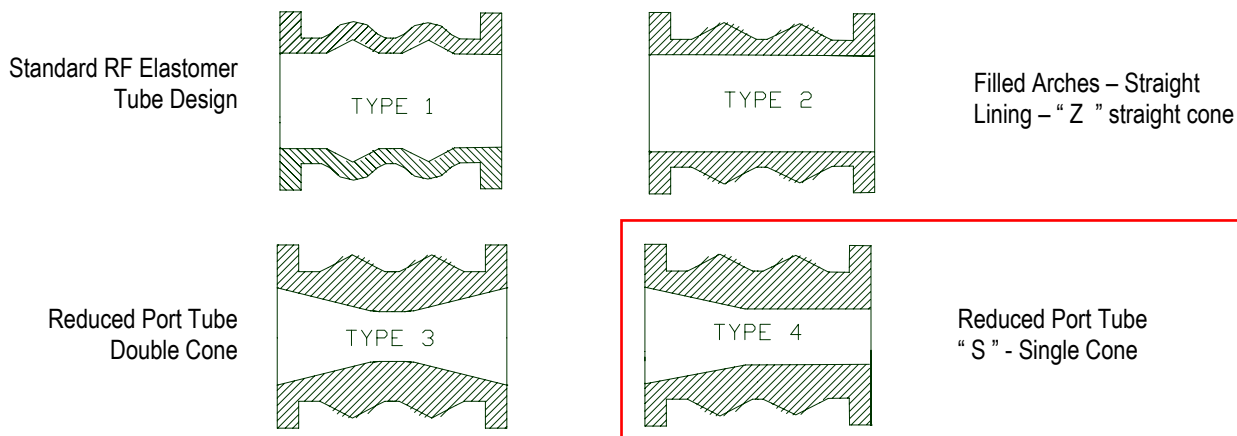




ELASTOMER TUBE PROFILE SELECTION



Elastomer tube designs or profiles are manufactured in four (4) basic configurations, depending on the given process conditions and requirements. Selection is based upon mode of operation and for modulating valves, based upon flow control requirements.

Type 1 ON/OFF or CONTROL Standard “dual fold” profile allows elastomer tube to flex, not stretch, when closing is the most widely used RF VALVE[®] tube profile for on/off service. Best use is when valve cycles frequently and velocity ≤ 15 ft./sec. The elastomer is NOT stretched and stressed during actuation as conventional pinch valves are. Due to this non-stretch design, elastomer tubes can last up to 2-3 times longer than conventional “straight sleeves” that stretch to close, or hardened metal/alloy valves in abrasive, corrosive, or scaling type services. Folds mechanically resist collapse under vacuum conditions and assist valve to open with loss of air. For higher pressure and velocity, Type 2 may offer longer elastomer life in many services due to added wear rubber by filling folds.

Type 2 ON/OFF OR CONTROL Dual fold profile, straight lining; used in high pressure and throttling applications offering additional wear rubber (filled arches) for highly abrasive modulating services.

Type 3 CONTROL “Double Cone” reduced port profile allows elastomer tube profile to be matched to the customer’s precise throttling specifications. One of the major causes of early wear with any control valve is incorrect sizing for a given flow. Accurate flow and piping data allows tube trim to be “tailored” to process requirements. This design also permits bi-directional flow control when required.

Type 4 CONTROL “Single Cone” reduced port, unidirectional profile is the most widely used design for modulating providing highly accurate control by sizing trim ID to match flows requirements. Thicker layers of elastomer minimize impact of high velocity, abrasive wear and cavitation.