

FG100 Flow Sensor

Residential Solutions

TECHNICAL SPECIFICATIONS

MODEL:



FG100 Flow Sensor

The Rain Bird FG100 Flow Sensor sends flow data to compatible irrigation controllers for precise and accurate flow monitoring enabling you to capitalize on the advantages of flow sensing functionality.

FEATURES:

Designed for outdoor and underground applications, the Rain Bird FG100 Flow Sensor offers the highest performance in flow sensing. The FG100 reads high and low flow rates reliably and accurately. With a glass filled nylon body, no straight pipe requirements and high pressure ratings the FG100 offers the most flexibility in installation locations.

- **Flo-Watch™:** This functionality in the ESP-ME3 Controller uses information from the FG100 to learn the flow and monitor for low or excessive flow conditions caused by broken lines or heads—saving water, protecting plants and preventing property flooding.
- **Winter ready:** Designed to withstand high-burst pressure blowouts. Does not need to be removed during winter months.
- **No specialty PE-cable:** Shielded cable is required in residential installations where electrical interference is likely, but in some scenarios, standard 18g irrigation wire cable may still be used when proper wire distance from potential sources of electrical interference is maintained.
- **Threaded or slip unions:** Threaded or slip unions allow for faster installation and easy maintenance.
- **Rain Bird App:** Pair the FG100 with the ESP-ME3 Controller to check system health from anywhere, and control advanced flow settings via the Rain Bird Mobile App. Available for iPhone and Android.
 - LNK or LNK2 WiFi Module required.
- Flow Sensing for ESP-ME3, compatible with ESP-LX Series (LXME, LXD, IVM)

PRODUCT SPECIFICATIONS:

- Single Size: 1 inch inlet/outlet
- Operating Flow Range:
 - Min: 3 gpm / 11.4 lpm
 - Max: 25 gpm / 94.6 lpm
- Continuous Working Pressures: 20 - 150 PSI
- Accuracy: +/- 10% across full flow range
- Max Temperature: 125°F (51.7°C)

FLOW SENSOR HARDWARE:

- 1" / 25.4 mm inlet/outlet NPT/BSP/Slip
- Plastic body
- Paddle wheel impeller with ceramic shaft for heat dissipation

OPERATING SPECIFICATIONS:

- 500' / 152.4 m range on standard 18g irrigation wire
- Shielded wire is recommended for installations with wire runs that exceed 500' / 152.4 m, installation sites with significant wireless interference or to help protect against high-lightning locations.
- Minimum Flow: 3 gpm / 11.41 lpm

DIMENSIONS:

Length: 9.25" / 234.95 mm
Height: 3.31" / 84.07 mm
Width: 2.56" / 65.02 mm

CERTIFICATIONS:

FCC, US UL, CA UL, ACMA, CE, UAE, WEEE

MODEL COMPARISON:

A83926

FG100 1" / 25.4 mm Flow Sensor NPT

A83927

FG100 1" / 25.4 mm Flow Sensor Slip

A83928

FG100 1" / 25.4 mm Flow Sensor BSP



RAIN BIRD APP FEATURES:

- **Advanced Settings:** Ability to set high- and low-flow thresholds with Zone Alarms based on typical flows with optional enabled notifications via controller settings.
- **Flow Gauge:** Intuitive per zone irrigation flow gauge graphic indicating if low, learned or high flow.
- **Flow Reports:** water use per month and adjusted water savings charts.

OPERATING SPECIFICATIONS:

The FG100 Flow Sensor is designed to protect the user's property and landscape against leaks with Flow-Sensing Technology that monitors irrigation, and instantly identifies when there is a leak or line break to prevent costly damage.

Models			
Product ID	Model Number	Description	Dimensions (Length x Width x Height)
A83926	FG100	FG100 1" Flow Sensor	9.25" x 3.31" x 2.56" (234.95mm x 84.07mm x 65.02mm)
A83927	FG100SS	FG100 1" Flow Sensor - Slip	9.25" x 3.31" x 2.56" (234.95mm x 84.07mm x 65.02mm)
A83928	FG100	FG100 1" Flow Sensor - BSP	9.25" x 3.31" x 2.56" (234.95mm x 84.07mm x 65.02mm)

RAIN BIRD FG100 FLOW SENSOR INSTALLATION NOTES:

The following tables contains detail on the Rain Bird FG100 Flow Sensor

K-Factor and Offset are key data points for programming controllers to properly convert pulse output from the FG100 Flow Sensor to a Gallon Per Minute reading. The FG100 Flow Sensor may operate above or below suggested ranges, but in all cases, it should be used within these ranges for performance as intended.

Flow Sensor Pipe Length Requirements		
Flow Sensor Size	Sensor and Coupling Lay Length	Required Pipe Length Removal*
1"	9-9/32"	7-3/6" (slip) 7-7/16" (NPT/BSP)

Programming K-Factor and Offset			
Flow Sensor Size	K-Factor	Offset	Pulse Output Rate
1"	2.822	0.1083	21 Pulses/gallon

*Length of pipe removal to accommodate Sensor, Couplings and PVC Fitting

Flow Sensor Pressure Loss				
Flow Sensor Size	3 GPM	8 GPM	15 GPM	20 GPM
1"	0.6 PSI	0.7 PSI	1.2 PSI	2.3 PSI

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