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 ±10% of calibration points shown.
- Repeatability ±1%.
- Unit will pass greater flows.

Pressure Loss

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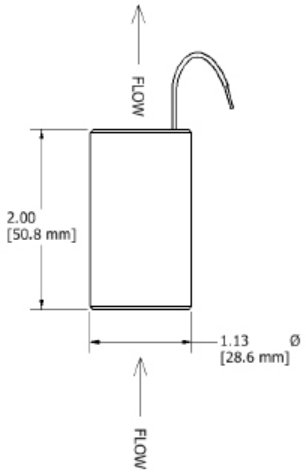
Switch Data	SPST	SPDT
Maximum Switching Voltage		
DC (V)	250	175
AC (V)	265	120
Contact Rating		
DC (W)	50	5
AC (VA)	50	5
Maximum Switching Current (A)		
DC (A)	1.5	0.25
AC (A)	1.1	0.18

Leads	SPST UL File #E70063	SPDT UL File #E471070
	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

How to Order

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)