Mass Flow Controller for SEMI or Vacuum

Easy drop-in upgrade for more stable and responsive 50-ms control

Available with integrated shut-off valve for vacuum applications.

Fast • Repeatale • Stable

The Fastest Way to Control Flow Rates in the World!

alicat.com/mc
Mass Flow Controllers (SEMI / Vacuum)

Hit the mark every time! Control flows with rock-solid stability and responsiveness.

Making You Faster
- 50-100 ms control response: stills upstream fluctuations.
- Accessible PID valve tuning for best speed and stability.
- Control mass flow, vol. flow or pressure with one device.
- No warm-up: ready to control process flows in one second.

Quick Specs
- Accuracy: 0.8% of the reading (0.4% optional) + 0.2% full-scale repeatability (NIST-traceable).
- Linear range: 0.5-100% of full scale (200:1).
- All flow data visible on one screen (setpoint, mass flow, vol. flow, pressure, temperature).
- Lifetime warranty gives you peace of mind.

Tailored for You

MCE Series
颧 MCE-[range]-V
Drop-in replacement for MKS 1179A and other similar mass flow controllers. Also available with welded 1/4” male compression fittings (MCE-[range]-C).

MCV Series for vacuum apps
颧 MCV-[range]-V
Includes integrated pneumatic shut-off valve. Drop-in replacement for MKS 2179A and other like flow controllers.

Common Options:
- Matching pinouts for any manufacturer’s 9-pin and 15-pin D-Sub connectors.
- Digital communications via RS-232 or RS-485.
- Analog signals: 0-10v, 0-5v, 1-5v or 4-20 mA.
- Welded fittings in VCR or compression formats.
- Precision Dispensing Package relies on our fast valves to dispense metered amounts of gas.

Sample Application
Gas Flow Control for Reactive Sputtering

Precisely control the partial pressures of reactive gases in the vacuum chamber with rapid 50-ms control response to prevent target poisoning. Fine resolution ensures the proper release of atoms. Maintain tight shut-off under no-flow conditions with the pneumatic valve.