

050/051 Series Resilient Seated Butterfly Valve

Valve Type: Manual Butterfly Valves – Wafer & Lug

1. Construction

- The valves shall be butterfly valves, lug or wafer body style, cartridge style elastomer seat, tight-closing type for installation between two (2) ANSI Class 125/150 standard flanges.
- The valves shall be rated at 200 psi up to 12-inch, 150psig 14-inch through 24-inch, and provide drop tight shutoff at differentials up to maximum pressure.
- Valve bodies shall be ductile iron (ASTM A536) or equivalent GGG40.
- The seat shall be cartridge style elastomer bonded to a phenolic or metal backing. The seat shall also provide a positive seal without use of flange gaskets. Seats shall be field replaceable without the use of special tools. Dovetail style integrally molded seats shall not be accepted.
- The disc shall be high Cv slim disc up to 12", and shall be NSF-61 approved for **Commercial Hot** applications.
- Seat-Disc interface shall provide primary seal to prevent media from entering stem journals. Shaft o-ring seals shall be provided as secondary protection to prevent leakage.
- Shafts shall be two piece and shall be 416 stainless steel. Upper shaft to disc connection shall be square drive. Taper pins, torque plugs, or other mechanical means of attaching stem to disc shall not be accepted. Upper shaft shall be retained with a stem retainer plate for blowout protection and ease of maintenance.
- Stem Shall be ISO 5211, square drive, not legacy DD type drive connection.
- Valves shall be furnished with corrosion resistant Graphite reinforced PTFE bushings for smooth, low torque operation.

2. Standards

- Valves shall be NSF/ANSI-61 and NSF/ANSI-372 certified for potable water. Valves shall be certified for NSF-61 Cold Water (CLD), Domestic Hot Water (D.Hot), and Commercial Hot Water (C.Hot).
- Valves shall be manufactured in conformance to MSS-SP-67, MSS-SP-25, and API-609.

3. Operators - Manual

- Valves 6-inches and smaller shall be provided with 10-position latching handle. Valves 8-inches and larger shall be provided with worm gear operator and hand wheel.
- Valves with centerline more than 6-feet above operating floor shall be provided with worm gear operator and chain wheel.

4. Manufacturer

- Valves shall be Delta T Products 051/051 Series butterfly valve
- Or approved equal



Ratings:

- Valves shall be suitable for full rated pressure in either direction when mounted between flanges on both ends.
- Lugged Valves shall be suitable for dead end service to full rated pressure in preferred flow direction.
- Valve shall be bubble tight when tested to 110% of rated pressure.

Approvals / Certifications:

- CE/PED certification
- NSF/ANSI Standard 61 Approval – 2018 – Commercial Hot