



Elastomers



Red Valve Pinch Valve sleeves are constructed similar to a heavy-duty truck tire. This cutaway of a Red Valve hand-crafted quality 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:

Elastomer	Temperature
<p>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.</p>	<p>-50⁰F to +1 80⁰F continuous service.</p>
<p>Neoprene This elastomer is generally resistant to moderate chemicals, ozone, fats, and many hydrocarbons. <i>Also available in: White food grade Neoprene</i></p>	<p>-50⁰F to +230⁰F continuous service.</p>
<p>Buna-N Buna-N is resistant to many hydrocarbons, fats, oils, grease, kerosene, and moderate chemicals. <i>Also available in: White food grade Buna-N</i></p>	<p>-30⁰F to +230⁰F continuous service.</p>
<p>Hypalon® Resistant to heat, ozone, weathering, and oxidizing chemicals. It has good resistance to strong acids at room temperatures.</p>	<p>-50⁰F to +230⁰F continuous service.</p>

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.

Also available in: White food grade Chlorobutyl

-50⁰F to +250⁰F
continuous service

+300⁰F
intermittent service

Polyurethane

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

-50⁰F to +300⁰F
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.

Also available in: White food grade EPDM

-50⁰F to +300⁰F
continuous service

+325⁰F
surge temperatures

Viton®

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

Also available in: White food grade Viton.

-10⁰F to +400⁰F
continuous service.