



**Flow Monitors,
Flow Meters,
Excess Flow Valves**

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LPH Series NON-ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

Compact, Dependable, Economical

FEATURES

- Close On-Off Differential
- Visual Indication of Flow with Acrylic Model
- No Seals
- In Line Vertical Plumbing
- Materials: Acrylic, Brass, 316SS or Teflon
- Confirms: Normal Flow Conditions
- Senses: High Flow and Low Flow Conditions
- Output: Switch Contact

APPLICATIONS

- Analyzers
- Kidney Dialysis Machines
- Micro Biomedical Machines
- Laser Cooling Systems
- Bubbler Systems
- Pollution Sampling Equipment

FNPT PORT SIZES

- LPH 125 - 1/8"
- LPH 250 - 1/8"
- LPH 375 - 1/4"

OPERATION

When air/water flows through the unit it causes the magnetic piston to move up at the calibration point. This displacement is caused by the pressure differential from the air/water flowing through the unit. The magnetic piston actuates a hermetically sealed reed switch, which is encapsulated in the body of the unit, out of the air/water path. Decreasing the flow below the calibration point causes the reed switch to de-actuate.

- Actuation points for air at 68° F and 14.7 PSIA with increasing flow.
- Deactuation (decreasing flow) averages 10% less than actuation (increasing flow).
- Flow setting accuracy $\pm 10\%$ of calibration points shown.
- Repeatability $\pm 1\%$.
- Unit will pass greater flows.

PRESSURE LOSS

ΔP AT SET POINT

MBARS (INCHES OF WATER)

ALL UNITS 11.2 (4.5)

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

SPECIFICATIONS

BODY MATERIAL	WEIGHT OZ. (gm)	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS
Acrylic	4 (113.4)	100 (6.89)	Acrylic, 316SS, Epoxy
Brass	8 (226.8)	1500 (103.42)	Brass, 316SS, Epoxy
316SS	8 (226.8)	3000 (206.84)	316SS, Epoxy
Teflon	4 (113.4)	80 (5.52)	Teflon®

TEMPERATURE OPERATING RANGE

- 0 to 220° F (-17 to 104° C) for 316SS, Brass and Teflon®
- 32 to 160° F (0 to 71° C) for Acrylic

For other temperature ranges consult factory.



CALIBRATION TABLE

MODEL	AIR SCC/M(SCFH)	WATER ML/M(GPH)
LPH-125		
-0	50 (0.105)	1 (.016)
-1	120 (0.254)	2 (.03171)
-2	560 (1.187)	16 (.25369)
-3	750 (1.589)	30 (.47567)
-4	1,300 (2.755)	45 (.71350)
-5	1,400 (2.966)	50 (.79278)
-6	1,900 (4.026)	65 (1.0306)
-7	2,500 (5.297)	85 (1.3477)
-8	2,700 (5.721)	90 (1.4270)
-9	3,300 (6.992)	105 (1.6648)
-10	3,600 (7.628)	120 (1.9027)
-11	5,200 (11.02)	170 (2.6955)
-12	6,000 (12.71)	200 (3.1711)
LPH-250		
-1	350 (0.742)	7 (0.111)
-2	6,000 (12.71)	200 (3.171)
-3	7,500 (15.89)	250 (3.964)
-4	9,500 (20.12)	315 (4.994)
-5	10,500 (22.25)	346 (5.486)
-6	12,500 (26.49)	400 (6.342)
-7	15,200 (32.21)	500 (7.928)
-8	24,000 (50.85)	760 (12.05)
LPH-375		
-1	3,000 (6.36)	70 (1.110)
-2	15,200 (32.21)	475 (7.531)
-3	30,300 (64.20)	950 (15.06)
-4	37,000 (78.40)	1,425 (22.59)**
-5	45,300 (95.99)	2,200 (34.88)**

**Teflon® encapsulated piston not available

CE Recognized 73/23/EEC/93/68/EEC
 Recognized File E75356

LPH Series NON-ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

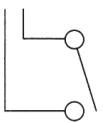
Contact Rating

DC (W)	50	5
AC (VA)	70	5

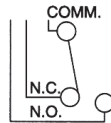
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

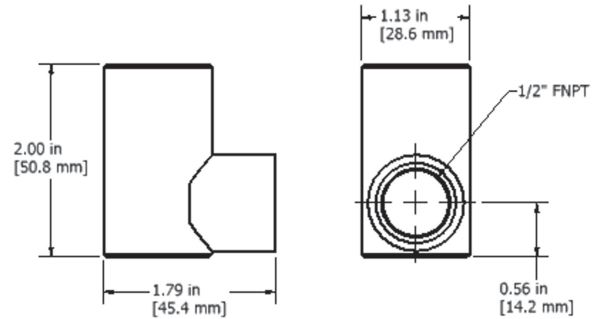
LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



leads 18 in. min. from body 24 AWG, TFE insulation
 • green - N.C.
 • blue - N.O.
 • white - Common



INSTALLATION

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

LEADS UP	Normally Open
LEADS DOWN	Normally Closed
CONDUIT	N.O. Conduit Offset Down N.C. Conduit Offset Up

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	Size	Calibration	Materials	Electrical Conduit	Media	Switch	Optional	Options
LPH	125	See cal. table	A Acrylic	C (Metallic Bodies Only) (1/2" FNPT)	W Water	N.O. Single Pole Single Throw Normally Open	TFE Teflon® Encapsulated Piston	
	250		B Brass		A Air			
	375		S 316SS					
			T Teflon®			N.C. Single Pole Single Throw Normally Closed	O2 Oxygen Cleaned	
						SPDT Single Pole Double Throw	HT High Temperature Option 340° F (171° C) metallic body only	
						DSNONO Double Switch N.O./N.O.	HV High Voltage Switch (220 VAC)	
						DSNONC Double Switch N.O./N.C.		
						DSNCNC Double Switch N.C./N.C.		



*Consult factory

*Teflon - E.I. Dupont & Co

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

FS Series NON-ADJUSTABLE FLOW MONITOR

For Economical Monitoring of Higher Flows of Corrosive and Non-Corrosive Liquids

FEATURES

- Non-Adjustable Flow Monitor
- Low Maintenance
- Close On-Off Differential
- No Seals
- Single Moving Part
- In Line Vertical Plumbing
- Materials: 316SS, Brass or PVC
- Confirms: Normal Flow Condition
- Senses: High flow or Low flow conditions
- Output: Switch Contact

APPLICATIONS

- Laser Cooling Systems
- Heat Pumps
- Cooling Systems

KEY FEATURES

Economical Liquid Flow Sensor.

OPERATION

As flow is established upward 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.

- Actuation Points for increasing flow
- Flow Setting Accuracy $\pm 10\%$ of actuation point
- Deactuation (decreasing flow) averages 10% less than actuation (increasing flow)
- Repeatability $\pm 2\%$
- Unit will pass greater flows

TEMPERATURE OPERATING RANGE

- 0° to 228° F (-17° to 104° C) for Brass and Stainless Steel.
- 32° to 120° F (0° to 49° C) for PVC.

For other temperature ranges consult factory.

PRESSURE LOSS

**ΔP TO ATMOSPHERE
at Set Point PSID (BARD)**

WATER PVC UNITS

ALL SET POINTS... 0.50 (0.034)

METAL UNITS

ALL SET POINTS.. 1.00 (0.069)

SPECIFICATIONS

MATERIAL	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS
PVC	100 (6.89)	PVC, Epoxy
Brass	250 (17.22)	Brass, Epoxy, 316SS
316SS	500 (34.45)	316SS, Epoxy, 316SS®



CALIBRATION TABLE

MODEL		PVC LPM(GPM)	BRASS or 316SS LPM(GPM)
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	3.68 (1.50)	15.1 (4.00)
	-F	7.57 (2.00)	21.8 (5.75)
FS-I	-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)

FS Series NON-ADJUSTABLE FLOW MONITOR

For Economical Monitoring of Higher Flows of Corrosive and Non-Corrosive Liquids

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

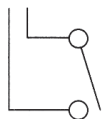
Contact Rating

DC (W)	50	5
AC (VA)	70	5

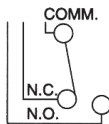
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

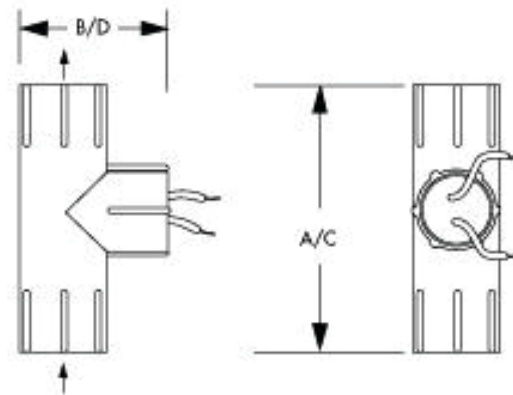
LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



leads 18 in. min. from body 24 AWG, TFE insulation
 • green - N.C.
 • blue - N.O.
 • white - Common



INSTALLATION

Metallic Bodies Only: Mount with inlet down vertically.
 Leads up - Normally Open
 Leads Down - Normally Closed
 PVC - N.O. Conduit Offset Up
 N.C. - Conduit Offset Down
 Filtration - 100 Micron Filter 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).

