

Double Offset Butterfly Valve



1) SHAFT DESIGN

a) 2-PIECED SHAFT

Splitting shaft design ensures high Kv (Cv) value and lower pressure drop. ABO splitted shaft system also offers bigger cross section area comparing to single-pieced shaft versions. Taper pins are precision fit into reamed holes.

b) SELF-LOADED STUFFING BOX AS OPTION

Perfect tightness of shaft, no up-movement of shaft as well as reduced torque for low pressure applications is guaranteed by self-loaded stuffing box in the body neck.

c) GRAPHITE PACKING

As standard, a graphite packing is installed around the upper shaft providing additional safety in case of medium overheating.

d) ADJUSTABLE SHAFT PACKING

ABO shaft packing system allows for easy access to adjusting the hex head nuts without requiring removal of the actuator.

e) BLOW-OUT PROOF STEM

A retaining ring is installed between the machined shaft groove and gland retainer step.

f) SHAFT BEARINGS

Top and bottom bearing consisting of TP Iguis fabric liner providing for excellent resistance to distortion, high temperatures and mechanical loading forces.

g) EXTENDED NECK

Extended neck ensures pipe insulation.

2) INTERNATIONAL STANDARD COMPATIBILITY

Top flange according to Standard ISO 5211 enables direct mounting of manual operators and power actuators.



3) DISC DESIGN

Disc has been engineered to maximize flow and minimize resistance providing a high Kv/Cv. Stainless steel material selection is standard.



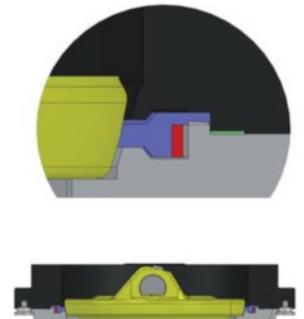
4) SEAT DESIGN

a) R-PTFE VERSION

Perfectly profiled seat ring ensures total tightness and also high number of cycles. PTFE seat is reinforced by 25% glass fibre which decreases wear and increases temperature resistance of the valve. The seat does not rely on any secondary support components to hold it in place which allows for longer service life with less maintenance required.

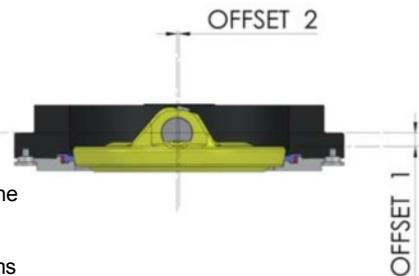
b) OVER-TRAVEL STOP

Over-travel stop is designed to prevent over-travel of the disc and minimize possible seat damage, thus provide for extended service life of the seat.



5) DOUBLE OFFSET DESIGN

Double offset design ensures safe function and tightness even in case of changing temperatures or in case of pressure peak. ABO double offset design reduces seat wear and secures zero leakage shut off throughout the full pressure range. To allow displacement of the seat, the shaft is offset from the center line of the disc seat and body seal (offset one), and the center line of the bore (offset two). The offset disc produces a cam-like action, pulling the disc from the seat resulting in friction during the first 10 degrees of opening and final 10 degrees of closing. While in open position, the disc is not in contact with the sealing, thus seat service life is increased and operating torques are reduced. As the valve closes, the cam-like action transforms the revolving motion of the disc to a linear one, and effectively pushes the disc into the valve seat. ABO double offset design further prevents undesirable build-up of material from slurries and suspended solids, via "wiping" action of the offset disc against the seat.



Design Benefits

- 1) Shaft Design
 - a) 2-Pieced Shaft
 - b) Self Loaded Stuffing Box as Option
 - c) Graphite Packing
 - d) Adjustable Shaft
 - e) Blow-Out Proof System
 - f) Shaft Bearings
 - g) Extended Neck
- 2) International Standard Compatability
- 3) Disc Design
- 4) Seat Design
 - a) R-PTFE Version
 - b) Over-Travel Stop
- 5) Double Offset Design

