

## OVERVIEW

Double Acting Pneumatic Actuators engineered for dependable linear actuation of all Bray knife gate valves.

Rugged construction enables fast installation and long-term serviceability.

Field-interchangeable design simplifies retrofit of manual valves on site.

## SPECIFICATIONS

<b>Size Range</b>	2" to 32"   50mm to 800mm Cylinder Diameter
<b>Temperature Rating</b>	Standard Trim: 194°F (90°C) Steel Cylinder & Viton Seals: 392°F (200°C)
<b>Pressure Rating</b>	101.5 psi (7 bar) maximum
<b>Air Supply Pressure</b>	101.5 psi (7 bar) maximum
<b>Cylinder Tube Material</b>	FRP (Fiberglass Reinforced Plastic) Steel
<b>Stroke Length</b>	To suit valve travel requirements
<b>Design</b>	Double acting linear pneumatic actuator

## FEATURES

- 1 Lightweight and non-corrosive fiberglass reinforced plastic cylinder tube offers high strength, impact and corrosion resistance with lower weight ideal for horizontal mounting.
- 2 Lubricated cylinder for increased lubricity and low friction enabling operation with or without air lubrication.
- 3 Available in side-mount (KCS) and top-mount (KCT) configurations.
- 4 External tie-rods allow easy inspection, maintenance and replacement of parts. They also allow contained release of force in the event of over-pressure.
- 5 Adjustable travel-stop for the open position.
- 6 Energized PTFE piston seal reduces friction for long, trouble-free operation.
- 7 Standard carbon filled PTFE guide and polyurethane wiper seal cleans the piston rod during travel and protects against ingress of media.
- 8 Standard stainless steel piston rods for superior corrosion protection.
- 9 Field-interchangeable on all Bray knife gate and slurry valves. No additional mounting hardware required.
- 10 Elastomer seals are provided on all sealing surfaces to prevent leakage of compressed cylinder air.



**SERIES KCS/KCT**  
**KNIFE GATE VALVE PNEUMATIC ACTUATOR**

**Bray**

**STANDARD CONSTRUCTION**

<b>Cylinder</b>	FRP
<b>End Caps</b>	Ductile Iron
<b>Piston</b>	Ductile Iron
<b>Tie Rods</b>	Stainless Steel
<b>Piston Rod</b>	Stainless Steel
<b>Piston Seal</b>	Energized PTFE
<b>End Cap Seals</b>	Nitrile
<b>Neck Seal Housing</b>	Aluminum
<b>Wiper Seal</b>	Polyurethane
<b>Guide</b>	Carbon-filled PTFE

**OPTIONS**

Trim for corrosive environment
Trim for elevated temperature environment
Manual handwheel override
Bray Pneumatic Fail Safe Unit

**ACCESSORIES**

Control Panel
Pneumatic Valves
Air Filter Regulator
Solenoid Valve
Volume Booster
Quick Exhaust
Limit Switches
Positioner
Variable Clevis for extended stroke lengths
Dual rod seal for higher cycle life and enhanced ingress protection

**MATERIAL OPTIONS**

<b>Cylinder</b>	Carbon Steel
<b>End Caps</b>	Stainless Steel
<b>Piston Rod</b>	316 Stainless Steel
<b>Piston Seal</b>	Energized PTFE
<b>End Cap Seals</b>	Viton
<b>Wiper Seal</b>	Viton

Additional material options may be available upon request. Consult factory for availability.

**OPERATING SPEED**

Recommended stroking speed is 1" / sec (25mm/sec), which is dependent on accessories and tubing used. Please consult factory for specific recommendations.



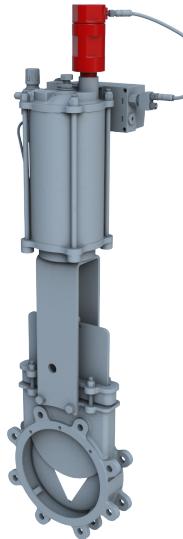
PNEUMATIC FAILSAFE



MANUAL OVERRIDE



ELECTRO PNEUMATIC POSITIONER



LINEAR POSITION SENSOR