

# LPH Series

Non-Adjustable Flow Monitor

## 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).
- Calibration 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)

Correction must be made for other fluids, line pressure 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 (0.016)
-1	120 (0.254)	2 (0.03171)
-2	560 (1.187)	16 (0.25369)
-3	750 (1.589)	30 (0.47567)
-4	1300 (2.755)	45 (0.71350)
-5	1400 (2.966)	50 (0.79278)
-6	1900 (4.026)	65 (1.0306)
-7	2500 (5.297)	85 (1.3477)
-8	2700 (5.721)	90 (1.4270)
-9	3300 (6.992)	105 (1.6648)
-10	3600 (7.628)	120 (1.9027)
-11	5200 (11.02)	170 (2.6955)
-12	6000 (12.71)	200 (3.1711)
LPH-250		
-1	350 (0.742)	7 (0.111)
-2	6000 (12.71)	200 (3.171)
-3	7500 (15.89)	250 (3.964)
-4	9500 (20.12)	315 (4.994)
-5	10500 (22.25)	346 (5.486)
-6	12500 (26.49)	400 (6.342)
-7	15200 (32.21)	500 (7.928)
-8	24000 (50.85)	760 (12.05)
LPH-375		
-1	3000 (6.36)	70 (1.110)
-2	15200 (32.21)	475 (7.531)
-3	30300 (64.20)	950 (15.06)
-4	37000 (78.40)	1425 (22.59)**
-5	45300 (95.99)	2200 (34.88)**



\*\*Teflon® encapsulated piston not available

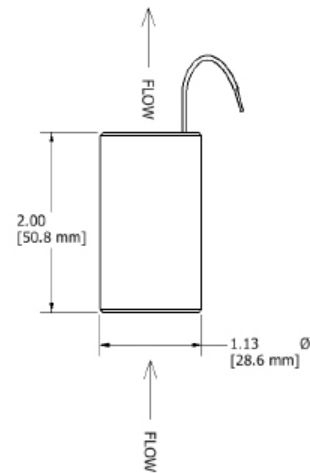


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Switch Data	SPST	SPDT
Maximum Switching Voltage		
DC (V)	250	175
AC (V)	265	120
Contact Rating		
DC (W)	50	5
AC (VA)	50	5
Maximum Switching Current (A)		
DC (A)	1.5	0.25
AC (A)	1.1	0.18

Leads	SPST UL File #E471070	SPDT UL File #E471070
 <p>leads 18 in. min. from body 22 AWG, TFE insulation</p>	 <p>leads 18 in. min. from body 24 AWG, TFE insulation</p> <ul style="list-style-type: none"> <li>• green - N.C.</li> <li>• blue - N.O.</li> <li>• white - Common</li> </ul>	<p>leads 18 in. min. from body 24 AWG, TFE insulation</p> <ul style="list-style-type: none"> <li>• green - N.C.</li> <li>• blue - N.O.</li> <li>• white - Common</li> </ul>



## 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   |

## How to Order

[Sales@ChemTec.com](mailto:Sales@ChemTec.com) | 800.222.2177

Model	Size	Calibration	Materials	Electrical Conduit	Media	Switch	Options
LPH	125 250 375	See Cal. Table	A Acrylic B Brass S 316SS T Teflon®  (TFE piston standard in Teflon units)	C (Metallic Bodies Only) (1/2" FNPT)	W Water A Air	N.O. Single Pole Single Throw Normally Open  N.C. Single Pole Single Throw Normally Closed  SPDT Single Pole Double Throw DSNONO Double Switch N.O./N.O. DSNONC Double Switch N.O./N.C. DSNCNC Double Switch N.C./N.C. DCNONO Double Conduit N.O./N.O. DCNONC Double Conduit N.O./N.C. DCNCNC Double Conduit N.C./N.C.	TFE Teflon® Encapsulated Piston (Standard in Teflon Units)  02 Oxygen Cleaned  HT High Temperature Options 340°F (171°C) metallic body only  HV High Voltage Switch (220 VAC)