# **Rubber Expansion Joints**

### **Features & Benefits**

- · Excellent ability to absorb vibration and sound
- Allows for four-way movement
- Withstands high pressure
- Easy installation using either floating flanges or threaded unions
- · Excellent for use with moderate chemicals, most oils, fats, grease, and many solvents
- A retention ring is supplied with all double sphere flanged expansion joints

### **Construction:**

• Nylon fabric-reinforced neoprene body with forged carbon steel flanges or cast ductile iron pipe unions

#### Note:

· Not for use with oxidizing acids, esters, and keytones

**Elastomer Physical Properties & Chemical Resistance** 

Elastomer Physical Properties & Chemical Resistant				
	<b>Material Designation</b>	Neoprene	<b>Material Designation</b>	Neoprene
	ANSI/ASTM D1418-17	CR	Dielectric Strength	Very Good
	ASTM D-2000 SAE J-200	BC, BE	Electrical Insulation	Fair/Good
	Ozone	Very Good	Water Absorption	Good
	Weather	Excellent	Radiation	Very Good
	Sunlight	Very Good	Swelling in Oil	Good
	Oxidation	Very Good	Acid, Diluted	Excellent
	Heat	Good	Acid, Concentrated	Good
	Cold	Good	Alphatic Hydrocarbons	Fair/Good
	Flame	Good	Aromatic Hydrocarbons	Fair
	Tear	Good	Oxygenated Hydrocarbons	Poor/Fair
	Abrasion	Very Good	Lacquers	Poor
	Impermeability	Good	Oil & Gasoline	Good
	Dynamic	Fair	Alkali, Diluted	Good
	Rebound-Hot	Very Good	Alkali, Concentrated	Poor
	Rebound-Cold	Good	Animal & Vegetable Oil	Good
	Comp. Set	Fair	Chemical	Fair/Good
	Tensile Strength	Good	Water	Good

# Why Rubber 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 Hospitals Schools Motels **Apartments** Hotels

Stores Aboard ships & boats **Central & Ancillary Power Generating Stations** 

Communities **Buildings** 

**Factories** Aboard ships & boats

**Sewage Disposal & Water Treatment Plants Irrigation & Fire Fighting Stations** 

**Process Piping** 

Pulp & paper

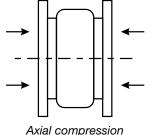
Chemical

Primary metal

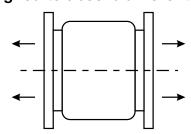
Petroleum refining

# **Rubber Expansion Joints Movement**

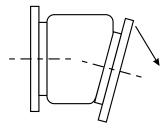
Expansion joints are designed to absorb different movements concurrently



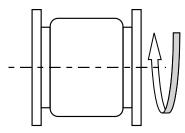
Axial compression



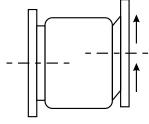
Axial elongation



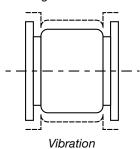
Angular deflection bending of the centerline



Torsional movement rotation about the centerline (twist)



Transverse deflection perpendicular to centerline



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