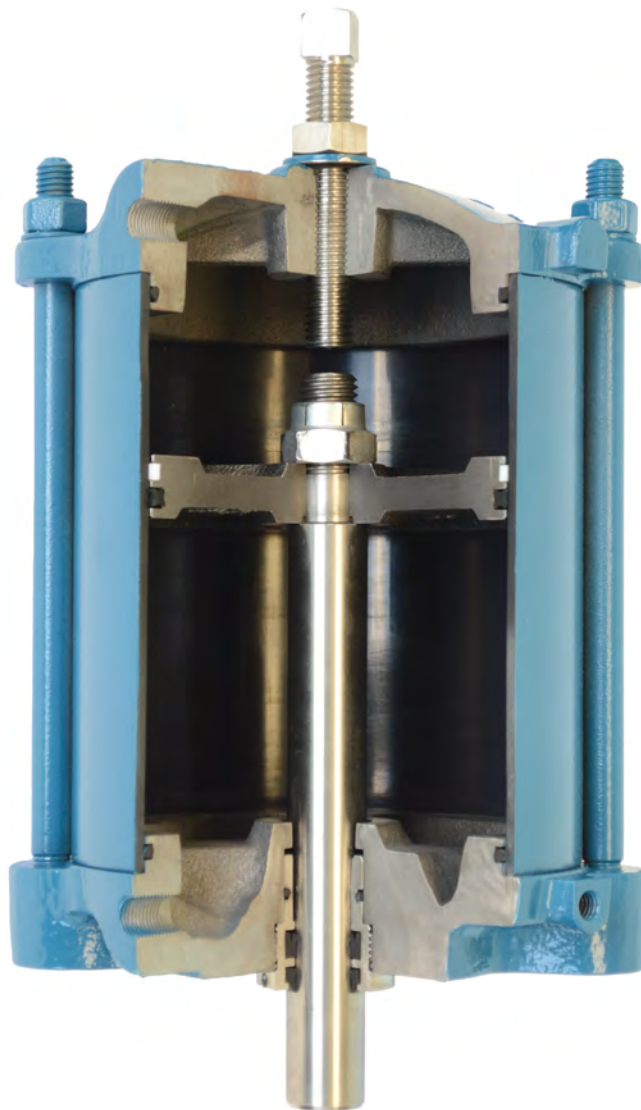


# **DeZURIK KNIFE GATE VALVE CYLINDER ACTUATORS**

**For use with KGC, KGN, KSL, KSV, KUL**



# Design and Construction

DeZURIK cylinder actuators are designed with a removable and replaceable cartridge assembly that houses the wear components for ease of maintenance. The cylinder tube is glass wound, vinyl ester, epoxy impregnated fiberglass. The seals are acrylonitrile butadiene (NBR) with a maximum temperature rating of 180°F (83°C). For higher temperature applications fluoro rubber (FKM) seals with the standard fiberglass tube are offered with a maximum temperature rating of 275°F (135°C). Steel tubes with FKM seals are available for a maximum temperature rating of 392°F (200°C) upon request. The minimum standard temperature rating is -58°F (-50°C). For corrosion resistance applications, stainless steel components are offered.

All cylinder actuators are cycle tested to 50,000 cycles and are mounted to a heavy duty cast superstructure in carbon steel or stainless steel to minimize corrosion.

## Lockout Option

Lockouts protect both people and the environment. The unique design of the cylinder actuator lockout includes a lockout collar that rotates around the open or closed lockout bolts to keep the valve in position. The lockout collar allows fine adjustment to ensure tight shutoff and maximum opening position. Lockouts are rated to withstand the maximum output of the actuators.

## On-Off Cylinder Actuators

DeZURIK cylinder actuators are available with double-acting pneumatic or hydraulic cylinders for on/off or positioning services. Supply pressure is 60 or 80 psi (410 or 550 kPa). To order, add the proper code from the on/off column of the table to the valve order code. Specify hydraulic media if other than oil.

## Actuator Sizing and Dimensions

Cylinder actuator sizing, dimensions and ordering information can be found in the knife gate valve bulletins for the following valve styles:

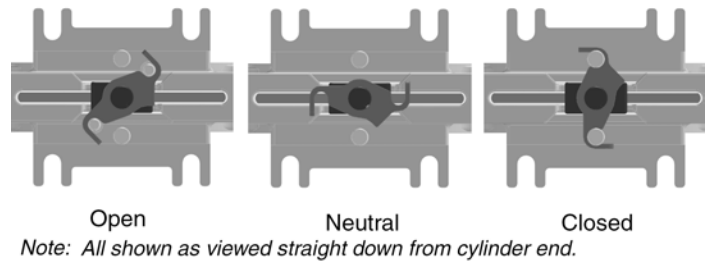
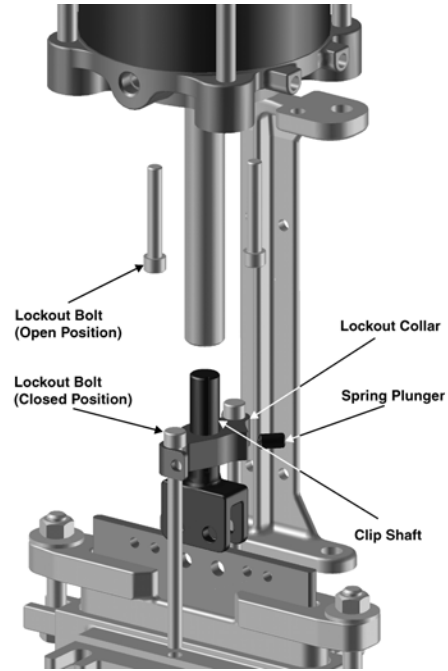
**KGC Extended Service Cast Stainless Steel Knife Gate Valves**

