

# LOW FLOW MAGMETER

## FMG80A Series



- ✓ No Moving Parts
- ✓ Requires No Straight Pipe
- ✓ Pulse and/or 4 to 20 mA Output
- ✓ Chemical and Corrosion Resistant
- ✓ Insensitive to Fluid Density and Fluid Viscosity Changes
- ✓ NEMA 4X (IP66)

The FMG80A Series magmeter is designed for low-flow chemical injection or difficult-to-meter applications with pulsating metering pumps in 1/4 to 3/4" pipe/tube. The housing is made of sturdy splash-proof HDPE plastic.

With no moving parts, the FMG80A Series can handle fluids containing particulate matter without clogging or jamming, keeping maintenance at a minimum. With no metallic parts (100% PVDF body and PVDF carbon fiber-filled electrodes), the meter is corrosion-resistant and compatible with a wide range of chemicals. Accuracy is maintained with conductive fluids (>20 micro Siemens) of varying viscosities and densities.

The FMG80A Series meter is compact enough to fit most pump/injection systems. With zero straight pipe required after an elbow, it can be easily mounted in tight spaces. The mounting bracket adds stability. The FMG80A Series meter has opto-coupled current sinking or current sourcing pulse as well as a 4 to 20 mA output that can be connected to many OMEGA® panel meters, controllers and data loggers; outputs and power are provided through a 6 m (19.7') cable with 8-pin female circular connector.



FMG82A

### SPECIFICATIONS

**Pipe Sizes:** 1/4, 3/8, 1/2, and 3/4"

**Fittings:** Fittings with two NPT threaded adaptors (included)

**Materials Body:** PVDF

**Electrodes:** PVDF carbon fiber-filled

**Ground:** PVDF carbon fiber-filled

**Housing:** HDPE with glass fiber

**Fittings:** PVDF

**Adaptors (NPT):** PVDF

or polypropylene

**Temperature:**

**Ambient:** -18 to 54°C (0 to 130°F)

**Fluid:** 0 to 93°C (32 to 200°F)

**Pressure:** 150 psi

**Flow Range:**

**FMG81A, FMG82A:** 3 GPM max (0.03 GPM cut off)

**FMG83A, FMG84A:** 20 GPM max (0.2 GPM cut off)

### Accuracy:

**FMG81A, FMG82A:** ±1%, ±0.002 GPM of reading across rated range

**FMG83A, FMG84A:** ±1%, ±0.005 GPM of reading across rated range

**Output Signal:** Optocoupled current sinking or current sourcing pulse output; 30 Vdc, 5 mA max, 4 to 20 mA current loop; 7 Vdc plus load voltage drop min; 50 Vdc max

