

# CHEM TEC EQUIPMENT COMPANY

234 SW 12th Ave., Deerfield Beach, FL 33442  
(954) 428-8259 Fax: (954) 428-8745

## INSTALLATION AND MAINTENANCE

## MODEL FS SERIES

### OPERATION:

As flow is established through the unit and continues to increase, the pressure differential across the magnetic piston increases until it overcomes the magnetic piston's resistance (mass). This force causes it to progress fully upward to actuate the dry reed switch. This is a snap action and occurs in the decreasing mode as well.

### SPECIFICATIONS:

#### STANDARD FLOW SETTINGS

Calibration in LPM (GPM) water

MODEL	PVC Calibration point	Brass or Stainless
FS-50	A 0.57(0.15)	0.95(0.25)
	B 0.95(0.25)	1.89(0.50)
	C 1.89(0.50)	3.79(1.00)
	D 2.84(0.75)	5.68(1.50)
	E 3.79(1.00)	7.57(2.00)
	F 4.73(1.25)	9.46(2.50)
FS-75	A 0.76(0.20)	1.89(0.50)
	B 1.89(0.50)	3.79(1.00)
	C 2.84(0.75)	7.57(2.00)
	D 3.79(1.00)	11.4(3.00)
	E 5.68(1.50)	15.1(4.00)
	F 7.57(2.00)	21.8(5.75)
FS-1	A 0.95(0.25)	7.57(2.00)
	B 2.84(0.75)	9.46(2.50)
	C 3.79(1.00)	11.4(3.00)
	D 7.57(2.00)	15.1(4.00)
	E 11.4(3.00)	22.7(6.00)
	F 15.1(4.00)	32.2(8.50)

Actuation points shown are for increasing flows.  
Differential between on and off averages 10%.  
Flow setting accuracy  $\pm 10\%$  Repeatability  $\pm 2\%$

### SWITCH DATA

SPST SPDT

Maximum Switching Voltage

DC	200	100
AC	150	-

Contact Rating

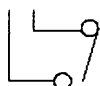
DC (W)	50	3
AC (VA)	70	-

Maximum Switching Current (A)

DC	1.0	.25
AC	0.7	-

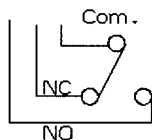
Above values for resistive loads only. For inductive loads, surge current and rush current - contact protection is required, consult your local representative.

SPST leads 18 in. min. from body, yellow.



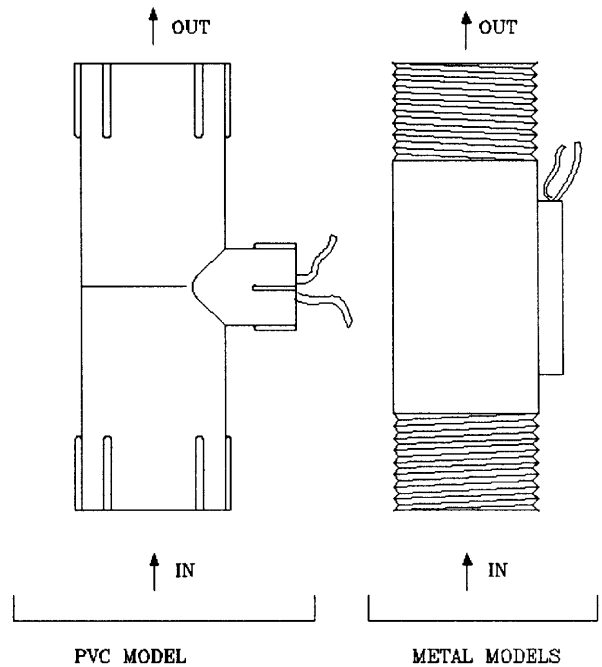
22 E 19, TFE Insulation

SPDT (Optional) leads 18 in. min. from body.



24 E 19, TFE Insulation

- Green - NC
- Blue - NO
- White - Common



BODY MATERIAL	MAXIMUM WORKING PRESSURE	WETTED PARTS
PVC	100 psig	PVC, epoxy, Titanium
Brass	250 psig	Brass, epoxy, Titanium
316ss	500 psig	316ss, epoxy, Titanium

CONNECTIONS:	MODEL	PVC	BRASS, STAINLESS
	FS-50	1/2" FNPT	1/2" MNPT
	FS-75	3/4" FNPT	3/4" MNPT
	FS-1	1" FNPT	1" MNPT

### INSTALLATION:

The flow switch should be installed vertically, inlet down, outlet up. Avoid dirt, Teflon tape shred, or other foreign material from entering unit. Do not use pipe dope. We recommend use of a 100 micron filter.

The standard unit is provided with a SPST dry reed switch. Mount with leads up for NO operation (open at rest), leads down for NC. SPDT models have both NO and NC capabilities.

Large metallic bodies and magnetic fields may affect the principle of operation of these units. Magnetic shielding may be required in severe cases.

### MAINTENANCE:

The FS model is a low maintenance unit. If the bore appears dirty or the piston is not responsive to changes in flow, flush the flow passage with a suitable solvent to remove any dirt or build-up.