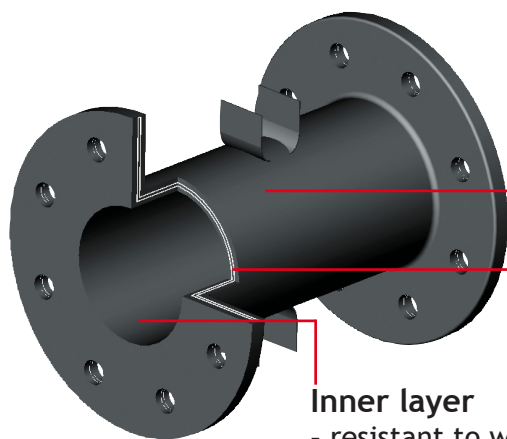


Pinch Valve Sleeves

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
SBRT Styrene Butadiene, Flowrox Blend	Heavy wearing High cycle frequency	-40 °C - +110 °C	Abrasive materials, diluted acid, alkali and chemical applications
EPDM 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
NBR Nitrile Rubber	Applications involving oils, fats and hydrocarbon	-30 °C - +100 °C	Oils, fats, fuels hydrocarbon, lubricants
NR Natural Rubber	High wear applications	-50 °C - +75 °C	Abrasive materials, diluted acids, alkali & chemicals
HNBR Hydrogenated Nitrile	High temperature applications	-30 °C - +160 °C	Oils, fats, fuels hydrocarbon, lubricants
NRF 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
NBRF 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
EPDM/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
CR Chloroprene Rubber	Special-purpose chemical applications • Resilient to ozone and averse weather	-40 °C - +100 °C	Chemicals, acids, several solvents, aliphatic oils, fats, lubricants
FPM Fluorine Rubber (Viton®)	Special-purpose chemical applications • Resilient to ozone and averse weather	-20 °C - +120 °C	Chemicals, aliphatic oils, aromatic and halogenated hydrocarbon
CSM Chloro-sulphone- ethylene (Hypalon®)	Special-purpose chemical applications • Resilient to ozone and averse weather	-40 °C - +100 °C	Chemicals, acids, several solvents, aliphatic oils, fats, lubricants
IIR Butyl	Special-purpose chemical applications • Impermeable to gas	-40 °C - +100 °C	Concentrated and acidic chemicals, vegetable oils
PU Polyurethane with PU lining	Abrasive media applications	-10 °C - +80 °C	Abrasive materials, diluted chemicals, hydrocarbon, oils, lubricants

