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.

Please check out our exciting and innovative NEW PRODUCTS and ADD-ON's to our existing product line.

INSTALLATION & MAINTENANCE MANUALS are now available in PDF format.

www.flw.com/chemtec Distributed By FLW Inc, *(800) 576 -6308*

EXCESS FLOW VALVES

EFV SERIES

For preventing uncontrolled flows of gases and liquids.

Recognized File E75356

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

KEY FEATURES	APPLICATIONS
Controls excessive flows	Fitting Failure Regulator failure Hydraulic control Gas Analyzers Toxic Gas and Liquid Releases

Features

- Controlled Bleed, Resets Automatically
- Field Adjustable
- Positive Shut-off
- Attitude Variable Mounting
- Function: Restricts or Shuts Off Flow
- Output: switch contact optional
- Materials: 316ss or Brass Body

Operation

Flow enters the unit and makes a right angle to the outlet port across the nose of a magnetic piston. The piston is held in place by attraction to an adjusting screw magnet. A pressure differential is created by flow across the piston. When the differential is great enough, the piston slides to a seat at the outlet port. The flow rate at which the piston actuates can be changed externally by turning the adjusting screw, thereby changing the piston's relationship with the flow stream.

In this auto reset model after actuation, the piston rests on a metal to metal seat which allows a controlled bleed. To reset the unit, pressure must be equalized on both sides of the piston. If the source is turned off, either upstream or downstream, the bleed will equalize the pressure and the valve will automatically reopen by magnetic repulsion from the fixed magnet located in the valve body.

For positive shut-off an elastomer is used on the nose of the piston. When it comes to rest on the seat it provides a bubble tight closure. To reopen the valve there are two options.

1. The upstream pipeline must be bled to atmosphere if the line downstream is at atmosphere.

2. A by-pass line with an on/off valve must be installed to port the upstream pressure to the downstream pipeline to equalize the pressure.

Our MRS series is available with the by-pass system as an integral part of the unit.

- Actuation points for air at 68° F and 14.7 PSIG.
- Corrections must be used for other gases, line pressures and temperatures.*
- Please consult your representative or the factory.

CALIBRATION RANGE

Model	Adjustable Range Air SLPM (SCFM)	Adjustable Range Water LPM (GPM)	Port Size FNPT
EFV-125	0.5 to 155.70 (0.018 to 5.5)	0.015 to 4.5 (0.004 to 1.2)	1/8"
EFV-250	4 to 1132 (0.14 to 40)	0.100 to 15.1 (0.026 to 4.0)	1/4"
EFV-375	85 to 1840 (3.0 to 65)	0.380 to 15.1 (0.100 to 4.0)	3/8"
EFV-500	142 to 2123 (5.0 to 75)	1.90 to 37.8 (0.50 to 10.0)	1/2"
EFV-750	425 to 3681 (15.0 to 130)	3.80 to 75.7 (1.0 to 20.0)	3/4"

PRESSURE LOSS TABLE

Model	Set Point		DP to Atmosphere BARD (PSID)
	Air SLPM (SCFM)	Water LPM (GPM)	
EFV-125	0.5 (0.018) 75 (2.63) 155.7 (5.5)	0.015 (0.004) 2.65 (0.70) 4.50 (1.20)	0.08 (1.2) 0.11 (1.6) 0.21 (3.0)
EFV-250	4 (0.14) 500 (17.50) 1132 (39.62)	0.1 (0.26) 5.0 (1.32) 15.1 (3.99)	0.21 (3.0) 0.41 (6.0) 0.83 (12.0)
EFV-375	85 (2.98) 900 (31.50) 1840 (64.40)	0.38 (0.10) 10.0 (2.64) 15.1 (3.99)	0.10 (1.5) 0.28 (4.0) 0.83 (12.0)
EFV-500	142 (4.97) 1000 (35.00) 2123 (74.31)	1.9 (0.50) 25.0 (6.60) 37.8 (9.98)	0.07 (1.0) 0.28 (4.0) 0.48 (7.0)
EFV-750	425 (14.88) 1800 (63.00) 3681 (128.84)	3.8 (1.00) 4.7 (1.24) 75.7 (19.98)	0.14 (2.0) 0.21 (3.0) 0.34 (5.0)

* Consult Factory

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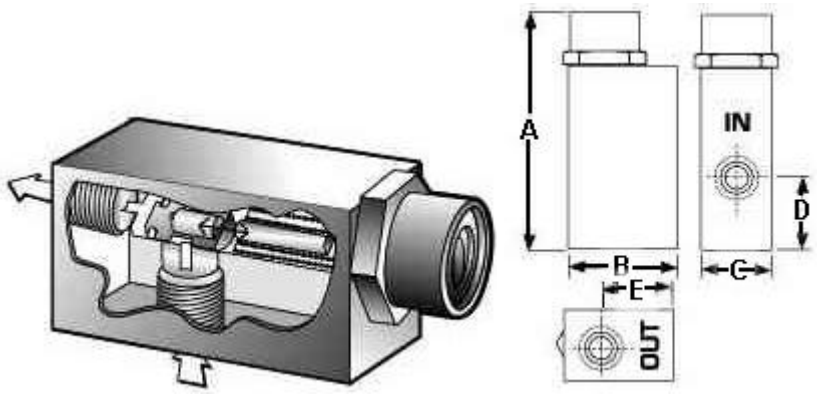
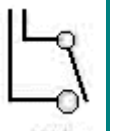
CTE CHEM TEC



Patent No's 4,637,427; 4,630,799; 4,574,833 Others may apply.

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

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

Above values for resistive loads only. For inductive loads, surge current and rush current -- contact protection is required; consult your local representative.

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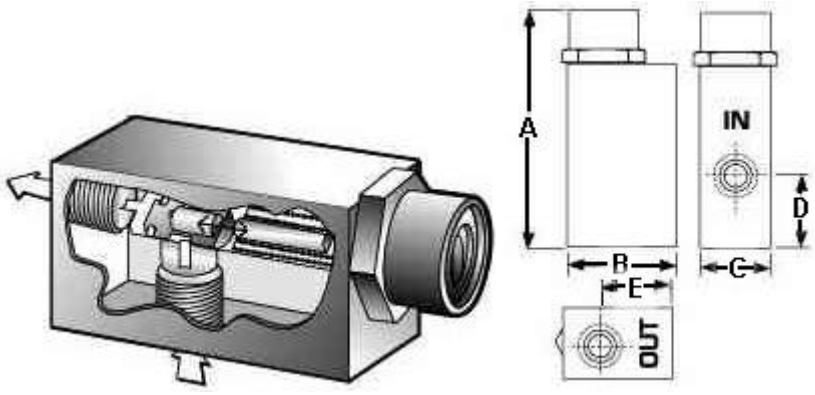

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How to Order

EFV Model	125 Size	B Material	PSO Positive Shut-Off	ES Electric Switch Normally Open	OPTIONS Any of the following options may be added:
	125 250 375 500 750	B Brass S 316ss Other material available upon request.	Blank for Controlled Bleed Model	(ES not available on 125 model)	O2 Oxygen Cleaned HT High Temperature Unit 340° F (171° C) KZ Kalrez® Seals EPR EPR Seals Z Special Custom FP Factory Presetting (State trip point, medium, and line pressure) Welded Fittings *

* Consult Factory

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