

### TILTING DISC CHECK VALVE

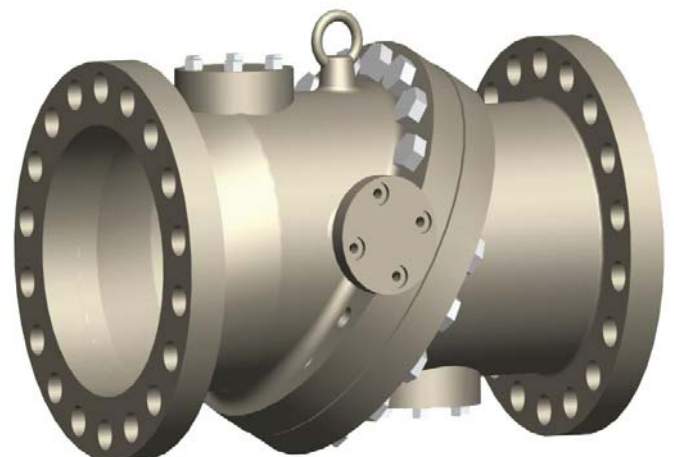
#### INTRODUCTION



The tilting disc check valve shall consist of a circular disc with conical rim, hinged about a fixed pivot above its center-line and offset from the plane of the seat, sealing against a body seat clamped between the two sections of the valve body.

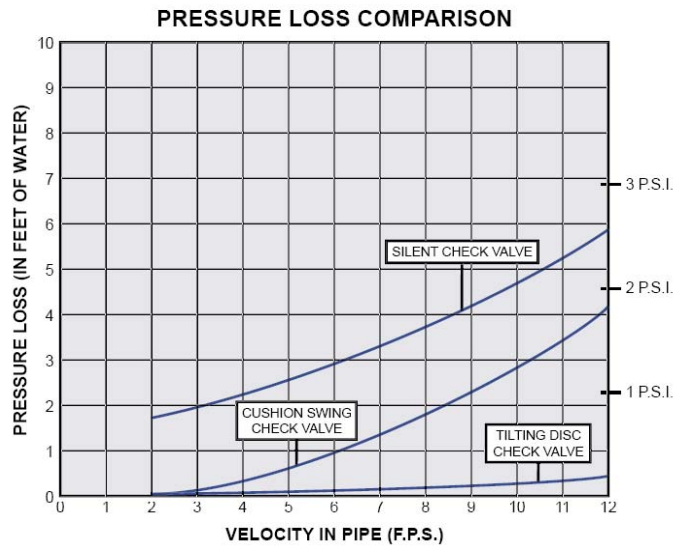
The body shall be two-piece, consisting of an entrance and a discharge section bolted together at an angle with the pipeline. An O-ring seal in a groove between the body flanges shall be in place to prevent leakage between the flanges when bolted together. The valve shall be complete with ANSI class flanges to mate with adjacent equipment.

A body seat shall be clamped in place in a slot between the two body sections. The body seat shall have a conical finish to mate with the disc seat. There shall be an inspection port provided in both the entrance and discharge sections to provide visual access both upstream and downstream of the disc. An indicator shall be provided to show disc position for the full range of travel. Bosses shall be cast in both the entrance and discharge sections to allow for either bottom mounted dashpot or top mounted oil dashpot for controlled opening and closing.



### LOW HEADLOSS DESIGN ADVANTAGE

The Tilting Disc Check Valve offers significant energy savings compared to other types of conventional check valves because of its larger flow area and low head loss characteristics. The valve achieves full opening when the disc "tilts" in the flow of the media. The tilting disc design through lifting and stabilizing in the full-open position provides minimal flow resistance.



### SCOPE OF LINE: TILTING DISC CHECK VALVE

- Available in sizes 10 inches through 60 inches
- Various end configurations available
- Ductile iron body, disc and cover
- Bronze disc and body seat rings
- Stainless steel hinge pin
- Other materials available upon request
- Larger size available on request

