

# LOW FLOW MAGMETER



FMG80 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 FMG80 Series magmeter is designed for low-flow chemical injection or difficult-to-meter applications with pulsating metering pumps in  $\frac{3}{4}$  to  $\frac{1}{4}$ " pipe/tube. The housing is made of sturdy splash-proof HDPE plastic.

With no moving parts, the FMG80 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 FMG80 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 FMG80 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 (18') cable with 8-pin female circular connector.



FMG82.

## SPECIFICATIONS

**Pipe Sizes:**  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ "

**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

**O-Rings:** EPDM or FKM (-FKM)

**Temperature:**

**Ambient:** -18 to 54°C (0 to 130°F)

**Fluid:** 0 to 93°C (32 to 200°F)

**Pressure:** 150 psi

**Flow Range:**

**FMG81, FMG82:** 3 GPM max (0.03 GPM cut off)

**FMG83, FMG84:** 20 GPM max (0.2 GPM cut off)

**Accuracy:**

**FMG81, FMG82:**  $\pm 1\%$ ,  $\pm 0.002$  GPM of reading across rated range

**FMG83, FMG84:**  $\pm 1\%$ ,  $\pm 0.005$  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

**FMG81, FMG82:** 1000 pulses/liter (3785 pulses/gallon)

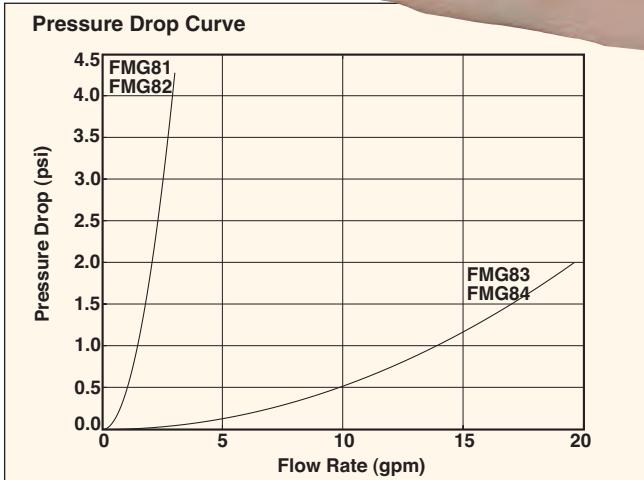
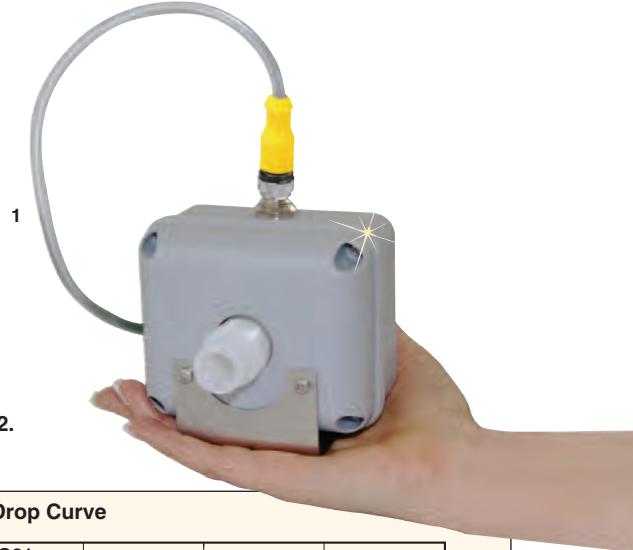
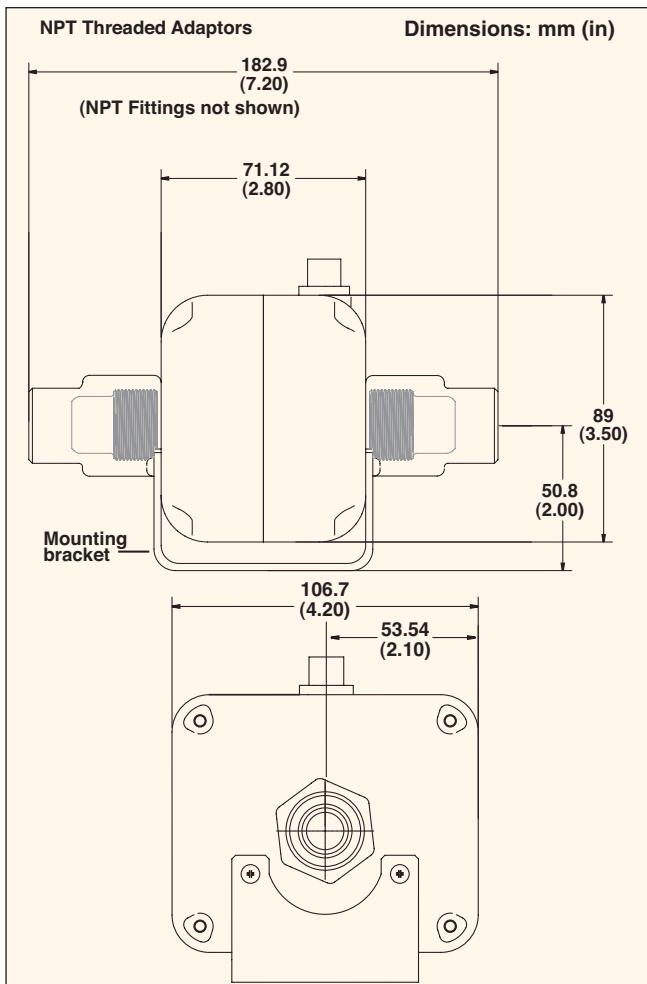
**FMG83, FMG84:** 500 pulses/liter (1892 pulses/gallon)

