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Representative photograph, actual product appearance may vary.

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AWM5101VN

Airflow Sensor, Signal Conditioning: Amplified; Flow/P 0 SLPM to 5.0 SLPM; Port Style: Threaded, ¼ NPT

Features

Linear voltage output
Venturi design
Remote mounting capability
Active laser trimming improves interchangeability
Separate gas calibration types:
-Ar (argon)
-N_2 (nitrogen) or
-CO_2 (carbon dioxide)

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

In-Line Flow Measurement
AWM5000 Series Microbridge Mass Airflow Sensors feature a flow housing. They measure flow as high as 20 standard liter (SLPM) while inducing a maximum pressure drop of 2.25" H_2 microbridge chip is in direct contact with the flow stream, gre error possibilities due to orifice or bypass channel clogging.

Rugged, Versatile Package
The rugged plastic package has been designed to withstand common mode pressu the small sensing element allows 100 g of shock without compromising performanc compatible connector provides reliable connection in demanding applications.

On-board Signal Conditioning
Each AWM5000 sensor contains circuitry which performs amplification, linearizatio compensation, and gas calibration. A 1 to 5 Vdc linear output is possible for all listin range (5, 10, 15, or 20 SLPM) or calibration gas (nitrogen, carbon dioxide, nitrous o calibration is performed by active laser

CAUTION
PRODUCT DAMAGE
AWM Series Microbridge Mass Airflow Sensors are not desig liquid flow and will be damaged by liquid flow through the s
Failure to comply with these instructions could result

damage.

Product Specifications	
Signal Conditioning	Amplified
Flow/Pressure Range	0 SLPM to 5.0 SLPM
Output Voltage @ Trim Point	5.0 Vdc @ Full Scale Flow
Port Style	1/4 in - 18 NPT
Series Name	AWM5000 Series
Null Shift over Temperature	± 0.050 Vdc typ., &@177 0.20 Vdc max.
Output Shift over Temperature	± 7% Reading
Maximum change in flow rate	5.0 SLPM/s
Max. Repeatability & Hysteresis Error	± 0.50% Reading
Null Offset	0.95 Vdc min., 1 Vdc typ., 1.05 Vdc max.
Response Time	60 ms max.
Supply Voltage	8.0 Vdc min., 10.0 Vdc typ., 15.0 Vdc max.
Maximum Common Mode Pressure	50.0 psi
Power Consumption	100 mW max.
Operating Temperature Range	-20 °C to 70 °C [-4 °F to 158 °F]
Storage Temperature Range	-20 °C to 70 °C [-4 °F to 158 °F]
Media Compatibility	Dry gas only
Weight	60 g
Shock	100 g peak 6 ms half-sine (3 drops, each direction of 3 axe
Availability	Global
Comment	Nitrogen calibration gas. This calibration is identical to usin oxygen or air as calibration gas.
UNSPSC Code	411121
UNSPSC Commodity	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.