



DeZURIK KSL-SD SLURRY KNIFE GATE VALVES

Design and Construction

DeZURIK's KSL-SD Slurry Knife Gate Valves are designed for on-off (isolation) service for applications consisting of abrasive, high solids content, wet or dry media. KSL-SD Slurry Knife Gate Valves are ideally suited for applications in the mining, power, and aggregate industries. The KSL-SD valve features a short body design with narrow face-to-face per MSS SP-81.

KSL-SD Knife Gate Valves are available in sizes 2-24" (50-600mm) with larger sizes available on application. Temperature ratings to 177°F (81°C) as standard, and up to 300°F (150°C) with high temperature optional seat materials. Standard pressure rating on 2-16" valves is 150 psi CWP (1030kPa) and 18-24" is 100 psi CWP (690 kPa), with higher pressures available with optional gate materials.

Depending on the application requirements, the cast body is available in Ductile Iron, Carbon Steel and various Stainless Steel or higher alloy materials.



Packagingless Design

The DeZURIK KSL-SD's compression-loaded sleeve design eliminates the need for conventional style packing. In the full open and closed positions, the sleeves seal to both downstream and atmosphere.

Rugged Stainless Steel Gate

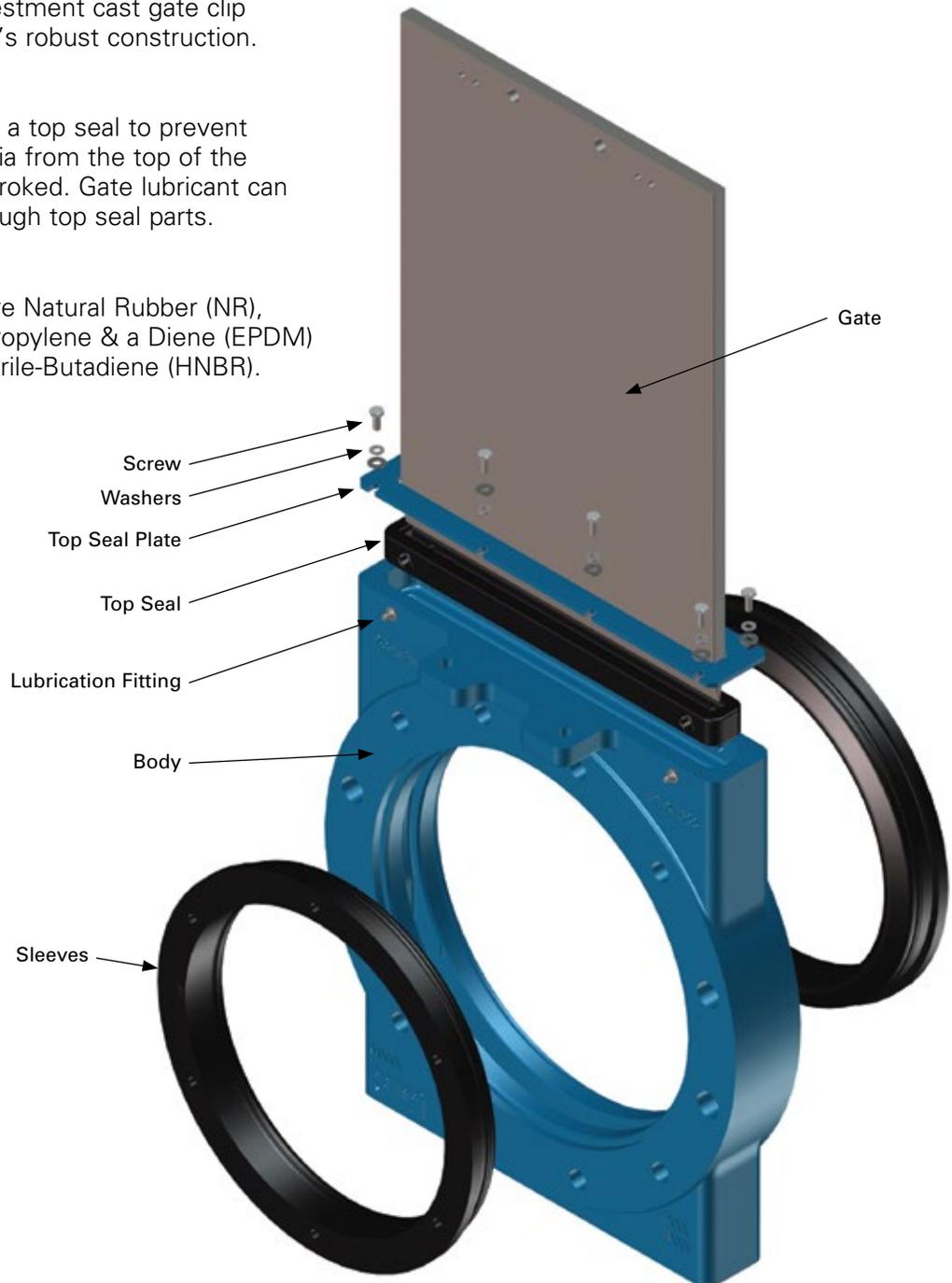
A durable gate resists damage and allows higher pressure drops. Standard gate material options include various stainless steels, heat-treated, and hardened. Other materials available upon request. The gate is finish ground on both sides and edges to ensure long top seal and sleeve life. To extend top seal and sleeve life, optional gate coatings are available that provide a lubrication-infused, non-stick surface that reduces the operating forces of the valve. A strong investment cast gate clip complements the KSL-SD's robust construction.

