

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