



Actual product appearance may vary.

**Airflow Sensor, Signal
Conditioning: Unamplified
(mV); Flow/Pressure
Range: ± 1000 sccm (1.0
SLPM); Port Style: Straight**

Features

- Bidirectional sensing capability
- Actual mass air flow sensing
- Low differential pressure sensing

Potential Applications

- Damper control for heating, ventilation, and air conditioning systems
- Gas analyzers
- Low vacuum control
- Process control
- Medical respirators and ventilators
- Oxygen concentrators
- Leak detection equipment
- Vent hoods
- Anesthesia control
- Gas metering
- Gas chromatography

Description

The AWM2000 Series microbridge mass airflow sensor is a passive device comprised of two Wheatstone bridges. The heater control circuit is required for operation per specifications. The sensing bridge supply circuit is also required for operation per specifications. These two circuits are not on board the package and must be supplied in the application. The differential amplifier is a useful interface for the sensing bridge. It can be used to introduce gain and to voltage offsets to the sensor output.

CAUTION

PRODUCT DAMAGE

AWM Series Microbridge Mass Airflow Sensors are not designed to sense liquid flow and will be damaged by liquid flow through the sensor.

Failure to comply with these instructions could result in product damage.

Product Specifications	
Signal Conditioning	Unamplified (mV)
Flow/Pressure Range	± 1000 sccm (1 SLPM)
Output Voltage @ Trim Point	50.0 mV dc @ 650 sccm
Port Style	Straight
Series Name	AWM2000
Null Shift over Temperature	± 0.20 mV dc
Output Shift over Temperature	± 5% Reading
Maximum change in flow rate	5.0 SLPM/s
Max. Repeatability & Hysteresis Error	± 1% Reading
Null Offset	± 1 mV dc
Response Time	1 ms typ., 3 ms max.
Supply Voltage	8.0 Vdc min., 10.0 Vdc typ., 15.0 Vdc max.
Maximum Common Mode Pressure	25.0 psi
Power Consumption	30 mW typ., 50 mW max.
Operating Temperature Range	-25 °C to 85 °C [-13 °F to 185 °F]
Storage Temperature Range	-40 °C to 90 °C [-40 °F to 194 °F]
Media Compatibility	Dry gas only
Sensor Resistance	5.0 kOhm
Sensor Current	0.6 mA max.
Weight	10.8 g
Shock	100 g peak (5 drops, 6 axes)
Availability	Global
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers