

# HIGH-PRESSURE, HIGH-REPEATABILITY MASS FLOWMETERS *For Clean Gases*

FMA-8501  
**\$1247**



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



FMA-8501, \$1247, shown with FPW-D15,  $\pm 15$  Vdc power supply available for 115 Vac wall socket, \$95. Shown smaller than actual size. See page D-51.



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.

The FMA-8500 Series controllers operate similarly to those in the FMA-7000 Series.

## 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

### Max Pressure:

Up to 4500 psi at 66°C (150°F)

**Pressure Drop:** 10" water, max

**Ambient Temperature Range:** 4 to 66°C (40 to 150°F)

**Output:** 0 to 5 Vdc into 1000  $\Omega$  min load; 3 mV rms max ripple

**Power:**  $\pm 15$  Vdc; 0.6 W max power consumption

**Fittings:**  $\frac{1}{4}$ " 316 SS compression fitting

**O-Rings/Gaskets:** Teflon®

**Transducer Assembly:** 316 SS

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

**Pressure Coefficient:** 0.03% shift within  $\pm 200$  psig of the calibrated pressure

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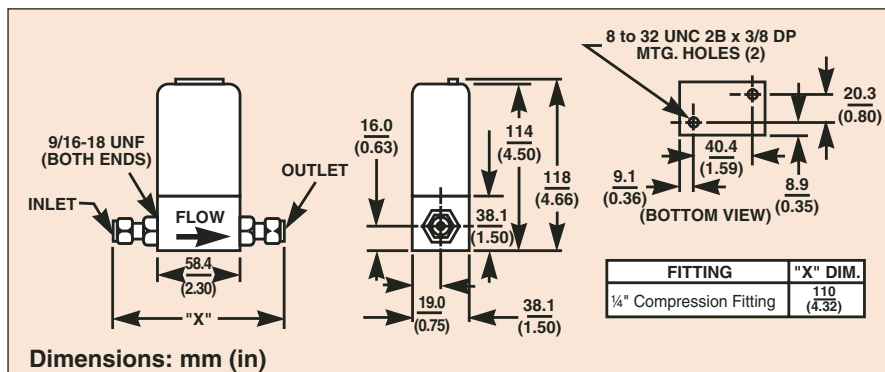
To Order (Specify Model Number)		
Model No.	Price	Range
FMA-8500-(* )	\$1637	0 to 10 SCCM
FMA-8501-(* )	1247	0 to 20 SCCM
FMA-8502-(* )	1247	0 to 50 SCCM
FMA-8503-(* )	1247	0 to 100 SCCM
FMA-8504-(* )	1247	0 to 200 SCCM
FMA-8505-(* )	1247	0 to 500 SCCM
FMA-8506-(* )	1247	0 to 1000 SCCM
FMA-8507-(* )	1247	0 to 2000 SCCM
FMA-8508-(* )	1247	0 to 5000 SCCM
FMA-8509-(* )	1247	0 to 10 SLM
FMA-8510-(* )	1247	0 to 20 SLM

Comes with complete operator's manual.

\* Please specify gas, temperature and inlet/output pressure when ordering. See the FMA-5876A and FMA-5878A for electronics package, page 37.

**Example:** FMA-8500-[Argon, 38°C (100°F), 75/50 psig], \$1637. For calibration above 200 psig, add \$450 to price. For NIST 4-point calibration, add "-NIST" to the part number and \$425 to the price.

**Ordering Example:** FMA-8501-[Nitrogen, 21°C (70°F), 20/0 psig], flowmeter for nitrogen, \$1247.



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