

# 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

A rotork® Brand  
**FAIRCHILD**



**bürkert**



**SIEMENS**



**alcon**  
SOLENOID VALVES

A rotork® Brand



**MIDLAND-ACS**  
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**Honeywell**



**Bourdon**  
Baumer Group



**SOLDO**  
CONTROLS

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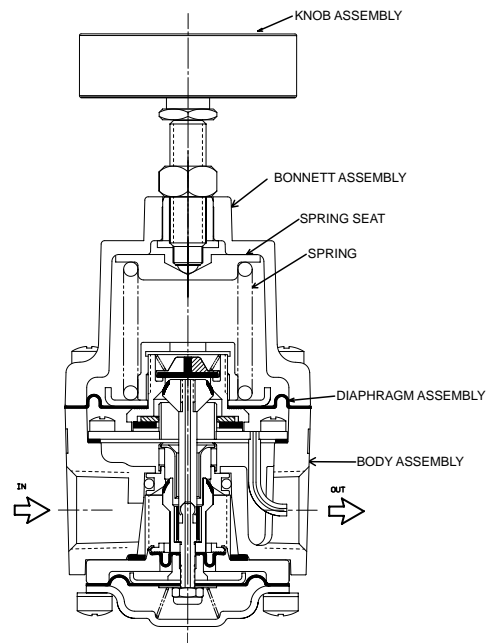


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### Features

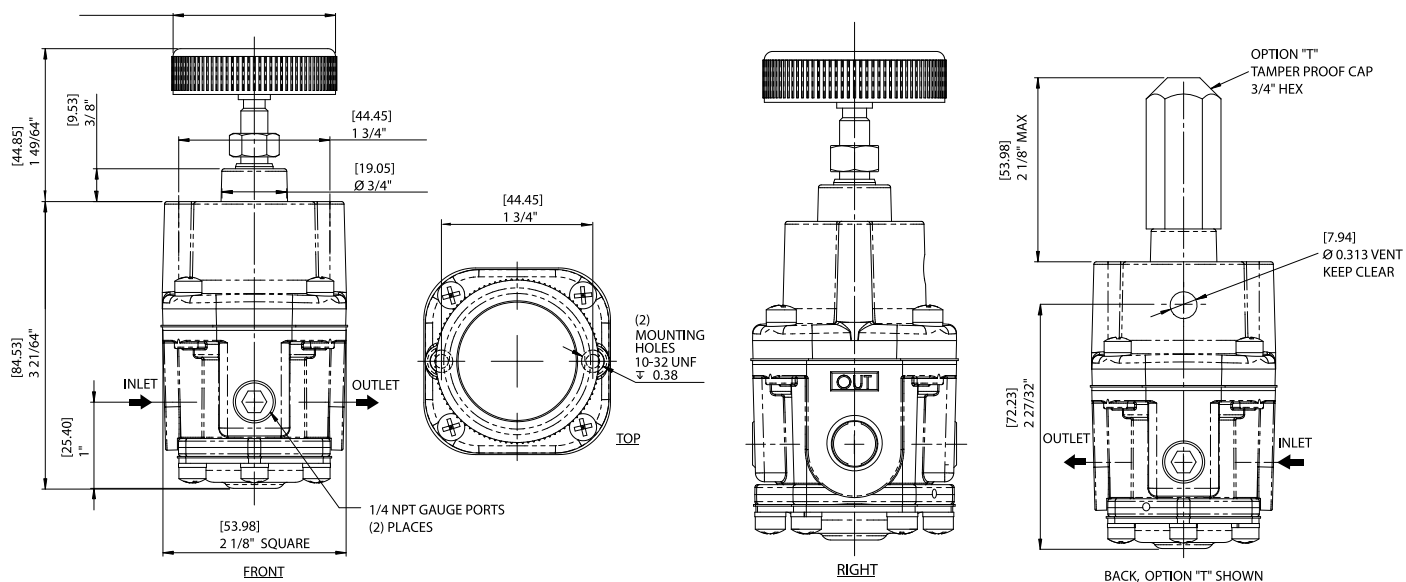
- Stable operation that eliminates hunting and buzzing.
- Flow compensation provided by venturi action of the aspirator tube.
- Indirect operation provided by the action of a separate pilot valve and valve motor to eliminate unbalanced closing forces in inner valve assembly.
- Large correcting effect due to the sensitive pilot valve action that maintains constant pressure drop across the supply valve to assure immunity to supply pressure variations.
- No-Bleed design minimizes consumption of air or inert gas.
- Compact in size where space is limited.



