# DUAL PINCH VALVE SLEEVES (DPVS)

The core of the DUAL Pinch Valve is the rubber sleeve, which is the only part in contact with the medium. The full bore sleeve intergrates the valve perfectly to the pipeline, eliminates turbulence and minimizes pressure losses. Technologically advanced sleeves guarantee high wear and corrosion resistence, a trouble free operation and extended lifetime.
The sleeves are well suited for on/off throttling control applications involving slurries, powders, liquids, granulated materials and applications where scale build is a problem.


## FEATURES

- Excellent wear resistance
- High corrosion resistence
- No turbulence
- No flow resistence
- Reduces process downtime
- Long operating lifetime
- Full bore, low friction loss
- 100% drip tight closure even with solids in the medium
- Light weight
- Flexible
- Self-cleaning
- Multilayer construction
- Steel reinforcing for higher pressures
- 100% tight
- Only the sleeve is in contact with the medium
- Numerous elastomer compounds
- Special sleeve designs

## PRODUCT SPECIFICATION

| | |
|---|---|
| ELASTOMER SLEEVE MATERIALS: | Gum black and red rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Viton and Hypalon |
| SIZE RANGE: | 50mm - 1500mm / $^{1}/_{2}$" - 60" |
| PRESSURE RATING: | From vacuum to 100Bar |
| FLANGE TYPE: | Full face or D ring |
| SLEEVE INTERNALS: | Resistant to wear and chemicals |
| MATERIAL CERTIFICATION: | Certified chemical and physical test reports can be supplied. |
| VALVE TYPE: | Rising and non rising spindle |
| TEMPERATURES: | -50˚C to +120˚C |

## SLEEVE DESIGN

Pinch Valves are commonly applied in aggressive, abrasive and corrosive medium types or in high pressure applications. To withstand these conditions Dual sleeves are handmade, layer by layer, in a quality process.


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

DPVS

## SPECIALISED SLEEVE DESIGNS

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

### Suction Sleeve

Specially designed for negative pressure applications such as suction lines and for applications where sleeve pulsations occurs.

### Conical Sleeve

Conical sleeves ensure the most accuate control in flow control applications.

### Sensomate Sleeve

Sonsomate sleeves detects and signals critical wear.

### Polyurethan (PU) Lined Sleeves

Sleeves with polyurethan lining enures improved protection against wear.

## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.

## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic and handwheel.

## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as:

- Polyurethane.
- Natural red rubber.
- Natural black rubber.
- Neoprene rubber.
- Nitrile rubber.
- EPDM rubber.
- Reduced port sleeve for throttling applications.

## ALTERNATIVE SLEEVE MATERIAL OPTIONS

| RUBBER QUALITY | APPLICATION EXAMPLES | TEMPERATURE RANGE | TYPICAL MEDIA |
|---|---|---|---|
| NBR<br>Nitrile Rubber | Oils, fats and hydrocarbon | -30˚C to +100˚C | Oils, fats, fuels, hydrocarbon, lubricants |
| NR<br>Natural Rubber | High wear applications | -50˚C to +75˚C | Abrasive materials, diluted acids, alkali and chemicals |
| HNBR<br>Hydrogenated Nitrile | High temperature applications | -30˚C to +160˚C | Oils, fats, fuels, hydrocarbon, lubricants |
| NRF<br>Natural Rubber<br>Foodstuff Quality<br>White Inner Lining | Foodstuff applications.<br>Fulfils FDA (Food and Drug Administation requirements | -40˚C to +75˚C | Media used in food and other CIP (clean-in-place) processes, alcohol |
| NBRF<br>Nitrile Rubber<br>White Inner Lining | Applications involving fatty foodstuff<br>Fulfils FDA (Food and Drug Administation requirements | -30˚C to +100˚C | Vegetable and animal oils and fats |
| EPDM/B<br>Ethylene Propylene Rubber | Pulp and paper industry's green liquor application | -40˚C to +100˚C | Green liquor, alkaline and extraneous matter in green liquor processes |
| CR<br>Chloroprene Rubber | Special- purpose chemical applications<br>• Resilient to ozone and adverse weather | -40˚C to +100˚C | Chemical, acids, several solvents, aliphatic oils, fats and lubricants |
| FPM<br>Flurorine Rubber (Viton®) | Special- purpose chemical applications<br>• Resilient to ozone and adverse weather | -20˚C to +120˚C | Chemicals, aliphatic oils, aromatic and halogenated hydrocarbon |
| CSM<br>Chloro-Sulphate-Ethylene Rubber (Hypalon®) | Special- purpose chemical applications<br>• Resilient to ozone and averse weather | -40˚C to +100˚C | Chemicals, acids, several solvents, aliphatic oils, fats and lubricants |
| IIR<br>Chloro-Butyl Rubber | Special- purpose chemical applications<br>• Impermeable to gas | -40˚C to +100˚C | Concerntrated and acidic chemicals, vegetable oils |
| PU<br>Polyurethane Lined Sleeve | Abrasive medium applications | -10˚C to +80˚C | Abrasive materials, diluted chemicals, hydrocarbon oils and lubricants |



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