



burkert









A rotork Brand

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 rangerepresenting leading technologies & brands:

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

Temperature: Temperature Probes & Thermowells, Temperature ransmitters, 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 rotorik Brand



Honeywell



Baumer Group









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



Features

- Outstanding sensitivity
- Droop or boost virtually eliminated
- Fast response
- Minimal effect for supply pressure change
- High forward flow capacity
- High exhaust capacity
- Small physical size, saves space
- Sapphire orifice
- Permits use in instrumentation and control applications
- Provides constant output pressure over large flow range
- Eliminates output pressure excursions
- Reduces time to exhaust
- Reduces abrasive effects of air

Operating Principles

This Model 81 is a precision two-stage regulator that combines a pilot control system with a basic force balance system to provide accurate output pressure regulation.

It is recommended for use in both highly sensitive instrumentation and control circuits and in equipment requiring high flow with precise control.







Technical Information





Mounting Bracket: 11989

Model 81 Regulator Kits & Accessories

Mounting Bracket Kit11989 (sold separately)

Model 81 Multi-Stage Pressure Regulator

Catalog Information

Catalog Number		814 -				Model 81
Pressu	re Ranges					
psig 0-2 0-5 0-20 0.5-60 0.5-100	[0-0.35] [0-1.5] [0.035-4]	(kPa) (0-15) (0-35) (0-150) (3.5-400) (3.5-700)	2 3 4			
Pipe Si						
1/4" NPT . Options			····· [2		
					E P	

Service Information

A service kit is available for the Model 81. Refer to the *Installation, Operation and Maintenance Instructions,* IS-10000081.

Specifications

Flow Capacity (nominal)

50 SCFM (85 m³/HR) (100 psig, [7.0 BAR], (700 kPa) supply; 20 psig, [1.5 BAR], (150 kPa) setpoint)

Exhaust Capacity

5.5 SCFM (9.4 m³/HR) Downstream pressure 5 psig [.35 BAR] (35 kPa) above setpoint

Tamper Proof

BSPT (Tapered)

Maximum Supply Pressure

2, 5 psig, [.15, .35 BAR], (14, 35 kPa) ranges: 100 psig, [7.0 BAR], (700 kPa)

20, 60, 100 psig, [1.5, 4.0, 7.0 BAR], (140, 400, 700 kPa) ranges: 150 psig, [10.0 BAR], (1000 kPa)

Minimum Supply Pressure 20 psig, [1.5 BAR], (150 kPa)

Maximum Output Pressure 100 psig, [7.0 BAR], (150 kPa)

Pressure Change (due to supply pressure variation) Less than .2 psig, [.13 BAR], (150 kPa) for 100 psig, [7.0 BAR], (700 kPa) change

Air Consumption Less than 0.1 SCFM (1.7 m³/HR)

Sensitivity

Less than 0.1" (.254 cm) Water Column

Ambient Temperature Limit -40°F to +200°F, (-40°C to 93°C)

Materials of Construction

Body Die Case Aluminum	
Trim Stainless Steel, Brass, Aluminum, and Plated Steel	
Diaphragms Nitrile on Dacron	
Orifice	



Т

U