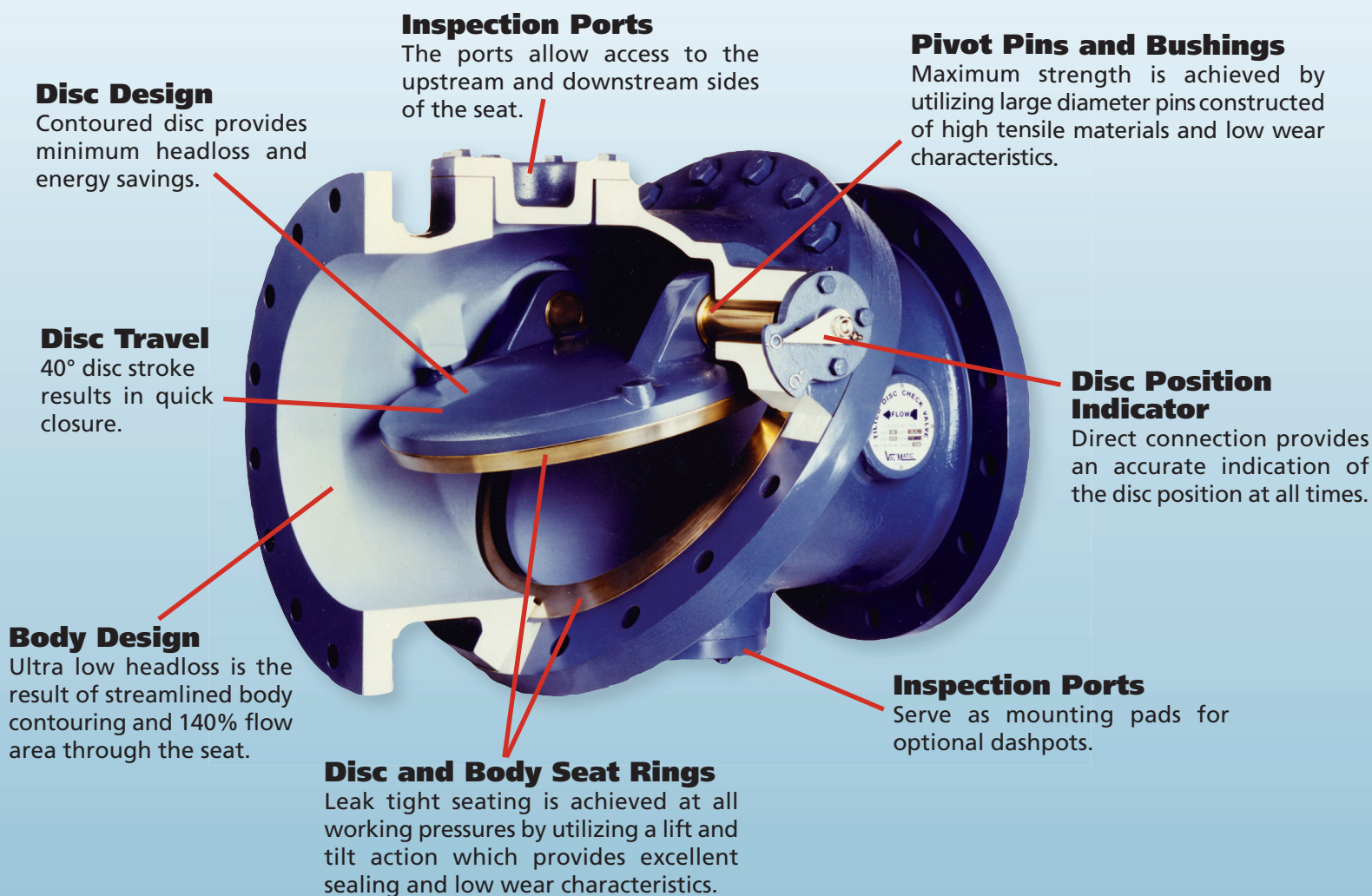


Tilted Disc® Check Valve

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**.



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



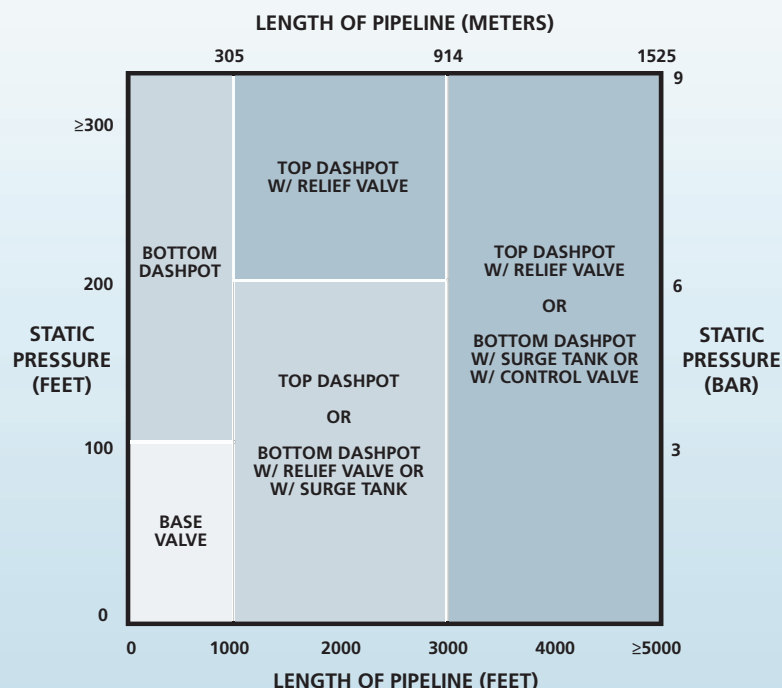
Bottom Mounted Oil Dashpots control final stage of closing to reduce slamming associated with systems having rapid flow reversal characteristics.

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.



Applications



The application graph illustrates the range of use for three valve configurations: 1) base valve, 2) bottom mounted oil dashpot, and 3) top mounted oil dashpot. For example, on a 2,500 ft. (762m) long water transmission main operating at 150 ft. (4.5 Bar) of head, a Tilted Disc® Check Valve with a top mounted oil dashpot would be selected. If a surge relief system is provided, then the bottom mounted oil dashpot configuration may be used.

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**.

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

*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.

