

MB-Series Portable Mass Flow Meters

LABORATORY-GRADE FLOW VERIFICATION, ANYWHERE YOU NEED IT



*18 hours of
battery life*

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

*No warm-up
required*

*98+ gases with
Gas Select™ and
COMPOSER™*

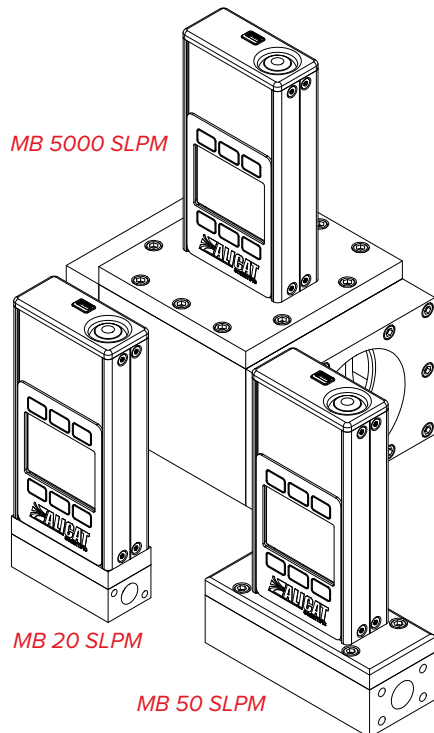
*5 millisecond
response times*



Portable. Durable. Accurate.

MB-Series Portable Mass Flow Meters: MB, MWB, MBS, MBQ

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MB Quick Specifications:

Mass Flow Full Scale Ranges:
0.5 SCCM–5000 SLPM

Standard Accuracy:
Greater of $\pm 0.6\%$ of reading
or $\pm 0.1\%$ of full scale

High-Accuracy Option:
Greater of $\pm 0.5\%$ of reading
or $\pm 0.1\%$ of full scale

Repeatability:
0.1% of reading + 0.02% of full scale

Expanded Options:
MBS-Series for corrosive gases
MWB-Series for low pressure drop
MBQ-Series for high pressure

Operating Range:
0.01–100% of full scale

Maximum Pressure:
160 PSIA (320 PSIA for MBQ)

Temperature Range:
 -10°C to $+60^{\circ}\text{C}$

Battery life:
18 hours for monochrome screens;
8 hours for color screens

See spec sheet for complete details

Introduction

Alicat's series of portable mass flow meters include our standard MB, low pressure drop MWB, corrosive-gas-compatible MBS, and high pressure MBQ. These standalone units are made for mobility with features like drop-resistance, 18 hour battery life, and live onscreen readouts of flow, pressure, and temperature. With no warmup time, a response time less than 10 ms, and 0.01–100% of full scale operating range, these units are ready to perform verifications, validations, and calibrations in the field.



Applications

Flow Verification of Field Equipment

Portable units are an excellent choice for unobtrusive in-line verification of flow rates and absolute pressure readings. Alicats are used for in-house checks of gas chromatograph operations, where portable meters are used to verify mass and volumetric measurements on all inlets and vents. In automotive painting, portable Alicats verify that the total consumption of air per minute in automated painting robots remains consistent over time. These assessments help maintain the performance of both your devices and processes.

Natural Gas & Air Monitoring

Our meters are used to validate process outputs to ensure a system is functioning properly. For example, our portable low pressure series, MWB, is frequently used to measure and leak check oil and gas in remote, hard to access locations. One technician equipped with just one Alicat can accurately validate a range of vent flows since these handheld units are lightweight, durable, and have a wide operating range. Our units are also used to make sure stack gas outputs at power plants and refineries meet EPA requirements.

Calibration Standards

Alicat's high-accuracy meters are calibrated using NIST-traceable standards, so they are commonly used as secondary calibration standards in the field, depending on required accuracy. A portable mass flow meter can work as a portable rapid calibration lab that minimizes system impact and downtime.



A Halma company

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