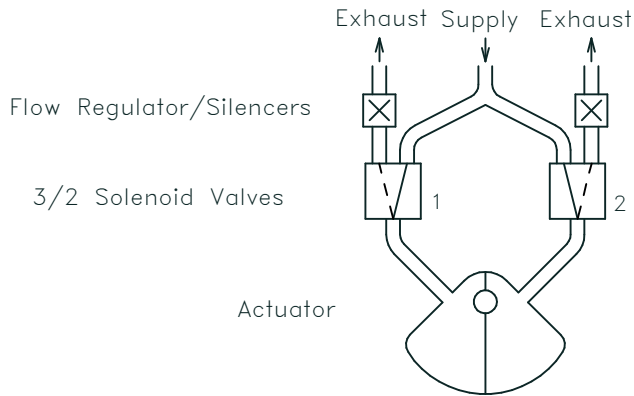




# P3 POSITIONER OPTIONS - PNEUMATIC CIRCUITS

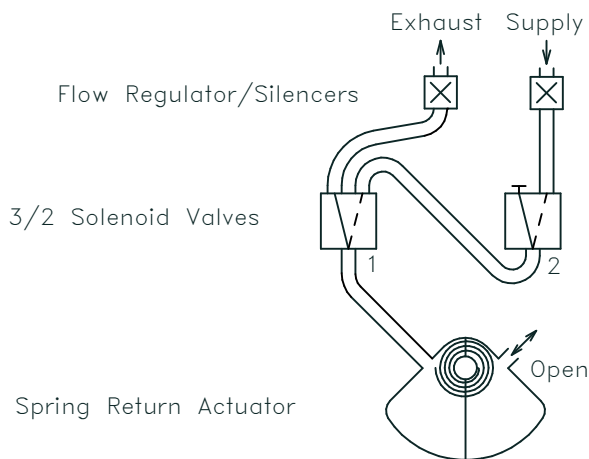
## (1) DOUBLE-ACTING FAIL-FREE



Solenoid Valve Air Paths:  
 — De-energised  
 - - - - Energised

To drive clockwise – Energise Valve 1  
 To drive anticlockwise – Energise valve 2  
 To hold position – De-energise both valves

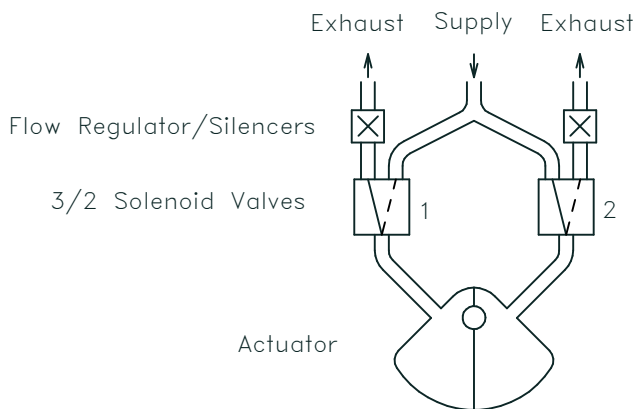
## (2) FAIL-SAFE SPRING-RETURN



Solenoid Valve Air Paths:  
 — De-energised  
 - - - - Energised

To drive anticlockwise (air stroke)  
 – Energise both valves  
 To drive clockwise (spring stroke)  
 – De-energise both valves  
 To hold position – Energise valve 1  
 Loss of air pressure valves de-energise

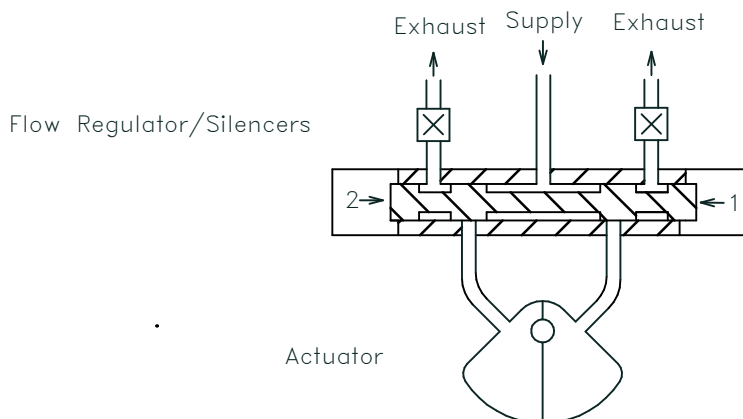
## (3) DOUBLE-ACTING FAIL-DOWN



Solenoid Valve Air Paths:  
 — De-energised  
 - - - - Energised

To drive anticlockwise (Upscale)  
 – Energise both valves  
 To drive clockwise (Downscale)  
 – De-energise both valves  
 To hold position – Energise valve 1

## (4) DOUBLE-ACTING FAIL-HOLD



5/3 Centre closed dual solenoid spool valve (centred by spring, drawn in central de-energised position)

To drive anti clockwise – Energise Valve 1  
 To drive clockwise – Energise valve 2  
 To hold position – De-energise both valves