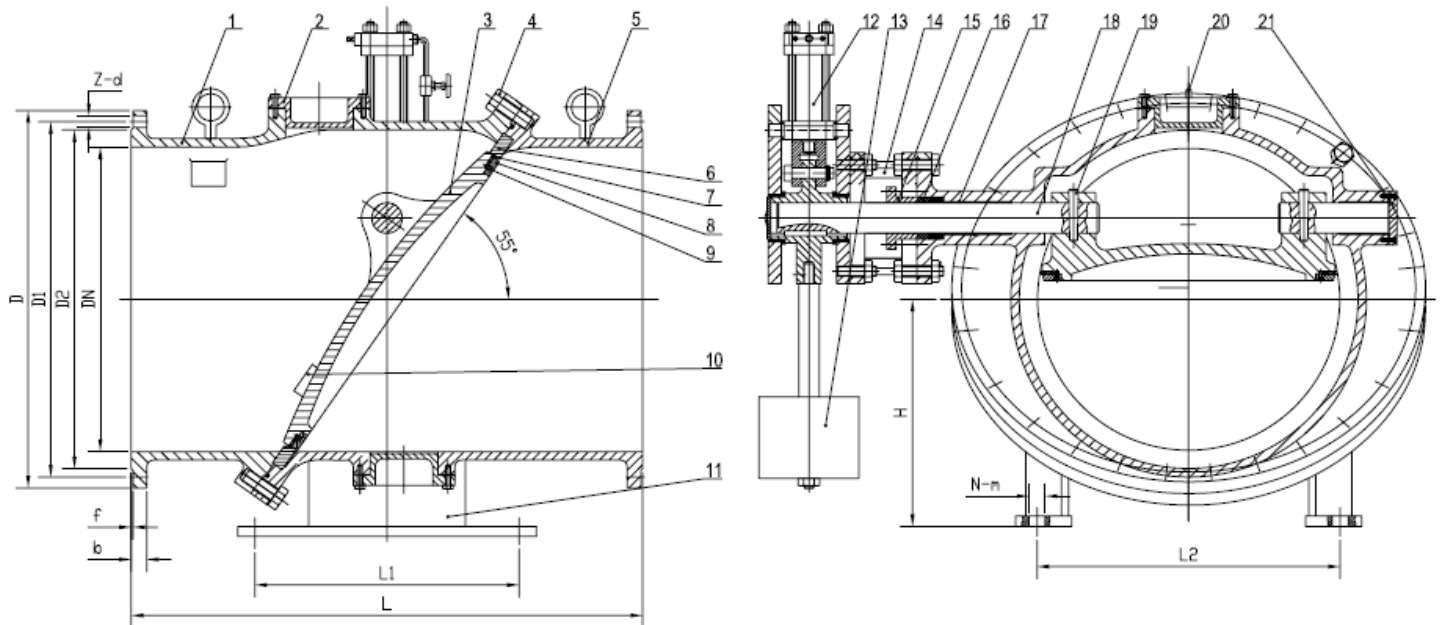


### FEATURES & BENEFITS

- Variable opening and closing speeds  
Short disc travel from full open to full close provides the ability to close very rapidly or very slowly to avoid contributing to slamming and surges.
- Cushioned closure  
Action of the fluid on the disc is balanced due to pivot points that allow for cushioned movement of the disc into the seat.
- Long body laying length  
Permits smooth passage of water with minimum turbulence and low potential for cavitation.
- Low maintenance  
The stainless steel stub shafts do not come in contact with fluid and can be lubricated either manually or automatically.

- Non-slam characteristics  
The design of the seat and hydraulic dashpot cushions the closing forces on the disc to allow for smooth operation. This prevents slamming of the disc into the seat.
- Low headloss  
Minimal effort to keep the disc open is achieved through the balanced disc design that provides light weight lifting properties, which translates to minimal flow resistance.
- Less risk of reverse flow  
Rapid closing of the disc decreases the chance of reverse flow to occur.

### PARTS LIST



Item	Description	Material	Standard	Item	Description	Material	Standard
1	Support body	Ductile iron	ASTM A536	12	Cylinder	Steel	ASTM A570
2	Cover	Ductile iron	ASTM A536	13	Counter weight	Steel	ASTM A570
3	Disc	Ductile iron	ASTM A536	14	Adapter	WCB	ASTM A216
4	Bolt	Steel	ASTM 1035	15	Gland	Steel	ASTM A570
5	Body	Ductile iron	ASTM A536	16	Packing	NBR	
6	Body sealing ring	Aluminum bronze	ASTM B271	17	Bearing bushing	PTFE / Bronze	
7	Disc sealing ring	Aluminum bronze	ASTM B271	18	Shaft	S.S.431	ASTM 276
8	Retaining ring	Steel	ASTM A570	19	Pin	S.S.431	ASTM 276
9	Screw	Steel	ASTM 1035	20	Lifting lug	Steel	ASTM 1035
10	Mechanical stopper	Ductile iron	ASTM A536	21	Shaft cover	304	ASTM 304
11	Foot	Steel	ASTM A570				