FLUID PORTS: INLET/OUTLET PORTS INCHES

Model	FNPT (PVC)	MNPT (Brass or 316SS)
FS-50	1/2"	1/2"
FS-75	3/4"	3/4"
FS-I	1"	1"

DIMENSIONS INCHES (MM)

		FS-50	FS-75	FS-I
PVC	A	3.2 (81.3)	3.5 (88.9)	4.3 (109.2)
PVC	B	2.0 (50.8)	2.0 (50.8)	2.2 (55.9)
METAL	C	4.0 (101.6)	4.0 (101.6)	4.5 (114.3)
METAL	D	1.2 (30.5)	1.4 (35.6)	1.7 (43.2)

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

Model	Size	Materials	Conduit	Switch Options	Options
FS	-50	P PVC	C	N.O. Single Pole Single Throw Normally Open Leads Up	Any of the following options may be added. HT High Temperature Option 340° F (171°C) (metallic body only)
	-75	B Brass	(PVC Model Only)	N.C. Single Pole Single Throw Normally Closed Leads Down	
	-1	S 316SS		SPDT Single Pole Double Throw	

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*Consult Factory
 *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.



125 Series STANDARD UNOBTRUSIVE ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

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

FEATURES

- Broad Range of Adjustability
- Compact Size
- High Resolution
- Materials: 316SS, Brass or Teflon®
- Confirms: Normal Flow Conditions
- Senses: High Flow and Low Flow Conditions
- Output: Switch Contact

APPLICATIONS

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

OPERATION

A magnetic piston is suspended by the repulsion of a fixed magnet. When fluid flows through the unit it causes the magnetic piston to move against the repulsion of the fixed magnet. The magnet piston actuates an encapsulated hermetically-sealed reed switch out of the fluid path. Decreasing the flow below the calibration point causes the reed switch to de-actuate. 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 ±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.*



CALIBRATION RANGE

MODEL	AIR SCC/M(SCFH)	WATER ML/M(GPH)	PORTS FNPT
125 Minimum	30 (0.063)	1 (0.016)	1/8"
Maximum	16,000 (33.90)	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 (.064)	1.0 (0.016)	8.71 (3.50)
310 (.657)	30 (0.48)	25.8 (10.38)
1500 (3.178)	300 (4.76)	29.7 (11.92)
16000 (33.9)	500 (7.93)	63.8 (25.63)

SPECIFICATIONS

BODY MATERIAL	WEIGHT OZ. (gm)	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS	SEAL
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®

CE Recognized 73/23/EEC/93/68/EEC
 TÜV Recognized File E75356

125 Series STANDARD UNOBTRUSIVE ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

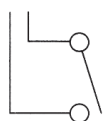
Contact Rating

DC (W)	50	5
AC (VA)	70	5

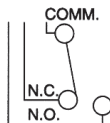
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

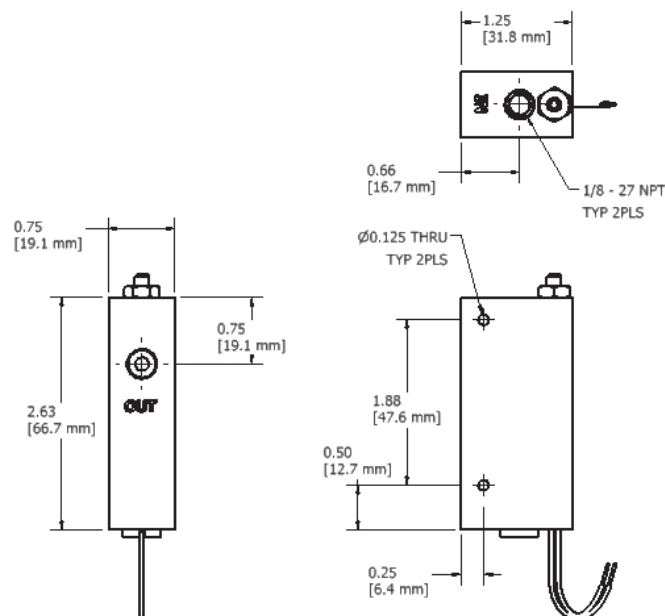
LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



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 up vertically. Inlet port down changes the adjustable range of the unit. 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	ELECTRICAL CONDUIT (OPTIONAL)	SWITCH	OPTIONS
125	T Teflon®**	C	N.O. Single Pole Single Throw Normally Open	TFE Teflon® Encapsulated Piston**
	B Brass	(METALLIC BODIES ONLY)		O2 Oxygen Cleaned
316	316SS	(1/2" 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.



125 BP Series BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

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

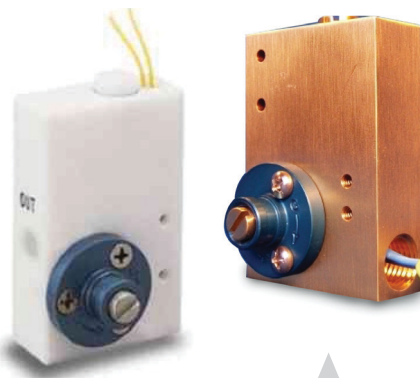
- 0° to 220° F (-17° to 104° C)

For other temperature ranges consult factory.

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

 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®

125 BP Series BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

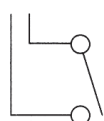
Contact Rating

DC (W)	50	5
AC (VA)	70	5

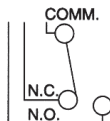
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

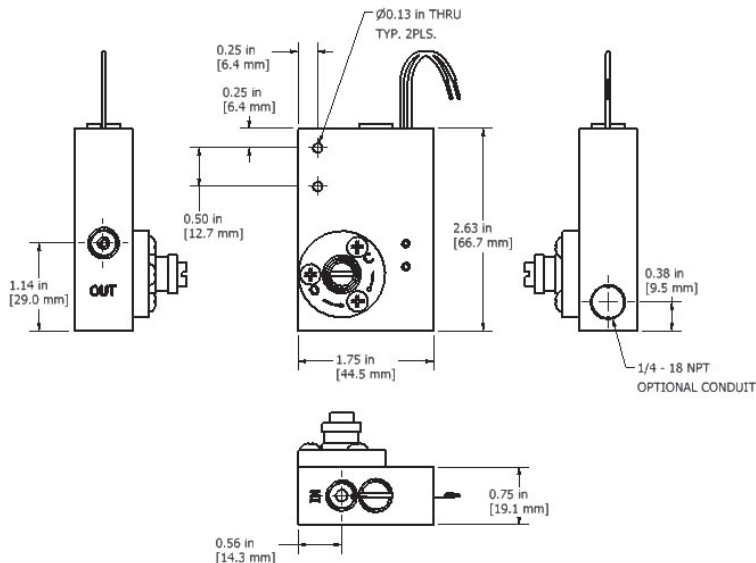
LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



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 [®] ** B Brass 316 316SS	BP By Pass BPHF By Pass High Flow	C (Blank for Standard Unit) (1/4" FNPT)	N.O. Single Pole Single Throw Normally Open N.C. Single Pole Single Throw Normally Closed (not available on conduit unit) SPDT Single Pole Double Throw*	TFE Teflon [®] Encapsulated Piston** O2 Oxygen Cleaned 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.



500 BP Series

BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

Best for applications where the normal flow to set point is 10:1 or less.

FEATURES

- Low Minimum Operating Pressure
- Close ON-OFF differential
- Ease of adjustability
- In Line 180 Degree Porting
- Monitors Gases or Liquids
- Confirms: Normal flow conditions
- Senses: High Flow or Low Flow Conditions
- Water or Explosion Proof Covers
- Output: Switch Contact
- Materials: 316SS, Brass, Teflon

APPLICATIONS

- Wet Stations
- Shipboard Water Systems
- CVD Furnaces Cooling Water
- Biomedical Instruments
- Vacuum Systems
- Coolant Failure Alarm

OPERATION

With no flow present, the magnetic piston rests on the bottom of the bypass bore. When flow is established the piston is forced upward by the bypass flow and actuates the reed switch. The bypass flow is controlled by manual adjustment of the flow control vane. 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 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.*



ChemTec

CALIBRATION RANGE

MODEL		AIR SLPM (SCFM)	WATER LPM (GPM)	PORTS FNPT
500-BP	Minimum	6 (0.20)	0.11 (0.03)	1/2"
	Maximum	991 (35)	15.14 (4)	
500-BPHF	Minimum	23 (0.80)	0.38 (0.10)	1/2"
	Maximum	2124 (75)	37.85 (10)	

