

# 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.

### FEATURES

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

### APPLICATIONS

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

- 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.

### PRESSURE LOSS TABLE

MODEL	WATER FLOW RATE LPM (GPM)	$\Delta P$ BARD (PSID)
<b>LCA-250/375</b>		
Minimum	0.38 (0.10)	0.34 (0.5)
Maximum	15.14 (4.0)	0.21 (3.0)
<b>LCA-500</b>		
Minimum	1.89 (0.5)	0.069 (1.0)
Maximum	37.85 (10.0)	0.689 (10.0)
<b>LCA-750</b>		
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.

### CALIBRATION POINTS

MODEL	ADJUSTABLE RANGE Increasing Flow Water LMN	FACTORY PRESET FOR Decreasing Flow Water (GPM)*	INLET/ OUTLET FNPT Port Inches
LCA-250-P	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-P	1.89 - 15.1 (0.50 - 4.00)	-10 1.89 (0.50) -20 9.46 (2.50) -30 11.36 (3.50)	3/8"
LCA-500-P	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-P	3.79 - 56.8 - 15.1 (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

BODY MATERIAL	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

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1057 CTE LCA Series

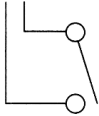
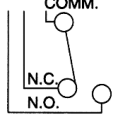
# LCA SERIES

## ADJUSTABLE FLOW MONITOR

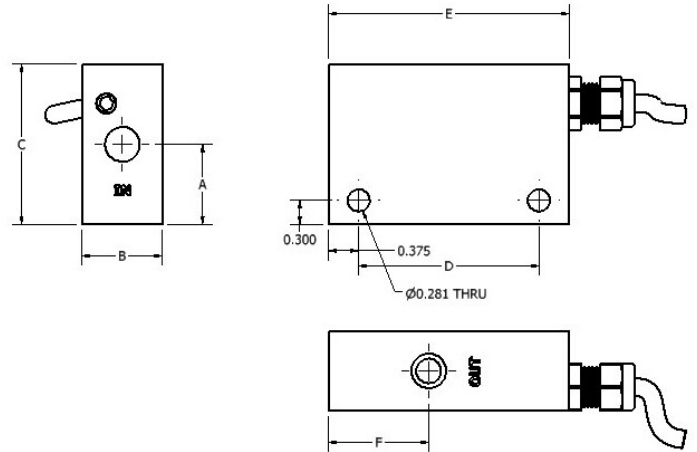
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SWITCH DATA	SPST	SPDT
<b>Maximum Switching Voltage</b>		
DC (V)	200	175
AC (V)	150	120
<b>Contact Rating</b>		
DC (W)	50	5
AC (VA)	70	5
<b>Maximum Switching Current (A)</b>		
DC (A)	1.0	.25
AC (A)	0.7	.25

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. • red - N.C. • black - Common

*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

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 (Please see Custom Page for Special Options.)

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

\*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.

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