



## **DeZURIK KUL URETHANE LINED KNIFE GATE VALVES**



## Design and Construction

DeZURIK's KUL Urethane Lined Knife Gate Valves are designed for on-off applications of abrasive slurry and dry abrasive materials. Flanged Urethane Lined Knife Gate Valves are 100% port area and are ideally suited for applications in mining, chemical and food industries.

Flanged Urethane Lined Knife Gate Valves are available in sizes 2-48" (50-1200mm), and grooved end valves are available in sizes 2-12" (50-300mm). Temperature ratings range from -20 to 265° F (-29 to 130° C) as standard. The cast ductile iron body is available with a variety of urethane liner compounds suitable for water, oil, food grade, phosphoric acid, petroleum and high temperature service to 265° F (130° C).

KUL valves feature a one-piece, cast-in-place bonded liner that provides bi-directional, drip-tight shutoff to either 150 or 250 psi (1030 or 1720 kPa) CWP. Urethane Lined Knife Gate Valves can also provide bi-directional dead-end service to the full pressure rating of the valve. All wetted surfaces are lined with urethane.

## Port Area

The round port design allows high flow capacity and minimum pressure drop. The inside port diameter of the flanged KUL is 100% ASME B36.10 for sizes 4 inch and larger. The inside diameter of the grooved end KUL conforms to valve standard MSS SP-81 for size 4" and larger.



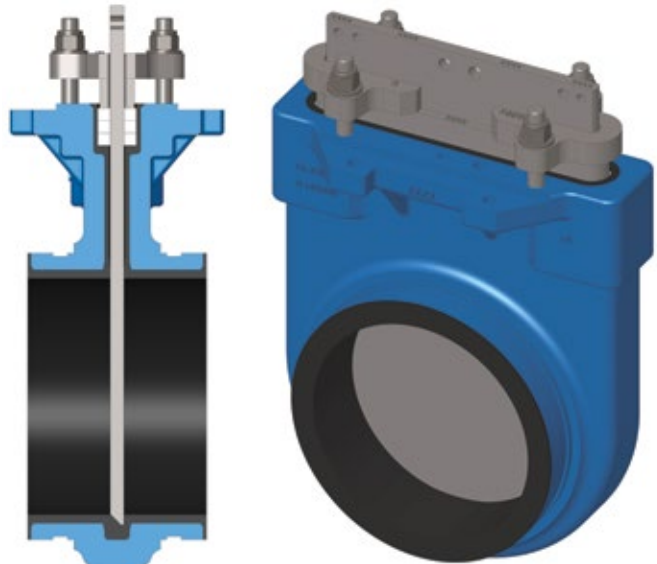
## One-Piece, Bonded Urethane Liner

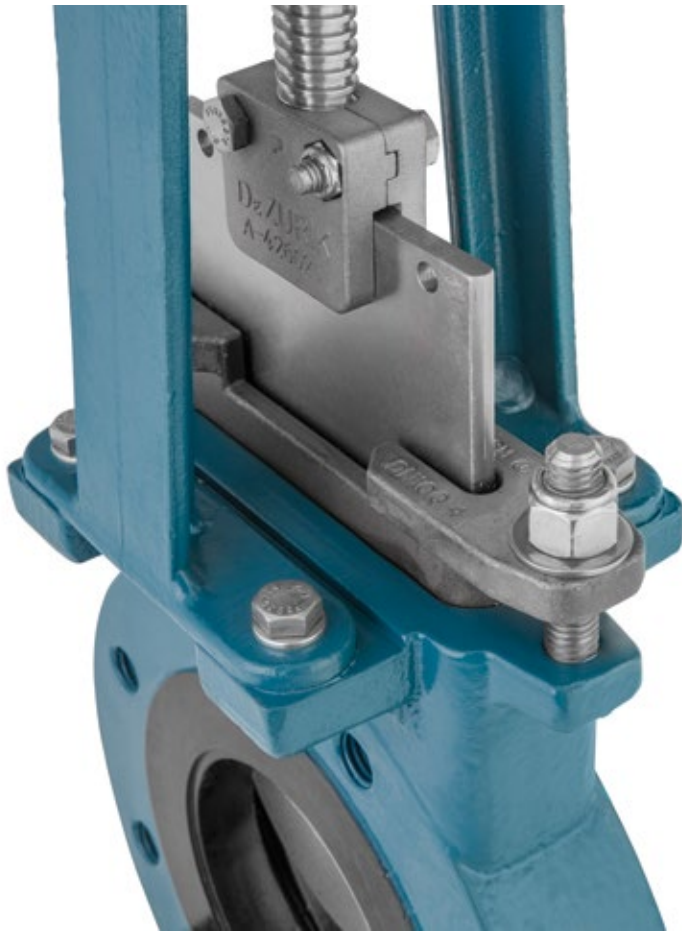
The urethane liner is bonded in place to form a continuous liner throughout the entire body, chest, packing chamber and flange face area. The bonding process enhances the mechanical and abrasion resistance properties of the urethane, which creates a robust seat seal in harsh slurry services. The seamless bonded urethane liner extends over the flange face to serve as the valve's flange gasket. No additional gaskets are required.



