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

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All valves shall be model BOS-US Resilient Seated Butterfly Valves as manufactured by DeZURIK or approved equal.

<u>Butterfly valves</u> in sizes 2-20" (50-200mm) shall have single-offset disc and shall be of the lugged or wafer body style. All valves shall be suitable for use with ASME class 125/150 flanges, or specify.

Valve sizes 2-14" with ductile iron or aluminum bronze discs shall provide bi-directional bubble-tight shutoff at pressures to 250 psi (1720 kPa) or to 200 psi (1380 kPa) with 316 Stainless Steel disc. Valve sizes 16-20" with ductile iron or aluminum bronze discs shall provide bubble-tight shutoff at pressures to 250 psi (1720 kPa) with pressure on the non-seat side, or to 125 psi (860 kPa) with pressure on the seat side. Valves with 316 Stainless Steel discs shall provide bubble-tight shutoff at pressures to 200 psi (1380 kPa) with pressure on the non-seat side, or to 125 psi (860 kPa) with pressure on the seat side.

When specified, valves shall be NSF/ANSI 372 certified lead-free and NSF/ANSI 61 certified for drinking water.

<u>Discs</u> shall be offset to provide an uninterrupted 360 degree seating edge and shall be nickel plated ductile iron, aluminum bronze or 316 stainless steel. The disc/shaft connection shall be splined.

<u>Bodies</u> shall be ductile iron. Lugged body valves shall provide bubble-tight shutoff up to the full valve rating on dead end service without the use of downstream flanges. Wafer valves shall have four flange bolt guides to center the body in the pipeline.

<u>Elastomer seats</u> shall fully line and be permanently bonded to the valve body. Seats shall be NBR or EPDM. Seats shall have integral flange seals so flange gaskets are not required.

<u>Shafts</u> shall be one-piece 410 stainless steel when valves have ductile iron or aluminum bronze discs and 316 stainless steel when valves have 316 stainless steel discs. Shaft diameters shall meet the AWWA C504, class 75B standard. Multiple shaft seals shall be provided to prevent leakage.

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Three <u>shaft bearings</u> made of heavy-duty aluminum bronze shall be provided to ensure smooth, reliable valve operation. Bearings are located adjacent to the top and bottom of the disc, and a third bearing at the top of the valve neck to support loading from actuators.

<u>Lever operators</u> for sizes 2-6" (50-150mm) shall provide automatic, positive latching in the open, closed and eight intermediate positions.

<u>Gear actuators</u> shall be provided on valves 8" and larger. Actuators shall have cast iron weatherproof or buriable construction, and shall have adjustable open and closed position stops. Operating shaft to be supported axially and radially at the input end by permanently lubricated thrust and sleeve bearings.

<u>Warranty</u> Valves and actuators shall be warranted by the manufacturer for defects in materials and workmanship for a period of two years (24 months) from date of shipment.