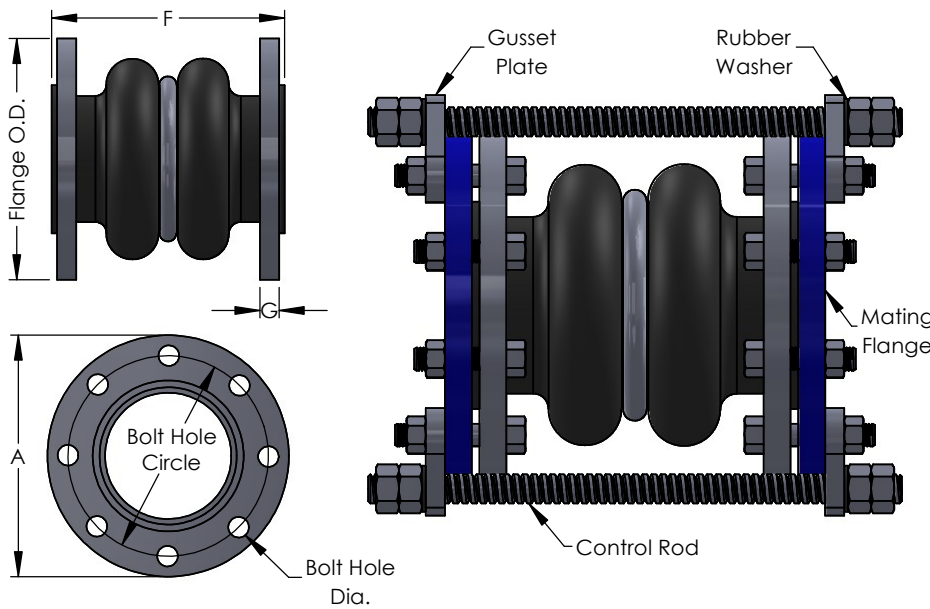


All Products are reinforced with Nylon Tire Cord.



Available Materials

| EFP Code | Cover Elastomer | Tube Elastomer | Max Operating Temp. |
|----------|-----------------|----------------|---------------------|
| EE | EPDM | EPDM | 250°F |
| NN | Neoprene | Neoprene | 225°F |
| NP | Neoprene | Nitrile | 212°F |
| BB | Chlorobutyl | Chlorobutyl | 250°F |

****When installing against a raised face flange - the use of a ring gasket is recommended.****

| Dimensions | | | Flange Drilling | | | Motion Ratings | | | | Operating Conditions | | Approx. Weights | | |
|-------------------|-------------------|--------------------|-----------------|-------------------------|--------------------|-------------------|-----------------|--------------------|-------------------|--------------------------------|-----------------------|-----------------------|-------------------|--------------------------|
| Nominal Pipe Size | F-Length of Joint | G-Flange Thickness | A-Flange O.D. | Flange Bolt Hole Circle | Number & Hole Size | Axial Compression | Axial Extension | Lateral Deflection | Angular Movements | Pressure Rating (PSIG @ 170°F) | Vacuum Rating (In/Hg) | Expansion Joint (lbs) | Control 2-Rod Set | Total Approx. wght (lbs) |
| 1" | 10" | 0.55" | 4.25" | 3.13" | 4 - 0.62" | 2" | 1.188" | 1.75" | 45° | 225 | 26 | 5.2 | 3.6 | 8.8 |
| 1.25" | 7" | 0.55" | 4.63" | 3.5" | 4 - 0.62" | 2" | 1.188" | 1.75" | 45° | 225 | 26 | 5.3 | 3.5 | 8.8 |
| 1.5" | 7" | 0.55" | 5" | 3.88" | 4 - 0.62" | 2" | 1.188" | 1.75" | 45° | 225 | 26 | 6.8 | 4.8 | 11.6 |
| 2" | 7" | 0.63" | 6" | 4.75" | 4 - 0.75" | 2" | 1.188" | 1.75" | 45° | 225 | 26 | 9 | 7 | 16 |
| 2.5" | 7" | 0.71" | 7" | 5.5" | 4 - 0.75" | 2" | 1.188" | 1.75" | 43° | 225 | 26 | 13.3 | 8 | 21.3 |
| 3" | 7" | 0.71" | 7.5" | 6" | 4 - 0.75" | 2" | 1.188" | 1.75" | 38° | 225 | 26 | 14.3 | 8.6 | 22.9 |
| 4" | 9" | 0.71" | 9" | 7.5" | 8 - 0.75" | 2" | 1.375" | 1.562" | 34° | 225 | 26 | 20.3 | 8 | 28.3 |
| 5" | 9" | 0.79" | 10" | 8.5" | 8 - 0.88" | 2" | 1.375" | 1.562" | 29° | 225 | 26 | 24.5 | 8.3 | 32.8 |
| 6" | 9" | 0.87" | 11" | 9.5" | 8 - 0.88" | 2" | 1.375" | 1.562" | 25° | 225 | 26 | 29.5 | 11.7 | 41.2 |
| 8" | 13" | 0.87" | 13.5" | 11.75" | 8 - 0.88" | 2.375" | 1.375" | 1.375" | 19° | 225 | 26 | 43.8 | 15.4 | 59.2 |
| 10" | 13" | 0.95" | 16" | 14.25" | 12 - 1" | 2.375" | 1.375" | 1.375" | 15° | 225 | 26 | 65.5 | 24.5 | 90 |
| 12" | 13" | 0.95" | 19" | 17" | 12 - 1" | 2.375" | 1.375" | 1.375" | 13° | 225 | 26 | 95 | 31 | 126 |
| 14" | 13.75" | 1.02" | 21" | 18.75" | 12 - 1.13" | 1.75" | 1.118" | 1.118" | 9° | 150 | 26 | 142 | 32 | 174 |
| 16" | 13.75" | 1.10" | 23.5" | 21.25" | 16 - 1.13" | 1.75" | 1.118" | 1.118" | 8° | 125 | 26 | 162 | 30.8 | 192.8 |
| 18" | 13.75" | 1.18" | 25" | 22.75" | 16 - 1.25" | 1.75" | 1.118" | 1.118" | 7° | 125 | 26 | 176 | 36.1 | 212.1 |
| 20" | 13.75" | 1.18" | 27.5" | 25" | 20 - 1.25" | 1.75" | 1.118" | 1.118" | 7° | 125 | 26 | 212 | 35.5 | 247.5 |
| 24" | 13.75" | 1.18" | 32.06" | 29.5" | 20 - 1.38" | 1.75" | 1.118" | 1.118" | 5° | 110 | 26 | 250 | 48 | 298 |
| 30" | 12" | 1.26" | 38.75" | 36" | 28 - 1.38" | 1.75" | 1.118" | 1.118" | 4° | 110 | 26 | 300 | 62 | 362 |

