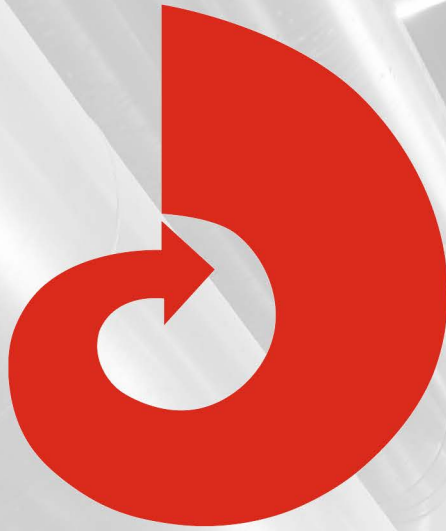


# FINE CONTROLS (UK) LTD



Fine Controls have been supplying process controls & instrumentation equipment since 1994, & now serves an ever expanding customer base, both in the UK & globally.

We offer a full range of valve & instrumentation products & services, with our product range representing leading technologies & brands:

**Flow:** Flow Meters & Transmitters, Flow Switches, Flow Control Valves & Batch Control Systems

**Temperature:** Temperature Probes & Thermowells, Temperature transmitters, Temperature Regulators & Temperature Displays

**Level:** Level Transmitters & Switches

**Pressure:** Pressure Gauges & Transmitters, Precision & High Pressure Regulators & I-P Converters, Volume boosters.

**Precision Pneumatics:** Pressure Regulators, I-P Converters, Volume Boosters, Vacuum Regulators

**Valves:** Solenoid & Pneumatic Valves, Control Valves & Positioners, Actuated Ball, Globe or Diaphragm Valves & Isolation Valves

**Services:** Repair, Calibration, Panel Build, System Design & Commissioning

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**FAIRCHILD**



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Fine Controls (UK) LTD, Bassendale Road, Croft Business Park,  
Bromborough, Wirral, CH62 3QL UK  
Tel: 0151 343 9966  
Email: sales@finecontrols.com

## 4500 SERIES ANCILLARY VALVES AIR PRESSURE SWITCH



- Specifically designed for Severe Offshore Environments
- For use on failsafe systems
- Compact / Lightweight
- 5 pressure ratings
- Integrated tagging facility
- Fluoroelastomer seals
- 3/2 and 5/2 versions

### General Description

A compact fully adjustable pneumatically operated 316 Stainless Steel pressure switch with operating pressures up to 16 bar (232 psi).

### Working Temperature Range

- -20°C to +80°C (-4°F to +176°F)

### Maximum Flow

- 6 bar (87 psi),  
1 bar (14.5 psi) differential
- 3/2 valves - 480 L/min (17 SCFM)
- 5/2 valves - 680 L/min (24 SCFM)

### Operating Medium

- Gases - Filtered lubricated or non-lubricated air, inert gas, sweet (natural) gases. Sour gas option available.

### Cv (Kv)

- 3/2 valves 0.5 (7.5)
- 5/2 valves 0.7 (10.5)

### Maximum Pilot Pressure Inlet

- 16 bar (232 psi)

### Ports NPT (BSP option available)

- ½" NPT
- 1/8" NPT pilot port

### Working Pressure (gases & liquids)

- For main directional valve 12 bar (174 psi)

### Regulated Pressure (adjustable)

- For main directional valve

1.0	to	2.0 bar	14.5	to	29 psi
1.0	to	4.0 bar	14.5	to	58 psi
1.0	to	7.0 bar	14.5	to	102 psi
1.0	to	10 bar	14.5	to	145 psi
1.0	to	16 bar	14.5	to	232 psi

(Note: 16 bar regulated pressure must be fed from independent supply to main directional valve)

### Pressure Setting Hysteresis

- 0.25 bar (3.63 psi)

## 4500 SERIES ANCILLARY VALVES AIR PRESSURE SWITCH

### Note:

- All dimensions given in mm

### Construction Materials

- Body: 316 Stainless Steel
- Spool: 316 Stainless Steel
- Spring: 316 Stainless Steel
- Seals and diaphragm: Fluoroelastomer

### Function

#### APPLICATION FOR SPRING RETURN

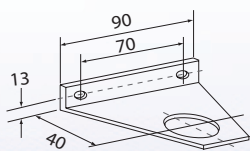
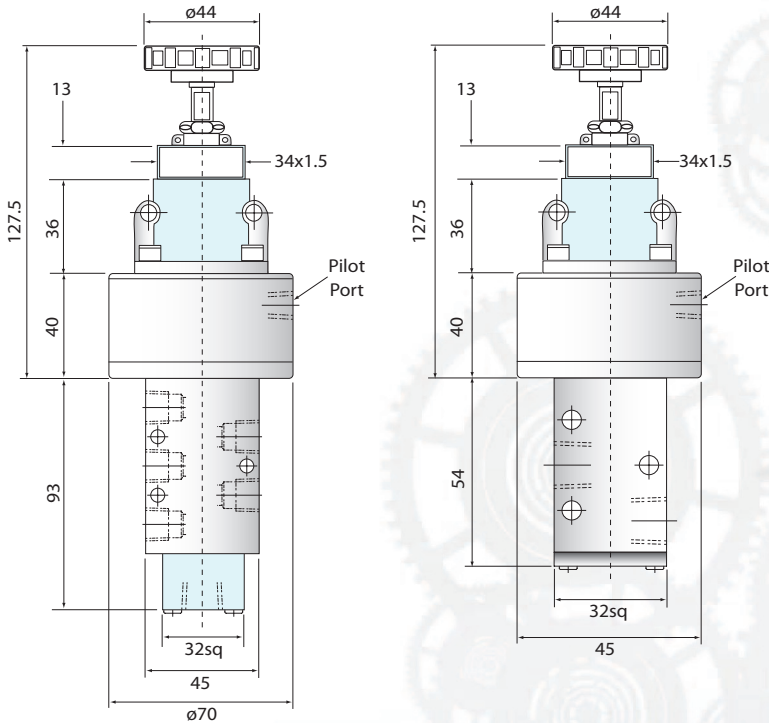
##### ACTUATORS 3/2

1) Airfail stay put - For this application port 3 is plugged. When pilot air is applied to port 1 or 2 in the Normally Closed mode and pilot air is greater than set pressure, air can flow in either direction. When pilot pressure falls below set pressure, the integral spool valve closes therefore block port 1 to 2 and the output from 2 remains blocked, leaving the actuator or downstream signal in the last controlled position. 2) Venting by not plugging port 3 - the valve can be used in the Normally Open, Closed, Diverter or Changeover mode and the actuator will vent to atmosphere.

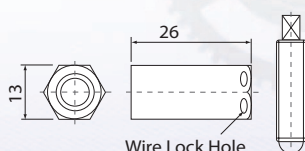
#### APPLICATION FOR DOUBLE ACTING

##### ACTUATORS 5/2

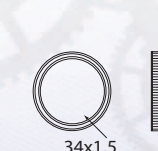
1) Airfail open or close For this application when air is applied to ports 1 and 3 (N/C) or 1 and 5 (N/O) and the actuator is connected to the outlets 2 and 4 and pilot air is greater than set pressure, air from another 5/2 solenoid or air operated valve will control the double acting actuator. The pressure switch can be piped Normally Closed or Normally Open and can detect air falling below the set pressure to either open or close the actuator, via a volume tank.reset to its unoperated position. The valve cannot be operated by pilot pressure alone, manual operation must take place first.



Tamper Proof  
Cap Kit



Panel  
Mounting Kit



Mounting Bracket

