DeZURIK KGC-BD BI-DIRECTIONAL CAST STAINLESS STEEL KNIFE GATE VALVES SUGGESTED SPECIFICATION



APPLICATION DATA 35.01-7 Page 1 Dated July 2018 Supersedes June 2016

All valves shall be model KGC-BD Bi-Directional Cast Knife Gate Valves as manufactured by DeZURIK or approved equal.

<u>Gate edges</u> shall be machined, finished, and rounded. The gate faces shall be finish ground.

<u>Exclusive Premium Packing System</u> shall fit a rounded machined packing chamber. The Exclusive Premium Packing System shall consist of multiple layers of packing with antiextrusion guides. The packing gland shall match the valve body or (specify). The fasteners shall be stainless steel.

<u>Body</u> shall be a one piece casting of type _____ (304) (316) (317) (254-SMO) (2205 Duplex) stainless steel, (Hastelloy C) or (Specify) for corrosive applications. Valve inside port diameter shall be equal to ANSI B36.10 STD pipe inside diameter. Raised faces shall be full width per ASME B16.20 standards for spiral-wound gaskets.

<u>Resilient Seat</u> shall be capable of bubble-tight bi-directional shutoff to the full pressure rating of the valve, and provide shutoff on dead end service. Valves shall be of a perimeter seat design and the seat shall provide guiding for the gate. Resilient seat shall be a one-piece rubber molded seat with seat pucks at the top and an encapsulated full metal reinforcement insert in 316 stainless steel for rigidity. Seat pucks shall be locked into a machined pocket in the bottom of the packing chamber and not interfere with the integrity of the packing chamber. The perimeter seat shall be locked into the valve body in a dovetail groove. Resilient seat material shall be ______ (specify seat material).

Face-to-face dimension shall meet MSS SP-81 for knife gate valves.

<u>Cold Working Pressure</u> valve rating shall meet or exceed MSS SP-81. Valves shall be 150 psi (1030 kPa) for 2-28" (50-700mm) and 100 psi (690 kPa) available for 30" and 36" (750mm and 900mm).

<u>Flange drilling</u> shall be in accordance with _____(ASME B16.5 class 150, 2-24"/50-600mm) (ASME 16.47 Series A class 150, 26-48"/650-1200mm) (JIS 10) (DIN 10) (DIN 16) (ISO 7005-1/PN10) (ISO 7005-2/PN16) (BS 4504/PN10) (BS 4504/PN16) (AS2129 Table D) (AS2129 Table E) (SANS 1123-1000) or (SANS 1123-1600).

<u>Actuation</u> Manually actuated valves 2-12" (50-300mm) shall have ______ (chainwheel) (handwheel) (bevel gear) actuators. Valves 14-36" (350-900mm) shall be supplied with ______ (handwheel) (chainwheel) (bevel gear) actuators. The manual operated (handwheel) (chainwheel) actuator yoke shall be one piece______ (carbon steel) (304 stainless steel) or (specify). The bevel gear yoke shall be a two piece (carbon steel) (304 stainless steel). The yoke sleeve shall be aluminum bronze. The stem shall be type 304 stainless steel. A standard locking device shall be available upon request. The lockout shall be rated to withstand the maximum output of the actuator.

Power actuated valves shall be furnished with ______ (cylinder) (electric motor) actuators. Cylinder actuators shall be sized to operate with ______ psi (kPa) cylinder pressure at a maximum shutoff pressure of ______ psi (kPa). The powered actuator yoke shall be a two piece design of ______ (carbon steel) (304 stainless steel) or (specify). An adjustable standard locking device shall be available upon request. The lockout shall be rated to withstand the maximum output of the actuator.

Cylinder controls shall include _____ (solenoid valve) (speed control valves) (pneumatic, electro/pneumatic or digital positioners) (switches) mounted on the valve.

<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.