PRESSURE LOSS TABLE

AIR FLOW RATE SLPM (SCFM)	WATER FLOW RATE LPM (GPM)	ΔP TO ATMOSPHERE MBARS (PSID)
84.9 (3)	3.8 (1)	17.2 (0.25)
566.3 (20)	15.1 (4)	51.7 (0.75)
1557.4 (55)	30.3 (8)	233.0 (3.38)
1925.5 (68)	37.9 (10)	362.0 (5.25)
2265.3 (80)	64.4 (17)	517.1 (7.50)

SPECIFICATIONS

BODY MATERIAL	WEIGHT Lbs. (Kg.)	MAX WORKING PRESSURE PSIG (BARG)	WETTED PARTS	SEAL
Teflon®	1.5 (0.68)	80 (5.51)	Teflon®	TFE®
Brass	4.0 (1.81)	1500 (103.42)	Brass, Epoxy	Viton®
316SS	4.0 (1.81)	3000 (206.84)	316SS, Epoxy	Viton®

CE Recognized 73/23/EEC/93/68/EEC
FM Recognized File E75356

500 BP Series BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

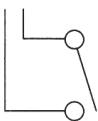
Contact Rating

DC (W)	50	5
AC (VA)	70	5

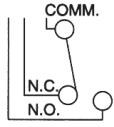
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

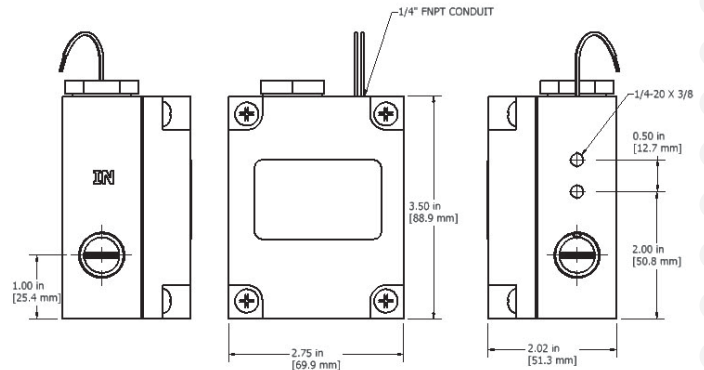
LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



leads 18 in. min. from body 24 AWG, TFE insulation
 • green - N.C.
 • blue - N.O.
 • white - Common



INSTALLATION

Mount vertical (leads up) with horizontal piping. A 100 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	Cover Type	Switch (Optional)	Options
500	T Teflon® B Brass 316 316SS	BP Bypass BPHF Bypass High Flow	W NEMA IV Water Proof X NEMA VII Explosion Proof	N.O. Single Pole Single Throw Normally Open STD. SPDT Single Pole Double Throw	TFE Teflon® Encapsulated Piston** O2 Oxygen Cleaned HT High Temperature Option 340° F (171° C) metallic body only KZ Kalrez® Seals EPR EPR Seals BN Buna N Seals



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*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.

500 BPHP Series

BYPASS HIGH
PRESSURE
ADJUSTABLE
FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

Higher Working Pressure.

FEATURES

- Broad Range of Adjustability
- Close On-Off Differential
- Ease of Adjustment
- In Line 180 Degree Porting
- High Resolution
- Materials: 316SS
- Confirms: Normal Flow Conditions
- Senses: High Flow, Low Flow conditions
- Water and Explosion Proof Covers
- Output: Switch Contact
- Best for Ratio (normal flow/set point) of 10:1 or less

APPLICATIONS

- High Pressure Systems
- Hydraulic Fluid
- Coolants
- Process Chemicals
- Gas & Liquid Sampling

OPERATION

When no flow is present the free magnetic piston rests on the bottom of the bypass bore. When flow is established the piston is forced upward and actuates the reed switch. The bypass flow is controlled by manual adjustment of the flow control vane. When flow decreases the piston moves downward and the reed switch deactuates. The adjustment assembly is then locked down to prevent any inadvertent readjustment.

- 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.

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

Recognized File E75356



ChemTec

CALIBRATION RANGE

MODEL	AIR SLPM (SCFM)	WATER LPM (GPM)	PORTS FNPT	
500-BPHP	Minimum Maximum	6 (0.21) 993 (35)	0.11 (0.03) 15.14 (4)	1/2"

PRESSURE LOSS TABLE

AIR FLOW RATE SLPM (SCFM)	WATER FLOW RATE LPM (GPM)	ΔP TO ATMOSPHERE MBARS (PSID)
84.9 (3)	3.8 (1)	17.2 (0.25)
566.3 (20)	15.1 (4)	51.7 (0.75)
1557.4 (55)	31.3 (8)	233.0 (3.38)
1925.5 (68)	37.8 (10)	362.0 (5.25)

SPECIFICATIONS

BODY MATERIAL	WEIGHT Lbs. (Kg.)	MAX WORKING PRESSURE PSIG (BARG)	WETTED PARTS	SEAL
316SS	5 (2.27)	6000 (413.4)	316SS, Epoxy	Viton®

500 BPHP Series BYPASS ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

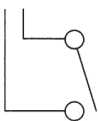
Contact Rating

DC (W)	50	5
AC (VA)	70	5

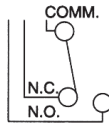
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

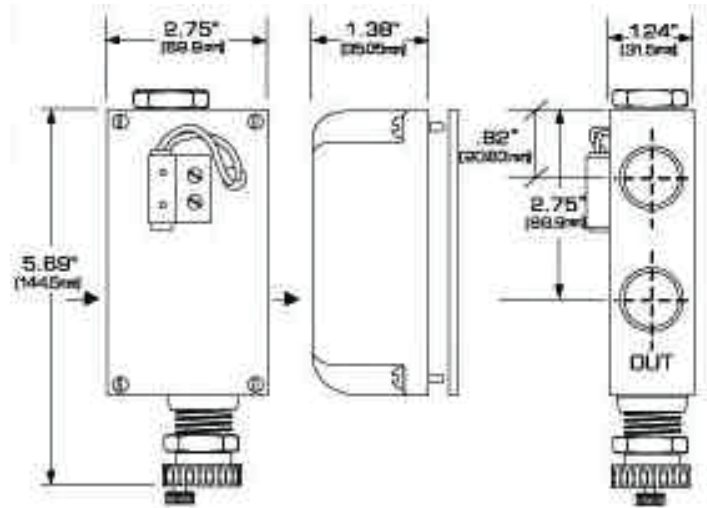
LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



leads 18 in. min. from body 24 AWG, TFE insulation
 • green - N.C.
 • blue - N.O.
 • white - Common



INSTALLATION

Mount vertically (leads on the side) with horizontal piping. A 100 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 High Pressure Design	Cover Type	Switch Options	Options
500	316 316SS	BPHP	W NEMA IV Water Proof X NEMA VII Explosion Proof	N.O. Single Pole Single Throw Normally Open STD. SPDT Single Pole Double Throw	TFE Teflon® Encapsulated Piston* O2 Oxygen Cleaned HT High Temperature Option 340° F (171° C) KZ Kalrez® Seals EPR EPR Seals BN Buna N Seals



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*Consult Factory
 *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.

LCA Series ADJUSTABLE FLOW MONITOR

Low Cost Monitoring of Corrosive Liquid Flows

KEY FEATURES

Economical, Best for loss of flow detection, Normal flow to set point is 10:1 or greater.

APPLICATIONS

- Machine Lubrication
- Process Flows
- Cooling Systems
- Water Treatment Systems

FEATURES

- Adjustable
- Confirms: Normal flow conditions
- Senses: high flow or low flow conditions
- Output: Switch Contact

OPERATION

When flow is increased, the magnetic piston is forced against a bias spring. As the magnet comes near the adjustable reed switch it actuates, indicating proper flow. When flow decreases the spring forces the piston in the opposite direction deactuating the reed switch an indicating a reduced or no flow situation.

- All models field adjustable
- Deactuation (decreasing flow) averages 40% less than actuation (increasing flow).
- Repeatability $\pm 2\%$
- Correction must be made for attitudes other than horizontal.
- Unit will pass greater flows.

