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Flow Monitors - Flow Switches Excess Flow Valves - Flow Meters



Welcome to CTE Chem Tec Equipment.
Leading manufacturers of Flow Monitors, Flow Meters, Flow Switches, and Excess Flow Valves for 35 years.

Flow Switches (also known as Flow Monitors and Flow Sensors) give switch contact at a predetermined flow rate. Flow Meters provide varying electrical output with fluid flow. Excess Flow Valves are normally open valves that close automatically at a predetermined flow rate.

We specialize in the lower flow ranges -- i.e. 120 SCFM air, 20 GPM water, or less. Flow Switches have fixed and adjustable models. All categories have a variety of flow ranges and pipe sizes.

CTE is the only manufacturer of all Teflon[®] Flow Switches and Flow Meters.

Important Notice: All of our products containing reed switches are now available with digital solid state switching.



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FLOW MONITORS 125 BYPASS

For monitoring lower flows of corrosive and non-corrosive gases and liquids.



UL Recognized E75356
CE Recognized 73/23/EEC,93/68/EEC

KEY FEATURES	APPLICATIONS
<p>Best for Applications where the Ratio (Normal Flow/Set Point) is 10:1 or less.</p>	<p>Vacuum Systems Wet Stations Gas Analyzers Cooling Systems Industrial Fluid Lines</p>
Features	
<ul style="list-style-type: none"> • Broad Range of Adjustability • Compact Size • High Resolution • Close On-Off Differential • Ease of Customer Setting 	<ul style="list-style-type: none"> • Monitors Gases or Liquids • Materials: 316ss, Brass, Teflon® • Confirms: Normal Flow Conditions • Senses: High Flow, Low Flow conditions • Output: Switch Contact

Operation



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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

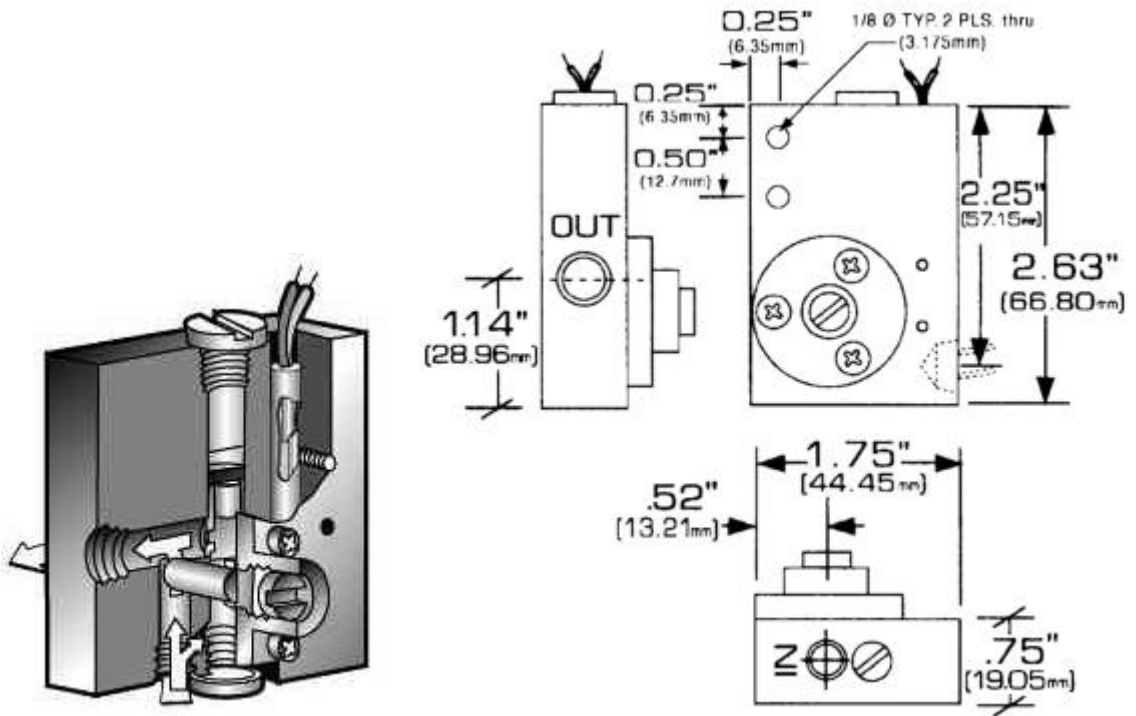
Corrections must be made for other gases, line pressure and temperatures. Please consult your representative or the factory.

