

HIGH-PRESSURE, HIGH-REPEATABILITY MASS FLOWMETERS

For Clean Gases

FMA-8500



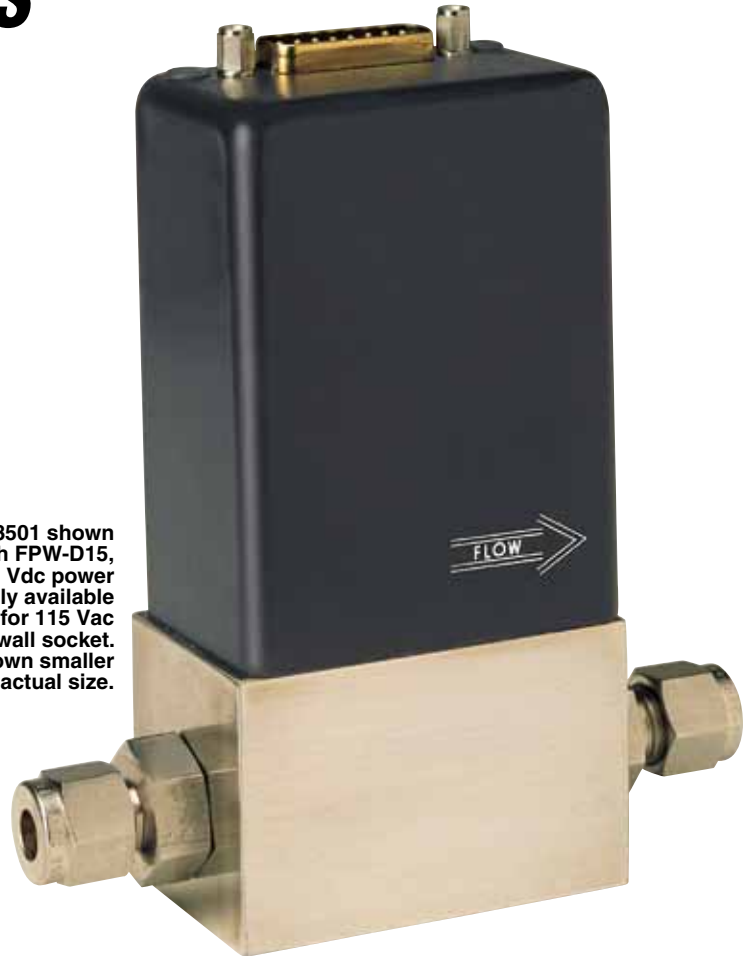
Optional

- ✓ Up to $\pm 1\%$ Full Scale Accuracy
- ✓ $\pm 0.25\%$ Repeatability
- ✓ 316 SS Wetted Parts
- ✓ Low Pressure Drop
- ✓ For Clean, Non-Coating Gases For Use Up to 4500 psig
- ✓ Calibration Available to 1500 psig

This flowmeter is precise and sophisticated. It must be accurately calibrated for application conditions. If in doubt, consult OMEGA's Flow Department.

OMEGA® FMA-8500 Series high pressure mass flowmeters feature a superior $\pm 0.25\%$ repeatability for accurate measurement and control of gas flow. The flow sensor produces a 0 to 5 Vdc output signal linear to the mass flow rate for use in recording, indicating, or control purposes.

FMA-8501 shown with FPW-D15, ± 15 Vdc power supply available for 115 Vac wall socket. Shown smaller than actual size.



SPECIFICATIONS

Accuracy: $\pm 1\%$ full scale at 16 to 27°C (60 to 80°F) and 10 to 40 psig; $\pm 2\%$ full scale at 4 to 38°C (40 to 100°F) and 5 to 150 psig

Repeatability: $\pm 0.25\%$

Time Constant: Three seconds to reach 98% of final value

Maximum Pressure: Up to 4500 psi at 66°C (150°F)

Pressure Drop: 10" water, maximum

Ambient Temperature Range:

4 to 66°C (40 to 150°F)

Output: 0 to 5 Vdc into 1000 Ω minimum load; 3 mV rms maximum ripple

Power: ± 15 Vdc; 0.6 W maximum power consumption

Fittings: 1/4" 316 SS compression fitting

O-Rings/Gaskets: PFA

Transducer Assembly: 316 SS

Leak Rate: 10^{-9} atm/cc-Helium

Pressure Coefficient: 0.03% shift within ± 200 psig of the calibrated pressure

To Order

| Model No. | Range |
|---------------|----------------|
| FMA-8500-(*) | 0 to 10 SCCM |
| FMA-8501-(*) | 0 to 20 SCCM |
| FMA-8502-(*) | 0 to 50 SCCM |
| FMA-8503-(*) | 0 to 100 SCCM |
| FMA-8504-(*) | 0 to 200 SCCM |
| FMA-8505-(*) | 0 to 500 SCCM |
| FMA-8506-(*) | 0 to 1000 SCCM |
| FMA-8507-(*) | 0 to 2000 SCCM |
| FMA-8508-(*) | 0 to 5000 SCCM |
| FMA-8509-(*) | 0 to 10 SLM |
| FMA-8510-(*) | 0 to 20 SLM |

Comes complete with mating connector and operator's manual. Calibrations done at ambient temperature only 20°C (70°F).

* Please specify gas, inlet and outlet pressure when ordering. For calibrations between 201 and 999 psig, consult Flow Engineering for price. For calibrations between 1000 and 1500 psig, consult Flow Engineering for price.

For NIST certificate add suffix "-NIST" to model number, for additional cost. NIST certificate does not include points.

Ordering Examples: FMA-8501-N2, 0 to 20 SCCM mass flowmeter for nitrogen. FMA-8509-O2, 0 to 1 SLM mass flowmeter for oxygen.

