

**DeZURIK HIGH PERFORMANCE BUTTERFLY  
VALVES (BHP) DUAL SEATED  
SUGGESTED SPECIFICATION**

**APPLICATION DATA 45.01-4**  
November 2017  
Supersedes July 2012



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

Valve Disc shall be an offset design to provide uninterrupted 360° seating. Discs shall be designed with a concave face to reduce 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 a combination of 316 Stainless Steel and PTFE or RTFE capable of bubble - 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 tight shutoff to 285 psi (1960 kPa) and ASME Class 300 valves to 740 psi (5100 kPa). In the event of partial or full PTFE or RTFE seat burn-out, valves with Fyre-Block option shall still provide tight shutoff in accordance with the minimum requirements of API 607, 6<sup>th</sup> edition with the seat downstream (low pressure side).

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 blow-out proof shaft connections.

Valve Shafts 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, 316 stainless steel materials ASTM A351 Grade CF8M or other materials as specified. The valve body is either Integral cast lugged or wafer valve body configurations with a minimum of four guide holes. Lug body valves shall also provide normal drip-tight shutoff, to the full valve pressure rating, on dead end service without a downstream flange.

Adjustable Packing shall be multiple v-ring PTFE or braided carbon graphite including anti-extrusion ring. Valve shall also permit 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. Valves shall meet the seat/shell test leak rate requirement of API 598.

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.