

tyco

Flow Control

Flexible Piping Systems



TFC-FPS stock and distribute a comprehensive range of rubber expansion joints for use in many tough, demanding industrial applications such as air conditioning, heating and ventilation systems, petrochemical, industrial process piping systems, power generation, marine services, pulp and paper, water and sewerage systems.

TFC-FPS standard rubber expansion joints feature an engineered sphere design bellow which is inherently stronger than the hand fabricated old standard cylindrical shapes. Internal pressure within a sphere is exerted in all directions distributing forces evenly over a large area.

The spherical design “flowing arch” reduces turbulence, sediment build-up, thrust area and the effects of thrust on the piping system equipment when compared to the “high-arch” design.

Construction

Standard stock units in styles FTU, FSF and FTF are constructed from EPDM rubber inner liner and outer cover with an embedded nylon cord reinforcement and wire reinforced flanged collars.

End fittings are steel flanges drilled to the required specifications or female unions.

Other materials and styles of rubber flexible joints are available on request or can be designed to meet customers’ specific requirements.

Available Styles/Materials

Material Code	Cover Elastomer	Tube Elastomer	Maximum Operating Temp °C
EE	EPDM	EPDM	100°C
BB	Chloro Butyl	Chloro Butyl	100°C
HH	Neoprene	Hypalon	100°C
NN	Neoprene	Neoprene	100°C
NP	Neoprene	Nitrile (Buna)	100°C

Advantages of Rubber Expansion Joints

Prevents stresses due to extension and contraction

TFC-FPS rubber expansion joints provide relief from stresses caused by thermal extension and contraction in pipe lines or ducting systems. Continuing movement is experienced in these systems because of varying ambient temperatures, differences in temperature of materials being handled and differences in composition. TFC-FPS expansion joints absorb this unavoidable movement thereby eliminating the danger of buckling or pulling apart piping systems or equipment and the expensive maintenance costs that would result.

Insulates against the Transfer of Noise and Vibration

Pumps, compressors, fans and similar pulsating equipment usually generate objectionable noise and vibration. The transmission of noise and vibration tends to reduce the efficiency of adjacent equipment as well as impair the working conditions in offices and factories. TFC-FPS rubber expansion joints serve as reliable insulators against such destructive vibration and disturbing noise.

Compensates for Misalignment

Settlement, load stresses and wearing of parts will frequently cause piping, ducting and mechanical equipment to move out of normal alignment.

TFC-FPS rubber expansion joints handle these problems within their design limits.

Specially constructed expansion joints are available for specific conditions of misalignment.

