Expansion Joints

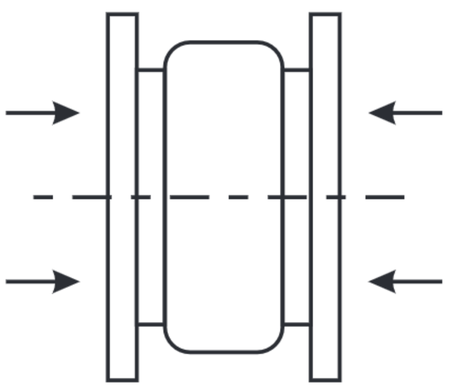
ELASTOMER PHYSICAL PROPERTIES & CHEMICAL RESISTANCE OF RUBBER EXPENSION JOINTS

Material Designation	Neoprene
ANSI/ASTM D1418-17	CR
ASTM D-2000 SAE J-200	BC, BE
Ozone	Very Good
Weather	Excellent
Sunlight	Very Good
Oxidation	Very Good
Heat	Good
Cold	Good
Flame	Good
Tear	Good
Abrasion	Very Good
Impermeability	Good
Dynamic	Fair
Rebound-Hot	Very Good
Rebound-Cold	Good
Comp. Set	Fair
Tensile Strength	Good

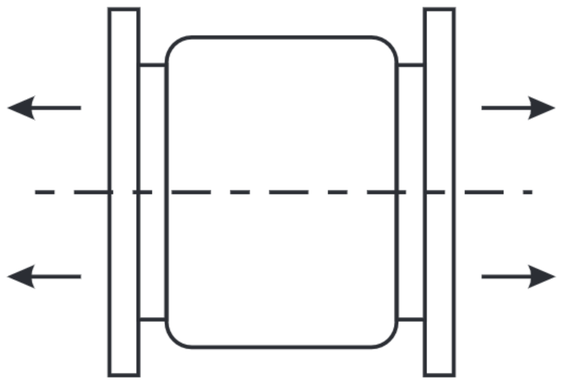
Material Designation	Neoprene
Dielectric Strength	Very Good
Electrical Insulation	Fair/Good
Water Absorption	Good
Radiation	Very Good
Swelling in Oil	Good
Acid, Diluted	Excellent
Acid, Concentrated	Good
Alphatic Hydrocarbons	Fair/Good
Aromatic Hydrocarbons	Fair
Oxygenated Hydrocarbons	Poor/Fair
Lacquers	Poor
Oil & Gasoline	Good
Alkali, Diluted	Good
Alkali, Concentrated	Poor
Animal & Vegetable Oil	Good
Chemical	Fair/Good
Water	Good

RUBBER EXPANSION JOINTS MOVEMENT

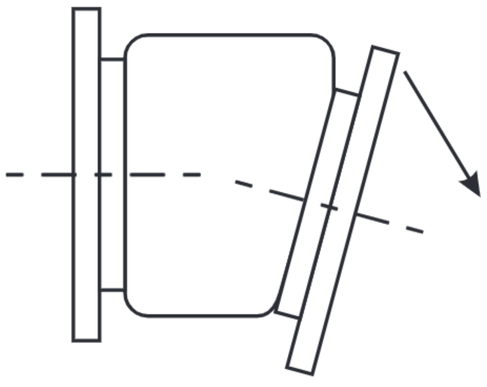
Expansion joints are designed to absorb different movements concurrently



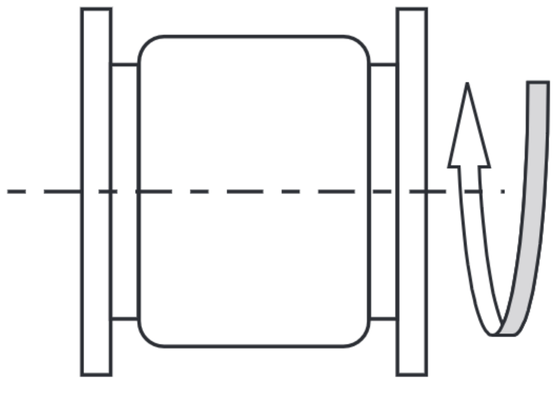
Axial compression



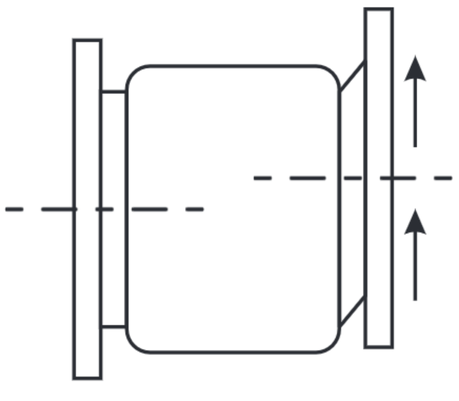
Axial elongation



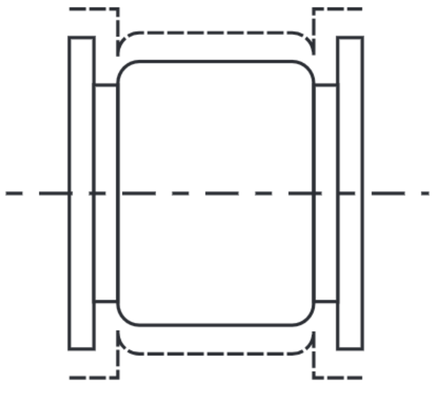
Angular deflection bending of the centerline



Torsional movement rotation about the centerline (twist)



Transverse deflection perpendicular to centerline



Vibration

Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.

Expansion Joints

There are a number of reasons why rubber expansion joints can provide the ideal solution to your piping and plumbing problems:

- **Minimal face-to-face dimensions** — Rubber expansion joints require considerably less space than typical expansion bends or loops and frequently have a lower pressure drop. This can translate into savings on installation costs, as well as improved performance.
- **Light weight** — Rubber expansion joints are relatively light in weight. This makes installation easier and less costly.
- **Low movement forces required** — The natural flexibility of rubber expansion joints allows almost unlimited flexing and recovery, as well as requiring less force to move. This helps prevent damage to costly equipment and expensive down time.
- **Reduced fatigue factor** — The elastomers used in rubber expansion joints are not subject to fatigue breakdown or embrittlement. And they prevent electrolytic action.
- **Reduced heat loss** — Rubber expansion joints reduce heat losses and give longer maintenance-free service.
- **Corrosion- and erosion-resistance** — The superior corrosion-resistant characteristics of rubber expansion joints permit the safe handling of a wide variety of materials within the rated pressures and temperatures

TYPICAL APPLICATIONS

- **Air Conditioning, Heating & Ventilation Systems**
  - Commercial & institutional buildings
  - Schools
  - Apartments
  - Stores
  - Hospitals
  - Motels
  - Hotels
  - Aboard ships & boats
- **Central & Ancillary Power Generating Stations**
  - Communities
  - Factories
  - Buildings
  - Aboard ships & boats
- **Sewage Disposal & Water Treatment Plants**
- **Irrigation & Fire Fighting Stations**
- **Process Piping**
  - Pulp & paper
  - Chemical
  - Primary metal
  - Petroleum refining