



# JORDAN VALVE

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## Jordan Sliding Gate Valve for Precise, Efficient Steam Control

The Jordan sliding gate valve technology is designed to deliver more efficient control than traditional valves. Using Jordan sliding gate valves in industrial steam applications reduces cost of ownership with more efficient steam control and less maintenance cost.

### How does the sliding gate valve work?

The sliding gate seat is made up of a movable disc and stationary plate each with matching multiple openings. When the valve is fully closed, the disc and plate are aligned such that the openings are covered, creating a tight Class IV shutoff. As the valve opens, the slots are gradually uncovered and fluid flows straight through until the desired set point is reached. The disc modulates its position to allow process fluid to flow and maintain the set point.

This sliding gate seat set achieves levels of performance, reliability and accuracy that are hard to find in other designs.

### Why the Sliding Gate Valve Outperforms in Steam Service

The Jordan sliding gate valve is designed for industrial use where long term operation and lower overall cost of ownership are important.

#### Jordan sliding gate valve lasts longer

In a sliding gate design, the product travels straight through the valve, minimizing turbulence and wear. Conversely, in a Globe style the product flow changes direction three times leading to higher velocity and flow turbulence, causing more wear on the seat components.



Jordan Valve sliding gate seats, with their advanced Jorcote coating, have demonstrated minimal wear for over one million cycles in high-pressure steam service. When the sliding gate opens, steam travels straight through multiple openings, distributing the erosive exposure of steam across surfaces and minimizing wire draw often occurring in traditional steam valve designs.

- Longer valve seat life results in less maintenance and downtime.

#### Sliding gate delivers more accurate control

The control element in the Jordan sliding gate valve is perpendicular to the process flow and has a short stroke length. Combined with the multiple openings, this seat design allows faster more accurate control and minimal droop. The process flow path is into the disk, minimizing valve chatter and improving stability at the low end of stroke. Because it responds quickly to input signals, Jordan sliding gate valve reaches pressure and temperature setpoint quicker.

- More accurate control and faster response results in steam savings.

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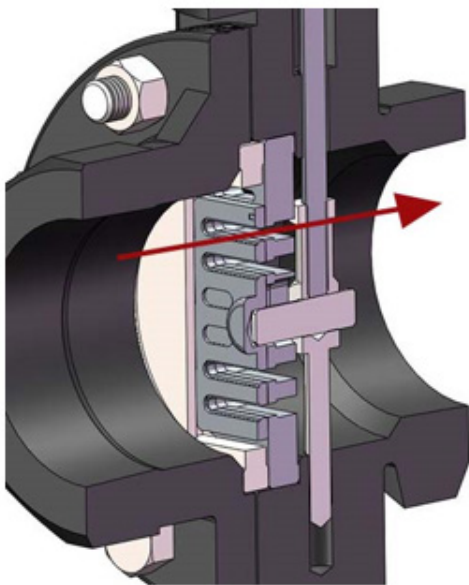
### **Sliding gate valve operates with less energy**

The stroke length of the sliding gate valve is a fraction of an inch. This not only results in faster reaction times, but the short operating path requires less force to operate. It also significantly reduces the stresses on the packing and the valve actuator.

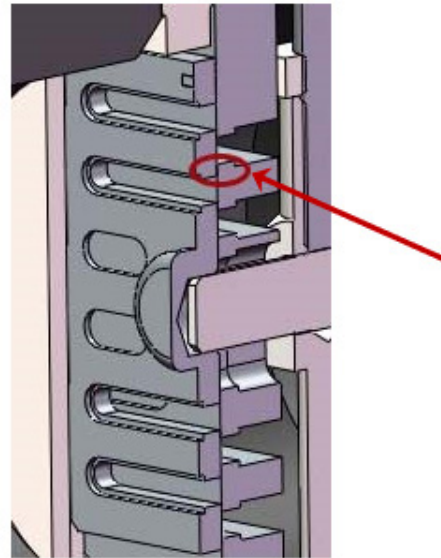
- Savings add up with reduced energy consumption.

### **Jordan valve overlapping design creates tight shut-off**

The disc and plate are designed with a slight overlap of the openings to provide an ANSI Class IV shut-off rating. Each orifice is engineered with a 1/32" overlap creating an area of closure versus a line of closure as seen in globe valves.



*Open sliding gate allows straight through flow*



*Closed sliding gate has 1/32" overlap for shut-off*

This seat overlap in the Jordan Sliding Gate Valve is an important advantage. If there were any damage to the leading edge of the valve seat due to steam erosion, it would be covered when the sliding gate closes, ensuring full shut-off.

- Area of closure design has better long term shut-off.

### **Sliding gate design generates less noise**

Compared to conventional globe and cage designs, the sliding gate seat generates between 5-10dB less noise. The sliding gate valve is quieter than other traditional valves for several reasons: The disc and plate remain in constant contact, eliminating the chatter; The straight-through flow passage minimizes turbulence, a significant cause of valve noise; And the multiple orifices in the plate and disc divide the flow into smaller flow streams, resulting in less noise.

- Save on premium costs of a "low-noise trim" by using the quiet sliding gate valve.

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