1/4       | 1          | 1           | 173            | 108             | 43                 |
| 42              | 1 3/16                       | 1 1/4  | 2 1/2 | 2 1/4 | 29/32 | 90                  | -                   | 2 1/4       | 1          | 1           | 193            | 110             | 44                 |
| 44              | 1 3/16                       | 1 1/4  | 2 1/2 | 2 1/4 | 29/32 | 90                  | -                   | 2 1/4       | 1          | 1           | 198            | 136             | 44                 |
| 48              | 1 3/16                       | 1 1/4  | 2 1/2 | 2 1/4 | 29/32 | 90                  | -                   | 2 1/4       | 1          | 1           | 211            | 154             | 87                 |
| 50              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1          | 1           | 240            | 163             | 87                 |
| 54              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 265            | 185             | 87                 |
| 56              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 288            | 203             | 87                 |
| 60              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 309            | 215             | 87                 |
| 62              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 325            | 230             | 87                 |
| 66              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 350            | 255             | 87                 |
| 72              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 385            | 300             | 87                 |
| 78              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 410            | 325             | 103                |
| 84              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 435            | 350             | 113                |
| 96              | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 460            | 375             | 125                |
| 102             | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 485            | 400             | 137                |
| 108             | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 510            | 425             | 139                |
| 120             | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 535            | 560             | 151                |
| 132             | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 560            | 585             | 163                |
| 144             | 1 3/16                       | 1 3/8  | 2 1/2 | 2 1/4 | 29/32 | 85                  | -                   | 2 1/4       | 1 1/4      | 1           | 585            | 610             | 176                |

Dimension are in inches unless otherwise indicated.

Dimension are for reference only and subject to change.

A- Flange Thickness  
 B- Body Thickness  
 C- Internal Arch Height

D- Arch Width  
 E - Arch Thickness

**Note:** We do not use marginal constructions which reduce safety factors and cause pressure reductions with slight operating pressure increases. All Supreme expansion joints have a minimum four to one safety factor at rated operating temperatures and pressures. Note: Maximum diameter for Style 1100 is 36"