

M-Series Mass Flow Meters and Controllers

DIFFERENTIAL PRESSURE-BASED MEASUREMENT AND CONTROL OF GAS FLOWS



*NIST-traceable accuracy
up to $\pm 0.5\%$ of reading*

*No warm-up
required*

*98+ pre-loaded gas
calibrations*

*5 millisecond
response times*



Accurate. Multivariate. Intuitive.

M-Series Mass Flow Meters and Controllers

MONITOR OR CONTROL GASES EVEN IN CHANGING PROCESS CONDITIONS

Quick Specifications:

Mass Flow Ranges:

0.5 SCCM–10,000 SLPM

Accuracy:

Standard: $\pm 0.6\%$ of reading

High: $\pm 0.5\%$ of reading

Measurement Range:

0.01–100% of full scale

Response Time:

10 ms measurement response;

30 ms control response

Multi-gas Calibration:

98+ pre-loaded gases

Repeatability:

Greater of $\pm 0.1\%$ of reading or

$\pm 0.02\%$ of full scale

Communications:

Analog, RS–232, RS–485,

DeviceNet, EtherCAT, EtherNet/IP,

TCP/IP, Modbus RTU, PROFIBUS,

PROFINET, IO-Link



M/MC Meter or Controller

High-accuracy, multivariate flow measurement or control in real time.



MW/MCW Low Pressure Drop

Measure flow readings near atmospheric pressure with pressure drops as low as 0.07 PSID (4.8 mbarD).



MB Portable Meter

Easily verify flow anywhere with an 18 hour rechargeable battery and an intuitive interface.

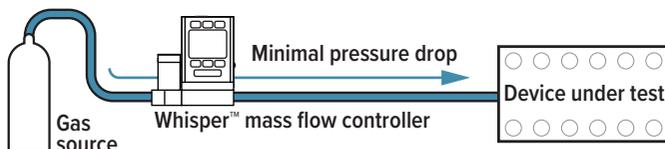


MCV Vacuum Control

Protect your vacuum process with a pneumatic shutoff valve on a controller built for flow or pressure control.

Fast and Accurate Leak Testing

A single Whisper multivariate controller is able to maintain a constant pressure in the device under test (DUT) while providing accurate, real-time mass and volumetric flow readings. When the DUT is subjected to a constant pressure within the closed system, any resulting flow is a direct measure of the DUT's leakage.



Easy Verification and Calibration

Quickly integrate an Alicat into test stands for fast and accurate verification without any warm-up time. For in-field calibrations, a portable, battery-powered flow meter can be easily added into a flow line at any point for rapid system verification.

