

LS Series Electro-Mechanical Flow Sensors

Electro-Mechanical Air Velocity Sensors

Description: LS airflow sensors are cooling effect monitors that provide a positive indication of the presence of airflow. Independent of the air temperature, these units are used to operate an alarm or shutdown device when airflow drops below a preset level.

Operations: LS airflow sensors utilize a differential expansion principle in which the air entering the inlet circulates and cools an electrically heated internal element. Varied voltage source designs available. When the airflow drops below the nominal setting, the temperature of the heated element rises quickly causing the operation of a contact (either N.O. or N.C.). This inherent thermal delay avoids contact operation on brief interruptions of airflow. On restoration of air flow the sensor will automatically reset after a brief cooling period.

Advantages:

- Small size meets MIL shock/vibration/ambient requirements.
- Operate down to -55°C if continually energized.
- High reliability/enhanced MTBF rate.
- Self contained sensor/switch, no additional circuitry required.
- Built in time delay ignores transient air flow losses.

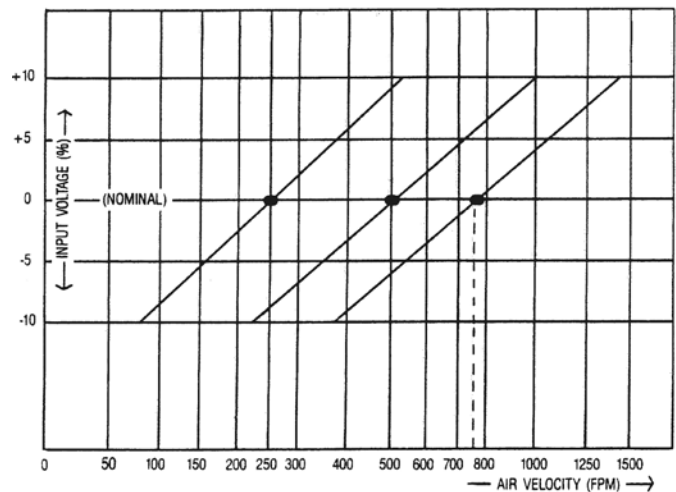
Applications:

- Computer/peripheral systems.
- Shipboard ventilation/exhaust systems.
- Fire control systems.
- MIL communications systems.
- MIL radar systems.
- Weapons systems.



SPECIFICATIONS	
Heater Voltage:	5V, 12V, 28V, or 115V. AC/DC Other voltages available
Input Power:	4 Watts, nominal
Contact Rating:	2A. resistive up to 115V. AC 1A. resistive up to 32V. DC
Usable Voltage Range:	±10% of nominal, see voltage variation chart below
Setting:	Per table, page 3
Response Time:	1 to 20 seconds (depending on setting and air velocity prior to stoppage)
Temperature Range:	-55°C to +85°C, energized
Vibration:	10g to 500 Hz.
Shock:	50g for 11 msec.

LS Series Airflow Sensors Input Voltage vs. Setting



LS SERIES

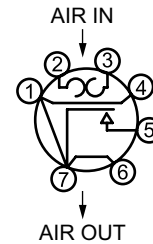
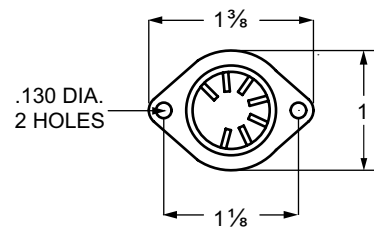
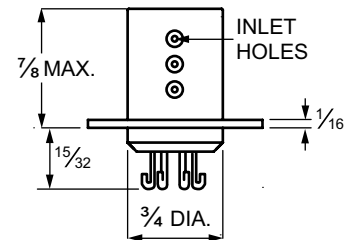
REFER TO TABLE AND SPECIFY MODEL

Heater Voltage AC/DC	Contact Configuration S.P.S.T (#)	Air Flow (*) (Linear Feet Per Minute)		
		250 F.P.M.	500 F.P.M.	750 F.P.M.
5V.	N.O.	LS-6025	LS-6027	LS-6029
	N.C.	LS-6052	LS-6054	LS-6056
12V.	N.O.	LS-6031	LS-6033	LS-6035
	N.C.	LS-6058	LS-6060	LS-6062
28V.	N.O.	LS-5053	LS-5011	LS-5057
	N.C.	LS-5054	LS-5022	LS-5058
115V.	N.O.	LS-5055	LS-5001	LS-5059
	N.C.	LS-5056	LS-5016	LS-5060

(*) Nominal Factory Setting. Tolerance ± 100 Ft./Min. at Rated Voltage.

(#) N.O.: Contacts close on loss of air flow. N.C.: Contacts open on loss of air flow.

Outline Dimensions



All dimensions in inches

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