

PNEUMATIC ACTUATOR

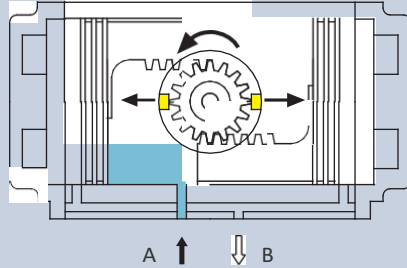
Single Acting and Double Acting Type



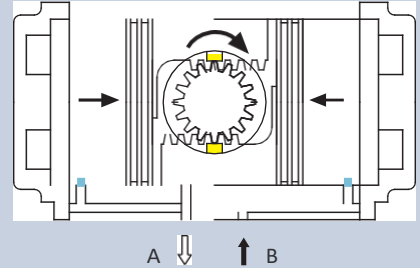
Operations



Double Acting

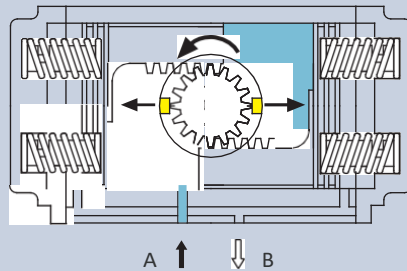


By supplying air to Port A, pressure is applied to the center chamber and forces the dual pistons outward. Linear piston force is transferred via gear racks to the pinion gear, causing the pinion to turn counterclockwise while the air is being exhausted from Port B.

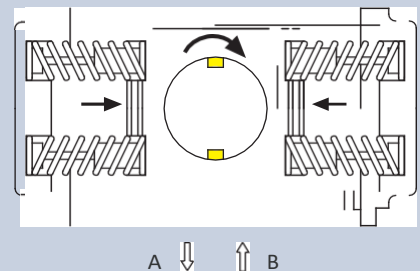


By supplying air to Port B, pressure is applied to the outside chamber and drives the dual pistons inward. The action causes the pinion to turn clockwise while the air is being exhausted from Port A.

Spring Return (Fail clockwise shown)

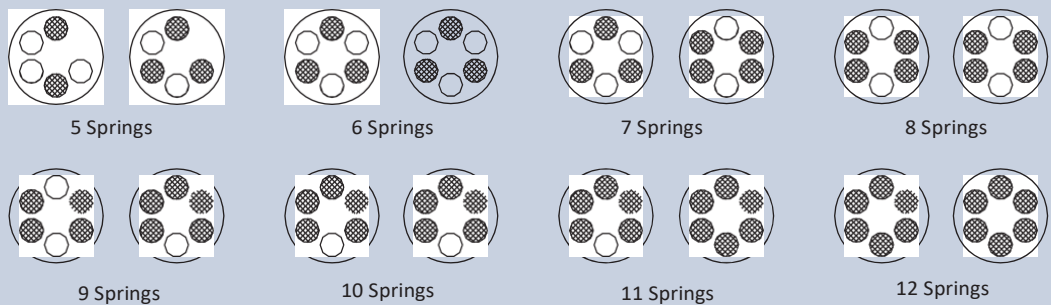


By supplying air to Port A, pressure is applied to the center chamber, forcing the dual pistons outward, compressing the springs in the outside chambers to produce a counterclockwise rotation. Exhaust air exits at Port B.



Upon loss of air pressure, the stored energy in the compressed springs forces the pistons inwards producing rotary motion with exhaust air exiting at Port A. This "fail safe" position is held by spring force until air pressure reapplied to Port A.

Installation of Springs for Spring Return Actuator



Even spring set is recommended for high cycle application.

Quality Assurance

- All actuators are manufactured in a registered ISO 9001-2000 facility
- All actuators are 100% inspected and tested in factory
- Each actuator is marked with a unique serial number for full traceability.

Z-tork can also provide valve automation accessories, including
Limit Switches, Positioners, Solenoid Valves, and Mounting

Actuators & Accessories Range

<p>RA Series</p> 	<ul style="list-style-type: none"> • 100% Stainless Steel Actuators • Rack & pinion mechanism, available in double acting and spring return. • Excellent corrosion resistance. • Output torque upto 3815 Nm at 5 bar air pressure.
<p>RB Series</p> 	<ul style="list-style-type: none"> • 100% extruded Aluminium Body. • Rack & pinion mechanism, available in double acting and spring return. • Symmetrical design & High performance • Available for use upto -55°C degree • Output torque upto 8140 Nm at 5 bar air pressure.
<p>RC Series</p> 	<ul style="list-style-type: none"> • 100% extruded Aluminium Body. • Rack & pinion mechanism, available in double acting and spring return. • +/- 5° adjustable end stop for both end positions. • Available for use in -55°C degree • Output torque upto 8140 Nm at 5 bar air pressure.
<p>RD Series</p> 	<ul style="list-style-type: none"> • 100% extruded Aluminium Body. • Rack & pinion mechanism, available in double acting and spring return. • +/- 5° adjustable end stop for both end positions. • Available for use in -55°C degree • Output torque upto 3800 Nm at 5 bar air pressure. • High performance design for frequent operations.
<p>ZSV Solenoid Valve</p> 	<ul style="list-style-type: none"> • 3/2 or 5/2 or 5/3 way suitable for all fail positions. • Offer excellent environmental protection. • Safe coils certified for use in all hazardous areas. • Suitable for use in high temperature (150°C) and cold temperature (-40°C) applications
<p>ZLS Control Box</p> 	<ul style="list-style-type: none"> • Control box for valve position feedback in die-cast Aluminium and Stainless-Steel versions. • Available with Mechanical Switches, Proximity and magnetic sensors. • IP67, Namur Shaft, ISO bracket available as standard. • Ex-proof design available for hazardous environment.

