APCO CRF-100 RUBBER FLAPPER SWING CHECK VALVE with Bottom Mounted Buffer SUGGESTED SPECIFICATION

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Rubber Flapper Swing Check Valves with Bottom Mounted Buffer to be APCO model CRF (Body Style 100 with BMB) as manufactured by DeZURIK, Inc. or pre-approved equal.

<u>Bottom hydraulic buffer</u> permits free opening, but positive non-slam closure of the rubber flapper. The hydraulic buffer rod shall make contact with the rubber flapper during the final 10% of closure to control the rubber flapper until shut-off in a manner to prevent slam and water hammer.

The buffer rod is 303 stainless steel per ASTM A582. The final closure is to be adjustable by means of a color-coded micrometer type control valve. Control valve to have a locking set screw to secure final setting.

<u>The Oil Reservoir</u> shall be 316 stainless steel per ASTM A240. Hydraulic hoses are to be S.A.E. certified.

Body to be Ductile Iron ASTM A536 Grade 65-45-12 for sizes 4-24" (100-600mm) and Cast Iron ASTM A126 Grade B for sizes 30" (750mm) and larger.

<u>Body Seat</u> shall be on a 45 degree angle to the centerline of the pipe, permitting horizontal or vertical (flow up) installation. The valve shall be rated to 175 psi (1210 kPa) cold working pressure.

Rubber Flapper to have a steel disc encapsulated with Acrylonitrile-Butadiene (NBR), Chloroprene (CR), Terpolymer of Ethylene Propylene and A Diene (EPDM), or Fluoro Rubber (FKM). The flapper is captured between the body and valve cover to permit the disc to flex open and closed. An integral "o-ring" shall be molded onto the face of the rubber flapper for positive sealing.

<u>Hinge Section</u> of the rubber flapper shall be designed to accelerate closing due to an elastic spring effect. High-strength fabric shall be integrally molded in the rubber over the disc and bar to form a flexible joint giving the flapper a high cycle life.

<u>Testing:</u> Valve to be tested by the manufacturer as a complete assembly per AWWA C508.

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