

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

SPECIFICATIONS

Size Range	NPS 2 to 32 DN 50 to 800 Cylinder Diameter
Temperature Rating	FRP: 100°C Steel Cylinder & Viton Seals: 200°C
Pressure Rating	7 bar maximum
Air Supply Pressure	7 bar maximum
Cylinder Tube Material	FRP (Fiberglass Reinforced Plastic) Steel
Stroke Length	To suit valve travel requirements
Design	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 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.



SERIES KCS/KCT
KNIFE GATE VALVE PNEUMATIC ACTUATOR

Bray

STANDARD CONSTRUCTION

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

OPTIONS

Stainless steel for corrosive environments
Carbon steel cylinders for high temperature
Manual handwheel override
Bray Pneumatic Fail Safe Unit

ACCESORIES

Control Panel
Pneumatic Valves
Air Filter Regulator
Solenoid Valve
Volume Booster
Quick Exhaust
Limit Switches
Positioner
Variable Clevis for extended stroke lengths

MATERIAL OPTIONS

Cylinder	Steel
End Caps	Stainless Steel
Tie Rods	Stainless Steel
Piston Rod	316 Stainless Steel
Piston Seal	Energized PTFE
End Cap Seals	Viton
Wiper Seal	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