**KGN Cast Stainless Steel Knife Gate Valves**

**KSL Slurry Knife Gate Valves**

**KSV Severe Service Knife Gate Valves**

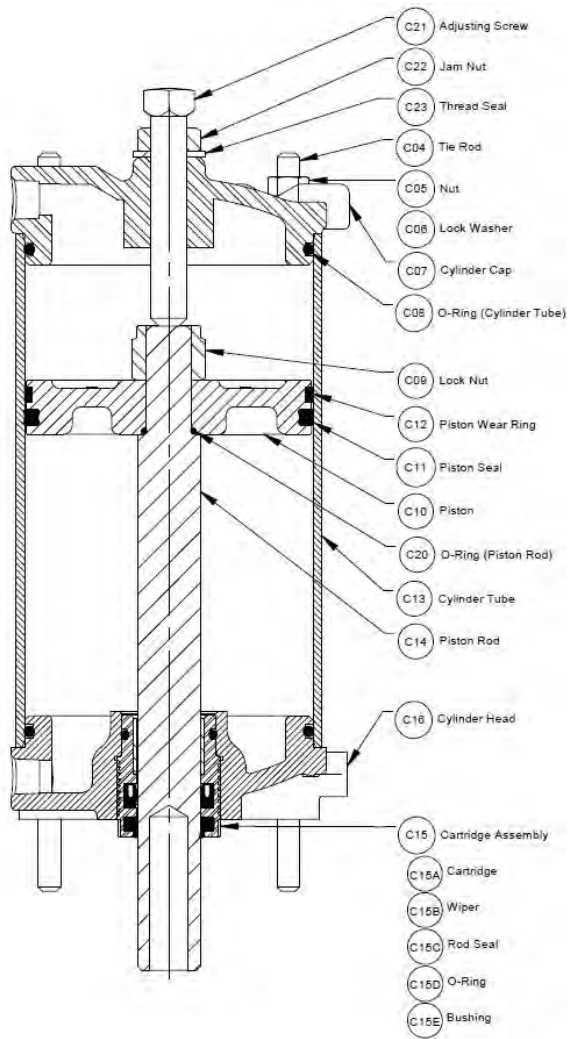
**KUL Urethane Lined Knife Gate Valves**



## Positioning Cylinder Actuators

DeZURIK cylinder actuators are available with pneumatic or electronic positioners on KGC V-Port knife gate valves for throttling control. Positioners are enclosed and mounted on the superstructure.

# Materials of Construction



Item	Description	Material
C04	Tie Rod	Carbon Steel, ASTM A108 Grade 1018 Zinc Plated
		Stainless Steel, ASTM A276, Type 304
C05	Nut	Carbon Steel, Zinc Plated
		Stainless Steel, 18-8
C06	Lock Washer	Carbon Steel, Zinc Plated
		Stainless Steel, 18-8
C07	Cylinder Cap	Ductile Iron, ASTM A536 Grade 65-45-12
C08	O-Ring	Nitrile Rubber
C09	Lock Nut	Carbon Steel, Zinc Plated
C10	Piston	Cast Iron, ASTM A126 Class B
C11	Piston Seal	Nitrile Rubber
C12	Piston Wear Ring	PTFE
C13	Cylinder Tube	Fiberglass, Glass Wound, Epoxy Impregnate, Vinyl Ester
C14	Piston Rod	Stainless Steel, M153 ASTM A582, Type 303
C15A	Cartridge	Stainless Steel, M153 ASTM A582, Type 303
C15B	Wiper	Nitrile Rubber
C15C	Rod Seal	Nitrile Rubber
C15D	O-Ring	Nitrile Rubber
C15E	Bushing	ASTM A276 Type 304, sintered bronze layer & PTFE layer
C16	Cylinder Head	Ductile Iron, ASTM A536 Grade 65-45-12
C20	O-Ring	Nitrile Rubber
C21	Adjusting Screw	Stainless Steel, ASTM A276, Type 304
C22	Jam Nut	Stainless Steel, ASTM A276, Type 304
C23	Thread Seal	Stainless Steel, ASTM A276, Type 304 w/Nitrile Rubber

# Cylinder Actuator Accessories

## Position Indicating Switches

Mechanical or Proximity Position Indicating Switches are available for use on double-acting cylinder actuators. One switch can be set to indicate open or closed position. Two switches will automatically be set to indicate full open and full closed positions.

## Positioners

DeZURIK cylinder actuators are available with pneumatic, electro-pneumatic or digital positioners on KGC V-Port knife gate valves for throttling control.

## Air Filter Regulator

The DeZURIK Air Filter Regulator is designed to provide clean, accurate air pressure to actuators and positioners.

## Four-Way Solenoid Valves

Solenoid valves may be ordered mounted and piped as part of a complete valve/actuator assembly or as a separate item.

## Speed Control Valves

Speed Control Valves are available for controlling valve opening or closing speed with pneumatic actuators. The speed of operation is adjustable.

## Sales and Service

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

**Web Site: [DeZURIK.com](http://DeZURIK.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)**



250 Riverside Ave. N. Sartell, Minnesota 56377 • Phone: 320-259-2000 • Fax: 320-259-2227

*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.*