

# STAINLESS STEEL GAS MASS FLOWMETERS AND CONTROLLERS

## For Clean Gases

### FMA2800 Series



- ✓ Economical
- ✓ Compact and Lightweight
- ✓ Power Supply Included

The FMA2700/FMA2800 Series electronic mass flowmeters and FMA3700/FMA3800 mass flow controllers provide high performance and versatility. OMEGA's in-line series features a "flow-through" zero dead space design for quicker processing and lower contamination.

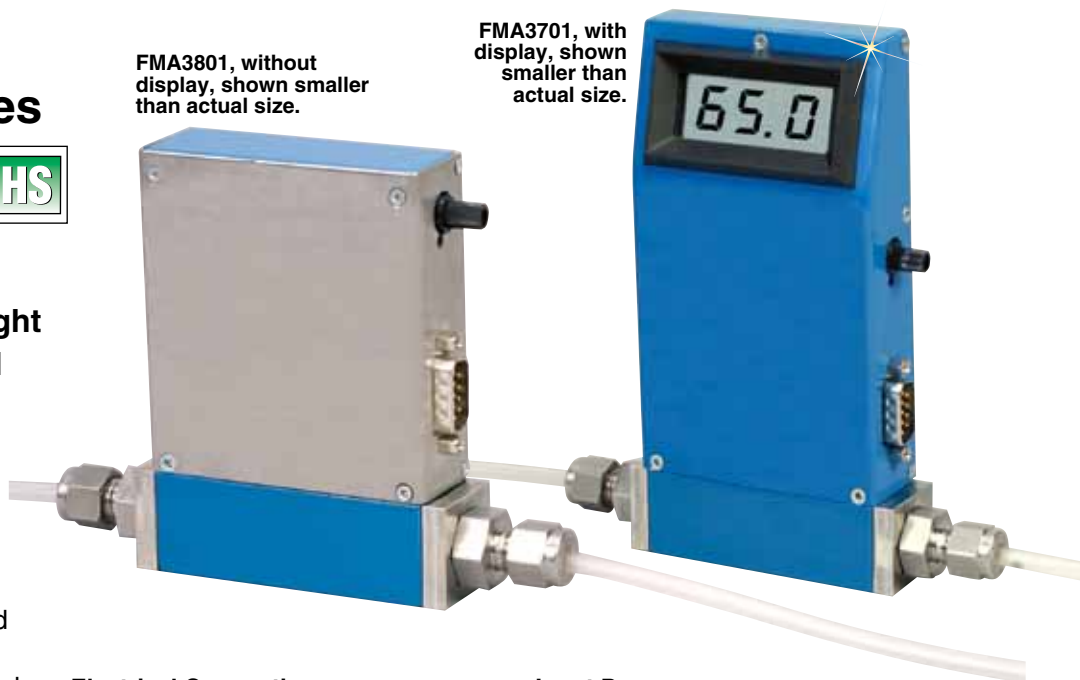
Available with onboard display and wall-mounted power supply, the in-line series is ideal for laboratory and test applications. Compact, lightweight, and economical, the FMA2700/FMA2800 Series electronic mass flowmeters and FMA3700/FMA3800 mass flow controllers are perfect for applications that require an all stainless steel construction.

### SPECIFICATIONS

- Accuracy:** ±1% of full scale including linearity
- Repeatability:** ±0.15% full scale or better
- Turndown Ratio:** 100:1
- Response Time:** 5 seconds
- Gas Ambient Temperature:** 0 to 50°C (32 to 122°F)
- Temperature Coefficient:** 0.05% full scale per 1°C or better
- Pressure Coefficient:** 0.01% full scale per psi or better
- Minimum Pressure Requirements:**
  - Meters: 1 inch of H<sub>2</sub>O
  - Controllers Up to 1 SLM: 1 psi
  - Controllers Greater Than 20 SLM: 20 psi
- Differential Pressure for Mass Flow Controllers:** <5 SLM, 5 to 50 psi standard; >5 SLM, 20 to 40 psi standard
- Maximum Gas Pressure:** 500 psig
- Leak Integrity:** 1 x 10<sup>-6</sup> cc/min of He or better
- Wetted Parts:** 316 and 17-4 SS with FKM O-rings
- Gas Connections:** ¼" compression fitting

FMA3801, without display, shown smaller than actual size.

FMA3701, with display, shown smaller than actual size.



#### Electrical Connection:

- 9-pin sub-D connector
- Control Signal:** Integral or 0 to 5 Vdc
- Control Valve:** Electromagnetic, normally closed
- Output Signal:** Linear 0 to 5 Vdc, 1000 Ω min load, 4 to 20 mA, 500 Ω loop resistance

#### Input Power:

- Meters:** 24 Vdc @ 150 mA, 115 Vac, 220 Vac with AC adaptor
- Controller:** 24 Vdc @ 300 mA, 115 Vac, 220 Vac with AC adaptor

#### Dimensions:

152.4 H x 83.5 W x 25.4 mm D (6.00 x 3.29 x 1.00")

**Weight:** 1.57 kg (1.25 lb) with power supply

To Order				
Mass Gas Flowmeters		Controller		Max Flow
With Display Model No.	Without Display Model No.	With Display Model No.	Without Display Model No.	
FMA2701	FMA2801	FMA3701	FMA3801	10 SCCM
FMA2702	FMA2802	FMA3702	FMA3802	20 SCCM
FMA2703	FMA2803	FMA3703	FMA3803	50 SCCM
FMA2704	FMA2804	FMA3704	FMA3804	100 SCCM
FMA2705	FMA2805	FMA3705	FMA3805	200 SCCM
FMA2706	FMA2806	FMA3706	FMA3806	500 SCCM
FMA2707	FMA2807	FMA3707	FMA3807	1 SLM
FMA2708	FMA2808	FMA3708	FMA3808	2 SLM
FMA2709	FMA2809	FMA3709	FMA3809	5 SLM
FMA2710	FMA2810	FMA3710	FMA3810	10 SLM
FMA2711	FMA2811	FMA3711	FMA3811	15 SLM
FMA2712	FMA2812	FMA3712	FMA3812	20 SLM

#### Accessories

Model No.	Description
FMA-200PWA	Replacement socket plug-in power supply for 90 to 260 Vac

Comes complete with operator's manual, 9-pin sub-D connector, power supply and 5-point NIST calibration.

For 10-point NIST calibration certificate, add suffix "-NIST10" to model number for additional cost.

**Ordering Examples:** FMA2712, 20 SLM max mass flowmeter. FMA3704, 100 SCCM max mass flow controller.