

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

APPLICATION DATA 45.01-3
November 2017
Supersedes July 2012



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

Valve Disc shall be an offset shaft 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 of 316 Stainless Steel. Seat design shall be pressure assisted and mechanical seat-to-disc sealing features capable of ANSI/FCI 70-2 IV and V unidirectional shutoff. ASME Class 150 valves shall provide drip-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 blow-out proof shaft connections.

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 material 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 configuration 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 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 shell/seat test leak rate requirements 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.