

## Rubber Expansion Joints • Spherical vs. Spool Type

	Spher Type	ical Cabe	Spool Type	Rd Nuts
Quality Standard	Unknown	Questionable quality control with a commodity approach and often unknown composition and manufacturers affiliation.	Made in the USA	100% quality controlled, high performance product manufactured by ISO 9001 & 14001 certified and FSA member company.
Control Units	Cables	Cables are unable to initially restrain the pressure thrust force until the slack is consumed, exerting the full pressure thrust force on adjacent piping and equipment. Not a universally accepted code restraint.	Tie Rods	Tie Rods protect adjacent piping and equipment by continuously restraining the full pressure thrust force. Certified to ASME B31.3 and other internationally accepted pipe code standards.
Pressures	Standard	Commodity design without embedd-ed high tensile steel reinforcement material. Commodity design cannot be modified for higher pressures or full vacuum.	Higher	Perform <mark>ance</mark> design with embedded high tensile steel reinforcement material for high pressure and full vacuum. Custom and higher pressures easily accommodated.
Sealing Area	Reduced	Embedded cable in the stub flange is often out of round with reduced sealing area and increased likelihood of flange pullout failure.	Greater	Integral full-face rubber flange provides greater sealing area with all reinforcing fabric extending to flange OD for maximum safety.
Customization	Νο	Custom lengths and built-in offsets are unavailable. Unable to meet lower spring rates or higher movement requirements. Limited selection for elastomer tube & cover combinations.	Yes	Available with custom lengths and built-in angular &/or lateral offsets. Designed to meet critical spring rates &/or greater movement requirements. Various tube & cover combinations available.
Service Life	Shorter	Non-Performance design with shortened service life.	Longer	Performance design providing 20 plus years of maintenance free service life.