

**DeZURIK HIGH PERFORMANCE BUTTERFLY  
VALVES (BHP) PTFE/RTFE SEATED  
SUGGESTED SPECIFICATION**

**APPLICATION DATA 45.01-2**

November, 2017

Supersedes July, 2012



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High Performance Butterfly valves and actuators shall be model BHP PTFE/RTFE Seated as manufactured by DeZURIK, or pre-approved equal.

Valve Disc shall be an offset design to provide uninterrupted 360° sealing. Discs shall be designed with a concave face to minimize dynamic torque, decrease turbulence and maximize flow capacity. Discs shall be 316 stainless steel ASTM A351 Grade CF8M, or other materials as specified.

Valve Seats shall be pressure assisted PTFE or RTFE capable of drip-tight bi-directional and dead end shutoff. A hoop, integral to the seat, made of Titanium or Nickel-Chromium Alloy (for oxidizing service) shall provide memory for low pressure sealing and high cycle service. Seat design shall be pressure assisted and mechanical seat-to-disc sealing features shall meet ANSI/FCI 70-2 Class VI shutoff. ASME Class 150 valves shall provide bubble-tight shutoff to 285 psi (1960 kPa) and ASME Class 300 valves to 740 psi (5100 kPa).

Disc-to-shaft connection shall be subject to compression forces only through the use of a tangential pin or torque plugs. Designs using shear or through-pin connections are not allowed. All valves shall have a blow-out proof shaft connection.

Valve Shaft shall be a one-piece design and shall be centerless ground to minimize bearing and packing wear. Shaft material shall be 2205 Duplex Stainless Steel ASTM A479 or other materials as specified.

Valve Bodies shall be constructed of Carbon Steel ASTM 216 Grade WCB or 316 Stainless Steel ASTM A351 Grade CF8M or other materials as specified. The valve body shall be cast lugged or wafer configurations with a minimum of four guide holes.

Adjustable Packing shall be multiple v-ring PTFE or braided carbon graphite including anti-extrusion ring. Valve shall also shall permit inspection, adjustment or complete replacement of packing without disturbing any part of the valve or actuator assembly except the packing follower.

Testing Each valve and valve actuator shall be assembled, adjusted, and tested as a unit by the valve manufacturer. Valve shall meet the seat/shell test leakage rate requirements of API 598.

Valves shall be NSF/ANSI-61, 371 certified lead-free for drinking water when specified with NSF option.

Certified Test Report shall include material certifications for pressure retaining components, low and high pressure seat leakage test per ANSI/FCI 70-2. Test reports shall be kept on file by the manufacturer, for a period of three years from the date of manufacture.

Two Year Warranty shall be provided for all valves and actuators.