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



CALIBRATION RANGE

MODEL	ADJUSTABLE RANGE Increasing Flow Water LPM (GPM)	FACTORY PRESET FOR Decreasing Flow Water LPM (GPM)*	INLET/ OUTLET FNPT Port Inches
LCA-250	0.38 - 15.1 (0.10-4.00)	-10 0.38 (0.10) -20 9.46 (2.50) -30 11.46 (3.00)	1/4"
LCA-375	1.89 - 15.1 (0.50 - 4.00)	-10 1.89 (0.50) -20 9.46 (2.50) -30 11.36 (3.00)	3/8"
LCA-500	1.89 - 37.9 (0.50 - 10.00)	-10 1.89 (0.50) -20 18.93 (5.00) -30 28.39 (7.50)	1/2"
LCA-750	3.79 - 56.8 (1.00 - 15.00)	-10 3.79 (1.00) -20 18.93 (5.00) -30 28.39 (7.50)	3/4"

*-00 Available on all models - no settings

SPECIFICATIONS

MODEL	WEIGHT Lbs. (Kg)	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS
LCA 250P	.375 (.17)	100 (6.89)	PVC, Epoxy, 316SS
LCA-250-B	1.4 (.635)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-250-S	1.4 (.635)	3000 (206.84)	316SS, Epoxy
LCA 375P	.375 (.17)	100 (6.89)	PVC, Epoxy, 316SS
LCA-375-B	1.4 (.635)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-375-S	1.4 (.635)	3000 (206.84)	316SS, Epoxy
LCA 500P	.375 (.17)	100 (6.89)	PVC, Epoxy, 316SS
LCA-500-B	1.4 (.635)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-500-S	1.4 (.635)	3000 (206.84)	316SS, Epoxy
LCA 750P	.625 (.283)	100 (6.89)	PVC, Epoxy, 316SS
LCA-750-B	1.7 (.771)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-750-S	1.7 (.771)	3000 (206.84)	316SS, Epoxy

CE Recognized 73/23/EEC/93/68/EEC
 Recognized File E75356

PRESSURE LOSS TABLE

MODEL	WATER FLOW RATE LPM (GPM)	ΔP BARD (PSID)
LCA-250/375		
Minimum	0.38 (0.10)	0.34 (0.5)
Maximum	15.14 (4.0)	0.21 (3.0)
LCA-500		
Minimum	1.89 (0.5)	0.069 (1.0)
Maximum	37.85 (10.0)	0.689 (10.0)
LCA-750		
Minimum	3.79 (1.0)	0.10 (1.5)
Maximum	56.8 (15.0)	0.62 (9.0)

TEMPERATURE OPERATING RANGE

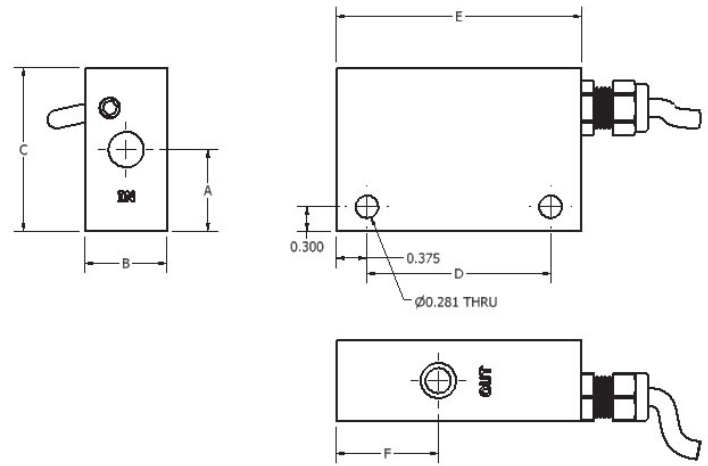
- PVC: 32° to 120° F
- 316SS and Brass: 32 to 220° F
- Acrylic: 32 to 160° F

For other temperature ranges consult factory.

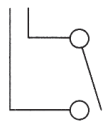
LCA Series ADJUSTABLE FLOW MONITOR

Low Cost Monitoring of Corrosive Liquid Flows

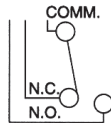
SWITCH DATA	SPST	SPDT
Maximum Switching Voltage		
DC (V)	200	175
AC (V)	150	120
Contact Rating		
DC (W)	50	5
AC (VA)	70	5
Maximum Switching Current (A)		
DC (A)	1.0	.25
AC (A)	0.7	.25



LEADS	SPST	SPDT (optional)
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leads 18 in. min. from body 22 AWG, TFE insulation



leads 18 in. min. from body 24 AWG, TFE insulation
 • green - N.O.
 • red - N.C.
 • black - Common

INSTALLATION

Mount with the inlet port on the side horizontally. Other attitudes change the adjustable range of the unit. A 100 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).

DIMENSIONS

Model	A	B	C	D	E	F
LCA-250	1.00 (25.4)	1.00 (25.4)	2.00 (50.8)	2.25 (57.15)	3.0 (76.2)	1.25 (31.8)
LCA-375	1.00 (25.4)	1.00 (25.4)	2.00 (50.8)	2.25 (57.15)	3.0 (76.2)	1.25 (31.8)
LCA-500	1.00 (25.4)	1.00 (25.4)	2.00 (50.8)	2.25 (57.15)	3.0 (76.2)	1.25 (31.8)
LCA-750	1.63 (41.4)	1.25 (31.8)	2.75 (69.9)	3.25 (82.55)	4.0 (101.6)	1.63 (41.4)

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

Model	Size	Materials	Factory Pre-set Options	Type of Service	Switch Options
LCA	250 375 500 750	P PVC A Acrylic B Brass S 316SS	-00, -10, -20, -30 (See Flow Settings)	W- Water	N.C. Normally Closed N.O. Normally Open SPDT Single Pole Double Throw

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 *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.



FAV Series ADJUSTABLE FLOW MONITOR

For Monitoring Higher Flows of Gases and Liquids

FEATURES

- Adjustable Flow Monitor
- Monitors both Gases and Liquids
- Materials: Brass or 316SS
- Confirms: Normal flow conditions
- Senses: High flow or Low flow conditions
- Output: Switch Contact

APPLICATIONS

- Process Media
- Fire Control Systems
- Cooling Systems
- Heat Pumps
- Hydraulic Lifts
- Water Treatment Chemicals

OPERATION

When flow is increased, the magnetic piston is forced against a bias spring. As the magnet comes near the adjustable reed switch it actuates, indicating proper flow. When flow decreases the spring forces the piston in the opposite direction deactuating the reed switch and indicating a reduce or no flow condition.

- Actuation points for air at 68 F and 14.7 PSIA with increasing flow.
- Deactuation (decreasing flow) averages 40% 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.

KEY FEATURES

Best for applications where the normal flow to set point is 10:1 or greater.



SPECIFICATIONS

MODEL	WEIGHT Lbs. (Kg)	MAX WORKING PRESSURE PSIG (BARG)	WETTED PARTS	SEALS
FAV-250-ESB	1.4 (635)	1500 (103.42)	Brass, Epoxy 316SS	Viton®
FAV-250-ESS	1.4 (635)	3000 (206.84)	316SS, Epoxy	Viton®
FAV-375-ESB	1.4 (635)	1500 (103.42)	Brass, Epoxy 316SS	Viton®
FAV-375-ESS	1.4 (635)	3000 (206.84)	316SS, Epoxy	Viton®
FAV-500-ESB	1.4 (635)	1500 (103.42)	Brass, Epoxy 316SS	Viton®
FAV-500-ESS	1.4 (635)	3000 (206.84)	316SS, Epoxy	Viton®
FAV-750-ESB	1.7 (771)	1500 (103.42)	Brass, Epoxy 316SS	Viton®
FAV-750-ESS	1.7 (771)	3000 (206.84)	316SS, Epoxy	Viton®

TEMPERATURE OPERATING RANGE

- 0 to 220° F (-17 to 104° C)
- For other temperature ranges consult factory.*

PRESSURE LOSS TABLE

MODEL	AIR FLOW RATE SLPM (SCFM)	WATER FLOW RATE LPM (GPM)	ΔP TO ATMOSPHERE BARD (PSID)
FAV-250/375			
Minimum	14.2 (0.50)	0.38 (0.1)	0.034 (0.50)
Maximum	1416.0 (50.00)	15.14 (4.0)	0.21 (3.00)
FAV-500			
Minimum	28.32 (1.00)	1.89 (0.50)	0.069 (1.00)
Maximum	2124.0 (75.00)	37.85 (10.00)	0.69 (10.00)
FAV-750			
Minimum	141.6 (5.00)	3.78 (1.00)	0.10 (1.50)
Maximum	3398.0 (120.00)	75.70 (20.00)	0.62 (9.00)

CE Recognized 73/23/EEC/93/68/EEC
 RoHS Recognized File E75356

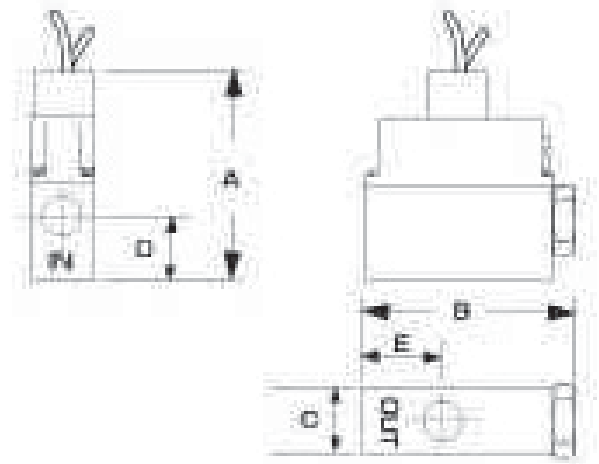
CALIBRATION RANGE

MODEL	AIR SLPM (SCFM)	WATER LPM (GPM)	INLET/ OUTLET FNPT PORT
FAV-250			
Minimum	14.16 (0.5)	0.38 (0.1)	1/4"
Maximum	1416 (50)	1514 (4.0)	
FAV-375			
Minimum	14.16 (0.5)	0.38 (0.1)	3/8"
Maximum	1416 (50)	1514 (4.0)	
FAV-500			
Minimum	28.32 (1.0)	1.89 (0.5)	1/2"
Maximum	2124 (75)	37.85 (10.0)	
FAV-750			
Minimum	141.60 (5.0)	3.78 (1.0)	3/4"
Maximum	3398 (120)	75.70 (20.0)	

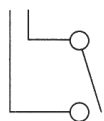
FAV Series ADJUSTABLE FLOW MONITOR

For Monitoring Higher Flows of Gases and Liquids

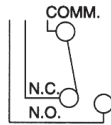
SWITCH DATA	SPST	SPDT
Maximum Switching Voltage		
DC (V)	200	175
AC (V)	150	120
Contact Rating		
DC (W)	50	5
AC (VA)	70	5
Maximum Switching Current (A)		
DC (A)	1.0	.25
AC (A)	0.7	.25



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 (lead up) with inlet port on the side horizontally and the outlet down vertically. Other attitudes change the adjustable range of the unit. A 100-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).