WARNING: Control units must be used to protect this part from excessive movement if piping is not properly anchored. Expansion Joints may operate in pipelines or equipment carrying fluids and/or gases at elevated temperature and pressures. Normal precautions should be taken to make sure these parts are installed correctly and inspected regularly. Precautions should be taken to protect personnel in the event of leakage or splash.

NOTE:
 WWW.ENGINEEREDFLEX.COM FOR INSTALLATION INSTRUCTIONS. JOINT MUST BE INSTALLED AT ITS NEUTRAL LENGTH. BOLTS MUST BE PROPERLY TORQUED. NOT SUITABLE FOR STEAM APPLICATIONS. **IF CONNECTING PIPE IS NOT ANCHORED AND GUIDED, CONTROL RODS MUST BE USED.**

CUSTOMER: _____

PROJECT: _____

NSF 372 - LEAD FREE

The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

REV. _____ DRAWN BY: CL Date: 11/27/2023



5331 Quam Ave NE
 St. Michael, MN 55376
 Phone: 763-201-2151
 Fax: 763-201-2134
 Email: sales@engineeredflex.com

(302 Series) Double Sphere Exp. Joints

Table 6: Control Units/Unanchored

Control Units must be installed when pressures (test • design • surge • operating) exceed rating below:

| Pipe Size | Series 301 P.S.I.G. | Series 302 P.S.I.G. |
|--------------|------------------------|------------------------|
| 1" thru 4" | 180 | 135 |
| 5" thru 10" | 135 | 135 |
| 12" thru 14" | 90 | 90 |
| 16" thru 24" | 45 | 45 |
| 30" | 35 | 35 |

| Table 7: | | Maximum Surge or Test Pressure of the System | | | |
|--|-------|--|-----|-----|-----|
| Nominal Pipe Size Expansion Joint I.D. Inch /(mm) | | Number of Control Rods Recommended | | | |
| | | 2 | 4 | 6 | 8 |
| 1 | (25) | 949 | • | • | • |
| 1.25 | (32) | 830 | • | • | • |
| 1.5 | (40) | 510 | • | • | • |
| 2 | (50) | 661 | • | • | • |
| 2.5 | (65) | 529 | • | • | • |
| 3 | (75) | 441 | • | • | • |
| 4 | (100) | 311 | 622 | • | • |
| 5 | (125) | 235 | 470 | • | • |
| 6 | (150) | 186 | 371 | • | • |
| 8 | (200) | 163 | 326 | • | • |
| 10 | (250) | 163 | 325 | 488 | • |
| 12 | (300) | 160 | 320 | 481 | • |
| 14 | (350) | 112 | 223 | 335 | • |
| 16 | (400) | 113 | 227 | 340 | 453 |
| 18 | (450) | 94 | 187 | 281 | 375 |
| 20 | (500) | 79 | 158 | 236 | 315 |
| 24 | (600) | 74 | 147 | 221 | 294 |
| 30 | (750) | 70 | 141 | 211 | 281 |

Note:

Pressures listed above do not relate to the actual design pressure of the expansion joint products, but are the maximum surge or pressure for a specific control rod nominal pipe size.