



## **DeZURIK BOS-US 2-20" (50-500mm) UNINTERRUPTED SEAT RESILIENT SEATED BUTTERFLY VALVES**

- **Design**
- **Operation**
- **Performance**



## Design and Construction

BOS-US Valves feature a one-piece body; one-piece shaft and high-performance resilient seats made of EPDM or NBR. The uninterrupted seat design provides bi-directional shutoff to the full rating of the valve. They are available as lugged or wafer bodies, with nickel plated ductile iron, 316 stainless steel or aluminum bronze discs.

## Wide Range of Applications

BOS-US Resilient Seated Butterfly Valves are designed to handle a wide variety of liquids and gasses. The uninterrupted seat BOS Valve is desirable for applications where extended service applications are necessary such as high cycles, high pressures and high temperatures. BOS-US valves are excellent choices for continuous modulating control, dead-end service to 250 psi, and vacuum service to 24" Hg.

## Pressure Ratings

- 250 psi (1724 kPa) for valves with Ductile Iron or Aluminum Bronze discs
- 200 psi (1380 kPa) for valves with 316 Stainless Steel discs

## Temperature Ratings

- NBR, Acrylonitrile-Butadiene 10 to 180°F (-12 to 82°C)
- EPDM, Terpolymer of Ethylene Propylene & a Diene -30 to 250°F (-35 to 121°C)

## Uninterrupted Seat Design

By using an off-center disc, BOS Valves have an uninterrupted seat design for improved seating performance, resulting in longer seat life. The BOS-US uninterrupted seat design assures dead-tight shutoff in isolation and dead-end service without requiring downstream flanges. BOS-US Valves have integral flange seals, eliminating the need for flange gaskets.

## Superior Bonded Seats

The BOS-US seat bonding process provides a long-lasting, maintenance free seal. Seats are bonded to the body, holding the seat firmly in place and eliminating premature seat failure that can occur due to flexing and fatigue. The bonded seat also improves performance when the line maintains a vacuum, or when handling viscous liquids – circumstances that tend to dislodge seats that are not solidly retained in the valve body.



## **Bearings for Reliable Operation**

Three heavy-duty bearings ensure smooth, reliable valve operation and promote a longer cycle life than valve designs without bearings. They are fit into the valve body to support shaft loads and eliminate binding. Shaft seals protect bearings from internal and external corrosion.

## **Shaft Seals for Maximum Reliability**

The BOS-US shaft sealing technology offers maximum reliability. It uses four separate sealing components for continuous protection from leakage. Disc hubs form the primary seal around the shaft. Two additional seals are molded into the seat to ensure reliability.



## **Blowout Proof Shaft**

BOS-US Valves feature a rugged, splined disc-to-shaft connection. This provides high cycle life and great control performance. Shaft diameters meet AWWA 504 Class 75B standards. For user safety, each valve has a blowout proof shaft per API 609 standard.

## **Actuator Mounting Flange**

The actuator mounting flange is per ISO 5211 and accommodates all types of actuators – including levers, gears, pneumatic cylinders and electric motors.

## **Testing and Standards**

Every BOS-US Valve is tested for leakage, shell pressure and to be operational with actuator.

## **NSF-61/NSF-372 Certified**

BOS-US valves with EPDM or NBR Seats are certified per NSF/ANSI-61 and NSF/ANSI-372 requirements for use in drinking water applications.

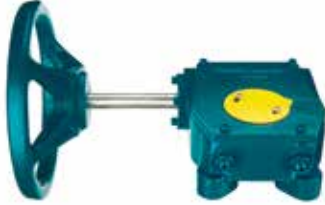


## Compatible with Standard Actuators

The actuator mounting flange on BOS valves is compatible with the ISO 5211 bolt pattern which increases flexibility and reduces inventory. Actuator options include lever, handwheel, chainwheel, PowerRac®, and G-Series Cylinder.

## MG-Series Manual Gear

Manual Gear actuators provide high torque for robust applications and a long service life without maintenance. Handwheel or Chainwheel input operators are available.



## PowerRac® Cylinder Actuators

Double-acting and spring-return PowerRac® actuators feature a proven rack-and-pinion design ideally suited for high cycle applications. PowerRac® actuators provide high output torque for on-off applications and consistently high output torque throughout the full stroke for accurate control. Its durability is backed up with a Lifetime Warranty.



## G-Series Cylinder Actuators

G-Series actuators feature a rack-and-gear design for larger size rotary valves where constant high torque capability throughout the stroke is required. They are available as double-acting with either pneumatic or hydraulic supply.



## Accessories

A full line of accessories is also available, including positioners, solenoids, switches, speed controls, floorstands and valves boxes.

## Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: [www.dezurik.com](http://www.dezurik.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)



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