Tilted Disc® Check Valve

Energy Efficient • Surge Control • Metal Seating Integrity

The Val-Matic Tilted Disc® Check Valve provides energy efficient operation, while easily handling the most severe and demanding applications with features such as: non-slam closure, wear resistance, leak tight seating, and versatility of operation.

Disc Design
Contoured disc provides minimum headloss and energy savings.

Disc Travel
40° disc stroke results in quick closure.

Body Design
Ultra low headloss is the result of streamlined body contouring and 140% flow area through the seat.

Inspection Ports
The ports allow access to the upstream and downstream sides of the seat.

Disc and Body Seat Rings
Leak tight seating is achieved at all working pressures by utilizing a lift and tilt action which provides excellent sealing and low wear characteristics.

Pivot Pins and Bushings
Maximum strength is achieved by utilizing large diameter pins constructed of high tensile materials and low wear characteristics.

Disc Position Indicator
Direct connection provides an accurate indication of the disc position at all times.

Inspection Ports
Serve as mounting pads for optional dashpots.

Product Scope
- Size Range: 3” - 60” (DN 80 - 1500)
- ASME Pressure Classes: 125-300 (PN10 - PN25)
- 2 Part Interior Epoxy Standard
- Top or Bottom Mounted Oil Dashpots Available
- Fusion Bonded Epoxy (FBE) Available
- Available in Iron or Carbon Steel Construction
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- Energy Efficient with Ultra-Low Headloss
- Independently Certified Flow and Cycle Tested
Versatility of Operation

Bottom Mounted Oil Dashpot

Bottom Mounted Oil Dashpots control final stage of closing to reduce slamming associated with systems having rapid flow reversal characteristics.

Top Mounted Oil Dashpot

Top Mounted Oil Dashpots are directly connected to the disc and provide full open and close control of the valve disc to further reduce the potential for surges and water hammer.

Energy Cost Savings

The Tilted Disc® possesses the lowest headloss of any check valve available today, allowing the least amount of energy during system operation to be consumed. The continuous electrical energy savings that result from using the Val-Matic Tilted Disc® can be seen in the table below for 30 in. valves. This information was calculated using Val-Matic's Energy Cost Calculator.

<table>
<thead>
<tr>
<th>Valve Type</th>
<th>Flow Coefficient (K)</th>
<th>Headloss (ft)</th>
<th>40-Year Energy Cost*</th>
<th>40-Year Tilted-Disc Energy Cost</th>
<th>40-Year Tilted-Disc Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Globe-Style Control Valve</td>
<td>5.70</td>
<td>12.8</td>
<td>$1,111,980</td>
<td>$122,903</td>
<td>$989,077</td>
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<tr>
<td>Silent Check Valve</td>
<td>3.00</td>
<td>6.7</td>
<td>$585,253</td>
<td>$122,903</td>
<td>$462,350</td>
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<td>Swing Check Valve</td>
<td>1.60</td>
<td>3.6</td>
<td>$312,135</td>
<td>$122,903</td>
<td>$189,232</td>
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<td>Tilted Disc® Check Valve</td>
<td>0.63</td>
<td>1.4</td>
<td>$122,903</td>
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</tbody>
</table>

*Assumes 50% usage, $.08/kw-hr, 12 ft/sec, 0.8 efficiency.

Refer to Val-Matic's Tilted Disc® Check Valve Brochure for more information.