Hunter Product Written Specification Template (HC Flow)

**Part 1 – Introduction**

1.1The simple-to-install HC flow meter, now with additional range options to accommodate larger pipe

sizes, allows customers to better monitor flow rates in systems with Hydrawise™-enabled Wi-Fi

controllers. When connected to the Hydrawise platform, the HC flow meter provides a convenient

option to detect, monitor, and report critical flow zone data and total system flows.

By including an HC flow meter as part of a Hydrawise system installation, customers add an

additional layer of landscape protection. This ensures their investment is monitored, their plants are

healthy, and their outdoor living space remains in excellent condition. For contractors, a flow meter is

a great way to build their businesses through increased offerings and top-level customer service, as

problems can be addressed immediately before landscape degradation occurs. For landscape

designers, the HC flow meter adds an extra security that helps preserve their thoughtfully designed

landscapes.

The HC flow meter connects to Hydrawise-enabled controllers, allowing for:

- Flow monitoring

- Instant high- and low-flow alerts

- Leak detection

- Water outage during irrigation alerts

- Total water use reporting

- Zone water use reporting

**Part 2 – Parts and Materials**

2.1TheHC Flow Sensor is available in the following options: (list available models)

 A. The HC flow meter accommodates the following ranges. The flow meter designed for the U.S. has four options covering ¾", 1", 1½", and 2", all with NPT threads and an on-meter, dial-type gauge

that displays readings in U.S. gallons. The metric range now has four meters covering 20, 25, 40,

and 50 mm BSP threads and an on-meter, dial-type gauge that displays readings in meters.

* Connects to Hydrawise-ready controllers and Hydrawise software
* Shows total water use by zone
* Monitors the system to alert for high- and low-flow conditions
* Dial allows for manual recording at the meter in U.S. gallons or meters (model dependent)
* Meters are factory calibrated
* Two-wire, read-based pulse output
* Flow directional markings on body
* Temperature range (water): up to 100°F (37.8°C)
* Electrical connection: two wires
* Directional flow: yes
* Accuracy: 2% (+ or -) at recommended flow
* Material: brass body with PVC reading cap

B. (Fittings Description)

1. Brass threads with NPT or BSP threads

 C. (Flow Sensor - Pulse)

 1. Read-based pulse switch

 2. The unit shall provide a pulse output.

 3. The units shall be connected to the controller using two-wire, shielded cable

 D. (Manual Read Dial)

 1. The dial shall read in U.S. gallons (NPT model) or m3 (BSP model)

2.2. (HC Flow Sensor dimension description – all parts)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Part Number** | **Catalog Number** | **Description** | **Unit Carton Height (in)** | **Unit Carton Length (in)**  | **Unit Carton Width (in)** | **Unit Carton Weight (lbs)** |
| 596048 | HC-075-FLOW | Flow meter with ¾" NPT thread | 4 | 7.4 | 4 | 2.5 |
| 596082 | HC-100-FLOW  | Flow meter with 1" NPT thread | 4 | 7.4 | 4 | 3.2 |
| 596735 | HC-150-FLOW  | Flow meter with 1½" NPT thread | 4.9 | 12.2 | 7.1 | 12.5 |
| 596736 | HC-200-FLOW  | Flow meter with 2" NPT thread | 4.9 | 12.2 | 7.4 | 16.5 |
| **Part Number** | **Catalog Number** | **Description** | **Unit Carton Height (mm)** | **Unit Carton Length (mm)** | **Unit Carton Width (mm)** | **Unit Carton Weight (kg)** |
| 596047 | HC-075-FLOW-B | Flow meter with 20 mm BSP thread | 102 | 177.8 | 101.6 | 0.99792 |
| 596049 | HC-100-FLOW-B | Flow meter with 25 mm BSP thread | 102 | 177.8 | 101.6 | 1.20204 |
| 596737 | HC-150-FLOW-B | Flow meter with 40 mm BSP thread | 125 | 310 | 181 | 5.6699 |
| 596738 | HC-200-FLOW-B | Flow meter with 50 mm BSP thread | 125 | 310 | 181 | 7.48425 |

2.3 Warranty

 A. The Hunter 12-month warranty applies.

**Part 3 – Function and Operation**

3.1 The HC flow meter connects to Hydrawise-enabled controllers, allowing for:

- Flow monitoring

- Instant high- and low-flow alerts

- Leak detection

- Water outage during irrigation alerts

- Total water use reporting

- Zone water use reporting

 A. (operating/reading range per flow sensor size range)

|  |  |  |
| --- | --- | --- |
| **U.S. Gallons on the Dial Face** |   |   |
| **Catalog Number** | **Description** | **Sensor Setting** | **Pulse Rate** |
| HC-075-FLOW | Flow meter with ¾" NPT thread | 0.75" NPT Flow Meter | 0.1 U.S. gallon per pulse |
| HC-100-FLOW  | Flow meter with 1" NPT thread | 1", 1.5", or 2" NPT Flow Meter | 1.0 U.S. gallon per pulse |
| HC-150-FLOW  | Flow meter with 1½" NPT thread | 1", 1.5", or 2" NPT Flow Meter | 1.0 U.S. gallon per pulse |
| HC-200-FLOW | Flow meter with 2" NPT thread | 1", 1.5", or 2" NPT Flow Meter | 1.0 U.S. gallon per pulse |
|   |   |   |   |
| **m3 on the Dial Face, with NPT Threads** |   |   |
| **Catalog Number** | **Description** | **Sensor Setting** | **Pulse Rate** |
| HC-075-FLOW | Flow meter with ¾" NPT thread | Flow Meter with ¾" coupling | 0.1 litre per pulse |
| HC-100-FLOW  | Flow meter with 1" NPT thread | Flow Meter with 1" coupling | 1.0 litre per pulse |
|   |   |   |   |
| **m3 on the Dial Face, BSP Threads** |   |   |
| **Catalog Number** | **Description** | **Sensor Setting** | **Pulse Rate** |
| HC-075-FLOW-B | Flow meter with 20 mm BSP thread | 20 mm BSP Flow Meter | 1.0 litres per pulse |
| HC-100-FLOW-B | Flow meter with 25 mm BSP thread | 25 mm, 40 mm, or 50 mm BSP Flow Meter | 10 litres per pulse |
| HC-150-FLOW-B | Flow meter with 40 mm BSP thread | 25 mm, 40 mm, or 50 mm BSP Flow Meter | 10 litres per pulse |
| HC-200-FLOW-B | Flow meter with 50 mm BSP thread | 25 mm, 40 mm, or 50 mm BSP Flow Meter | 10 litres per pulse |

 B. (installation description)

The following instructions assume you have already installed your Hydrawise controller.

1. Flow meter body: The flow meter has a marking on the body indicating the direction of water flow. Installation of the flow meter must be in the correct orientation with water flowing in the direction of the arrow on the flow meter body. All HC flow meters must be installed horizontally with the dial facing upward.

2. Connect flow meter wire: Two-wire cable is required. The cable required to connect your flow meter must be dedicated to the flow meter and not shared with the common wire of the valves or other sensors. The cable gauge is determined by the total length of cable between the controller and the flow meter. The general rule is that 0.5 mm (20GA) wire is good for a run of up to 240 feet.

3. Connect the wires to your Hydrawise controller.

Wire Color Sensor Terminal Block

White Common

Blue SEN1 or SEN2

Red (not used): Wire should be capped with waterproof splice.

3.4 Serviceability description

Your HC Flow meter must be removed during the winterization process.