

## OVERVIEW

Double Acting Pneumatic Actuators designed and engineered for all Bray knife gate valves.

Field-interchangeable with manual valves and simple to retrofit on-site.

## APPLICATIONS

- > Chemical
- > Petrochemical
- > Food & Beverage
- > General Industry
- > Mining
- > Oil & Gas
- > Pharma & Biotech
- > Power
- > Pulp & Paper
- > Water & Wastewater

## 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 carbon-steel 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 ensures unrestricted flow-path when the valve is open while also protecting the gate sealing edge from damage and erosion.
- 6 Energised PTFE piston seal reduces friction for long, trouble-free operation.
- 7 Two-piece bolted body for easy maintenance and seat replacement.
- 8 Standard stainless steel piston rods with optional 316 stainless steel.
- 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.

## SPECIFICATIONS

<b>Size Range</b>	NPS 2 to 32   DN 50 to 800 Cylinder Diameter
<b>Temperature Rating</b>	FRP: 100°C Steel Cylinder & Viton Seals: 200°C
<b>Pressure Rating</b>	7 bar maximum
<b>Air Supply Pressure</b>	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



## STANDARD CONSTRUCTION

<b>Cylinder</b>	FRP
<b>End Caps</b>	Ductile Iron
<b>Piston</b>	Ductile Iron
<b>Tie Rods</b>	Carbon 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

Stainless steel for corrosive environments

Carbon steel cylinders for high temperature

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

## MATERIAL OPTIONS

<b>Cylinder</b>	Steel
<b>End Caps</b>	Stainless Steel
<b>Tie Rods</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**