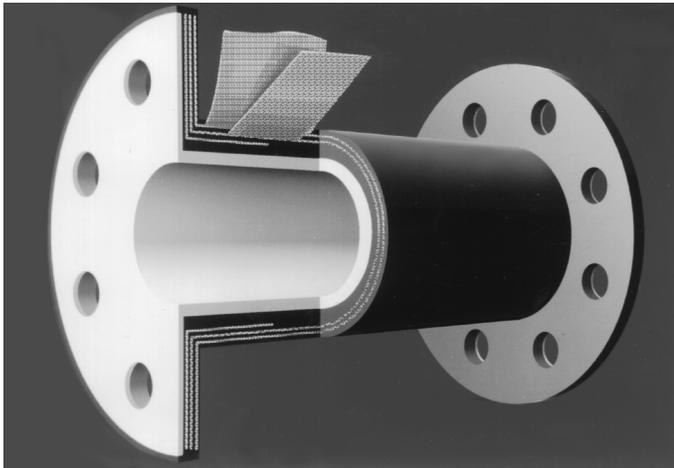




## *Pinch Valve Technical Information*

# Elastomer Characteristics

Red Valve Pinch Valve sleeves are constructed similarly to a heavy-duty truck tire. This cutaway of a Red Valve hand-crafted Pinch Valve sleeve illustrates the design: an elastomer inner tube, the only part of the valve in contact with the process; high strength nylon, polyester or Kevlar fabric; and an exterior Neoprene cover. These parts are vulcanized under pressure to form a pressure-containing sleeve that is the heart of a Pinch Valve. Pinch Valve sleeves are offered in the following elastomers:



*Pinch Valve sleeves offer value and cost-effectiveness with a long service life*

### **Pure Gum Rubber**

This is Red Valve's standard sleeve material for Pinch Valves. It has excellent resiliency, tensile strength and abrasion resistance. Pure Gum Rubber is generally good for most weak chemicals, wet or dry organic acids, alcohols and ketones.

**Maximum operating temperature:** -50°F to +180°F continuous service

### **Neoprene**

This elastomer is generally resistant to moderate chemicals, ozone, fats and many hydrocarbons.

**Maximum operating temperature:** -50°F to +230°F continuous service

Also available in: White food-grade Neoprene

### **Buna-N**

Buna-N is resistant to many hydrocarbons, fats, oils, grease, kerosene and moderate chemicals.

**Maximum operating temperature:** -30°F to +230°F continuous service

Also available in: White food-grade Buna-N

### **Chlorobutyl**

Generally resistant to animal and vegetable fats, oils, greases, ozone, heat and strong oxidizing chemicals. Chlorobutyl has the lowest permeability of all the synthetic rubbers.

**Maximum operating temperature:** -50°F to +250°F continuous service, intermittent service to 300°F

Also available in: White food-grade Chlorobutyl

### **Hypalon®**

Resistant to heat, ozone, weathering and oxidizing chemicals. It has good resistance to strong acids at room temperatures.

**Maximum operating temperature:** -50°F to +230°F continuous service

### **Polyurethane**

Polyurethane has excellent abrasion resistance and low temperature flexibility, tear resistance and ozone and weathering resistance. Polyurethane has outstanding oil and fuel resistance and is generally resistant to moderate chemicals, fats, diluted acids and many hydrocarbons.

**Maximum operating temperature:** -50°F to +300°F continuous service

### **EPDM**

Also known as Nordel, EPDM is recommended for good abrasion resistance at elevated temperatures. Good for steam, water, ketones and diluted acids.

**Maximum operating temperature:** -50°F to +300°F continuous service and surge temperatures of +325°F

Also available in: White food-grade EPDM

### **Viton®**

Viton® exhibits good resistance to most oils, chemicals, solvents, and halogenated hydrocarbons and an excellent resistance to ozone, oxygen and weathering.

**Maximum operating temperature:** -10°F to +400°F

Also available in: White food-grade Viton®