## APCO CSD-800 SLANTING DISC CHECK VALVE with Top Mounted Oil Dashpot (TMD) SUGGESTED SPECIFICATION

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All valves shall be APCO model CSD-800 Slanting Disc Check Valves with Top Mounted Oil Dashpot as manufactured by DeZURIK or approved equal.

<u>The Body</u> to be Ductile Iron ASTM A536 Grade 65-45-12. Bodies shall be a two piece-design, and on valves 6" & larger, each body half must have an access cover for internal inspection. Each 6" & larger body half shall have a removable cover to accept optional attachment of a Bottom Mounted Buffer (BMB) or Top Mounted Oil Dashpot (TMD). Disc stabilizers shall be cast into the valve body.

<u>Body halves</u> shall be O-ring sealed and bolted together to capture the seat ring at a 55 degree angle. The area through the seat section shall be 40% larger than the inlet and outlet of the valve.

<u>The Disc</u> shall have a "hydrofoil" design to create lift and provide low head loss. Discs shall be 316 Stainless Steel ASTM A351 CF8M; or Ductile Iron ASTM A536 Grade 65-45-12 on sizes 12" (300mm) and larger. A stainless steel indicator shall be provided to show the disc position.

The Body Seat and Disc Ring shall be Bronze ASTM B271 Alloy C92200 or 316 Stainless Steel per ASTM A351 and manufactured to be field replaceable without any special tools.

<u>The Pivot Pins</u> shall be 303 stainless steel per ASTM A562. Pivot pin bushings shall be 304 stainless steel per ASTM A296.

<u>Top Mounted Dashpot</u> shall be provided for controlled opening and non-slam closing to minimize surge and water hammer. The dashpot must be a self-contained oil system, separate and independent from the pipeline media.

Opening and closing speeds shall be independently adjustable by a color-coded micrometer type control valves. An internal adjustable cushion chamber in the head of the cylinder shall be provided for slower speed during the last few degrees of disc closing.

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

<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.