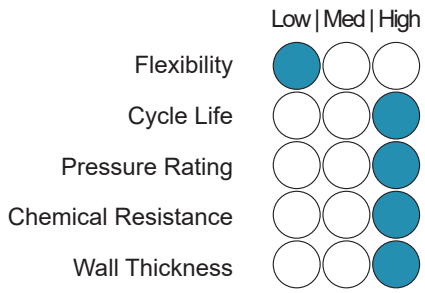
Single sphere rubber expansion joint

Product Features
1. Absorb Pipe Movements/ Stress
2. Reduce System Noise
3. Isolate Mechanical Vibrations
4. Compensate Alignment/Offset
5. Eliminate Electrolytic Action and Electrolysis



Introduction

The PTFE Expansion Joint—also referred to as a PTFE-lined rubber joint, Teflon coated flexible connector, or fluoroplastic-lined expansion joint—is a premium solution designed to handle extremely corrosive and aggressive media in industrial piping systems.

This expansion joint consists of a high-quality rubber body (typically EPDM or NBR) internally lined with a seamless PTFE (polytetrafluoroethylene) layer, offering outstanding chemical resistance against strong acids, alkalis, chlorine compounds, solvents, and oxidants. The PTFE lining serves as a protective barrier, preventing chemical penetration and extending the product's life cycle in harsh working environments.

To ensure structural strength and vibration isolation, the joint is reinforced with multiple layers of synthetic fabric cord and steel wire. The double-arch body design provides superior flexibility, allowing the joint to absorb axial, lateral, and angular movements caused by thermal expansion, mechanical misalignment, or equipment vibration.

Key Features

• PTFE Lining for Corrosion Resistance
Internally lined with virgin PTFE (Teflon®) to resist strong acids, alkalis, solvents, and other aggressive chemicals across a wide pH range (0–14).
•Rubber Flexibility with Chemical Protection
Combines the elasticity of EPDM or NBR rubber with the impermeability of PTFE, allowing excellent movement absorption and leak-proof sealing.
•Excellent Vibration and Noise Absorption
Reduces mechanical vibration and operational noise in piping systems, enhancing equipment longevity and operational safety.
•Multi-Directional Flexibility
Designed to absorb axial, lateral, and angular movements caused by thermal expansion, ground shifting, or misalignment.
•High Temperature and Pressure Tolerance
Suitable for demanding environments, operating up to 180°C and pressure ratings up to 16 bar depending on configuration.
•Reinforced Structure
Built with nylon fabric layers and optional steel wire reinforcement for added pressure resistance and durability.
•Universal Flange Compatibility
Available with ANSI, DIN, JIS, or custom flanges to meet international standards and ensure easy integration into existing systems.
•Customizable Options Available
Optional features include control rods, vacuum support rings, and different PTFE thicknesses tailored to your project needs.

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