

Features & Benefits

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HIGH PERFORMANCE VALVE FOR ABRASIVE, SCALING, CORROSIVE AND PLUGGING LIQUIDS & POWDERS

RF VALVE®

On/Off and Control/Throttling Services

aiRFlex®

Applications

The RF valves are especially suited where abrasion, jamming, plugging and leakage of other valves is a problem. They are typically used in pulp and paper mills, such as coating and filler handling systems, pulp production, and the chemical recovery areas of the mills. Other applications are in the mining, industrial minerals, chemicals, metal processing as well as industrial and municipal waste streams.

Early Warning to Valve Wear

The SMART Valve™ Wear Monitoring Sensor is built into each tube and gives maintenance personnel for the first time the tools to know when a tube needs replacement, reducing downtime and outage cost associated with unexpected valve failures. Integral to elastomer tube construction is a patented wear monitoring sensor, imbedded between the thick inner wear resistant lining and the outer reinforcing cords. If the inner lining wears sufficiently to expose and disturb the sensor, it will change the resistance of the control loop and send a signal to the alarm box.

Non-Stretch Elastomer Tube

RF's patented non-stretch tube design features two expansion joint-like arches, which flex, rather than stretch when closing the valve. This gives RF valves remarkable wear resistance and cycle life superiority over conventional pinch valves. In addition, the tube arches and positive opening tags ensure tube stability under low or fluctuating line pressures and vacuum conditions. Full port and reduced port tubes permit precise throttling control.

DIN, ISO, or ASME Face to Face length

All RF valves come in industry standard DIN, ISO and ASME face-to-face takeout, making it the only pinch valve line interchangeable with most ball, plug, gate, diaphragm etc. valves.

No Jamming - No Leaking

The self-cleaning, flexing action of the RF valves prevents build-up of scaling deposits and thus guarantees that the valves will not to jam or seize, even in high solids. The RF Valve® offers zero leakage closure, even on solids.

Easy Maintenance

The elastomer tube is the only part in contact with the process stream; as such it is the only part that needs replacement, reducing inventory requirements and eliminating the high cost of throwaway valves. The RF valves are designed to facilitate maintenance by permitting the tube to be changed in-line, without the need to re-calibrate the valve and without requiring special tools or skills. This reduces maintenance cost by up to 70%.

Fugitive Emission Control

Thanks to its design the RF valves have no valve stems, packing, seals or movable parts that can leak: their seamless elastomer tube design, incorporating the wear sensor wire inside, offers two levels of protection. The sealed body feature provides a third level of emission control.

Operating pressures vacuum to 900 psi; process flow temperature -50 to 300°F; Line size 1" to 60"
Wide variety of elastomers to meet the different process requirements
Manual, pneumatic, hydraulic and electromechanical actuators
Positioners, solenoids, limit switches, proximity switches, fail close devices

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