

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 3/4 to 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 (19.7') cable with 8-pin female circular connector.



FMG82

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

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

FMG83, FMG84: ±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

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

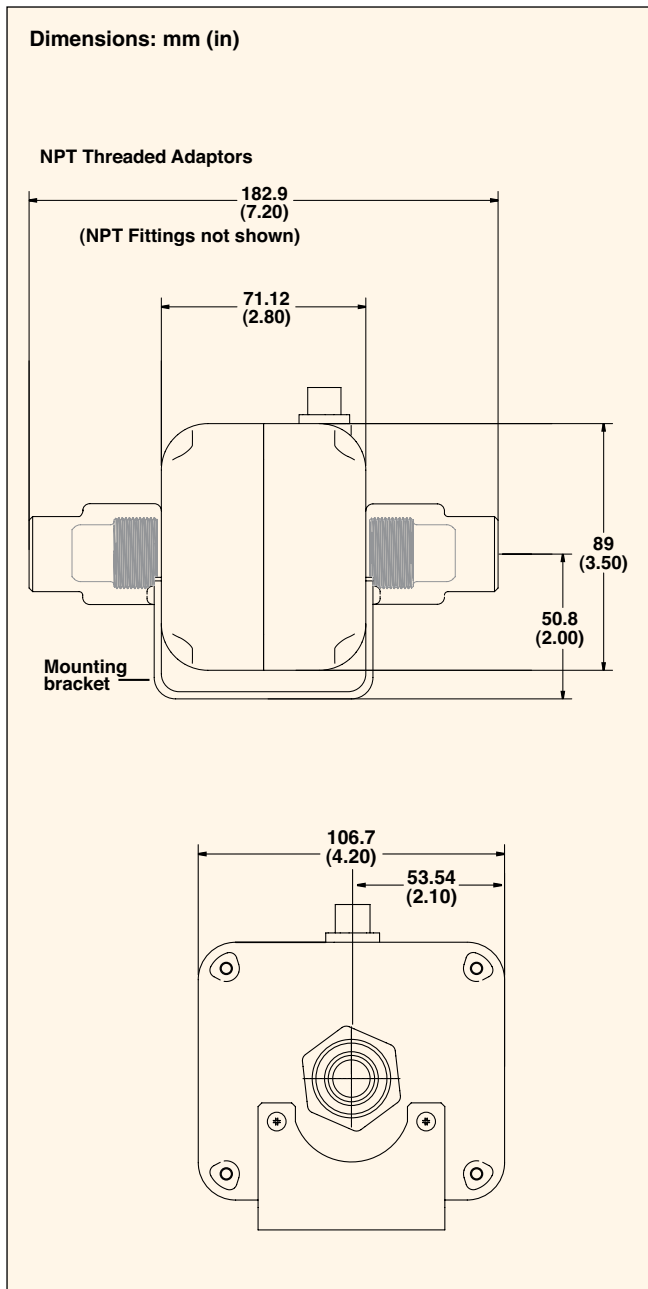
FMG83, FMG84: 500 pulses/liter (1892 pulses/gallon)

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

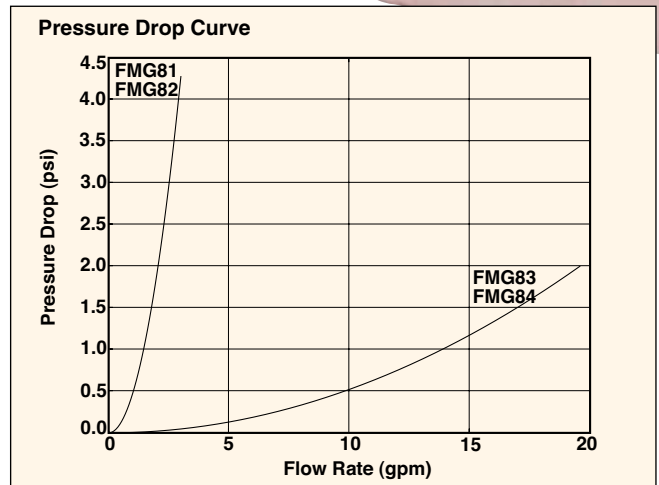
Fluid Conductivity: >20 microSiemens

Environmental: NEMA 4X (IP66)

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



FMG82



To Order Visit omega.com/fmg80 for Pricing and Details

Model No.	Description
FMG81	Magmeter ¼ NPT, EPDM 3 GPM
FMG82	Magmeter ⅜ NPT, EPDM 3 GPM
FMG83	Magmeter ½ NPT, EPDM 20 GPM
FMG84	Magmeter ¾ NPT, EPDM 20 GPM
FMG81-FKM	Magmeter ¼ NPT, FKM 3 GPM
FMG82-FKM	Magmeter ⅜ NPT, FKM 3 GPM
FMG83-FKM	Magmeter ½ NPT, FKM 20 GPM
FMG84-FKM	Magmeter ¾ NPT, FKM 20 GPM

Accessories

Model No.	Description
FMG80-CABLE	Replacement 6 m (19.7') cable with 8-pin female circular connector
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 operator's manual and 6 m (19.7') cable with 8-pin female circular connector.

Ordering Examples: **FMG81** magmeter ¼ NPT, 3 GPM and **DPF701** ½ DIN digital panel meter. For technical information on DPF701, visit omega.com/dpf701

FMG84 magmeter ¾ NPT, 20 GPM and **DPF65** ½ DIN batch controller. For technical information on DPF65, visit omega.com/dpf60