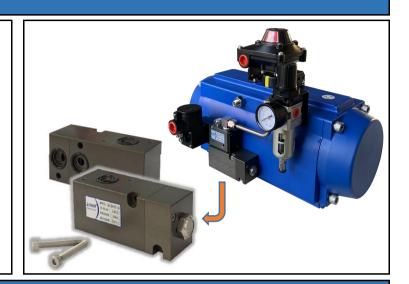
## **ACHEM®** Singapore Allied Automation

## Introduction of ALV series QP Valves

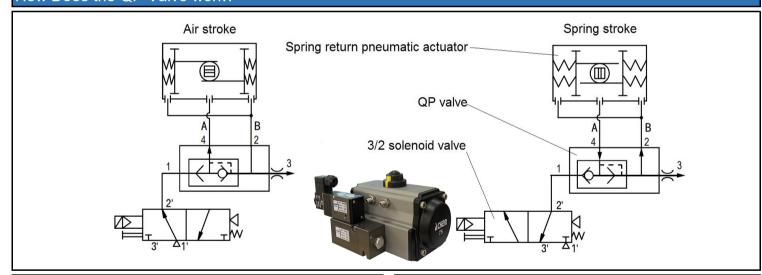
ALV Series QP Valve (Quick Exhaust & Breather Protection valve) is a unique design to be used on applications where the pneumatic spring-return actuator/valve need to be shutdown fast. This QP valve also provides a breather protection function which can effectively avoid direct contact between the actuator's spring chambers with corrosive and/or moisture atmosphere air. Here are the main features of the block.

## Features & Benefits

- $\sqrt{}$  Easy installation on actuators with a VDI/VDE 3845 (NAMUR) interface.
- √ Built-in quick exhaust function to help spring-return actuator shutdown fast.
- √ Provides corrosion protection of the actuator's spring chambers.
- $\sqrt{}$  Durable hard anodize aluminium design.
- $\sqrt{}$  Suitable for Namur or in-line mounted solenoid valves.
- Available with 1/4" ,1/2" or 3/4" BSPP (or NPT) pneumatic connection.



## How Does the QP Valve work?



Air stroke: Solenoid coil energized, the flow of supply air is from inlet port 1', port 2' to port 1 of the QP valve and moves the shuttle valve to the right and allows the air goes into port A of actuator through port 4, which force the pistons outwards and compress the springs, while air is being exhausted from port 3 of the QP valve through port B of the actuator.

**Spring stroke:** Solenoid coil de-energized, the air is exhausted at port 1 of the QP valve through port 3' and the shuttle valve moves to the left allowing the air from port A, port 4 and port 2 to fill and be sucked into the spring chamber of the actuator through port B of the actuator firstly, and at the same time, the excess air exhausting rapidly to atmosphere at port 3 through the silencer.

What we're good at is technology and solutions.