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

**Fluid Conductivity:** >20 microSiemens

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

**Cable Length:** 6 m (18')



**MOST POPULAR MODELS HIGHLIGHTED!**

### To Order (Specify Model Number)

Model No.		Description
FMG81		Magmeter 1/4 NPT, EPDM 3 GPM
FMG82		Magmeter 3/8 NPT, EPDM 3 GPM
FMG83		Magmeter 1/2 NPT, EPDM 20 GPM
FMG84		Magmeter 3/4 NPT, EPDM 20 GPM
FMG81-FKM		Magmeter 1/4 NPT, FKM 3 GPM
FMG82-FKM		Magmeter 3/8 NPT, FKM 3 GPM
FMG83-FKM		Magmeter 1/2 NPT, FKM 20 GPM
FMG84-FKM		Magmeter 3/4 NPT, FKM 20 GPM

### Accessories

Model No.		Description
FMG80-CABLE		Replacement 2.4 m (8') cable
FMG81-FITTING		Replacement fitting for FMG81 (2 required)
FMG82-FITTING		Replacement fitting for FMG82 (2 required)
FMG83-FITTING		Replacement fitting for FMG83 (2 required)
FMG84-FITTING		Replacement fitting for FMG84 (2 required)
FMG80A-ORING		Spare EPDM o-ring for FMG81/82 (2 required)
FMG80A-ORING-FKM		Spare FKM o-ring for FMG81/82 (2 required)
FMG80B-ORING		Spare EPDM o-ring for FMG83/84 (2 required)
FMG80B-ORING-FKM		Spare FKM o-ring for FMG83/84 (2 required)
DPF701		Panel mounted flow rate or total display
U12Y100		12 Vdc power supply

Comes complete with cable, 2 NPT adaptors and operator's manual.

**Ordering Examples:** FMG81, magmeter 1/4 NPT, 3 GPM with DPF701, 1/8 DIN digital panel meter. For technical information on DPF701, visit [omega.co.uk/dpf701](http://omega.co.uk/dpf701)

FMG84, magmeter 3/4 NPT, 20 GPM with DPF65, 1/8 DIN batch controller. For technical information on DPF65, visit [omega.co.uk/dpf60](http://omega.co.uk/dpf60)



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Stamford, CT.

#### UNITED KINGDOM

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+44-(0)161-777-6611

#### CANADA

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