DIMENSIONS

Model	A	B	C	D	E
FAV-250	3.25 (82.6)	3.25 (82.6)	1.00 (25.4)	1.00 (25.4)	1.25 (31.8)
FAV-375	3.25 (82.6)	3.25 (82.6)	1.00 (25.4)	1.00 (25.4)	1.25 (31.8)
FAV-500	3.25 (82.6)	3.25 (82.6)	1.00 (25.4)	1.00 (25.4)	1.25 (31.8)
FAV-750	3.97 (100.8)	4.28 (108.7)	1.25 (31.8)	1.63 (41.4)	1.63 (41.4)

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

Model	Size	Electric Switch	Materials	Type of Service	Electrical Switch	Options
FAV	-250 -375 -500 -750	ES	B Brass S 316SS	W Water G Gas	N.C. Normally Closed N.O. Normally Open SPDT Single Pole Double Throw	HT High Temperature Option 340° F (171 ° C) KZ Kalrez® Seals EPR EPR Seals BN Buna N Seals

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 *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.



CCM Series

UNOBTRUSIVE
ADJUSTABLE
FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

Monitors flows from 10 cc/m air, in line configuration.

FEATURES

- Adjustable Flow Monitor
- High Resolution
- Works in Very Low Flow Environments
- Minimal Pressure Drop
- Gas and Liquid Flow Sensor
- Materials: PVC
- Confirms: Normal flow conditions
- Senses: high flow, low flow
- Output: Switch Contact

APPLICATIONS

- Gas Chromatography
- Analyzers
- Filter Maintenance
- Metering Equipment
- Corrosive Chemicals
- Gas Generators

OPERATION

With no flow present, the magnetic piston is held at the flow tube inlet by magnetic repulsion of the fixed magnet at the opposite end. As flow is established the piston is displaced toward the magnetic end plug and a major portion of the flow is bypassed through the flow tube orifice into the annular space. At the adjustment point the magnetic piston actuates the reed switch. On decreasing flow the switch deactuates.

- Actuation points for air at 68 F and 14.7 PSIA with increasing flow.
- Deactuation (decreasing flow) averages 40% less than actuation (increasing flow).
- Repeatability $\pm 2\%$
- Unit will pass greater flows.

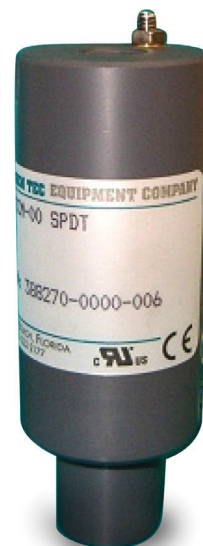
Corrections must be made for other gases, line pressure and temperatures. Please consult your representative or the factory.

FLUID PORTS

Inlet 1/8" FNPT / Outlet 1/4" FNPT

TEMPERATURE OPERATING RANGE

- 32° to 140° F (0° to 60° C).
- For other temperature ranges consult factory.*



ChemTec

CALIBRATION RANGE & PRESSURE LOSS TABLE

MODEL	AIR SCCM (SCFH)	WATER ML/M (GPH)	ΔP TO ATMOSPHERE (MBARS INCHES IN WATER)
CCM-00			
Minimum	10 (.021)	1 (0.016)	2.49 (1.0)
Maximum	150 (0.32)	5 (0.08)	19.9 (8.0)
CCM-010			
Minimum	150 (0.32)	8 (0.13)	0.99 (0.4)
Maximum	1000 (2.12)	180 (2.9)	17.4 (7.0)
CCM-015			
Minimum	500 (1.06)	20 (0.32)	1.74 (0.7)
Maximum	6000 (12.7)	370 (5.9)	19.9 (8.0)
CCM-125			
Minimum	6000 (12.7)	65 (1.03)	3.73 (1.5)
Maximum	16000 (33.9)	500 (7.9)	12.4 (5.0)

SPECIFICATIONS

BODY MATERIAL	WEIGHT Lbs. (Kg.)	MAX WORKING PRESSURE PSIG (BARG)	WETTED PARTS	SEAL
PVC	6 Oz.(170.1 gm)	100 (6.89)	PVC, Epoxy	Buna N

CE Recognized 73/23/EEC/93/68/EEC
FIM Recognized File E75356

CCM Series UNOBTRUSIVE ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

SWITCH DATA	SPST	SPDT
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Maximum Switching Voltage

DC (V)	200	175
AC (V)	150	120

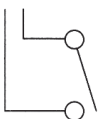
Contact Rating

DC (W)	50	5
AC (VA)	70	5

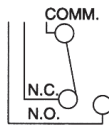
Maximum Switching Current (A)

DC (A)	1.0	.25
AC (A)	0.7	.25

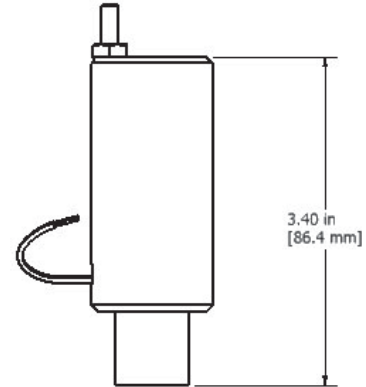
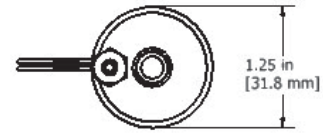
LEADS	SPST	SPDT (optional)
-------	------	-----------------



leads 18 in. min. from body 22 AWG, TFE insulation



leads 18 in. min. from body 24 AWG, TFE insulation
 • green - N.O.
 • blue - N.C.
 • white - Common



INSTALLATION

Mount vertically with inlet port at the top. 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	Size	Switch Options	Options
CCM	-00 -010 -015 -125	N.C. Normally Closed SPDT Single Pole Double Throw (Normally Open unit not available)	Any of the following options may be added. TFE Teflon® Encapsulated Piston O2 Oxygen Cleaned KZ Kalrez® Seals EPR EPR Seals



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*Consult Factory
 *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.

MAO Series 125/250 FLOW METER

Monitoring Lower Flows of Corrosive and Non-Corrosive Liquids.

FEATURES

- No Bearings
- Single Moving Part
- In Line Metering
- No Rotating Internals
- Materials: Teflon, Brass or 316SS
- Output: Analog or Digital
- Measures Low Flows

KEY FEATURES

All Teflon® wetted parts model available.
No seals. Undamaged by over ranging.

APPLICATIONS

- Wet Benches
 - Cooling Systems
 - Corrosive Chemical Dispensing
 - Materials Consumption Measurement
 - Process Controls
- Patent No's
4,858,647
4,905,844
5,033,311
Others may apply.

OPERATION

When fluid flows through the unit it displaces the Teflon® encapsulated magnetic piston. This displacement is proportional to the volumetric flow through the unit. A transducer, encapsulated in the body outside the fluid path, senses the displacement of the piston. The transducer's signal is converted by a microprocessor-based conditioning circuit then sends the signal to three types of outputs: voltage, pulse and current loop.

- TOTAL ACCURACY: ± 5%
- REPEATABILITY: ± 2% FULL SCALE
- LINEARITY: ± 2% FULL SCALE

TEMPERATURE OPERATING RANGE

- AMBIENT: 0° to 125° F (-18° to 52° C)
- MEDIA: 0° to 180° F (-18° to 82° C)

MECHANICAL SPECIFICATIONS

MODEL BODY	WEIGHT LBS. (Kg)	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS
MAO-125/250-T	0.63 (0.29)	80 (5.51)	Teflon®
MAO-125/250-B	1.30 (0.59)	1500 (103.42)	Brass, Teflon®
MAO-125/250-S	1.30 (0.59)	3000 (206.84)	316SS, Teflon®

Polypropylene Cover, Viton® Gasket and Stainless Steel Hardware.

