

125 BP SERIES

BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

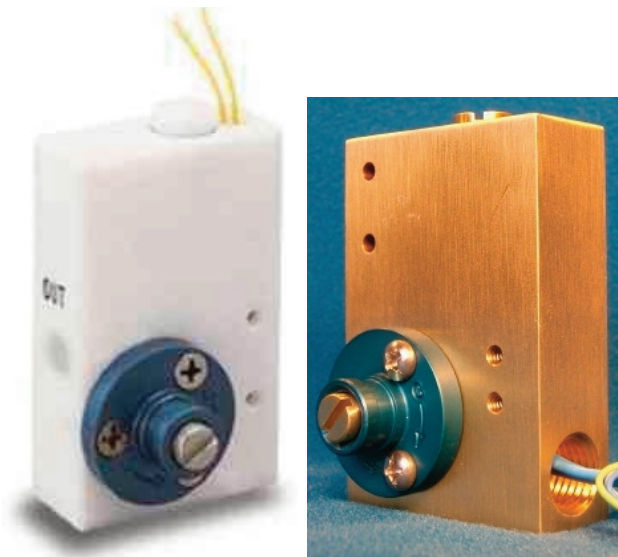
Best for Applications where the Ratio (Normal Flow/Set Point) is 10:1 or less.

FEATURES

- Broad Range of Adjustability
- Compact Size
- High Resolution
- Close On-Off Differential
- Ease of Customer Setting
- Monitors Gases or Liquids
- Materials: 316ss, Brass, Teflon®
- Confirms: Normal Flow Conditions
- Senses: High Flow or Low Flow conditions
- Output: Switch Contact

APPLICATIONS

- Vacuum Systems
- Wet Stations
- Gas Analyzers
- Cooling Systems
- Industrial Fluid Lines



OPERATION

When no flow is present the free magnetic piston rests on the bottom of the bore, which is situated in a bypass off the main line. Adjustment of the variable orifice in the main line creates a small bypass flow sufficient to lift the magnetic piston and actuate the reed switch. When flow decreases, the piston moves downward and the reed switch deactuates.

- Actuation Points for air at 68° F and 14.7 PSIA with increasing flow
- Deactuation (decreasing flow) averages 10% less than actuation (increasing flow)
- Repeatability $\pm 2\%$
- Unit will pass greater flows

Corrections must be made for other gases, line pressure and temperatures. Please consult your representative or the factory.

TEMPERATURE OPERATING RANGE

- 0° to 220° F (-17° to 104° C)

For other temperature ranges consult factory.

CALIBRATION POINTS

MODEL		AIR SCC/M(SCFH)	WATER ML/M(GPH)	PORTS FNPT
125-BP	Min	100 (0.21)	3 (0.048)	1/8"
	Max	20,000 (42.4)	500 (7.93)	
125-BPHF	Min	200 (0.42)	5 (0.079)	1/8"
	Max	60,000 (127)*	950 (15.105)	

PRESSURE LOSS TABLE

AIR FLOW RATE CC/M (SCFH)	WATER FLOW RATE ML/M (GPH)	ΔP TO ATMOSPHERE MBARS (Inches in Water)
100 (0.21)	3 (0.048)	1.2 (0.50)
5500 (11.7)	200 (3.17)	9.2 (3.71)
7000 (14.8)	400 (6.34)	11.7 (4.71)
20000 (42.4)	500 (7.93)	24.7 (9.93)
60000 (127.1)	950 (15.10)	69.7 (28.00)

SPECIFICATIONS

BODY MATERIAL	WEIGHT OZ. (gm)	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS	SEAL
Teflon®	4.4 (123.5)	100 (6.89)	Teflon®	Teflon®
Brass	16 (453.6)	1500 (103.42)	Brass, Epoxy	Viton®
316ss	16 (453.6)	3000 (206.84)	316ss, Epoxy	Viton®

CE Recognized 73/23/EEC/93/68/EEC

Recognized File E75356

* At 60 PSIG (4.137 BARG)

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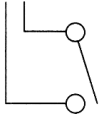
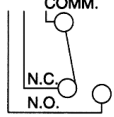
1057 CTE 125 BP Series

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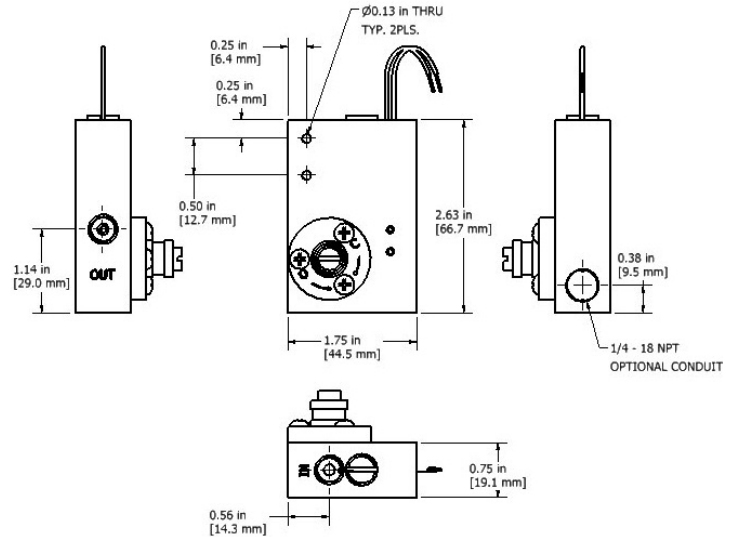
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SWITCH DATA	SPST	SPDT
Maximum Switching Voltage		
DC (V)	200	175
AC (V)	150	120
Contact Rating		
DC (W)	50	5
AC (VA)	70	5
Maximum Switching Current (A)		
DC (A)	1.0	.25
AC (A)	0.7	.25

LEADS	SPST	SPDT(Optional)
	leads 18 in. min. from body 22 AWG, TFE insulation	
		leads 18 in. min. from body 24 AWG, TFE insulation • green - N.C. • blue - N.O. • white - Common

Above values for resistive loads only. For inductive loads, surge current and rush current - contact protection is required, consult your local representative. SPDT UL Recognized (E47258).



INSTALLATION

Mount vertically with the inlet port at bottom. A 10 micron filter is recommended.

HOW TO ORDER (Please see Custom Page for Special Options.)

Model	Materials	Bypass Design	Electrical Conduit (Optional)	Switch	Options
125	T Teflon*** B Brass 316 316ss	BP By Pass BPHF By Pass High Flow	C (Blank for Standard Unit) (1/4" FNPT)	N.O. Single Pole Single Throw Normally Open STD. N.C. Single Pole Single Throw Normally Closed (not available on conduit unit) SPDT Single Pole Double Throw*	TFE Teflon® Encapsulated Piston** O2 Oxygen Cleaned KZ Kalrez® Seals EPR EPR Seals BN Buna N Seals

*Consult factory

**Standard with Teflon® unit

®Viton - E.I. Dupont & Co

®Teflon - E.I. Dupont & Co

®Kalrez - E.I. Dupont & Co

Note: All dimensions and specifications are subject to change for quality improvement. Not responsible for printing errors.

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