

## Flowrox Sleeves



### 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

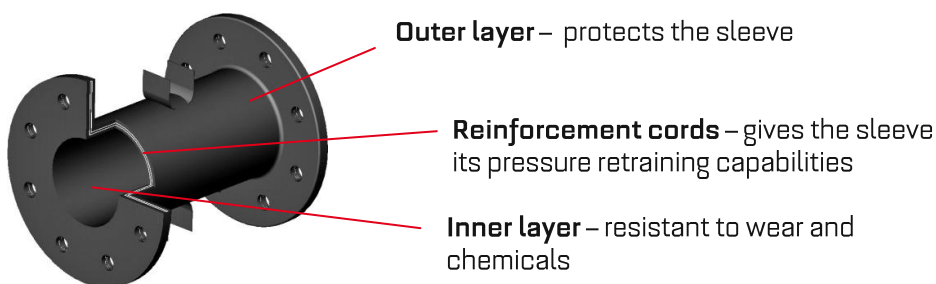
### Process benefits

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

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.



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 vacuum sleeve for negative pressure applications are available.

#### Suction sleeve

- Specially designed for negative pressure applications such as suction lines and for applications where sleeve pulsation occurs

#### Conical sleeve

- Conical sleeves ensure the most accurate control in flow control applications.

#### Sensomate sleeve

- Sensomate sleeve detects and signals critical wear.

#### Polyurethane (PU) lined sleeve

- Sleeve with polyurethane lining ensure improved protection against wear.



## 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 <ul style="list-style-type: none"> <li>Applicable to 75% of all industrial chemical applications</li> </ul>	-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	Applications involving oils, fats and hydrocarbon	-30°C - +100°C	Oils, Fats, Fuels Hydrocarbon, Lubricants
<b>NR</b> Natural Rubber	High wear applications	-50°C - +75°C	Abrasive materials Diluted acids, alkali and chemicals
<b>HNBR</b> Hydrogenated Nitrile	High temperature applications	-30°C - +160°C	Oils, Fats, Fuels Hydrocarbon, Lubricants
<b>NRF</b> Natural Rubber Foodstuff Quality White inner lining	Foodstuff applications 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	Applications involving fatty foodstuff 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	Pulp and paper industry's green liquor application	-40°C - +100°C	Green liquor Alkaline and extraneous matter in green liquor processes
<b>CR</b> Chloroprene Rubber	Special-purpose chemical applications <ul style="list-style-type: none"> <li>Resilient to ozone and averse weather</li> </ul>	-40°C - +100°C	Chemicals, Acids Several solvents Aliphatic oils Fats, Lubricants
<b>FPM</b> Fluorine Rubber (Viton®)	Special-purpose chemical applications <ul style="list-style-type: none"> <li>Resilient to ozone and averse weather</li> </ul>	-20°C - +120°C	Chemicals Aliphatic oils Aromatic and halogenated hydrocarbon
<b>CSM</b> Chloro-sulphone-ethylene (Hypalon®)	Special-purpose chemical applications <ul style="list-style-type: none"> <li>Resilient to ozone and averse weather</li> </ul>	-40°C - +100°C	Chemicals, Acids Several solvents Aliphatic oils Fats, Lubricants
<b>IIR</b> Butyl	Special-purpose chemical applications <ul style="list-style-type: none"> <li>Impermeable to gas</li> </ul>	-40°C - +100°C	Concentrated and acidic chemicals Vegetable oils
<b>PU</b> Polyurethane lined sleeve	Abrasive media applications	-10°C - +80°C	Abrasive materials Diluted chemicals Hydrocarbon Oils, Lubricants

For more information on sleeve materials for Flowrox valves, contact your nearest Flowrox representative.

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