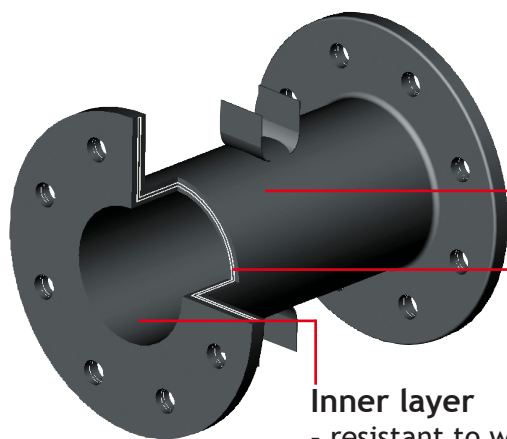


# Pinch Valve Sleeves

The core of the Flowrox pinch valve is the elastic sleeve, which is the only part in contact with the medium. The full bore sleeve integrates the valve perfectly to the pipeline, eliminates turbulence and minimizes pressure losses. Technologically advanced sleeves guarantee high wear and corrosion resistance, a trouble free operation and extended lifetime.

## SLEEVE DESIGN

Pinch valves are commonly applied in aggressive, abrasive and corrosive media types or in high-pressure applications. To stand these conditions Flowrox sleeves are handmade layer by layer in a quality process covered by ISO 9001:2000.



### Outer layer

- protects the sleeve

### Reinforcement cords

- gives the sleeve its pressure retaining capabilities

### Inner layer

- resistant to wear and chemicals

High grade sleeve materials range from wear resistant styrene butadiene to numerous other elastomers and rubber compounds. They are highly resistant to abrasive/corrosive slurries, powders and granular substances.

## SPECIAL DESIGNS

Several sleeve design options such as a conical sleeve for control valves and a suction sleeve for negative pressure applications are available.

### Suction sleeve

- Specially designed for negative pressure applications e.g. suction lines and for applications where sleeve pulsation occurs

### Sensomate sleeve

- Detects and signals critical wear

### Polyurethane (PU) lined sleeve

- Sleeve with polyurethane lining ensure improved protection against wear

### Conical sleeve

- Ensure the most accurate control in flow control applications



## TECHNICAL FEATURES

- Size Range: 25 mm - 1000 mm
- Operating temperature: -50 °C - +160 °C
- Operating pressure from vacuum to 100 bar

## PRODUCT FEATURES

- Flexible
- Self-cleaning
- Multilayer construction
- Full bore
- 100% tight
- Only the sleeve is in contact with the medium
- Numerous elastomer compounds
- Special sleeve designs

## PROCESS BENEFITS

- Excellent wear resistance
- High corrosion resistance
- No turbulence
- No jamming or clogging
- No flow restrictions
- Reduced process downtime

## STANDARD SLEEVE MATERIALS FOR FLOWROX VALVES

Rubber quality	Application examples	Temperature range	Typical media
<b>SBRT</b> Styrene Butadiene, Flowrox Blend	Heavy wearing High cycle frequency	-40 °C - +110 °C	Abrasive materials, diluted acid, alkali and chemical applications
<b>EPDM</b> Ethylene Propylene	Chemical applications • Applicable to 75% of all industrial chemical applications	-40 °C - +120 °C	Concentrated and oxidizing chemicals

## OTHER SLEEVE MATERIAL OPTIONS

Rubber quality	Application examples	Temperature range	Typical media
<b>NBR</b> Nitrile Rubber	<b>Applications involving oils, fats and hydrocarbon</b>	-30 °C - +100 °C	Oils, fats, fuels hydrocarbon, lubricants
<b>NR</b> Natural Rubber	<b>High wear applications</b>	-50 °C - +75 °C	Abrasive materials, diluted acids, alkali & chemicals
<b>HNBR</b> Hydrogenated Nitrile	<b>High temperature applications</b>	-30 °C - +160 °C	Oils, fats, fuels hydrocarbon, lubricants
<b>NRF</b> Natural Rubber Foodstuff Quality White inner lining	<b>Foodstuff applications</b> • Fulfils FDA (Food and Drug Administration) requirements	-40 °C - +75 °C	Media used in food and other CIP (clean-in-place) processes, alcohol
<b>NBRF</b> Nitrile Rubber White inner lining	<b>Applications involving fatty foodstuff</b> • Fulfils FDA (Food and Drug Administration) requirements	-30 °C - +100 °C	Vegetable and animal oils and fats
<b>EPDM/B</b> Ethylene Propylene, Flowrox Blend	<b>Pulp and paper industry's green liquor application</b>	-40 °C - +100 °C	Green liquor, alkaline and extraneous matter in green liquor processes
<b>CR</b> Chloroprene Rubber	<b>Special-purpose chemical applications</b> • Resilient to ozone and averse weather	-40 °C - +100 °C	Chemicals, acids, several solvents, aliphatic oils, fats, lubricants
<b>FPM</b> Fluorine Rubber (Viton®)	<b>Special-purpose chemical applications</b> • Resilient to ozone and averse weather	-20 °C - +120 °C	Chemicals, aliphatic oils, aromatic and halogenated hydrocarbon
<b>CSM</b> Chloro-sulphone- ethylene (Hypalon®)	<b>Special-purpose chemical applications</b> • Resilient to ozone and averse weather	-40 °C - +100 °C	Chemicals, acids, several solvents, aliphatic oils, fats, lubricants
<b>IIR</b> Butyl	<b>Special-purpose chemical applications</b> • Impermeable to gas	-40 °C - +100 °C	Concentrated and acidic chemicals, vegetable oils
<b>PU</b> Polyurethane with PU lining	<b>Abrasive media applications</b>	-10 °C - +80 °C	Abrasive materials, diluted chemicals, hydrocarbon, oils, lubricants

