

typical applications

The Vic-300 MasterSeal™ butterfly valve for a variety of mediums – wet or dry*.

HEATING SERVICES

- Heating hot water
- Water source heat pumps
- Dual temperature
- Boiler piping
- Passive or active solar systems

COOLING SERVICES

- Chilled water
- Condenser water
- Open loop cooling towers
- Brine systems
- Special coolant systems
- Closed loop cooling towers
- Central chiller
- Computer room cooling systems
- Ice chiller systems

OTHER SERVICES

- Pumps
- Compressed air
- Vacuum
- Pneumatics/hydraulics
- Waste treatment
- Water supply
- Glycol
- Dewatering services
- Dead-end services
- Oil services
- Component isolation
- Tri-Service

(when used with a check valve)

* Valve features a standard lubricated Nitrile seal for dry (air and gas) applications.



VIC-300 MASTERSEAL™ BUTTERFLY VALVE SPECIFICATION

Vic-300 MasterSeal butterfly valves 60.3-323.9 mm/2-12" shall be rated to 2065 kPa/300 psi and be both bi-directional and dead-end service capable to full rated pressure. Body material shall be ductile iron with blow-out proof stainless steel stems and electroless nickel coated ductile iron disc. Seat material shall be EPDM (or lubricated Nitrile or fluoroelastomer). Stem seals shall be of the same material as the seats. Disc shall be offset from the centerline of the stems and shall be connected to the stem without the use of fasteners or pins. Valve ends shall be grooved. Valve shall have standard ISO 5211 flange mounting for ease of actuation. Operators shall be as specified by choice in valve table. Vic-300 MasterSeal butterfly valves 50.8-152.4 mm/2-6" are offered with a 10-position handle that may be configured for infinite variable service with memory lock stop and is pad-lockable. Size 203.2 mm/8" valves are available with lever lock handles and all sizes (60.3-323.9 mm/2-12") are available with gear operators. Manufacturer – Victaulic – Vic-300 MasterSeal valve or approved equal.



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Vic-300 MasterSeal™ Butterfly Valves



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Imagine a valve that gives you both **better flow** and a **better seal**.

That's the
Vic-300 MasterSeal™ Butterfly Valve.

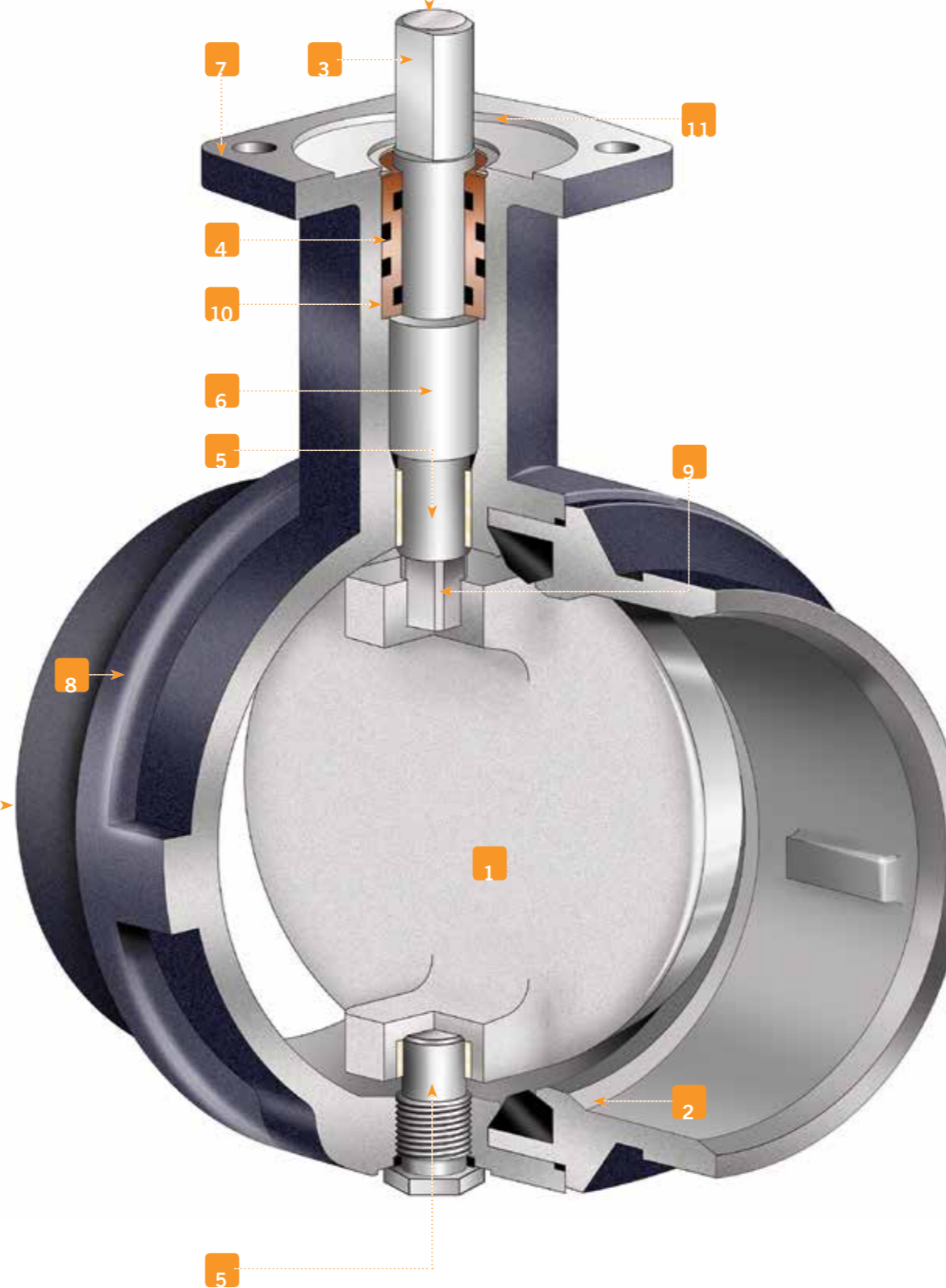
The most striking innovation is the unique design of the offset disc and two-piece stem. The disc design reduces operating torque up to 35%, and provides a 360° bubble-tight seal (at fully rated pressure, 2065 kPa/300 psi, in either direction), and has a longer life expectancy than most conventional valves.

