Sliding gate valves

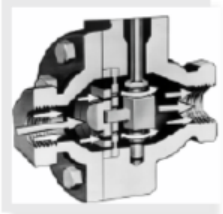
Tight shutoff

You'll notice something different in a Jordan valve . . . the sliding gate seat. A remarkably simple concept that offers sophisticated performance and benefits not found in traditional rising stem and rotary valves.

The sliding gate seat is made up of two primary parts: a moveable *disc* and stationary *plate* with multiple orifices. Together, this seat set achieves levels of performance, reliability and accuracy that are hard to find in other valve designs.

Straight-through flow

The control element in the Jordan Valve sliding gated design is perpendicular to the flow, unlike the traditional globe style design. With the straight thru flow design, the sliding gate design reduces turbulence and provides superior trim life.



The sliding gate design provides unparalleled low flow control since the flow works with the design, not against it. In a typical globe style design the flow goes underneath the plug, working against the plug. In the sliding gate design, the flow pushes the disc against the plate, helping to hold the desired setpoint. This also enables the disc and plate to lap and clean themselves. Thus the sliding gate design, wears in instead of wearing out!

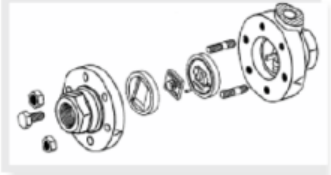
This unique ability provides much higher rangeability and better turndown while maintaining tight shut-off. When the valve is closed, the disc and plate form an area of closure, not a line of closure. The upstream pressure and a retaining guide combine to keep the disc and plate in constant contact, which eliminates the noisy chattering often encountered during valve operation. This construction also minimizes the hunting commonly found in conventional rising stem globe style valves.

Short stroke, fast response

The total stroke length of a sliding gate valve is just a fraction of the equivalent globe or rotary style valve. In pressure regulators, the stroke length is typically 1/3 that of a globe valve, reducing the amount of droop in the regulator. In a Jordan control valve, the stroke length can be as low as 1/6 that of a conventional globe or cage guided design. This allows much smaller actuators, reducing air consumption and weight. In both regulators and control valves, the response time from a change in the input signal is dramatically reduced. This also lessens the wear on the packing and lengthens the diaphragm life.

Easy to maintain

When maintenance is needed on a sliding gate valve, the simplistic design makes them easy to perform. Disassembly of the valve is very simple and, since the seats are not pressed or screwed into the valve body, they conveniently lift out. Should your flow requirements change, interchangeable Cv's are available in flow coefficients as low as 0.0008 and as high as 395 (depending on body size).



Quiet operation

Quiet operation is a standard feature of Jordan sliding gate valves. Compared to conventional globe and cage designs, the sliding gate seat generates between 5-10dBa less noise. In addition, you won't find a premium price adder for "low-noise trim". The sliding gate valve is inherently quieter than other types of valves because:

- The disc and plate remain in constant contact, eliminating the chatter found in plug and seat designs
- The straight-through flow passage minimizes turbulence found in globe and rotary designs, a prime cause of valve noise
- The multiple orifices in the plate and disc divide the flow into smaller, noise-dissipating flow streams.