PRESSURE LOSS TABLE

MODEL BODY		LINEAR RANGE ML/M (GPH)	ΔP MBARS (PSID)
MAO-125-AA	Minimum	20 (0.32)	24.82 (0.36)
	Maximum	70 (1.11)	42.06 (0.61)
MAO-125-BB	Minimum	50 (0.79)	8.27 (0.12)
	Maximum	150 (2.38)	10.34 (0.15)
MAO-250-AA	Minimum	100 (1.59)	8.27 (0.12)
	Maximum	500 (7.93)	9.65 (0.14)
MAO-250-BB	Minimum	260 (4.12)	10.34 (0.15)
	Maximum	1800 (28.54)	20.00 (0.29)



CALIBRATION IN WATER

MODEL	ML/MIN (GPH)	VDC	Hz	mA	PORTS FNPT
MAO125XAA	0	0	0	0	1/8"
	20 (0.3170)	1	40	4	
	32.5 (0.5151)	2	80	8	
	45 (0.7133)	3	120	12	
	57.5 (0.9114)	4	160	16	
MAO125XBB	0	0	0	0	1/8"
	50 (0.7925)	1	40	4	
	75 (1.1888)	2	80	8	
	100 (1.5850)	3	120	12	
	125 (1.9813)	4	160	16	
MAO250XAA	0	0	0	0	1/4"
	100 (1.5850)	1	40	4	
	200 (3.1701)	2	80	8	
	300 (4.7551)	3	120	12	
	400 (6.3401)	4	160	16	
MAO250XBB	0	0	0	0	1/4"
	250 (3.9626)	1	40	4	
	638 (10.1125)	2	80	8	
	1025 (16.2466)	3	120	12	
	1413 (22.3965)	4	160	16	

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

PA Recognized File E75356

MAO Series

Monitoring Lower Flows of Corrosive and Non-Corrosive Liquids.

ELECTRICAL SPECIFICATIONS

POWER REQUIREMENTS:

VOLTAGE: REGULATED 15 – 30 VDC

CURRENT: 250 mA

OUTPUTS:

ANALOG: 0 – 5 VDC,

Minimum Load Impedance: 5k ohm in parallel with 250pf

DIGITAL:

200 Hz, Square wave 50% duty cycle TTL compatible output.

CURRENT LOOP:

Current Loop: 4 - 20 mA

Loop Load : 100Ω ±1% 1/4 watt

WIRE CONNECTION:

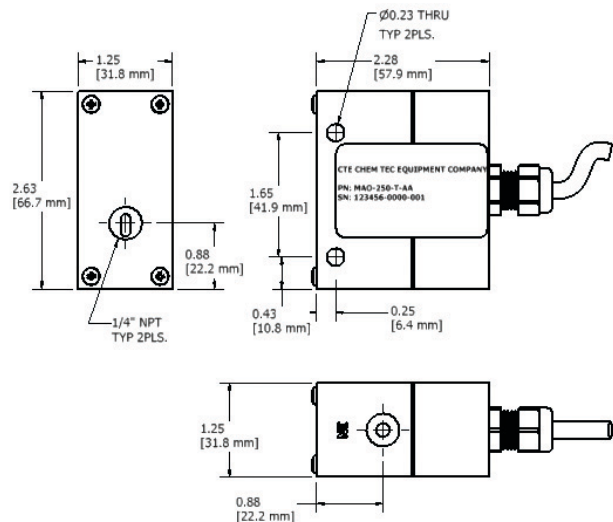
RED – (+)

BLACK – (Common)

WHITE – (Frequency)

GREEN – (Voltage)

ORANGE – (Current)



HOW TO ORDER

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

Model	Size	Materials	Flow Range
MAO	125	T Teflon®	(See Chart)
	250	B Brass	AA
		S Stainless Steel	BB



INSTALLATION

Control valves should be placed downstream of the MAO flow meter. The flow meter should never be installed so that it drains completely when flow ceases. When particles maybe present in the media, a filter should be installed ahead of the flow meter. It is advisable to filter to 10 microns. The MAO flow meter should not be located near ferrous material or near strong electro-magnetic fields.

The MAO flow meter is sensitive to velocity profile disturbances in the flow stream. It is advisable that straight lengths of 10 inside diameters upstream and 5 inside diameters downstream be used. All lines should be completely purged of air before use.

The use of pipe paste is not recommended. Use care when using Teflon tape to avoid shreds from entering the MAO flow meter.

MOUNTING

MAO-125-X-AA; Mount with INLET vertical, INLET port up, OUTLET port horizontal. All other models mount with INLET port vertical, INLET port down, OUTLET port horizontal.

MAO Series 500 FLOW METER

Monitoring Lower Flows of Corrosive and Non-Corrosive Liquids.

FEATURES

- No Bearings
- Single Moving Part
- In Line Metering
- No Rotating Internals
- Materials: Teflon, Brass or 316SS
- Output: Analog, Digital or Current Loop
- Measures Low Flows

KEY FEATURES

All Teflon® wetted parts model available.
No seals. Undamaged by over ranging.

OPERATION

When fluid flows through the unit it displaces the Teflon®-encapsulated magnetic piston. This displacement is proportional to the volumetric flow through the unit. A transducer, encapsulated in the body outside the fluid path, senses the displacement of the piston. The transducer's signal is converted by a microprocessor-based conditioning circuit then sends the signal to three types of outputs: voltage, pulse and current loop.

- TOTAL ACCURACY: $\pm 5\%$
- REPEATABILITY: $\pm 2\%$ FULL SCALE
- LINEARITY: $\pm 2\%$ FULL SCALE

TEMPERATURE OPERATING RANGE

- AMBIENT: 0° to 125° F (-18° to 52° C)
- MEDIA: 0° to 180° F (-18° to 82° C)

MECHANICAL SPECIFICATIONS

MODEL	WEIGHT LBS. (Kg)	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS
MAO-500-T	1.3 (0.6)	80 (5.52)	Teflon®
MAO-500-B	3.4 (1.54)	1500 (103.42)	Brass, Teflon®
MAO-500-S	3.4 (1.54)	3000 (206.84)	316SS, Teflon®

Polypropylene Cover, Viton® Gasket and Stainless Steel Hardware.

PRESSURE LOSS TABLE

MODEL BODY		LINEAR RANGE LPM (GPM)	ΔP MBARS (PSID)
MAO-500-AA	Minimum	1.89 (0.5)	27.58 (0.40)
	Maximum	7.57 (2.0)	31.03 (0.45)
MAO-500-BB	Minimum	3.79 (1.0)	27.58 (0.40)
	Maximum	13.25 (3.5)	68.95 (1.0)

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

Recognized File E75356

APPLICATIONS

- Wet Benches
 - Cooling Systems
 - Corrosive Chemical Dispensing
 - Materials Consumption Measurement
 - Process Controls
- Patent No's
4,858,647
4,905,844
5,033,311
Others may apply.



ChemTec

CALIBRATION IN WATER

MODEL	GPM (LPM)	VDC	Hz	mA	PORTS FNPT
MAO500XAA	0	0	0	0	1/2"
	0.5 (1.89)	1	40	4	
	0.75 (2.84)	2	80	8	
	1.25 (4.73)	3	120	12	
	1.75 (6.62)	4	160	16	
MAO500XBB	2.00 (7.57)	5	200	20	1/2"
	0	0	0	0	
	1 (3.79)	1	40	4	
	1.6 (6.06)	2	80	8	
	2.2 (8.33)	3	120	12	
	2.8 (10.60)	4	160	16	
	3.5 (13.25)	5	200	20	

MAO Series 500 FLOW METER

Monitoring of Corrosive and Non-Corrosive Liquids.

ELECTRICAL SPECIFICATIONS

POWER REQUIREMENTS:

VOLTAGE: REGULATED 15 – 30 VDC

CURRENT: 250 mA

OUTPUTS:

ANALOG: 0 – 5 VDC,

Minimum Load Impedance: 5k ohm in parallel with 250pf

DIGITAL:

200 Hz, Square wave 50% duty cycle TTL compatible output.

CURRENT LOOP:

Current Loop: 4 - 20 mA

Loop Load : 100Ω ±1% 1/4 watt

WIRE CONNECTION:

RED – (+)

BLACK – (Common)

WHITE – (Frequency)

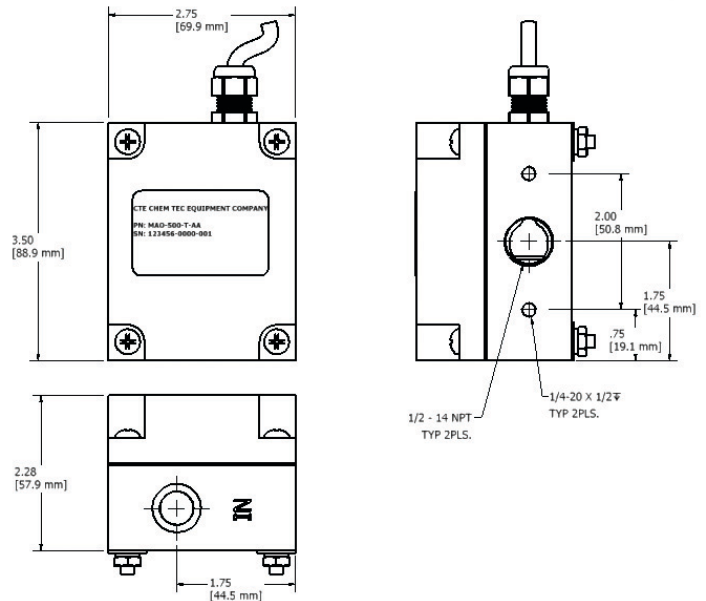
GREEN – (Voltage)

ORANGE – (Current)

HOW TO ORDER

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

Model	Size	Materials	Flow Range
MAO	500	T Teflon® B Brass S Stainless Steel	(See Chart) AA BB



INSTALLATION

Control valves should be placed downstream of the MAO flow meter. The flow meter should never be installed so that it drains completely when flow ceases.