**FMG81A, FMG82A:** 1000 pulses/liter (3785 pulses/gallon)

**FMG83A, FMG84A:** 500 pulses/liter (1892 pulses/gallon)

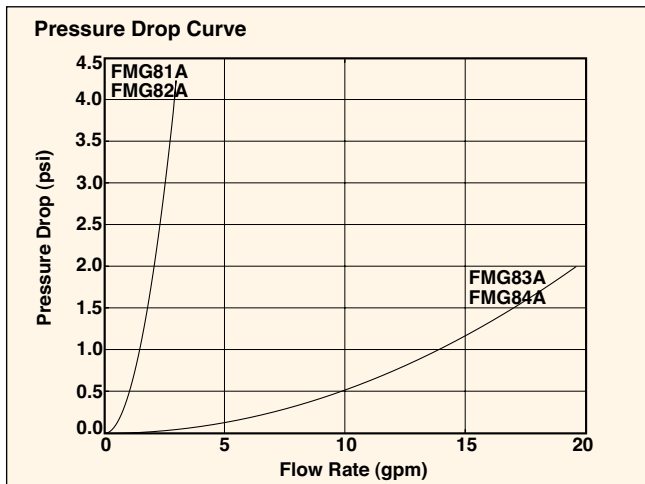
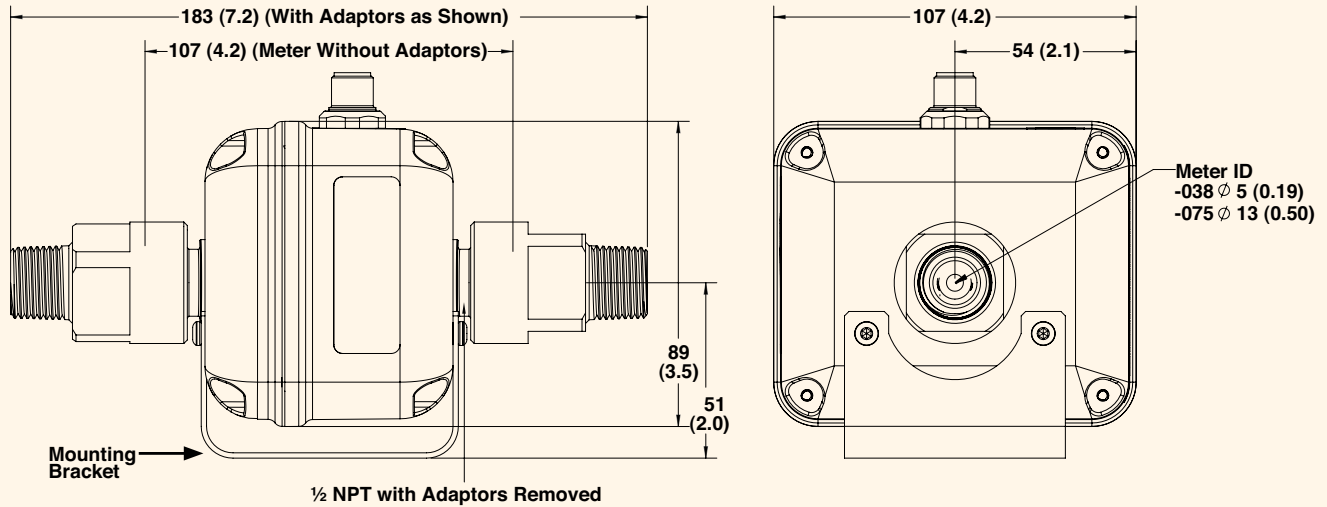
**Power:** 10 to 15 Vdc, 150 mA (linear power supply recommended)

**Fluid Conductivity:** >20 microSiemens

**Environmental:** NEMA 4X (IP66)

**Cable Length:** 6 m (19.7'), cable with 8-pin female circular connector

Dimensions: mm (inch)



To Order	
Model No.	Description
FMG81A	Magmeter 1/4 NPT, 3 GPM
FMG82A	Magmeter 3/8 NPT, 3 GPM
FMG83A	Magmeter 1/2 NPT, 20 GPM
FMG84A	Magmeter 3/4 NPT, 20 GPM

**Accessories**

Model No.	Description
FMG80-CABLE	Replacement 6 m (19.7') cable with 8-pin female circular connector
FMG81A-ADAPTERKIT	Replacement fitting for FMG81A, 2 per kit
FMG82A-ADAPTERKIT	Replacement fitting for FMG82A, 2 per kit
FMG83A-ADAPTERKIT	Replacement fitting for FMG83A, 2 per kit
FMG84A-ADAPTERKIT	Replacement fitting for FMG84A, 2 per kit
DPF701	Panel mounted flow rate or total display
U12Y100	12 Vdc power supply

Comes complete with operator's manual, mounting bracket and 6 m (19.7') cable with 8-pin female circular connector.

**Ordering Examples:** FMG81A magmeter 1/4 NPT, 3 GPM and DPF701 1/8 DIN digital panel meter. For technical information on DPF701 visit OMEGA.

FMG84A magmeter 3/4 NPT, 20 GPM and DPF65 1/8 DIN batch controller. For technical information on DPF65 visit OMEGA.