## Twin-Sphere Molded Rubber Expansion Joints (Series EFTS)

## APPLICATIONS

- Pressure piping systems in building equipment and general industrial plants.
- Pump and turbine lines used for power generation plants, industrial machinery and universal pump blowers.

■ Feed-water \& drainage lines for waterworks \& sanitary piping systems.

- Pipelines for industrial plants and shipbuilding yards.


## FEATURES

- Applicable for suction and delivery (discharge).

■ Designed for greater compression, elongation, and angular movement than the single sphere expansion joint.

- Excellent for absorbing thermal expansion and eliminating sound and vibration.
- Gaskets and packing not required.

■ Good electrical insulator.

- Absorbs water pulsation and minimizes water hammering.

OPERATING CONDITIONS

| Size Range | $\mathbf{1 - 1 / 2 " - 1 2 "}$ | $\mathbf{1 4 " - 2 4 " ~}$ |
| :--- | :--- | :--- |
| Operating Pressure | up to 214 psi | up tp 114 psi |
| Operating Temp. Range ${ }^{*}$ | $14^{\circ}-170^{\circ} \mathrm{F}$ (Neoprene) <br>  <br>  <br> $14^{\circ}-210^{\circ} \mathrm{F}$ (EPDM) | $14^{\circ}-170^{\circ} \mathrm{F}$ (Neoprene) <br> $14^{\circ}-210^{\circ} \mathrm{F}$ (EPDM) |
| Burst Pressure | 853 psi | 340 psi |
| Vacuum Rating | Contact Easyflex | Contact Easyflex |

## DIMENSION \& ALLOWABLE MOVEMENTS



MATERIALS

| Part | Part Description | Material |
| :---: | :--- | :--- |
| 1 | Flanges | Mild Steel - Plated |
| 2 | Reinforcing Fabric | Nylon |
| 3 | Reinforcing Wire | Mild Steel |
| 4 | Tube | Synthetic Rubber |
| 5 | Cover | Synthetic Rubber |
| 6 | Root Ring | Mild Steel Plated |


| Size | Face To Face Dimensions | Allowable Motion Ratings* Compression | Allowable Motion Ratings* Elongation | Allowable Motion Ratings* Lateral | Allowable Motion Ratings* Angular | Installation Tolerances Compression | Installation Tolerances Elongation | Installation Tolerances Lateral | Installation Tolerances Angular |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-1/2" | $7{ }^{\prime \prime}$ | $2{ }^{\prime \prime}$ | 1-1/8" | 1-3/4" | $35^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{0}$ |
| $2{ }^{\prime \prime}$ | $7{ }^{\text {7 }}$ | 2" | 1-1/8" | 1-3/4" | $35^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| 2-1/2" | $7{ }^{\text {" }}$ | 2" | 1-1/8" | 1-3/4" | $35^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| $3{ }^{\prime \prime}$ | $7{ }^{\text {" }}$ | 2" | 1-3/8" | 1-3/4" | $35^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| $4 "$ | 9" | 2" | 1-3/8" | 1-9/16" | $35^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| 5" | $9{ }^{\prime \prime}$ | 2 " | 1-3/8" | 1-9/16" | $30^{\circ}$ | 1/4" | 1/8" | 3/8" | $10^{\circ}$ |
| $6{ }^{\prime \prime}$ | $9{ }^{\prime \prime}$ | $2{ }^{\prime \prime}$ | 1-3/8" | 1-9/16" | $30^{\circ}$ | 1/4" | 1/8" | 3/8" | $10^{\circ}$ |
| 8" | 13" | 2-3/8" | 1-3/8" | 1-3/8" | $30^{\circ}$ | 1/4" | 1/8" | 1/2" | $10^{\circ}$ |
| 10" | 13 " | 2-3/8" | 1-3/8" | 1-3/8" | $30^{\circ}$ | 1/4" | 1/8" | 1/2" | $10^{\circ}$ |
| 12" | 13" | 2-3/8" | 1-3/8" | 1-3/8" | $20^{\circ}$ | 1/4" | 1/8" | 1/2" | $10^{\circ}$ |
| 14" | 13-3/4" | 1-9/16" | 1-1/8" | 1-1/8" | $20^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| 16" | 13-3/4" | 1-9/16" | 1-1/8" | 1-1/8" | $20^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| 18" | 13-3/4" | 1-9/16" | 1-1/8" | 1-1/8" | $20^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| $20^{\prime \prime}$ | 13-3/4" | 1-9/16" | 1-1/8" | 1-1/8" | $20^{\circ}$ | 1/4" | 1/8" | 5/16" | $10^{\circ}$ |
| 24 " | 13-3/4" | 1-9/16" | 1-1/8" | 1-1/8" | $20^{\circ}$ | 1/4" | 1/8" | 1/2" | $10^{\circ}$ |

Note: Customized for flanges ANSI-150, ANSI-300 and DIN
Warning: Do NOT elongate rubber expansion joints when installing for suction service.

