VAL-MATIC®

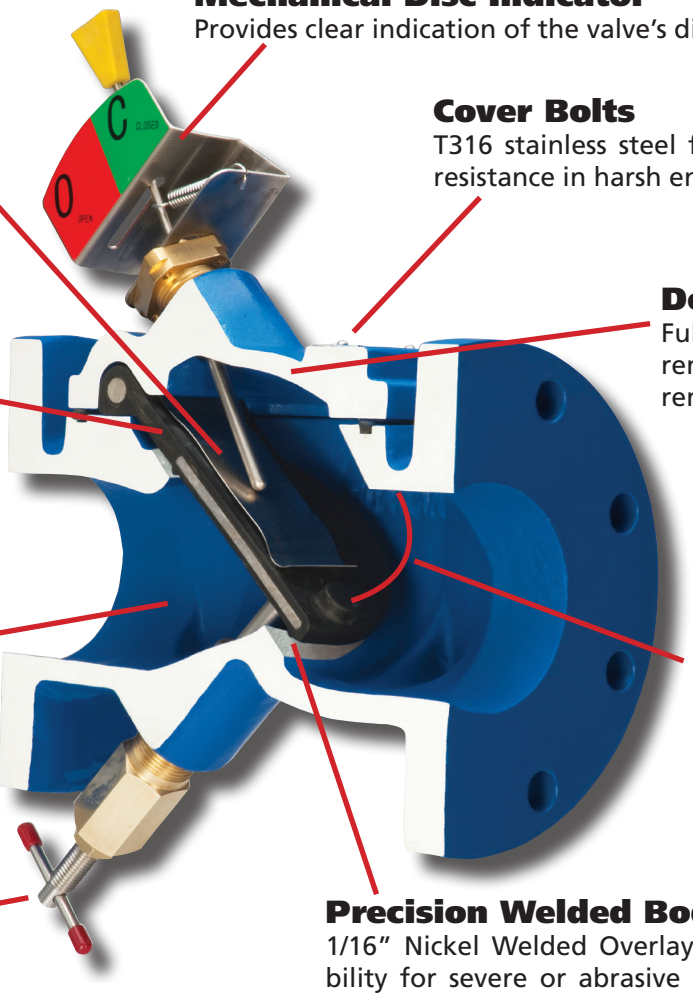
Surgebuster® NXT Check Valve with Nickel Welded Seat

The Surgebuster® NXT Check Valve is an excellent choice for water, wastewater slurries, sludge, and vertical flow up applications. The nickel welded seat is ideal for long life in severe and abrasive service.

Disc Accelerator™
Moves in perfect tandem with the reinforced disc to quickly and efficiently speed the closure of the disc

Mechanical Disc Indicator
Provides clear indication of the valve's disc position

Cover Bolts
T316 stainless steel for corrosion resistance in harsh environments



Reinforced Disc
One piece precision molded disc is steel and nylon reinforced for trouble free performance

Domed Access Port
Full size top access port allows removal of the disc without removing the valve from the line

Non-Clog Design
100% flow area for improved flow characteristics and lower headloss

Non-Slam Closure
"Short Disc Stroke" combined with Memory-Flex™ Disc Action and Disc Accelerator™ to reduce potentially destructive water hammer

Backflow Actuator
Most commonly used for priming pumps, back flushing, draining lines and system testing

Precision Welded Body Seat
1/16" Nickel Welded Overlay adds durability for severe or abrasive applications and ensures a long lasting seal

Product Scope

- Size Range: 2" - 48"
- Pressure Rating: 250 PSI
- 100% Flow Area
- Ductile Iron Construction
- Welded Nickel Seat
- Reinforced Memory-Flex™ Disc
- Disc Accelerator™
- Fusion Bonded Epoxy - Interior/Exterior
- AWWA C508 Certified
- NSF 61 and 372 Certified

Innovative Design

Pumping applications with high head, surge tanks or multiple pumps have long proved to be a challenge for system operators trying to minimize line surges resulting from slamming check valves.

Only one real cause exists for slamming check valves -- reverse flow. The impact of the reverse flow is direct and proportional; the faster the reverse flow, the more violent the slam. If reverse flow through the check valve is allowed to develop, the reverse flow will slam the disc into the seat and create a loud water hammer or surge. Now system operators have discovered the solution...The Surgebuster® Check Valve.

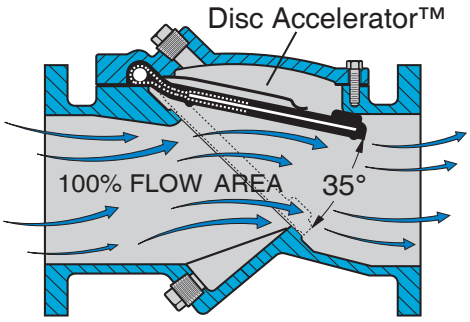


Figure 1. Val-Matic Surgebuster® Check Valve

Optimum Performance

The Surgebuster® achieves rapid closure through a short disc stroke of 35° and adjustable Disc Accelerator™. The short disc stroke is less than half the typical 80° to 90° stroke of a conventional swing check valve. It is achieved by placing the valve seat on a 45° angle while maintaining a full flow area equal to that of the mating pipe (Figures 1 & 2).

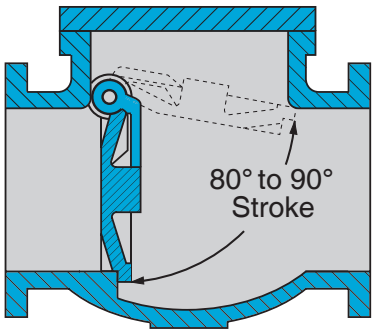


Figure 2. Conventional Swing Check Valve

The Disc Accelerator™ is a precision formed stainless steel mechanism that closes the valve disc rapidly thus avoiding slamming by flow reversal and allowing the disc to be stabilized under flow conditions. The accelerator is fully enclosed within the valve and completely out of the flow path (Figure 1).

Applications

The Surgebuster® Check Valve is excellent in a number of applications, including high head, multiple pump and surge tank installations. The Surgebuster® is designed for the harshest environments and applications.

Installations

- Pulp/Paper
- Sludge
- Potable Water
- Salt Water, Sea Water, Brine
- Raw and Screened Sewage
- Abrasive Slurries, Mining, Bottom Ash

Applications

- High Head
- Multiple Pump
- High Pressure
- Cooling
- Irrigation
- Surge Mitigation
- Vertical Flow Up
- Fracking, Dewatering
- Surge Tank Installations

Crystal Springs Pump Station
Roanoke, VA

TI SALES
36 Hudson Rd
Sudbury MA 01776
800-225-4616
www.tisales.com