When particles maybe present in the media, a filter should be installed ahead of the flow meter. It is advisable to filter to 10 microns.

The MAO flow meter should not be located near ferrous material or near strong electro-magnetic fields.

The MAO flow meter is sensitive to velocity profile disturbances in the flow stream. It is advisable that straight lengths of 10 inside diameters upstream and 5 inside diameters downstream be used.

All lines should be completely purged of air before use.

The use of pipe paste is not recommended. Use care when using Teflon tape to avoid shreds from entering the MAO flow meter.

MOUNTING

Mount with INLET vertical, INLET port down, OUTLET port horizontal.

EFV Series ADJUSTABLE EXCESS FLOW VALVE

For Preventing Uncontrolled Flows of Liquids and Gases

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.

TEMPERATURE OPERATING RANGE

- 0° to 220° F (-17° to 104° C)
- For other temperature ranges consult factory.*

KEY FEATURES

Controls excessive flows.

APPLICATIONS

- Fitting Failure
- Regulator failure
- Hydraulic control
- Gas Analyzers
- Toxic Gas and Liquid Releases

Patent No's:
4,858,647
4,905,844
5,033,311

Others may apply.



CALIBRATION TABLE

MODEL	ADJUSTABLE RANGE AIR SLPM (SCFM)	ADJUSTABLE RANGE WATER LPM (GPM)	PORTS 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 AIR SLPM (SCFM)	WATER LPM (GPM)	ΔP TO ATMOSPHERE BARD (PSID)
EFV-125	0.50 (0.018)	0.015 (0.004)	0.08 (1.2)
	75 (2.63)	2.65 (0.70)	0.11 (1.6)
	155 (5.5)	4.50 (1.20)	0.21 (3.0)
EFV-250	4 (0.14)	0.1 (0.26)	0.21 (3.0)
	500 (17.50)	5.0 (1.32)	0.41 (6.0)
	1132 (39.62)	5.1 (3.99)	0.83 (12.0)
EFV-375	85 (2.98)	0.38 (0.10)	0.10 (1.5)
	900 (31.50)	10.0 (2.64)	0.28 (4.0)
	1840 (64.40)	15.1 (3.99)	0.83 (12.0)
EFV-500	142 (4.97)	1.9 (0.50)	0.07 (1.0)
	1000 (35.00)	25.0 (6.60)	0.28 (4.0)
	2123 (74.31)	37.8 (9.98)	0.48 (7.0)
EFV-750	425 (14.88)	3.8 (1.00)	0.14 (2.0)
	1800 (63.00)	4.7 (1.24)	0.21 (3.0)
	3681 (128.84)	75.7 (19.98)	0.34 (5.0)

CE Recognized 73/23/EEC/93/68/EEC
TMA Recognized File E75356

EFV Series ADJUSTABLE EXCESS FLOW VALVE

For Preventing Uncontrolled Flows of Liquids and Gases

SWITCH DATA SPST

Maximum Switching Voltage

DC (V)	200
AC (V)	150

Contact Rating

DC (W)	50
AC (VA)	70

Maximum Switching Current (A)

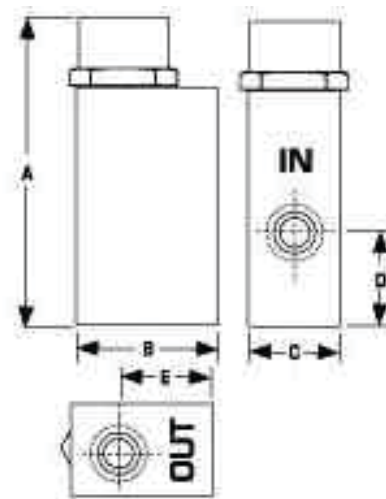
DC (A)	1.0
AC (A)	0.7

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. SPDT UL Recognized (E47258).



SPECIFICATIONS

BODY MATERIAL	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS	SEAL
Brass	1500 (103.42)	Brass, Epoxy, Delrin**	Viton®
316SS	3000 (206.84)	316SS, Epoxy	Viton® **Brass Piston in 125 Unit.

INSTALLATION

The 125, 250 and 375 series can be mounted in any position. The 500 and 750 series can be mounted in any position except with the outlet port down. We suggest the unit be calibrated in the attitude in which it will be installed. An actuation point approximately 3 or 4 times normal flow rate should be chosen to avoid the valve actuating from initial pressurization of the system and normal surges. If flow is kept constant, an actuation point 10% above the normal rate may be used.

DIMENSIONS INCHES (MM)

Model	WEIGHT	A	B	C	D	E
EFV125	0.25 (113.4)	2.5 (64)	1.00 (25)	0.75 (19)	0.70 (17)	0.63 (16)
EFV250	0.50 (226.8)	3.3 (84)	1.50 (38)	1.00 (25)	1.00 (25)	1.00 (25)
EFV375	0.50 (226.8)	3.3 (84)	1.50 (38)	1.00 (25)	1.00 (25)	1.00 (25)
EFV500	1.00 (453.6)	4.0 (102)	2.00 (50)	1.25 (31)	1.25 (31)	1.38 (35)
EFV750	1.50 (680.4)	4.9 (124)	2.25 (57)	1.25 (31)	1.63 (41)	1.63 (41)

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

Model	Size	Materials	Positive Shut-Off	Electrical Switch	Options
EFV	125 250 375 500 750	B Brass S 316SS (Other material available on request)	PSO Blank for Controlled Bleed Model	ES Normally Open* (ES not available on 125 model) Factory Preset Required	Any of the following options may be added. O2 Oxygen Cleaned HT High Temperature Unit 340° F (171° C) KZ Kalrez® Seals EPR EPR Seals FP Factory Presetting (State flow rate, medium and line pressure)

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*Consult factory
*Viton - 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.



EFV MRS Series

MANUAL RESET
ADJUSTABLE
EXCESS FLOW
VALVE

With Integral Manual Reset For Preventing
Uncontrolled Flows of Gases and Liquids

FEATURES

- Field Adjustable
- Manual Reset
- Materials: 316SS
- Detects Excess Flows
- Detects Increases in Media Viscosity
- Function: Shuts Off Flow
- Output: Switch Contact (Optional)

APPLICATIONS

- Plant Lines
 - Regulator Failure
 - Fitting Failure
 - Toxic Gases & Liquids
 - Gas Distribution Systems
 - Gas Analyzers
 - Loss Control
- Patent No's
4,858,647
4,905,844
5,033,311
Others may apply.



KEY FEATURES

Controls high pressure excessive flows.

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.

The piston makes a bubble tight seal when it comes in contact with the seat. To reopen the unit, turn the balancing valve handle on the side. This ports the upstream pipeline to the downstream pipeline. When the pressure is equalized on each side of the piston, it will reset. The unit is returned to normal operation by closing the balancing valve.

- Actuation points for air at 68° F and 14.7 PSIA.
- Corrections must be used for other gases, 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

Recognized File E75356

CALIBRATION RANGE

MODEL	ADJUSTABLE RANGE AIR SLPM (SCFM)	ADJUSTABLE RANGE WATER LPM (GPM)	PORTS 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"

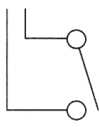
PRESSURE LOSS TABLE

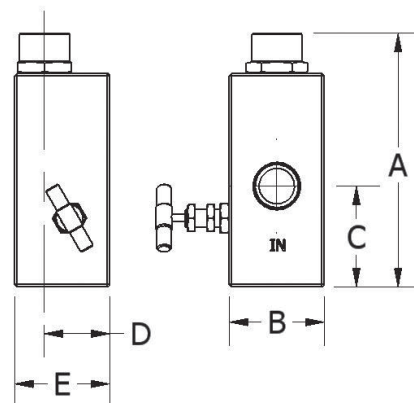
MODEL	SET POINT AIR SLPM (SCFM)	WATER LPM (GPM)	ΔP TO ATMOSPHERE BARD (PSID)
EFV-125	0.50 (0.018)	0.015 (0.004)	0.08 (1.2)
	75 (2.63)	2.65 (0.70)	0.11 (1.6)
	155 (5.5)	4.50 (1.20)	0.21 (3.0)
EFV-250	4 (0.14)	0.1 (0.26)	0.21 (3.0)
	500 (17.50)	5.0 (1.32)	0.41 (6.0)
	1132 (39.62)	5.1 (3.99)	0.83 (12.0)
EFV-375	85 (2.98)	0.38 (0.10)	0.10 (1.5)
	900 (31.50)	10.0 (2.64)	0.28 (4.0)
	1840 (64.40)	15.1 (3.99)	0.83 (12.0)
EFV-500	142 (4.97)	1.9 (0.50)	0.07 (1.0)
	1000 (35.00)	25.0 (6.60)	0.28 (4.0)
	2123 (74.31)	37.8 (9.98)	0.48 (7.0)
EFV-750	425 (14.88)	3.8 (1.00)	0.14 (2.0)
	1800 (63.00)	4.7 (1.24)	0.21 (3.0)
	3681 (128.84)	75.7 (19.98)	0.34 (5.0)

EFV MRS Series MANUAL RESET ADJUSTABLE EXCESS FLOW VALVE

With Integral Manual Reset For Preventing Uncontrolled Flows of Gases and Liquids

SWITCH DATA	SPST
Maximum Switching Voltage	
DC (V)	200
AC (V)	150
Contact Rating	
DC (W)	50
AC (VA)	70
Maximum Switching Current (A)	
DC (A)	1.0
AC (A)	0.7

LEADS	SPST
	
leads 18 in. min. from body 22 AWG, TFE	
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).	