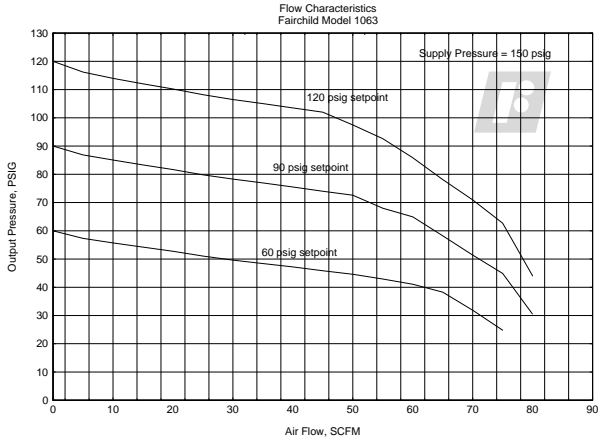
### Operating Principles

The Model 1000 Precision Pressure Regulator is designed for use in systems requiring both precision control and high forward flow and exhaust capacity. The sensitive valve motor of this high quality unit makes it virtually immune to supply pressure variations.

The combination of high flow capacity and good sensitivity make the versatile control applications, including loading of control valve and calendar roll actuators, operation of clutch and braking devices, and winding operations.



**Technical Information**



**Specifications**

**Flow Capacity**

50 SCFM (85 m<sup>3</sup>/HR) (100 psig, [7.0 BAR], (700 kPa) supply, 20 psig, [1.5 BAR], (150 kpa) setpoint)

**Exhaust Capacity**

8 SCFM (13.6 m<sup>3</sup>/HR) for downstream pressure 5 psig, [.35 BAR], (35 kPa) above set pressure

**Supply Pressure**

250 psig, [17.0 BAR], (1700 kPa) Maximum

**Effect of Supply Pressure Variation**

0.1 psig, [.007 BAR], (.7 kPa) per 100 psig, [7.0 BAR], (700 kPa) change

**Sensitivity**

0.5" (1.27 cm) Water Column

**Ambient Temperature Limits**

-40°F to +200°F, (-40°C to + 93.3°C)

**Hazardous Locations**

Acceptable for use in Zones 1 and 2 for gas atmosphere; Groups IIA and IIB and Zones 21 and 22 for dust atmospheres

**Materials of Construction**

Body . . . . . Zinc  
Diaphragms . . . . . Buna N and Dacron  
Trim . . . Aluminum, Brass, Neoprene and Zinc Plated Steel

**Catalog Information**

**Catalog Number**      **1 0**                 

**Pressure Range**

psig	[BAR]	(kPa)	
0.5-10	[0.03-0.7]	(3-70)	2
0.5-30	[0.03-2.0]	(3-200)	3
1-60	[0.1-4.0]	(10-400)	4
2-150	[0.15-10.0]	(15-1000)	6

**Pipe Size**

1/4" NPT	2
3/8" NPT	3

**Options**

BSPP (Parallel) <sup>1</sup>	H
Tamper Proof	T
BSPT (Tapered)	U

<sup>1</sup> BSPP Threads in Inlet & Outlet Ports Only. Others BSPT.

**Service Kit**

A Service Kit is available for the Model 1000. Refer to the Fairchild Model 1000 Installation, Operation and Maintenance Instructions, IS-10001000.