Platon Liquid Low Flow Alarm

DS1431

Features

- Low cost flow alarm
- Simple rugged construction
- Brass, BSP connections
- Selectable alarm trip level (factory set)
- No glands or seals
- Stainless steel and other special OEM versions available

PLATON FLOW ALARM TYPE LF

For liquid low flow or flow failure alarm on cooling systems, water heaters or lubrication systems, the Platon LF flow switch is a rugged sensor with simple electrical reed switch output. Installed in a vertical line with flow upwards, normal flows lift the float in the sensor. A magnet encapsulated in the float then actuates a reed switch, giving contact closure. Should the flow drop to below the preset alarm level, the float falls to the rest position and the contacts open to give an alarm output.

The Model LF is available in 1/2” and 3/4” line sizes, with BSP female threaded connections. Alarm rates are factory set between 0.5 L/min and 10 L/min, to suit most applications. The standard unit is in brass, and has a one piece body suitable for high pressures, with no glands or seals to leak. The externally mounted reed switch has flying leads for local connection to a terminal block.

Typical applications are for water supply flow failure into heaters or boilers, where the flame or power supply is cut to prevent overheating accidents, for lubricant or cutting fluid flow failure in machine tools or gearboxes.
For flow failure alarm in cooling circuits, the LF flowswitch is used on X-ray equipment, electron microscopes, transformers, radio transmitters and high frequency generators.

FLOW RANGES

The flow trip level set on water for the different models is as follows:

Connection	Model Number	Low Flow Trip Level
1/2” BSP	LFB11L	0.5 L/min
1/2” BSP	LFB12L	1.0 L/min
1/2” BSP	LFB13L	2.5 L/min
1/2” BSP	LFB14L	3.0 L/min
1/2” BSP	LFB15L	3.5 L/min
1/2” BSP	LFS11L	0.5 L/min
1/2” BSP	LFS12L	1.0 L/min
1/2” BSP	LFS13L	2.5 L/min
3/4”BSP	LFB22L	1.0 L/min
3/4”BSP	LFB23L	2.5 L/min
3/4”BSP	LFB24L	5.0 L/min
3/4”BSP	LFB25L	10.0 L/min

Typical hysteresis between on/off	±5%
Typical accuracy of trip point	±10%

General Note
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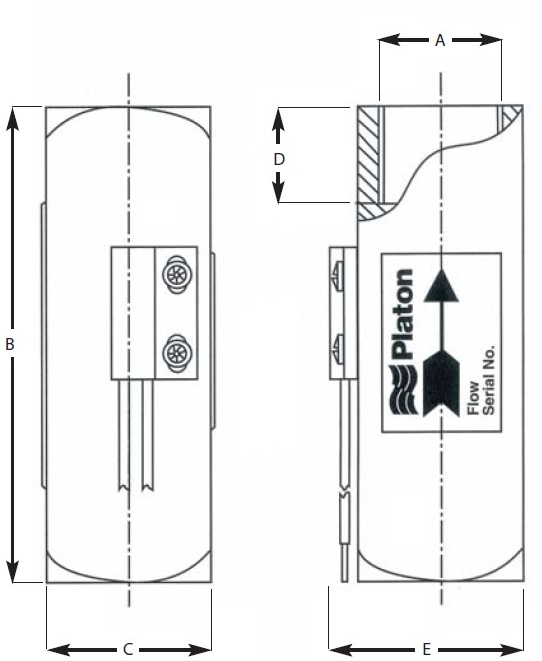
SPECIFICATION

Body Material	LFP: Brass (CZ121) LFS: Stainless Steel
Flow Sensor	LFB: Brass with encapsulated magnet LFS: Stainless Steel with encapsulated magnet in epoxy resin
Electrical Output	Encapsulated external reed switch
Switch Function	Normally closed contact Open circuit for low flow alarm
Switch Rating	Maximum values for resistive loads: 300V, 500mA, 10W
Lead Length	300mm, 2 cores
Pressure Rating	70 bar maximum
Temperature Rating	-20 to +105˚C
Pipe Connections	Model LFB1, LFS1, 1/2” BSPP female Model LFB2, 3/4” BSPP female

OPTIONS

Please contact the sales office for variations to the standard specification, either in materials of construction or, for flow switches on alternative liquids or gases. When switching inductive circuits or high currents, the LF reed output should be used to drive a slave relay module - contact the sales office for details.

DIMENSIONS



Model	A	B	C	D	E
LFB1	1/2” BSPP	90	25.4	12	31
LFS1	1/2” BSPP	90	25.4	12	31
LFB2	3/4” BSPP	100	35	20	41

Notes

1. Units are constructed from square section bar, ref ‘c’ dimension.
2. Cable length 300mm, bare ends.
3. Unit should be installed vertically with direction of flow upwards.

Every effort has been made during the preparation of this document to ensure the accuracy of statements and specifications. However, we do not accept liability for damage, injury, loss or expense caused by errors or omissions made. We reserve the right to withdraw or amend products or documentation without notice.

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