YF-S201C Hall Effect Flow Sensor Datasheet

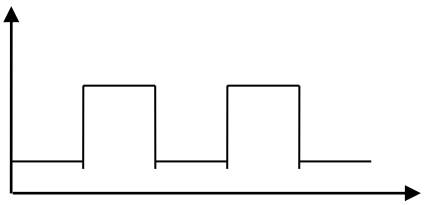
一、Product Introduction

The water flow sensor is primarily composed of a plastic valve body, a water flow rotor assembly, and a Hall effect sensor. It is installed at the water inlet of a water heater to detect the flow of incoming water. When water passes through the rotor assembly, the magnetic rotor spins at a speed that changes with the flow rate. The Hall effect sensor outputs a corresponding pulse signal, which is fed back to the controller. The controller then determines the water flow rate and adjusts accordingly.

二、 Usage Precautions

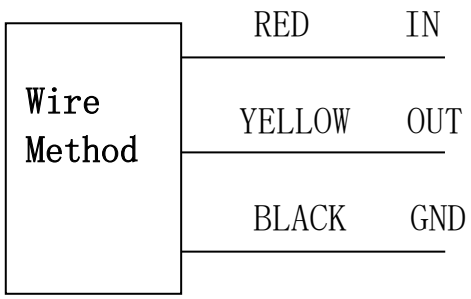
- ❖ Throwing or hitting the sensor is strictly prohibited.
- ❖ The sensor should be installed vertically, with an inclination of no more than 5 degrees.
- ❖ The temperature of the medium should not exceed 120^{0}C。

三、Output Waveform Diagram



Duty Cy=40%～60%

四、 Lead-out Wire Method



五、技术参数

	Operating Temperature Range	≤80℃
	Operating Humidity Range	35%～90%RH
	Allowable Pressure	Water pressure below 1.75 Mpa
	Storage Temperature	-25～+80℃
	Storage Humidity	25%～95%RH
	Accuracy	1～25L/min±3%
	Output Pulse Duty Cycle	50±10%
	Flow-Pulse Characteristic	Frequency (Hz) = 5.0 * Q (Q = Flow rate in L/min), ±3% (Horizontal Test)

六. Structural Dimensions (Unit: mm)