

# YF-G1 Flow sensor

## Product features:

1. Appearance of the product Lightweight flexible, Small volume, Convenient installation.
2. inside impellerset Stainless steel bead, forever wear-resisting.
3. Seal ring using Up and down Structure of force never leaking.
4. Hall element using German imports, and using The isolation design To prevent water, never aging.
5. All raw materials Comply with ROHS testing standard



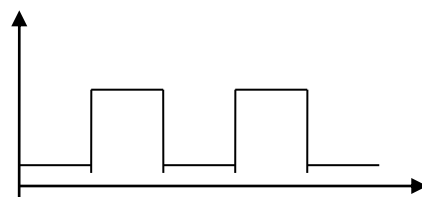
## 一、Product introduction:

The water flow sensor is mainly composed of plastic valve body, water flow rotor component and hall sensor. It is installed in the water heater inlet, used to detect water flow, when the water through flow rotor components, magnetic rotor rotation and speed changes with the flow, hall sensor output pulse signal, feedback to the controller, the controller to judge the size of the water flow, adjust and control.

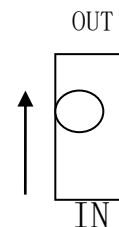
- ❖ Matters needing attention
- ❖ Severe shock and chemical erosion are strictly prohibited.
- ❖ It is strictly prohibited to throw or collide.
- ❖ Strictly follow the product to the water direction, connect the water pipe.
- ❖ Liquid temperature should not exceed 120 C.

Installation direction diagram

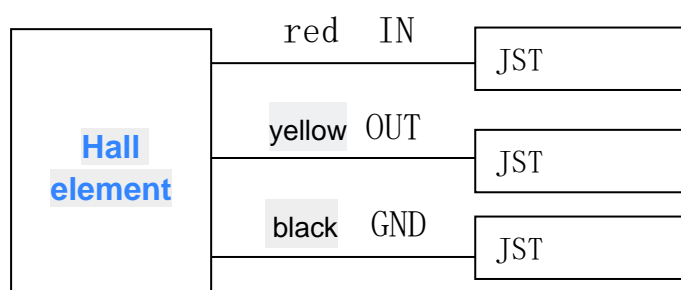
## 三 Output waveform diagram:



Duty Cy=40%~60%



## 四、Connection mode:



## 五、技术参数

Scope of application:		适用于全自动燃气热水器
The basic parameters	1、Minimum rated working voltage	DC 5V-24V
	2、Maximum working current	15 mA (DC 5V)
	3、Maximum working current	DC 5~18 V
	4、Load capacity	≤10 mA (DC 5V)
	5、Temperature range	≤80°C
	6、Temperature range	35%~90%RH (No Frosting state)
	7、Allow the pressure	hydraulic pressure 1.75Mpa below
	8、Keep the temperature	-25~+80°C
	9、Save the humidity	25%~95%RH
Technical requirements	1、The output pulse is high	>DC 4.5 V (Input voltage DC 5 V)
	2、The output pulse is low	<DC 0.5 V (Input voltage DC 5 V)
	3、accuracy (Flow rate--Pulse output)	1~100 L/min±5%
	4、The output pulse Duty ratio	50±10%
	5、output Rise time	0.04μS
	6、output Fall time	0.18μS
	7、Flow rate-Pulse characteristics	Horizontal test pulse frequency (Hz)= [1 * Q] + + / -3% (level test) (Q is flow L/min)
	8、Impact resistance	The product packaging is good, from 50cm height X, Y and Z free fall to the concrete surface without exception, Within 5% of accuracy change.
	9、Insulation resistance	Hall sensor and insulation resistance between copper body above 100 m Ω.(DC 500 v)
	10、Heat resistance	In the 80 + 3 °C environment for 48 h, return to room temperature for 1 to 2 h without exception, no crack, relaxation and parts, expansion and deformation phenomenon, change within 10% accuracy.

	11、Cold resistance	In the - 20 + / - 3 °C environment for 48 h, return to room temperature for 1 to 2 h without exception, no crack, relaxation and parts, expansion and deformation phenomenon, change within 10% accuracy.
	12 、 Humidity resistance	In 40 + 2 °C, relative humidity 90% ~ 95% RH environment put out 72 h after more than 1 m Ω insulation resistance.
	13、Tensile strength	The tension of 1 minute 10N is applied on the derivation line, no looseness and dissonation, and no change in performance.
	14、Durability	At normal temperature, the water pressure of 0.1MPa from the intake inlet is connected to the 1S, and the 0.5S is disconnected. The test was no abnormal for 300,000 times.