

Airflow Sensors

Contains advanced microstructure technology to provide a sensitive and fast response to flow, amount/direction of air or other gases. Potential applications include HVAC, gas metering, chromatography, vent hoods, and medical equipment.



Series	Honeywell Zephyr™ HAF	AWM1000	AWM2000	AWM3000
Signal conditioning	amplified	unamplified	unamplified	amplified
Technology	silicon die with thermally isolated heater	silicon die	silicon die	silicon die
Flow/pressure range	200 SCCM	±200 SCCM; 1000 SCCM to -600 SCCM; ±5.0 mbar [2.0 in H ₂ O]; ±10.0 mbar [4.0 in H ₂ O]	±30 SCCM; ±1000 SCCM; ±10.0 mbar [4.0 in H ₂ O]	30 SCCM; 200 SCCM; 1000 SCCM; 0 mbar to 1.25 mbar [0 in H ₂ O to 0.5 in H ₂ O]; 0 mbar to 5.0 mbar [0 in H ₂ O to 2 in H ₂ O]; 5.0 mbar [2.0 in H ₂ O]
Output	analog (Vdc), digital (I ² C)	analog	analog	analog
Power consumption	3.3 Vdc: 40 mW typ. (no load) (analog) 23 mW typ. (no load) (digital) 5.0 Vdc: 55 mW typ. (no load) (analog) 38 mW typ. (no load) (digital)	30 mW typ.	30 mW typ.	50 mW or 100 mW typ.
Port style	long port, short port	straight	straight	straight
Media compatibility	dry non-corrosive gases	dry gas only	dry gas only	dry gas only
Operating temperature range	-20 °C to 70 °C [-4 °F to 158 °F]	-25 °C to 85 °C [-13 °F to 185 °F]	-25 °C to 85 °C [-13 °F to 185 °F]	-25 °C to 85 °C [-13 °F to 185 °F]
Measurements (H x W x D)	long port: 20 mm x 36 mm x 19,9 mm [0.79 in x 1.42 in x 0.78 in] short port: 17,6 mm x 28,8 mm x 19,9 mm [0.69 in x 1.13 in x 0.78 in]	12,7 mm x 54,4 mm x 31,5 mm [0.5 in x 2.14 in x 1.24 in]	12,7 mm x 54,4 mm x 31,5 mm [0.5 in x 2.14 in x 1.24 in]	12,7 mm x 54,4 mm x 31,5 mm [0.5 in x 2.14 in x 1.24 in]
Features	high accuracy; high sensitivity at very low flows; high stability; low pressure; linear output; customizable; full calibration and temperature compensation	sensitivity to low flows; enhanced response time; low power consumption; analog output; bidirectional sensing capability	sensitivity to low flows; enhanced response time; low power consumption; analog output; bidirectional sensing capability	sensitivity to low flows; fast response time; low power consumption; analog output; amplified

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Series	AWM5000	AWM700
Signal conditioning	amplified	amplified
Technology	silicon die	silicon die
Flow/pressure range	0 SLPM to 5.0 SLPM; 0 SLPM to 10.0 SLPM; 0 SLPM to 15.0 SLPM; 0 SLPM to 20.0 SLPM	200 SLPM
Output	analog	analog
Power consumption	100 mW max.	60 mW max.
Port style	1/4 in-18 NPT	22 mm tapered
Media compatibility	dry gas only	dry gas only
Operating temperature range	-20 °C to 70 °C [-4 °F to 158 °F]	-25 °C to 85 °C [-13 °F to 185 °F]
Measurements (H x W x D)	35,6 mm x 162,8 mm x 32,3 mm [1.40 in x 6.41 in x 1.27 in]	33,8 mm x 22,9 x 37,0 mm [1.33 in x 0.90 in 1.40 in]
Features	sensitivity to low flows; enhanced response time; low power consumption; analog output; laser trimmed	sensitivity to low flows; enhanced response time; low power consumption; analog output; highly stable



Series	AWM40000	AWM90000
Signal conditioning	unamplified or amplified	unamplified
Technology	silicon die	silicon die
Flow/pressure range	±25.0 SCCM; 1.0 SLPM; 6.0 SLPM	±200 SCCM; ±5.0 mbar [2.0 in H ₂ O]
Output	analog	analog
Power consumption	60 mW max. or 75 mW max.	50 mW typ.
Port style	manifold	parallel
Media compatibility	dry gas only	dry gas only
Operating temperature range	-40 °C to 125 °C [-40 °F to 251 °F] (inclusive)	-25 °C to 85 °C [-13 °F to 185 °F]
Measurements (H x W x D)	12,7 mm x 30,5 mm x 30,2 mm [0.50 in x 1.2 in x 1.19 in]	13,08 mm x 30,48 mm x 27,94 mm [0.52 in x 1.2 in x 1.1 in]
Features	sensitivity to low flows; enhanced response time; low power consumption, analog output; laser trimmed	sensitivity to low flows; fast response time; low power consumption; analog output; bidirectional sensing capability