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CTE Chem Tec

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.

CTE • 234 S.W. 12th Avenue • Deerfield Beach, Florida 33442
Tel (800) 222-2177 • Fax (954) 428-8745 • Email: info@chemtec.com

FLOW MONITORS 125 SERIES

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



Recognized E75356

Recognized 73/23/EEC,93/68/EEC

KEY FEATURES

Best for Applications where the Ratio (Normal Flow/Set Point) is 10:1 or Greater.
Minimal Pressure Drop.

APPLICATIONS

Analyzers
Welding Systems
Vacuum Systems
Cooling Systems
Chillers
Biomedical Instruments
Process Flows

Features

- Broad Range of Adjustability
- Compact Size
- High Resolution
- Materials: 316ss, Brass, Teflon®

- Confirms: Normal Flow Conditions
- Senses: High Flow, Low Flow conditions
- Output: Switch Contact

Operation

When no flow is present the free magnetic piston is suspended in the upper portion of the valve bore due to magnetic repulsion between the lower fixed magnet and the piston. As soon as flow is established the piston is displaced downward and actuates the reed switch at the set point. Set point is adjustable.

- Actuation Points for air at 68° F and 14.7 PSIA with increasing flow
- Deactuation (decreasing flow) averages 30% 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

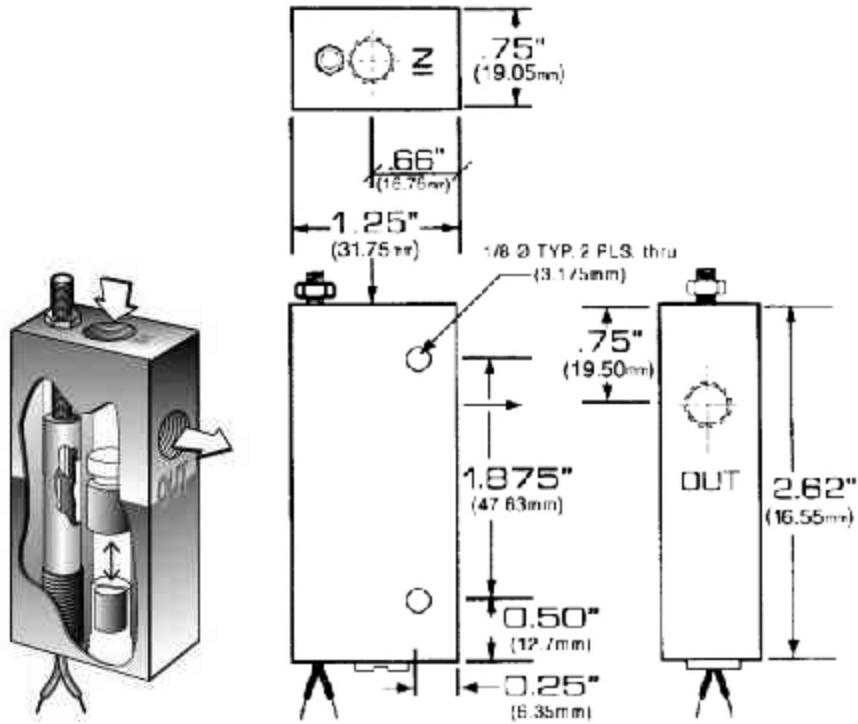
MODEL	AIR SCC/M (SCFH)		WATER ML/M (GPH)	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
125	30 (0.063)	16,000 (33.90)	1 (0.016)	500 (7.93)

Pressure Loss Table

AIR FLOW RATE CC/M (SCFH)	WATER FLOW RATE ML/M (GPH)	ΔP TO ATMOSPHERE MBARS (Inches of Water)
30 (0.064)	1.0 (0.016)	8.71 (3.50)
310 (0.657)	30 (0.48)	25.8 (10.38)
1500 (3.178)	300 (4.76)	29.7 (11.92)
16,000 (33.9)	500 (7.93)	63.8 (25.63)

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

Leads	
<p>SPST Leads 18 in. min. from body 22 AWG, TFE insulation.</p>	
<p>SPDT (optional) Leads 18 in. min. from body 24 AWG, TFE insulation.</p> <ul style="list-style-type: none"> • green - N.C. • blue - N.O. • white - Common 	

ChemTec Equipment Company - 125 Series - More Specs

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 (113.4)	80 (5.52)	Teflon®	Teflon®
Brass	12 (340.2)	1500 (103.42)	Brass, Epoxy	Viton®
316ss	12 (340.2)	3000 (206.84)	316ss, Epoxy	Viton®

Fluid Ports: Inlet/Outlet 1/8" 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 up vertically. Other attitudes change the adjustable range of the unit. A 10 micron filter is recommended.

How to Order

125 Model	316 Body Material	SPDT Switch Option	OPTION 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	<table border="1"> <tr> <td>N.O.</td> <td>SPST Normally Open STD.</td> </tr> <tr> <td>SPDT</td> <td>Single Pole Double Throw</td> </tr> </table>	N.O.	SPST Normally Open STD.	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>HT</td> <td>High Temperature Option 340°F (171° C)</td> </tr> <tr> <td>KZ</td> <td>Kalrez® Seals</td> </tr> <tr> <td>EPR</td> <td>EPR Seals</td> </tr> <tr> <td>S</td> <td>Special Custom</td> </tr> <tr> <td></td> <td></td> </tr> </table>	TFE	Teflon® Encapsulated Piston **	O2	Oxygen Cleaned	HT	High Temperature Option 340°F (171° C)	KZ	Kalrez® Seals	EPR	EPR Seals	S	Special Custom		
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* Consult Factory

** Standard with Teflon® unit

Note:

ChemTec Equipment Company - 125 Series - More Specs

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

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