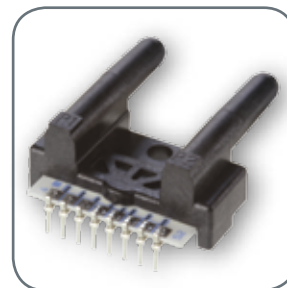


Airflow Sensors
AWM9000 Series



Airflow Sensors

AWM90000 Series microbridge mass airflow sensors are available in two versions, mass flow and differential pressure.

The AWM92100V has a flow range of ± 200 SCCM with a pressure drop of only 0.49 mbar | 49 Pa | 0.007 psi, typically. The AWM92200V is a differential pressure version that has a range of ± 2 inH₂O.

The AWM90000 Series sensors have a 1 ms response time, operate with a supply voltage from 8.0 Vdc to 15.0 Vdc, while consuming only 50 mW of power. The compact plastic package will withstand a maximum overpressure of 1720 mbar | 72 kPa | 25 psi without compromising performance. The sensor is well suited for use in portable devices and battery-powered applications.

The AWM90000 Series provides customers with a combination of time-proven reliability, repeatable flow sensing, and the ability to customize the sensor functions to meet their specific application needs.

Key Features and Benefits

- **Bi-directional sensing capability:** Allows use in applications where bidirectional flow is present
- **Highly stable null and full-scale:** Does not require recalibration in most applications
- **Low pressure drop:** Provides improved system performance
- **Compact package design:** Occupies less space in the customer's enclosure, potentially reducing production costs; enclosure size may also be reduced for easier fit into space-constrained applications
- **Low hysteresis and repeatability errors (less than 0.35% of reading):** Provides improved overall system accuracy
- **Fast response time (1 ms typical):** Captures full flow event
- **Low power consumption (50 mW max.):** Allows for use in portable devices and battery-powered applications

Potential Applications

MEDICAL

- Continuous Positive Airway Pressure (CPAP) equipment
- Sleep apnea monitors
- Oxygen conservers
- Oxygen concentrators
- Nebulizers
- Spirometers

INDUSTRIAL

- Variable Air Volume (VAV) damper control
- Clogged filter detection
- Fuel to air ratio sensing
- Leak detection equipment

HIGHLY STABLE • LOW PRESSURE DROP • FAST RESPONSE TIME