SPECIFICATIONS

BODY MATERIAL	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS	SEAL	BALANCING VALVE PACKAGING
Brass	1500 (103.42)	Brass, Epoxy, Delrin**	Viton®	Teflon®
316SS	3000 (206.84)	316SS, Epoxy	Viton®	Teflon®

**Brass Piston in 125 Unit.

INSTALLATION

The 125, 250 and 375 series can be mounted in any position. The 500 and 750 series can be mounted in any position except with the outlet port down. We suggest the unit be calibrated in the attitude in which it will be installed. An actuation point approximately 3 or 4 times the normal Maximum flow rate at the lowest line pressure should be chosen to avoid the valve actuating from initial pressurization of the system and normal surges. If flow is kept constant, an actuation point 10% above the normal rate may be used.

DIMENSIONS INCHES (MM)

Model	316SS Weight (lbs/gm)	Brass Weight (lbs/gm)	A	B 316S.S.	B Brass	C	D	E
EFV125	1.5 (680)	1.6 (726)	2.72 (69)	1.50 (38)	1.50 (38)	0.95 (24)	1.12 (28)	1.62 (41)
EFV250	3.5 (1588)	3.3 (1497)	3.71 (95)	2.00 (50)	1.75 (45)	1.50 (38)	1.38 (35)	2.00 (51)
EFV375	3.5 (1588)	3.2 (1452)	3.71 (95)	2.00 (50)	1.75 (45)	1.50 (38)	1.38 (35)	2.00 (51)
EFV500	4.0 (1814)	3.6 (1633)	4.46 (114)	2.00 (50)	1.75 (45)	1.75 (45)	1.38 (35)	2.00 (51)
EFV750	4.8 (2177)	4.4 (1996)	5.35 (136)	2.00 (50)	1.75 (45)	2.13 (54)	1.38 (35)	2.00 (51)

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

Model	Size	Materials	Manual Reset Model	Electrical Switch	Options
EFV	125 250 375 500 750	B Brass S 316SS (Other material available on request)	MRS Manual Reset Model	ES Normally Open (ES not available on 125 model) Factory Preset Required	Any of the following options may be added. O2 Oxygen Cleaned HT High Temperature Unit 340° F (171° C) KZ Kalrez® Seals EPR EPR Seals FP Factory Presetting (State flow rate, medium and line pressure)

HPEFV Series

ADJUSTABLE
HIGH PRESSURE
SAFETY EXCESS
FLOW VALVE

For Preventing Uncontrolled Flows of Liquids and Gases

KEY FEATURES

Controls high pressure excessive flows.

FEATURES

- Controlled Bleed Resets Automatically
- Field Adjustable
- Positive Shut-off option
- Materials: 316SS
- Maximum Pressure 6000 PSIG
- Detects Excess Flows
- Detects Increases in Media Viscosity
- Function: Restricts or shuts Off flow
- Output: Switch Contact (Optional)

APPLICATIONS

- CNG Delivery
 - High Pressure Plant Lines
 - Hydraulic Systems
- Patent No's
4,858,647
4,905,844
5,033,311
Others may apply.



ChemTec

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 the auto reset model after actuation, the piston resets on a metal to metal seat that 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.
- 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.

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

Recognized File E75356

CALIBRATION RANGE

MODEL	ADJUSTABLE RANGE AIR SLPM (SCFM)	ADJUSTABLE RANGE WATER LPM (GPM)	PORTS FNPT
HPEFV-250	4 to 1132 (0.14 to 40)	0.100 to 15.1 (0.026 to 4.0)	1/4"
HPEFV-500	142 to 2123 (5.0 to 75)	1.90 to 37.8 (0.50 to 10.0)	1/2"
HPEFV-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 AIR SLPM (SCFM)	WATER LPM (GPM)	ΔP TO ATMOSPHERE BARD (PSID)
HPEFV-250	4 (0.14)	0.1 (0.26)	0.21 (3.0)
	500 (17.50)	5.0 (1.32)	0.41 (6.0)
	1132 (39.62)	5.1 (3.99)	0.83 (12.0)
HPEFV-500	142 (4.97)	1.9 (0.50)	0.07 (1.0)
	1000 (35.00)	25.0 (6.60)	0.28 (4.0)
	2123 (74.31)	37.8 (9.98)	0.48 (7.0)
HPEFV-750	425 (14.88)	3.8 (1.00)	0.14 (2.0)
	1800 (63.00)	4.7 (1.24)	0.21 (3.0)
	3681 (128.84)	75.7 (19.98)	0.34 (5.0)

TEMPERATURE OPERATING RANGE

- 32° to 220° F (0° to 104° C)

For other temperature ranges consult factory.

HPEFV Series

ADJUSTABLE HIGH PRESSURE SAFETY EXCESS FLOW VALVE

For Preventing Uncontrolled Flows of Liquids and Gases

SWITCH DATA SPST

Maximum Switching Voltage

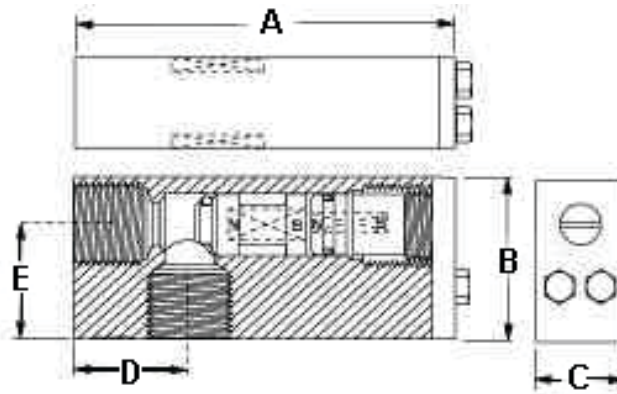
DC (V)	200
AC (V)	150

Contact Rating

DC (W)	50
AC (VA)	70

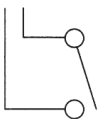
Maximum Switching Current (A)

DC (A)	1.0
AC (A)	0.7



SPECIFICATIONS

LEADS	SPST	BODY MATERIAL	MAX WORKING PRESSURE PSIG (barg)	WETTED PARTS	SEAL
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leads 18 in. min. from body 22 AWG, TFE insulation

316SS

6000 (413.4)

316SS, Epoxy

Viton®

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).

INSTALLATION

The 250 series may be mounted in any position. 500 and 750 series can be mounted in any position except with the outlet port down. We suggest the unit be calibrated in the attitude in which it will be installed. An actuation point approximately 3 or 4 times the normal Maximum flow rate at the lowest line pressure should be chosen to avoid the valve actuating from initial pressurization of the system and normal surges. If flow is kept constant, an actuation point 10% above the normal rate may be used.

DIMENSIONS

Model	Weight	A	B	C	D	E
HPEFV-250	1.47 (0.667)	3.75 (149)	1.50 (38)	1.00 (25)	1.00 (25)	1.00 (25)
HPEFV-500	2.625 (1.190)	4.25 (108)	2.00 (50)	1.25 (32)	1.25 (32)	1.37 (35)
HPEFV-750	3.44 (1.560)	5.25 (133)	2.25 (57)	1.25 (32)	1.625 (45)	1.625 (41)

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

Model	Size	Materials	Positive Shut-Off	Electrical Switch	Options
HPEFV	250 500 750	S 316SS (Other material available on request)	PSO Blank for Controlled Bleed Model	ES Normally Open* FP required	Any of the following options may be added. O2 Oxygen Cleaned HT High Temperature Unit 340° F (171° C) KZ Kalrez® Seals EPR EPR Seals FP Factory Presetting (State flow rate, medium and line pressure)

Flow Monitors, Flow Meters, Excess Flow Valves

www.chemtec.com

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