

# Programmable Magnetic Flowmeter APG® Series FM100



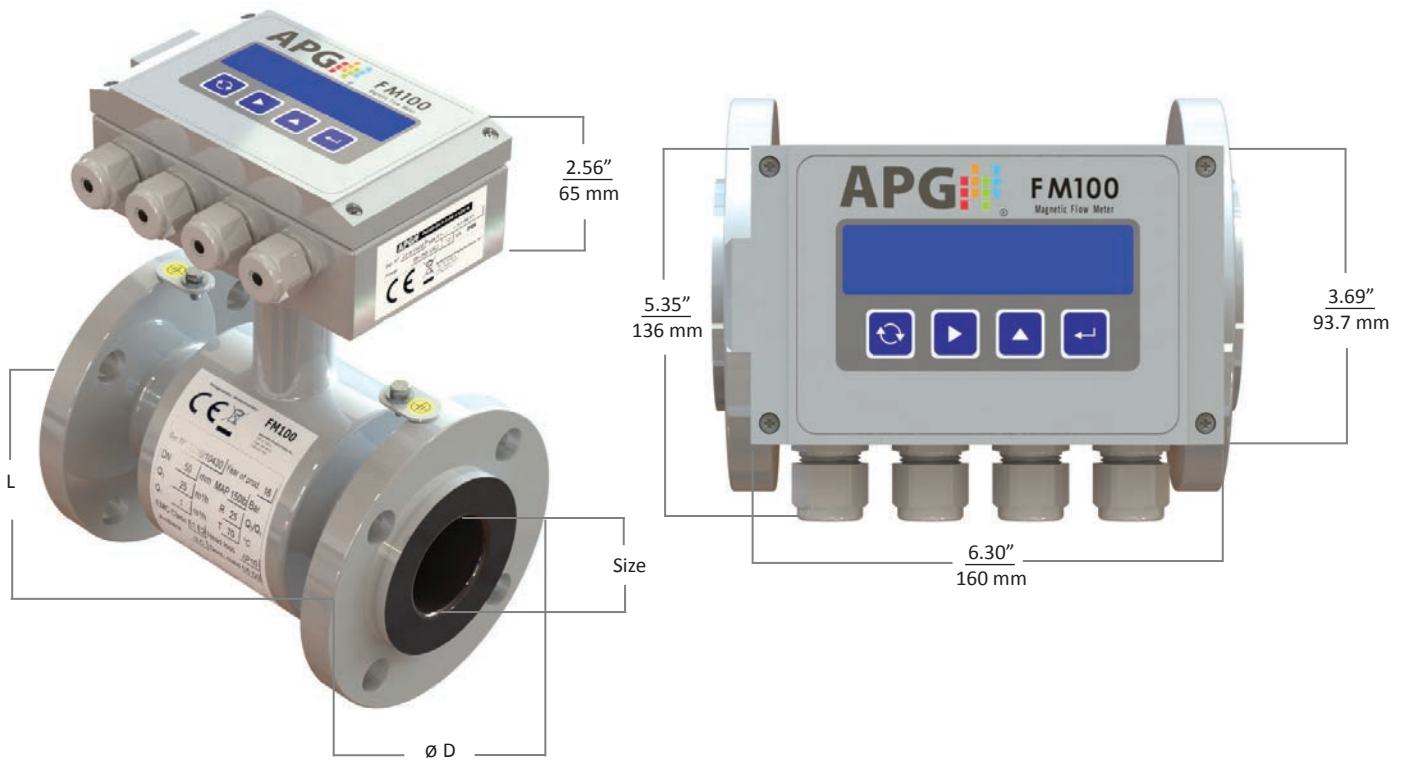
The FM100 Programmable Magnetic Flowmeter is a highly accurate, bi-directional flowmeter, with configurable 4-20 mA output. It comes with a two-line LCD display and four-button keypad for intuitive display set up and menu navigation. The hard technical rubber liner of the FM100 is compatible with most water and waste water applications.

