

PLASTIC BODIED ELECTROMAGNETIC FLOW METER

FMG800 Series



- ✓ No Moving Parts
- ✓ Minimal Straight Pipe Required
- ✓ Battery or DC Powered
- ✓ Built-In Rate and Total Indicator
- ✓ Corrosion Resistant
- ✓ Pulse Output (FMG810 Only)
- ✓ US Gallons Factory Programmed (Other Engineering Units Available)

The FMG800 Series is a full-bore, plastic-bodied electromagnetic flow meter designed for flow and usage monitoring applications in 1, 2 and 3 inch pipe. The polypropylene flow tube offers corrosion resistance to a wide range of chemicals and fertilizers. It is light weight and easy to install or remove from the pipe for inspection*.

With no moving parts, the magmeter permits unobstructed flow, minimizing flow disturbances and straight pipe requirements. The FMG800 Series can be used in piping configurations where there is little space between the meter and an elbow or valve. The FMG800 Series is resistant to wear from sand and debris found in ground or surface water. Since there are no bearings or propeller to wear out, maintenance and repair costs are kept to a minimum and it tolerates high flows without damage.

A hinged polyethylene cover is included that protects from dust and UV rays, while permitting easy access to the flow rate and total display. Flow rate and total can be displayed in a variety of units, factory programmed.

The FMG800 Series is used for tracking flow rate and total flow in usage monitoring applications including wells, industrial wastewater, heap leach mining discharge, cooling tower deduct, turf, landscape, and other water reclamation applications. In the event of DC power loss, or when changing batteries, the FMG800 will retain internal settings and flow total.



The FMG810 Series is externally powered via a 5-pin connector cable which also provides pulse output for use with a variety of OMEGA displays and controls for remote reading, data logging, pulse-to-analog conversion, and telemetry applications.

The FMG800 Series is a battery-operated unit for use when pulse output is not required. The batteries are user replaceable with an approximate 1 to 2 year life depending on usage.

*Includes OMEGA NPT fitting kit on 2 and 3" models.

SPECIFICATIONS

Pipe Size: 1, 2 or 3" full port
Fittings: 1 NPTF, 2 or 3" flange clamps with 2 or 3 NPTF fitting kit
Pressure: 150 psi or 10.3 bar working pressure @ 21°C (70°F)
Operating Temperature Range: -12 to 54°C (10 to 130°F), -40 to 80°C (-40 to 176°F) non-operating

Accuracy:

±1% of reading (between 10% and 100% of maximum flow)
 ±3% of reading (between cutoff and 10% of maximum flow)

Flow Range Minimum:

1": 2.3 GPM (0.145 LPS)
 2": 6 GPM (0.38 LPS)
 3": 14 GPM (0.88 LPS)

Flow Range Maximum:

1": 110 GPM (6.94 LPS)
 2": 300 GPM (18.9 LPS)
 3": 670 GPM (42.3 LPS)

