

# LCA Series

Adjustable Flow Monitor

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## 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: 316S S, Brass or Teflon®

## Applications

- Welding Systems
- Analyzers
- Vacuum Systems
- Cooling Systems

## 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. The magnetic piston actuates a hermetically sealed reed switch, which is encapsulated in the body of the unit, out of the air/water path.

- 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



## Specifications

Model	Weight Lbs (kg)	Max Working Pressure PSIG (barg)	Wetted Parts
LCA-250-P	0.375 (0.17)	100 (6.89)	PVC, Epoxy, 316SS
LCA-250-B	1.4 (0.635)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-250-S	1.4 (0.635)	3000 (206.84)	316SS, Epoxy
LCA-375-P	0.375 (0.17)	100 (6.89)	PVC, Epoxy, 316SS
LCA-375-B	1.4 (0.635)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-375-S	1.4 (0.635)	3000 (206.84)	316SS, Epoxy
LCA-500-P	0.375 (0.17)	100 (6.89)	PVC, Epoxy, 316SS
LCA-500-B	1.4 (0.635)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-500-S	1.4 (0.635)	3000 (206.84)	316SS, Epoxy
LCA-750-P	0.625 (0.283)	100 (6.89)	PVC, Epoxy, 316SS
LCA-750-B	1.7 (0.771)	1500 (103.42)	Brass, Epoxy, 316SS
LCA-750-S	1.7 (0.771)	3000 (206.84)	316SS, Epoxy

## Calibration Range

Model	Air LPM (SCFM)	Adjustable Range Increasing Flow Water LPM (GPM)	Inlet/Outlet FNPT Port Inches
LCA-250*	14.16 (0.5) 1416 (50)	0.38-15.1 (0.10 - 4)	1/4"
LCA-375*	14.16 (0.5) 1416 (50)	1.89-15.1 (0.5 - 4)	3/8"
LCA-500*	28.32 (1) 2124 (75)	1.89 - 37.9 (0.5 - 10)	1/2"
LCA-750*	141.6 (5) 3398 (120)	3.79 - 56.8 (1 - 15)	3/4"

## Pressure Loss

Model	Air LPM (SCFM)	Water LPM (GPM)	$\Delta P$ BARD (PSID)
LCA-250/375			
Minimum	14.16 (0.5)	0.38 (0.10)	0.34 (0.5)
Maximum	1416 (50)	15.14 (4)	0.21 (3)
LCA-500			
Minimum	28.32 (1)	1.89 (0.5)	0.069 (1)
Maximum	2124 (75)	37.85 (10)	0.689 (10)
LCA-750			
Minimum	141.6 (5)	3.79 (1)	0.10 (1.5)
Maximum	3398 (120)	56.8 (15)	0.62 (9)

## 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
- 32° to 120°F for Acrylic

For other temperature ranges consult factory



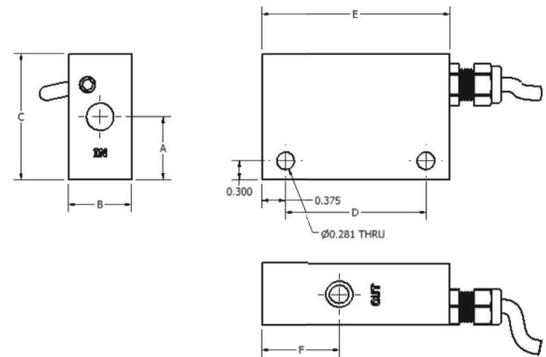
\*Users are solely accountable for product selection, regardless of any recommendations or suggestions provided by ChemTec Equipment Company, Inc. Users should base product selection on their own analysis and testing to determine functionality and material compatibility in relation to their application. To ensure safe and trouble-free performance, it is essential to adhere to proper installation, operation, and maintenance procedures.

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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 39 in. min. from body 22 AWG, PVC Jacketed Wired</p>	<p>leads 39 in. min from body 22 AWG PVC jacketed wired</p> <ul style="list-style-type: none"> <li>• red - N.C.</li> <li>• green - N.O.</li> <li>• black - Common</li> </ul>	

## 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.

## 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	Materials	Type of Service	Switch
LCA 250	P PVC	W Water	N.O. Normally Open
375	A Acrylic	G Gas	SPDT Single Pole Double Throw
500	B Brass		FP* Factory Preset
750	S 316SS		

\*Consult Factory

All dimensions are subject to change for quality improvement. Not responsible for printing errors.

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