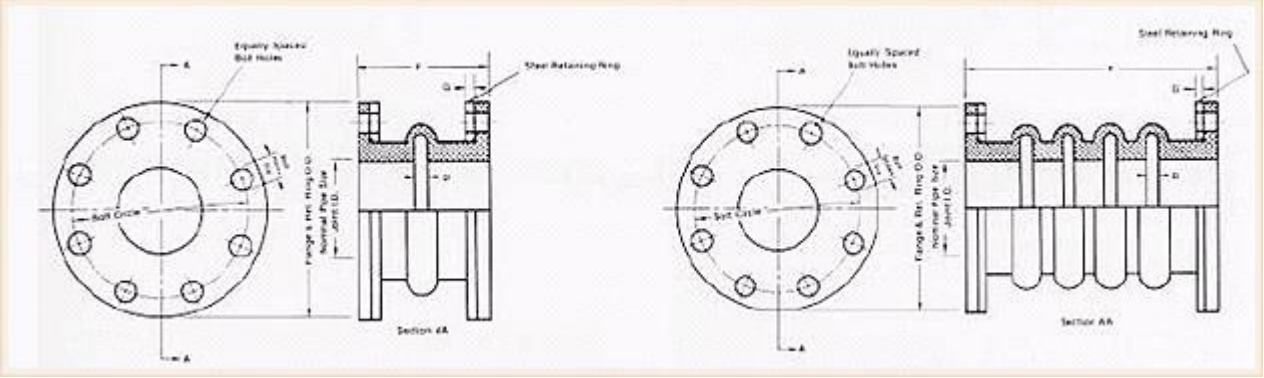
SPOOL TYPE

A full face integral flange design is available in both Single Arch
and Multiple Arch Types. These basic types can be manufactured
to meet the requirements of the related Code and Standards. These types are available in several construction design series,
based on the application pressure requirement.

1) Single Arch Type

Consists of fiber and rubber reinforced with metal rings or wire. Joint body and flange are in one body. Has same type of bolt holes as the metal flange of the pipe to be connected. The rubber flange is designed to be thick enough to avoid leakage without a gasket for connecting the other flange. Allows minimum face-to-face dimensions.

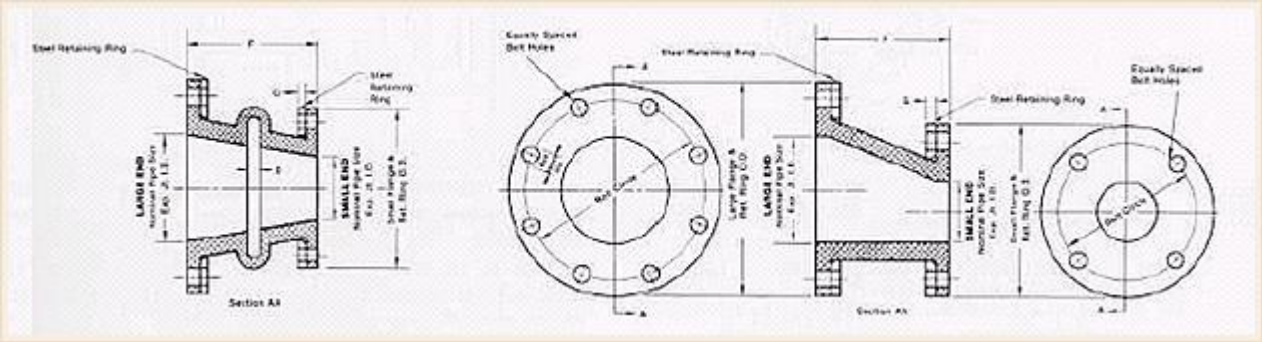


2) Multiple Arch Type

Applied where a larger movement is required compared to single arch. Each arch of multiple arch type is able to absorb the same movements as one arch of single arch of single arch type does. Minimum length is in proportion to arithmetic, and maintains lateral stability and the joint installed horizontally generally requires a maximum of four scenes to prevent loosening.

3) Reducer Type

Applied when each side has a different diameter. Have two types : "Concentric Type" (both pipes have the same central axis line) and "Eccentric Type" (having the axis of each end offset from each other). Taper angle does not exceed 15°.



4) Filled Arch Type

It fills a gap by inserting soft rubber into the inside gap, preventing separation of the rubber while operation. Movements of expansion joints with filled arches are limited to 50% of the normal movements of comparable size of expansion joint with unfilled (open) arches.

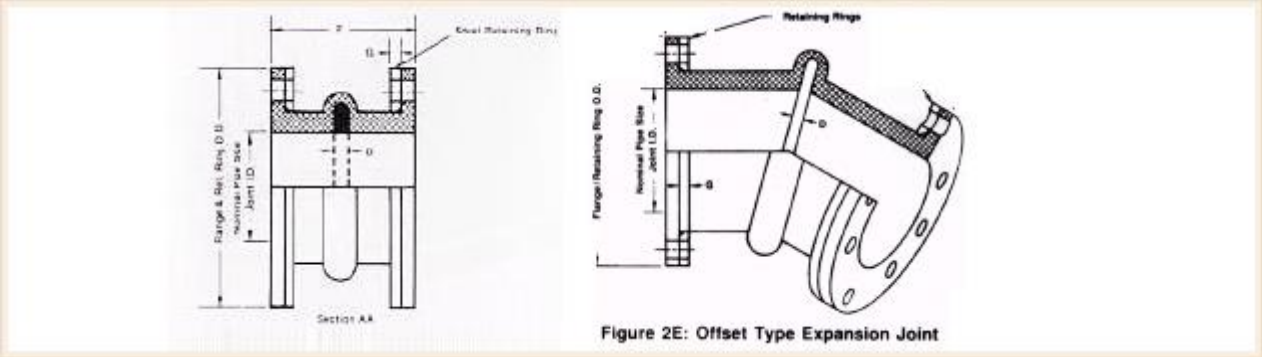
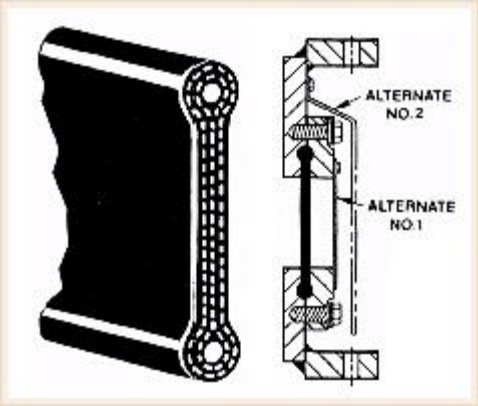


Figure 2E: Offset Type Expansion Joint

5) Offset Type

Manufactured by request of client in the case of non-identical piping axis line. Occasionally used where it is difficult to compensate for lineup errors.

DOG-BONE TYPE BELT



A molded construction of plies of rubber-impregnated fabric, rubber covered and spliced endless, to a specified peripheral dimension. Used as a flexible connection in central power stations on condensers. Designed for compression and lateral movements for full vacuum service and maximum pressure of 15 psig. Must be used with special clamping devices.