Materials Body: Glass-filled polypropylene

Electrodes: 316 stainless steel

Electronics Housing: Die-cast aluminum, powder-coated

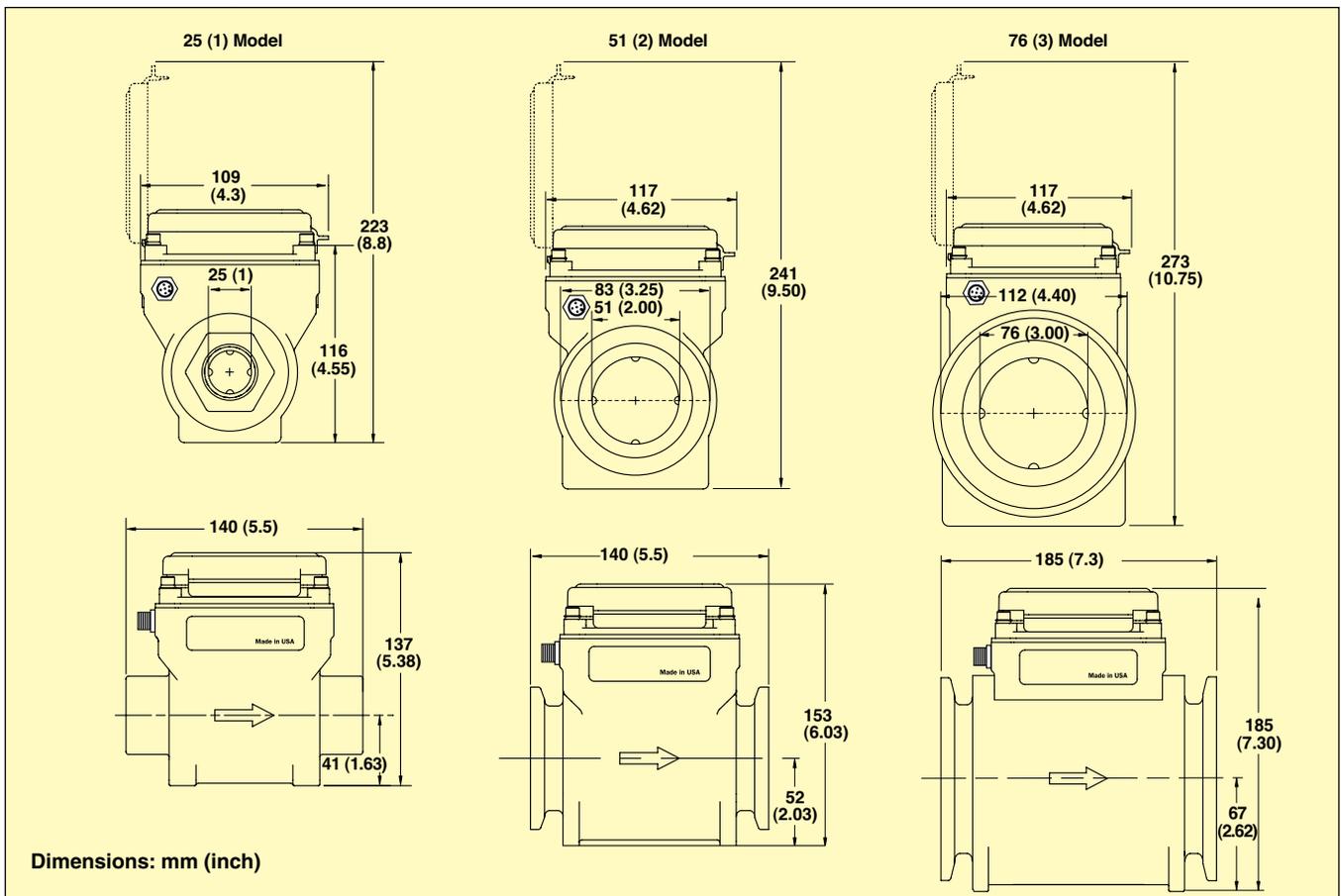
Display Cover: Polyethylene

Display Digits: Rate-6, Total-8

Units Rate: Gallons/Minute, Cubic Feet/Second, Acre-Feet, Acre-Inch, Gallons, Gallons x 1000, Cubic Feet/Minute, Liters/Second

Units Total: Cubic Feet, Liters, Mega-liters, Cubic Meters, Liters/Minute, Cubic Meters/Minute

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Alternate Programming Unit Suffixes

Rate	Total							
	Acre-feet	Acre-inch	Gallons	Gallonsx1000	Feet ³	Liters	Megaliters	Meters ³
Gallons/Min	-GMAF	-GMAI	(standard)	-GMKG	-GMCF	-	-	-
Feet ³ /Sec	-CFSAF	-CFSAI	-CFSG	-CFSKG	-CFSCF	-	-	-
Feet ³ /Min	-CFMAF	-CFMAI	-CFMG	-CFMKG	-CFMCF	-	-	-
Liters/Sec	-	-	-	-	-	-LSL	-LSML	-LSCM
Liters/Min	-	-	-	-	-	-LML	-LMML	-LMCM
Meters ³ /Min	-	-	-	-	-	-CMML	-CMMML	-CMMCM
Meters ³ /Hour	-	-	-	-	-	-CMHML	-CMHML	-CMHCM

Power:

FMG800: 6 each "AA" alkaline cells (included), replaceable. Estimated life is 1 to 2 years depending on usage

FMG810: 10 to 30 Vdc @ 60 mA maximum (15 mA average)

NOTE: Using an unregulated power supply >18 Vdc may damage the meter due to AC line input voltage fluctuation

Pulse Output (FMG810 Only):

Signal: Current sinking pulse, opto-isolated, 32 Vdc maximum at 10 mA maximum

Standard Pulse Rate: 1 unit/pulse out, pulse width of 10 ms depending on unit selection

High Frequency (-HF): Pulse width 1.1 ms, minimum/maximum frequency, 3 to 150 hz

Pulse/Unit: 1" = 80, 2" = 30, 3" = 13

Empty Pipe Detection: Hardware/software, conductivity-based

Conductivity: >20 micro Siemens/cm

Environmental: NEMA 4X standard

Electrical Connection (FMG810 Only): 5-pin male circular with 6 m (20') cable

To Order

Model No.	Description
FMG801	1" battery powered magmeter
FMG802*	2" battery powered magmeter
FMG803*	3" battery powered magmeter
FMG811	1" DC powered magmeter
FMG812*	2" DC powered magmeter
FMG813*	3" DC powered magmeter
FMG811-HF	1" DC powered magmeter high frequency out
FMG812-HF*	2" DC powered magmeter high frequency out
FMG813-HF*	3" DC powered magmeter high frequency out

* Includes NPT fitting kit.

For displays programmed in other engineering units use suffix chart above.

Accessories

Model No.	Description
FTB700-T	Remote 4 to 20 mA transmitter for wall mount
FTB700-D	Remote rate and total display for wall mount
FMG-800-CABLE	Replacement 6 m (20') cable

Comes complete with operator's manual. All 2 and 3" models include NPT fitting kit. All battery powered units include 6 "AA" alkaline batteries. All DC powered units include 6 m (20') cable

Ordering Example: FMG811, 1" DC powered magmeter.