

PORTER MPC

reduced size • reduced complexity • reduced cost

PORTER MPC Series Mass Flow Controllers represent a totally new concept in cost-efficient mass flow control. These units contain both a fast and accurate mass flow controller and the necessary electronics for a complete closed-loop control system, all in a compact, panel mount, 1/16 DIN package. The front panel includes the interface for all functions, as well as readouts for setpoint, flow rate and total flow. Alarms, batch control and multiple setpoints are programmable for enhanced versatility. The MPC Series operates on 24 Vdc and has remote analog I/O capability. These controllers are available in full-scale flow rates of 0.5, 2.0, 5.0, and 20.0 SLPM N₂.



Simple front panel user interface

ACTUAL SIZE



Pluggable terminal block electrical connections and 1/8" NPT gas connections easily accessed on rear of body.

1. MULTIPLE SETPOINTS

- Up to 4 setpoints can be switched via front panel or external input.

2. GAS CORRECTION

- Air, N₂, Argon, and CO₂ standard.
- Conversion factors for mixtures and other gases can be entered through front panel.

3. VALVE OVERRIDE

- Control valve can be programmed for normal control, full open or full closed.

4. SLOW START FUNCTION

- Response can be set for a ramp of up to 6 seconds.

5. INTEGRATED TOTALIZER

- 8-digit totalizer can be reset via front panel key function. Start/stop/reset via external switching input.
- Valve shut-off can be enabled at preset total flow value.

6. ALARM INDICATION

- Flow alarm can be set to upper and lower deviation limits between setpoint and flow rate.
- Alarm delay time is adjustable
- Alarm condition can trigger external output or valve override open/closed.

7. AUTOMATIC VALVE SHUT-OFF

- Internal control valve can be shut-off when predetermined totalizer value is reached or when alarm occurs.

8. VALVE DRIVE OUTPUT MONITOR

- Valve voltage status can prewarn of system abnormalities.

9. OPTIONAL COMPUTER INTERFACE

- Upload and download of setpoint, flow rate, and various function parameters possible via one-to-one computer communications cable.

PORTER

INSTRUMENT COMPANY, INC.