

## Honeywell Sensing and Control



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## AWM3100V

**Airflow Sensor, Signal Conditioning: Amplified; Flow/Pressure Range: + 200 sccm; Port Style: Straight**

### Features

- Laser trimmed for improved sensor interchangeability
- Flow sensing up to 1.0 SLPM
- Low differential pressure sensing

### Typical 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

Like the AWM2000 Series, the dual Wheatstone bridges control airflow measurement. The AWM3000 Series is amplified; therefore, it can be used to increase the gain and to introduce voltage offsets to the sensor output. The heater control circuit and the sensing bridge supply circuit are on board the package.

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#### 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	Amplified
Flow/Pressure Range	+ 200 sccm
Output Voltage @ Trim Point	5.0 Vdc @ 200 sccm
Port Style	Straight
Series Name	AWM3000 Series

<b>Null Shift over Temperature</b>	± 25.0 mV dc
<b>Output Shift over Temperature</b>	± 4% Reading
<b>Maximum change in flow rate</b>	5.0 SLPM/s
<b>Max. Repeatability &amp; Hysteresis Error</b>	± 0.50% Reading
<b>Null Offset</b>	1.00 Vdc ± 0.05 Vdc
<b>Response Time</b>	1 ms typ., 3 ms max.
<b>Supply Voltage</b>	8.0 Vdc min., 10.0 Vdc typ., 15.0 Vdc max.
<b>Maximum Common Mode Pressure</b>	25.0 psi
<b>Power Consumption</b>	50 mW typ., 60 mW max.
<b>Operating Temperature Range</b>	-25 °C to 85 °C [-13 °F to 185 °F]
<b>Storage Temperature Range</b>	-40 °C to 90 °C [-40 °F to 194 °F]
<b>Media Compatibility</b>	Dry gas only
<b>Weight</b>	10.8 g
<b>Shock</b>	100 g peak (5 drops, 6 axes)
<b>Availability</b>	Global
<b>UNSPSC Code</b>	411121
<b>UNSPSC Commodity</b>	411121 Transducers

*Due to regional agency approval requirements, some products may not be available in your area.  
Please contact your regional Honeywell office regarding your product of choice.*