Mass Flow Controller for SEMI or Vacuum

Easy upgrade for more stable control response, adjustable to under 50 ms
Mass Flow Controllers (SEMI / Vacuum)

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

Making You Faster
- **50-100 ms (or lower) control response:** stiffs 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).
- **Multi-gas calibration:** 98-130 gases preloaded, plus COMPOSER™ gas composition firmware.
- **All flow data** visible on one screen (setpoint, mass flow, vol. flow, pressure, temperature).
- **Lifetime warranty** gives you peace of mind.

Tailored for You

**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.

**Industrial communications:** EtherNet/IP, DeviceNet, PROFIBUS, or Modbus

**Anti-Corrosive Configuration** Features 316L stainless steel flow path and sensor to better withstand corrosion caused by aggressive gases. All ranges.

Sample Application

Gas Flow Control for Reactive Sputtering

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

MCV Series for vacuum apps

Includes integrated pneumatic shut-off valve. Replacement for MKS 2179A, GV50A and similar flow controllers.

MCE Series

Replacement for MKS 1179A, GE50A and other similar mass flow controllers. Also available with welded 1/4” male compression fittings.

See the video!

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