ROTARY CONTROL VALVE SUGGESTED SPECIFICATION

APPLICATION DATA 16.01-2 April, 2023 Supersedes July, 2012



Rotary Eccentric control valve and actuators shall be model RCV as manufactured by DeZURIK, Inc.

Accuracy of valve, actuator and positioner assembly to be +/- 0.5

<u>Shaft to Ball connection</u> shall be splined and have a torque screw to eliminate backlash (hysteresis).

<u>Actuator connection</u> shall be a clamped design to rigidly hold the valve shaft. The use of double-D or keyed connections shall not be allowed.

Rotary Eccentric Plug design shall be optimized to meet or exceed 200:1 rangeability. Back of plug must be designed to provide laminar flow and minimize erosion. Valve plug shall be eccentric to the valve shaft with geometry to allow maximum Cv (Kv) in 90 degrees of rotation.

<u>Seat to plug interface shall be self-aligning</u>. No shims or threaded seat components shall be allowed.

<u>Valve Seats</u> shall be interchangeable in the same body. Trim sizes shall be available in 0.2, 0.5, full and high capacity and provide shut-off to ANSI/FCI 70-2 Class IV. Seat shall have electroless nickel coating, or Tungsten carbide overlay for severe abrasive or hard scaling applications.

<u>Shafts</u> shall be blowout proof and constructed of 2205 duplex stainless steel (ASTM A276) or 17-4 pH condition H900 (ASTM A564, H900). Plug/Shaft torque screw shall be removable without damage to the valve shaft or plug. Valve shaft shall not be in flow path or obstruct flow

<u>Packing</u> shall be multiple V-ring PTFE or braided carbon graphite including anti-extrusion ring, shall permit inspection, adjustment or complete replacement of packing without disturbing any part of the valve or actuator assembly except the packing follower.

<u>Bodies</u> shall be constructed of 317 stainless steel (ASTM A743), carbon steel (ASTM A 216), 316 stainless steel (ASTM A351), Hastelloy C (ASTM A494) or Titanium (ASTM B367, Grade 5) materials. The valve body is either integral cast flanged or flangeless valve body.

Industry Standards ASME B16.34 Class 150 & Class 300, MSS-SP25 marking requirements, face to face dimensions shall meet or exceed ASME B16.10, ISO 5752 (PN10/16) and EN 558-1 or ISA 75.04 and IEC 534-3-2

<u>Two Year Warranty</u> shall be provided on valves and actuators by the manufacturer for defects in materials and workmanship from the date of shipment.