Calibration Range					Pressure Loss Table		
MODEL	AIR SCC/M (SCFH)		WATER ML/M (GPH)		AIR FLOW RATE CC/M (SCFH)	WATER FLOW RATE ML/M (GPH)	DP TO ATMOSPHERE MBARS (Inches of Water)
	MIN	MAX	MIN	MAX			
125-BP	100 (0.21)	20,000 (42.4)	3 (0.048)	500 (7.95)	100 (0.21)	3.00 (0.048)	1.2 (0.50)
125-BPHF	200 (0.42)	60,000 (127)*	5 (0.079)	950 (15.105)	5500 (11.7)	200 (3.17)	9.2 (3.71)
					7000 (14.8)	400 (6.34)	11.7 (4.71)
					20,000 (42.4)	500 (7.93)	24.7 (9.93)
					60,000 (127.1)	950 (15.10)	69.7 (28.00)

* AT 60 PSIG (4.137 BARG)

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Switch Data

SPST	SPDT
Hermetically Sealed Reed Switch	Hermetically Sealed Reed Switch
Max Switching Voltage DC (V) 200 AC (V) 150	Max Switching Voltage DC (V) 175 AC (V) 120
Contact Rating DC (W) 50 AC (VA) 70	Contact Rating DC (W) 5 AC (VA) 5
Max. Switching Current DC (A) 1.0 AC (A) 0.7	Max. Switching Current DC (A) .25 AC (A) .25

Leads

SPST
Leads 18 in. min. from body 22 AWG, TFE insulation.

SPDT (optional)
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 is UL recognized.

Specifications

Unit	Weight oz. (gm)	Working Pressure PSIG (BARG)	Wetted Parts	Seals
Teflon®	4.4 (123.5)	100 (6.89)	Teflon®	Teflon®
Brass	16 (453.6)	1500 (103.42)	Brass, TFE, Epoxy	Viton®
316ss	16 (453.6)	3000 (206.84)	316ss, TFE, Epoxy	Viton®

Fluid Ports: Inlet/Outlet 1/8" FNPT

Electrical Conduit Optional: 1/4" FNPT

Temperature Operating Range: 32° to 220° F (0° to 104° C). For other temperature ranges, consult factory.

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

How to Order

125 Model	316 Body Material	BP Bypass Design	C Conduit Optional	SPDT Switch Options		OPTIONS Any of the following options may be added:																							
	<table border="1"> <tr> <td>T</td> <td>Teflon®**</td> </tr> <tr> <td>B</td> <td>Brass</td> </tr> <tr> <td>316</td> <td>316ss</td> </tr> </table>	T	Teflon®**	B	Brass	316	316ss	BP- Bypass BPHF- Bypass High Flow	Blank for Standard Unit	<table border="1"> <tr> <td>N.O.</td> <td>SPST Normally Open STD.</td> </tr> <tr> <td>N.C.</td> <td>SPST Normally Closed not available on conduit unit</td> </tr> <tr> <td>SPDT</td> <td>Single Pole Double Throw</td> </tr> </table>	N.O.	SPST Normally Open STD.	N.C.	SPST Normally Closed not available on conduit unit	SPDT	Single Pole Double Throw	<table border="1"> <tr> <td>TFE</td> <td>Teflon® Encapsulated Piston **</td> </tr> <tr> <td>O2</td> <td>Oxygen Cleaned</td> </tr> <tr> <td>KZ</td> <td>Kalrez® Seals</td> </tr> <tr> <td>EPR</td> <td>EPR Seals</td> </tr> <tr> <td>BN</td> <td>Buna N Seals</td> </tr> <tr> <td>S</td> <td>Special Custom Option Welded Fittings*</td> </tr> </table>	TFE	Teflon® Encapsulated Piston **	O2	Oxygen Cleaned	KZ	Kalrez® Seals	EPR	EPR Seals	BN	Buna N Seals	S	Special Custom Option Welded Fittings*
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* Consult Factory
** Standard with Teflon® unit

Note:

All dimensions and specifications are subject to change for quality improvement. Not responsible for typing errors.

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