Vic-300 MasterSeal is available in sizes from 60.3-323.9 mm/2-12" and is rated to 2065 kPa/300 psi Water, Oil, Gas (WOG). The Vic-300 MasterSeal is UL Classified to ANSI/NSF-61 for potable water service.

- The pressure enhanced rubber seat within the valve body seals equally on both sides of the valve. This patented feature minimizes long-term wear, resulting in higher cycle life.
- A patented cartridge design with redundant and replaceable stem seals increases reliability and ease of service.
- The combination of stem bearings and a pressure-enhanced rubber seat keeps torque consistent over the life of the valve.
- A unique, square, integral neck design with standard ISO 5211 top flange allows for direct mounting of ISO 5211-conforming operators and actuators and accommodates standard 50.8 mm/2" insulation. An additional 50.8 mm/2" neck extension is available.
- The robust design of the valve delivers bi-directional shut-off and dead-end capabilities to the full rated working pressure 2065 kPa/300 psi.
- Vic-300 MasterSeal can be used for system isolation in either flow direction, simplifying installation and permitting use as an end-of-line isolation valve without the need for cap/flange installation.



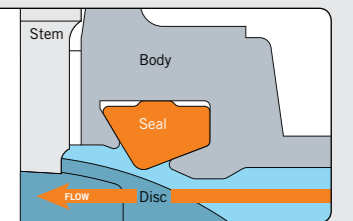
Take a Look Inside



- 1 DISC**
Made of durable electroless nickel-plated ductile iron. Designed for 360° of continuous disc body seat contact, the streamlined, offset disc profile with more open pipe area delivers high flow coefficient (Cv).
- 2 SEAT**
Patented, pressure-responsive rubber seat design yields continuous 360° seat seal equally on both sides of disc when fully closed.
- 3 DRIVE HUB**
Designed to accept nearly all standard types of actuation.
- 4 STEM SEALS**
Pressure-responsive rubber stem seals prevent leakage of media.
- 5 UPPER AND LOWER STEM BEARINGS**
TFE impregnated bearings effectively reduce torque required to open or close the valve while maintaining constant torque values. Bearings reduce size of actuation needed.
- 6 STEM**
Two piece stem made of corrosion resistant stainless steel includes a blow-out proof design.
- 7 ISO 5211 MOUNTING FLANGE**
Allows for direct mounting of ISO 5211 conforming actuators.
- 8 GROOVED END BODY**
Invented by Victaulic Company. Greatly reduces valve assembly weight, making it easier to handle, install and maintain.
- 9 RECTANGULAR DRIVE**
Positive rectangular drive eliminates fasteners in the flow stream. Design prevents replacement errors and eliminates potential for loose parts to travel downstream and cause damage to equipment.
- 10 SEAL CARTRIDGE**
Patented seal cartridge houses stem seals, increases reliability and ease of servicing.
- 11 THERMAL BARRIER**
Reduces condensation on gear operators when installed in chilled water applications.

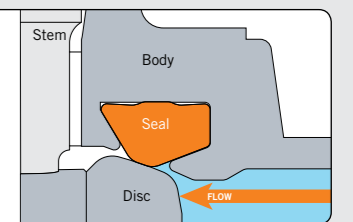
Innovative seat seal design

DISC OPEN 5° - 90°



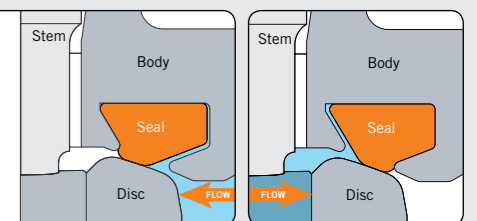
In this position, the disc allows streamline flow through the valve.

DISC CLOSED Low Pressure Differential



Compression Seal
The disc and seal are engaged and the process fluid is under low or balanced pressure. The patented seat design conforms to the edge of the disc forming the initial seal.

DISC CLOSED Pressure Responsive



Upstream Pressure **Downstream Pressure**
As line pressure increases, the seal is enhanced. The valve is rated to full working pressure in both directions and the sealing effect is the same regardless of the direction of the flow. The seal conforms to the seat edge of the disc ensuring a continuous 360° seal.

All drawings are exaggerated for clarity.