## Flanged or Grooved End Connections

ASME flange drilling conforms to ASME B16.1 Class 125 and ASME B16.5 Class 150. Grooved end connections conform to ANSI/AWWA C606.





### Exclusive Rounded Gate

A durable gate resists damage and allows higher pressure drops. Gate material options include stainless steels, including duplex and heat-treated stainless steel, and Hastelloy C. The gate is finish ground on all sides and edges to insure long packing and seat life. To increase packing life and provide a superior seal, the gate edges are rounded. The gate includes a knife-like bevel that pushes aside or cuts through thick slurries or solids in the flow. A high strength investment cast gate clip complements KUL's robust construction.

### Stainless Steel Stem

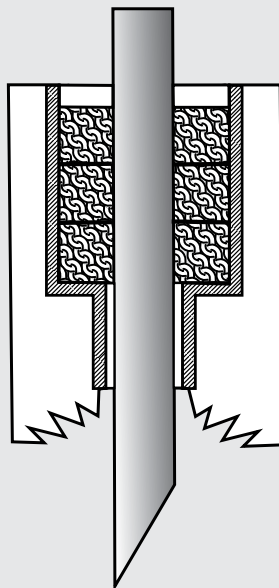
All valves are furnished with a stainless steel stem as standard for extra corrosion resistance, long life and easy operation. The stem has single-lead threads to minimize wear and reduce operating torque requirements of the valve.

### No Discharge to Atmosphere

The KUL knife gate valve is an enclosed design which keeps all process media contained within the pipeline. When the KUL valve is actuated, it slices through the media or slurry and does not allow any discharge to atmosphere, unlike a push-through design which allows process media to discharge into the environment.

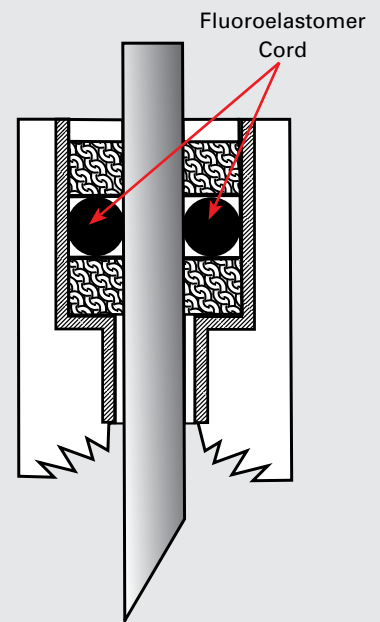
### Reliable Long-Life Packing

Multiple packing material options ensure a tight seal with a minimum of packing gland pressure. Three rings of packing and a smooth uniform urethane lined chamber assure a tight seal.



**SMP**  
PTFE Square  
Braided Packing

**TDP**  
Dry Service, Dry PTFE  
Braided Packing with  
Solid PTFE Cord



**FGP**  
Food Grade Service

**ASP**  
Self-adjusting PTFE  
Braided Packing with  
Fluoroelastomer Cord

## Choice of Actuators

The DeZURIK KUL Urethane Lined Knife Gate Valve is offered with a choice of handwheel, chainwheel, bevel gear, pneumatic or hydraulic cylinder, or electric motor actuators.

## Corrosion Resistant Yoke Sleeve

A bronze yoke sleeve provides corrosion resistance and assures easy operation. An added grease fitting provides lubricant to the stem thread and yoke sleeve.

## Heavy-Duty Superstructure

The standard actuator superstructure is available in carbon steel or stainless steel and is designed to stand up under the most difficult operating conditions. For valves mounted in horizontal installations, strengthened actuator legs are available.

## Accessories

A wide variety of accessories are available including handwheel extensions, floorstands, lockouts and various cylinder actuator accessories for customizing the valve/actuator package to meet specific application requirements.



## Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

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