## Features

- Ranges to 3360 gpm
- 4-20 mA output
- 1", 2", 3", 4" and 6" pipe diameters
- ±0.5% accuracy or better
- User selectable units, and up to 7 display fields
- Hourly, Daily, and Monthly onboard archives
- IP67 Case rating
- CE Approved



# FM100 Flowmeter Specifications



## FM100 Dimensions

Size	Flange*	Ø D*	L**	Weight
1" (25mm)	150lbs	4.53" (115mm)	7.87" (200mm)	9.7 lbs (4.4 kg)
2" (50mm)	150lbs	6.30" (160mm)	7.87" (200mm)	19.6 lbs (8.9 kb)
3" (80mm)	150lbs	7.68" (195mm)	7.87" (200mm)	28.4 lbs (12.9 kg)
4" (100mm)	150lbs	8.46" (215mm)	9.84" (250mm)	37.2 lbs (16.9 kg)
6" (150mm)	150lbs	11.0" (280mm)	11.81 (300mm)	63.6 lbs (28.9 kg)

\*Flange dimensions meet ANSI B 16.5

\*\*Standard construction length meets ISO 13359

### Performance

- Accuracy:
  - < 0.5% of full scale (BFSL)
  - 4-20 mA output:
    - 16 bit resolution
    - ± 0.1% accuracy, ±0.1mA

### Environmental

- Process Temp: 32 - 158 °F (0.1 - 70 °C)
- Enclosure Protection: IP67

### Electrical

- Supply Voltage: 85 - 265 VAC (1 phase, 2-wire + ground)
- 4-20 mA Loop Resistance: 1000 ohms
- Minimum fluid conductivity: 20µS/cm

### Programming

- Onboard, 2-line LCD with 4-button keyboard
- Five current output configurations
- Seven display options

### Physical

- Wetted Materials:
  - Lining: Hard Structure Technical Rubber
  - Electrodes: AISI 316Ti Stainless Steel
  - Measuring Tube: Stainless Steel
  - Flanges, Housing: Carbon Steel, Polyurethane paint
  - Converter Box: Aluminum, powder paint

### Certification

- CE

# Flow Rates per Line Size

Size		Flow Rates				R25 Range (Q <sub>3</sub> )	
Inches	mm	Q <sub>min</sub>		Q <sub>max</sub>		(Q <sub>3</sub> @ Q <sub>3</sub> /Q <sub>1</sub> =25)	
1"	25	0.7740 gpm	2.94 l/m	93.36 gpm	353.4 l/m	27.74 gpm	6.3 m <sup>3</sup> /hr
2"	50	3.114 gpm	11.78 l/m	373.4 gpm	1414 l/m	110.1 gpm	25 m <sup>3</sup> /hr
3"	80	7.968 gpm	30.16 l/m	955.8 gpm	3619 l/m	277.4 gpm	63 m <sup>3</sup> /hr
4"	100	12.45 gpm	47.12 l/m	1494 gpm	5654 l/m	440.3 gpm	100 m <sup>3</sup> /hr
6"	150	28.01 gpm	106.0 l/m	3360 gpm	12.72 x 10 <sup>3</sup> l/m	1101 gpm	250 m <sup>3</sup> /hr

## Common Model Configurations

Model Number	Model Description
FM100-01-F-1-A6-1-LCD	4-20mA Output, <b>1" diameter pipe</b> , Hard Rubber Liner, LCD Display, 85 - 240 VAC
FM100-02-F-1-A6-1-LCD	4-20mA Output, <b>2" diameter pipe</b> , Hard Rubber Liner, LCD Display, 85 - 240 VAC
FM100-03-F-1-A6-1-LCD	4-20mA Output, <b>3" diameter pipe</b> , Hard Rubber Liner, LCD Display, 85 - 240 VAC
FM100-04-F-1-A6-1-LCD	4-20mA Output, <b>4" diameter pipe</b> , Hard Rubber Liner, LCD Display, 85 - 240 VAC
FM100-06-F-1-A6-1-LCD	4-20mA Output, <b>6" diameter pipe</b> , Hard Rubber Liner, LCD Display, 85 - 240 VAC

# Model Configuration Options



Model Number: FM100 -      -      -      -      -      -       
                                  A      B      C      D      E      F

## A. Size (Pipe Diameter)

- 01**            1"
- 02**            2"
- 03**            3"
- 04**            4"
- 06**            6"

## B. Process Connection

- F**                150 lb Flange

## C. Liner Material

- 1**                Hard Rubber

## D. Output

- A6**              4-20 mA

## E. Input Power

- 1**                85 - 240 VAC

## F. Display

- LCD**            LCD Display

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## Accessories

Please order separately, by part number.

Description	Part Number
1 - 1" Grounding Ring (necessary for non-metalic pipe systems)	123016
1 - 2" Grounding Ring (necessary for non-metalic pipe systems)	123017
1 - 3" Grounding Ring (necessary for non-metalic pipe systems)	123018
1 - 4" Grounding Ring (necessary for non-metalic pipe systems)	123019
1 - 6" Grounding Ring (necessary for non-metalic pipe systems)	123020