

# DeZURIK KGN-MSU METAL SEATED CAST STAINLESS STEEL KNIFE GATE VALVES

### **Applications**

DeZURIK KGN-MSU metal seated unidirectional Cast Stainless Steel Knife Gate Valves are designed for applications in corrosive, abrasive liquid slurry or dry material applications including: Pulp and Paper, Mining, Waste Water, Chemical, Petrochemical, Power, Steel, and others.

## **Design and Construction**

**Sizes** - KGN-MSU Knife Gate Valves are available in sizes 2-36" (50-900 mm).

**Working Pressure** – Valve sizes 2-24" (50-600mm) are rated for 150 psi (1000 kPa), valve sizes 30" (750mm) and larger are rated for 100 psi (690 kPa).

**Body & Gland** - The cast one piece lugged body and the packing gland are available in 304 or 316 Stainless Steel.

**Gate** - The knife-like gate is available in 304 or 316 Stainless Steel. The gate is precision ground on all sides with beveled edges to maximize packing life and seat shutoff.

**Seat** - The integral metal seat provides shutoff that meets MSS SP-81 standards.

**Gate Guides** - Rugged gate guides provide support while gate moves up and down.

**Gate Jams** - The jams at the bottom of the body wedges the gate securely against the seat to assure positive shutoff.

**Actuators** - The actuator superstructures are heavy duty carbon steel or corrosion resistant stainless steel. All valves are furnished with a stainless steel stem. A variety of actuator options are available including: handwheels, chainwheels, bevel gears, and pneumatic cylinders.



# **Flow Capacity**

Round port design per MSS SP-81 requirements allows high flow capacity and minimum pressure drop. A stepped transition port eliminates the cavity, where material can accumulate.

#### **End Connections**

Raised face body has drilled and tapped flanges in accordance with ASME B16.5, 2-24" (50-600mm) or ASME 16.47, 30" (750mm) and larger.

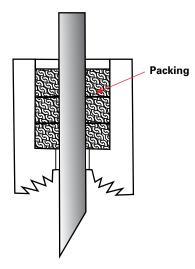
# **Application Factors That Affect Your Packing Selection For Optimal Sealing**

Compatibility with process media:

- Wet or dry application
- Life cycle stroke frequency
- Temperature
- pH Acid-Base level
- Scaling or crystallization on gate



# **Packing Material Options**



#### MSP

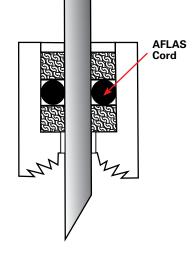
Square Braided PTFE Impregnated Synthetic Fiber to 500°F (260°C) pH Range: 4-10

#### TDP

Dry Service Square Braided PTFE Packing with Solid PTFE Cord to 500°F (260°C) pH Range: 0-14

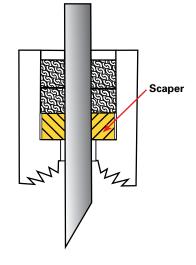
#### HBP

High Temperature Square Braided Packing to 1000°F (540°C) pH Range: 4-10



#### \*M03055

PTFE Square Braided Packing with AFLAS® Fluoroelastomer Cord to 400°F (205°C) (pH Range: 0-14)



#### CWP

Square Braided PTFE Packing with One Ring Copper Wire Braided Scraper to 500°F (260°C) pH Range: 4-10

#### **KWP**

Square Braided PTFE Packing with One Ring Kevlar® (para-aramid) Fiber Scraper to 500°F (260°C) pH Range: 4-10

#### Sales and Service



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DeZURIK, Inc. reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing by DeZURIK, Inc. Certified drawings are available upon request.