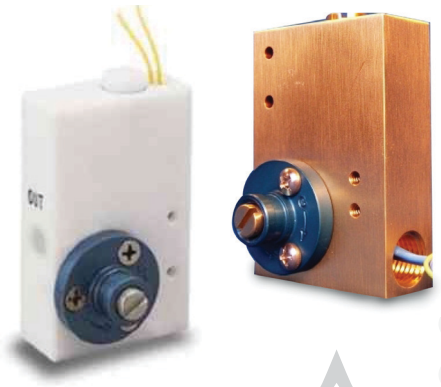
125 BP Series

BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases



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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 in a bypass off the main line. Adjustment of the orifice in the main line creates a small bypass flow 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 ±2%
- Unit will pass greater flows

Corrections must be made for other fluids, 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.

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

cULus Recognized File E75356

* At 60 PSIG (4.137 BARG)

CALIBRATION RANGE

MODEL		AIR SCC/M(SCFH)	WATER ML/M(GPH)	PORTS FNPT
125 BP	Minimum	100 (0.21)	3 (0.048)	1/8"
	Maximum	20,000 (42.4)	500 (7.93)	
125 BPHF	Minimum	200 (0.42)	5 (0.079)	1/8"
	Maximum	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 of 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 ®

3077 S.W. 13th Drive Deerfield Beach, FL 33442 **P** (954) 428 8259 (800) 222 2177 **F** (954) 428 8745 www.**ChemTec**.com

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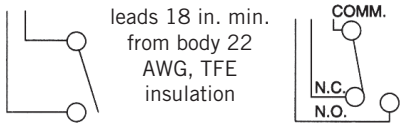
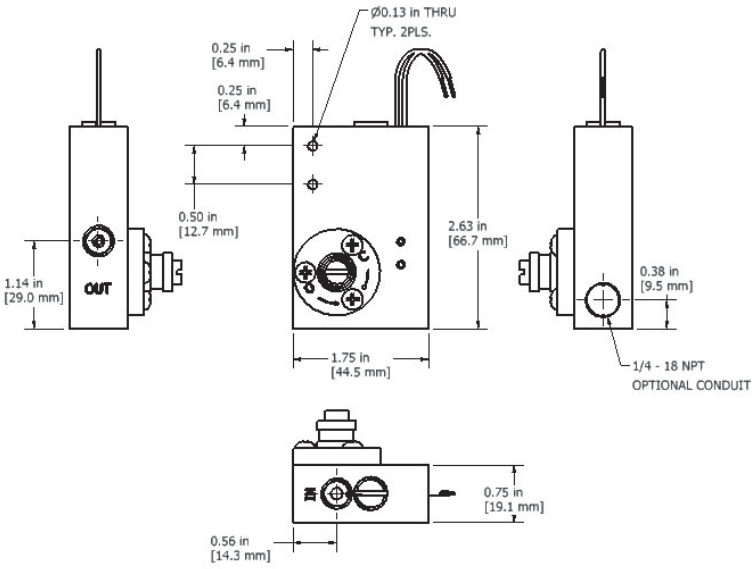
Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

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





INSTALLATION

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

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).

HOW TO ORDER (Sales@ChemTec.com | (800) 222-2177)

Model	Materials		Bypass Design		Electrical Conduit (Optional)	Switch		Options	
125	T	Teflon®**	BP	By Pass	C	N.O.	Single Pole Single Throw Normally Open	TFE	Teflon® Encapsulated Piston**
	B	Brass	BPHF	By Pass	(Blank for Standard Unit)	N.C.	Single Pole Single Throw Normally Closed (not available on conduit unit)	O2	Oxygen Cleaned
	316	316SS		High Flow	(1/4" FNPT)	SPDT	Single Pole Double Throw*	HT	High Temperature Option 340° F (171° C) metallic body only
								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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