Top Seal

The DeZURIK KSL-SD has a top seal to prevent discharge of process media from the top of the valve when the valve is stroked. Gate lubricant can be effectively applied through top seal parts.

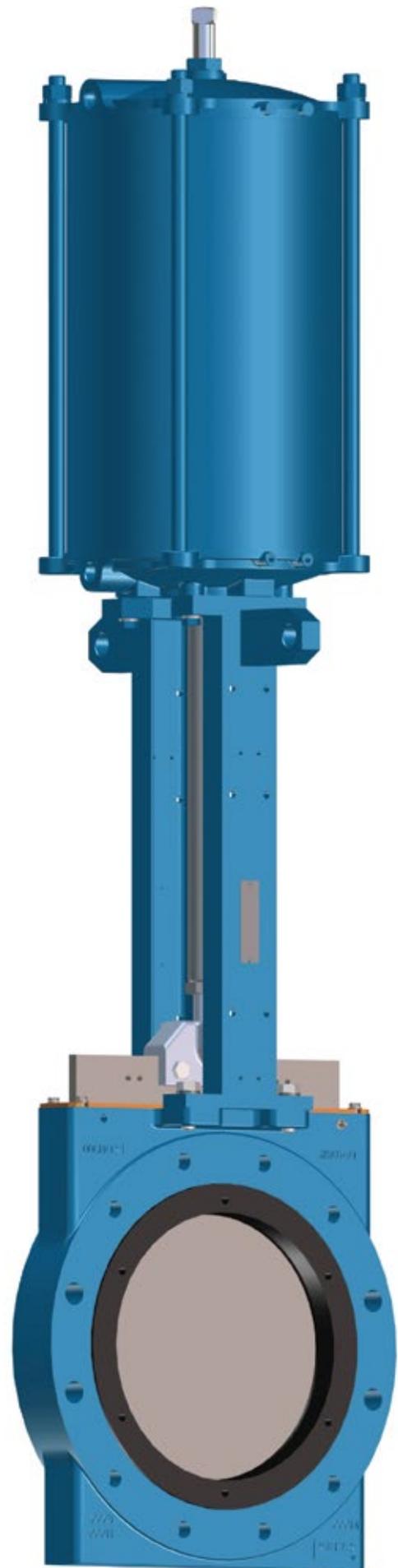
Sleeves

Sleeve material choices are Natural Rubber (NR), Terpolymer of Ethylene Propylene & a Diene (EPDM) or Hydrogenated Acrylonitrile-Butadiene (HNBR).



Features Include:

- Full flanged design with flange drilling per ASME B16.5 Class 150, DIN 10 and DIN 16; ISO 7005-1/PN10 and 7005-2/PN16; BS 4504/PN10 and BS 4504/PN16; AS 2129 Tables D and E; and SANS 1123-1000 and SANS 1123-1600
- Bi-directional, drip tight shutoff to full pressure rating.
- Field replaceable sleeves with encapsulated supporting ring.
- Valve design allows for easy repairs.
- Full port reduces turbulence and pressure drop across the valve.
- Sleeve compression eliminates cavity where solids can collect.
- Sleeve design eliminates gate and stem packing.
- Sleeve design eliminates the requirement for flange gaskets.
- Straight vertical plane superstructure allows for easy installation of accessories.
- Gate fully retracts out of the flow path in the open position.
- Open / Closed position lock-outs optional.
- Optional gate coatings provide additional abrasion resistance and a non-stick (lubrication infused) surface that reduces actuating forces and extends sleeve life.
- Integral Lifting Lugs standard on sizes 4" (100mm) and larger.
- Flushing drain plates available.



Open/Closed Position Lock-outs

The DeZURIK KSL-SD is available with optional open and closed position lock-outs. The lock-outs are designed to withstand the maximum operating forces of the actuator supplied on the valve.

Stainless Steel Stem

All valves are furnished with a stainless steel stem that provides extra corrosion resistance, easy operation, and a longer cycle life. On manually operated valves the stem has single lead threads to minimize wear and reduce the operating torque requirements of the valve.

Choice of Actuators

The DeZURIK KSL-SD Slurry Knife Gate Valve is offered with a choice of handwheel, chainwheel, bevel gear, pneumatic or hydraulic cylinder, or electric motor actuators. Custom engineered Hydraulic Power Units are also available.

Corrosion Resistant Yoke Sleeve

A bronze yoke sleeve on manually operated valves provides corrosion resistance and assures easy operation. A grease fitting is provided to lubricate the stem thread and yoke sleeve.

Heavy-Duty Vertical Plane 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. The vertical plane design allows for easy installation of accessories. For valves mounted in horizontal installations, strengthened superstructures are available.

Integral Lifting Lugs

On sizes 4" and larger, integral lifting lugs are designed to support the full weight of the valve.

Accessories

A wide variety of accessories are available including handwheel extensions, floorstands, stem covers, gate guard and various cylinder actuator accessories such as filter regulators, speed controls and position indicating switches 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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