

# 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

### $\Delta P$ 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

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SWITCH DATA	SPST	SPDT
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### Maximum Switching Voltage

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

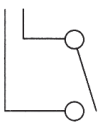
### Contact Rating

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

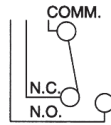
### Maximum Switching Current (A)

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

LEADS	SPST	SPDT (optional)
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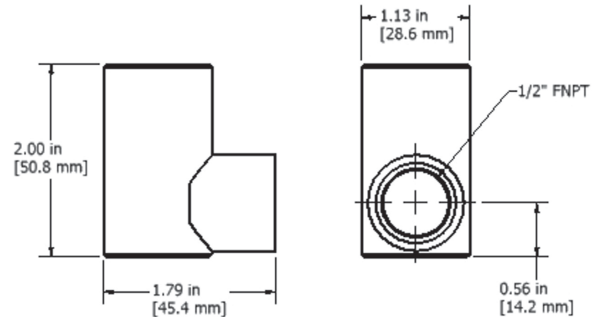


leads 18 in. min. from body 22 AWG, TFE insulation



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.