YF S402B Water Flow Sensor Instruction Manual

YF S402B Water Flow Sensor

Contents

WATER FLOW SENSOR

1. This product is light and convenient in appearance, small in volume and easy to install.
2. The impeller is encrusted with stainless steel beads and is always wear-resistant.
3. The sealing ring adopts upper and lower force structure never leak.
4. Hall element USES the German import and encapsulated with potting glue, prevent water, never aging.
5. All raw materials meet ROSH testing standards

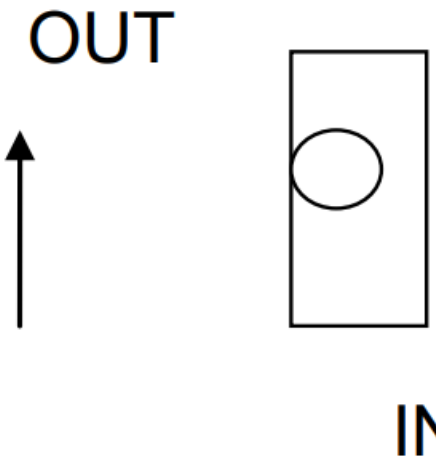
Product Brief Introduction

Water flow sensor is mainly composed of plastic body flow rotor components and hall sensor 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

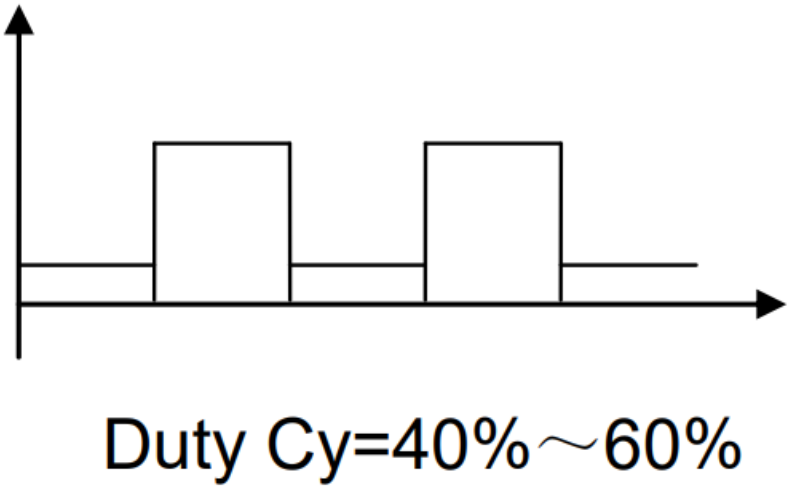
Caution

- Severe impact and chemical erosion are strictly prohibited.
- No throwing or collision is allowed.
- Horizontal or vertical installation is fine
- The temperature of the medium should not exceed 1200 C.

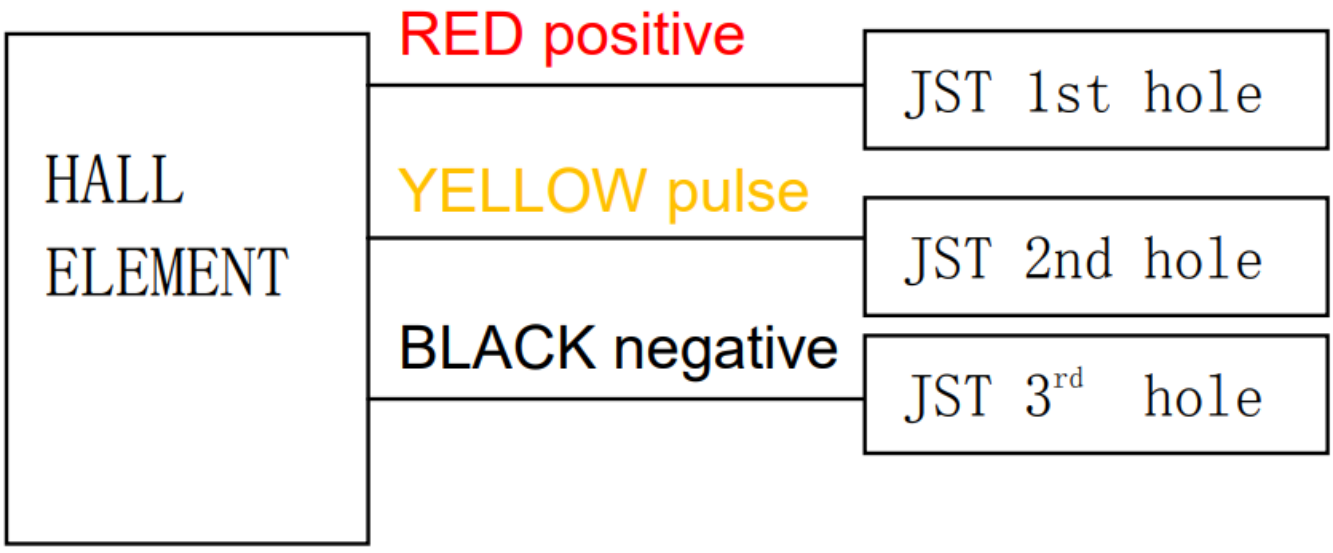
Installation direction diagram



Output Waveform Diagram



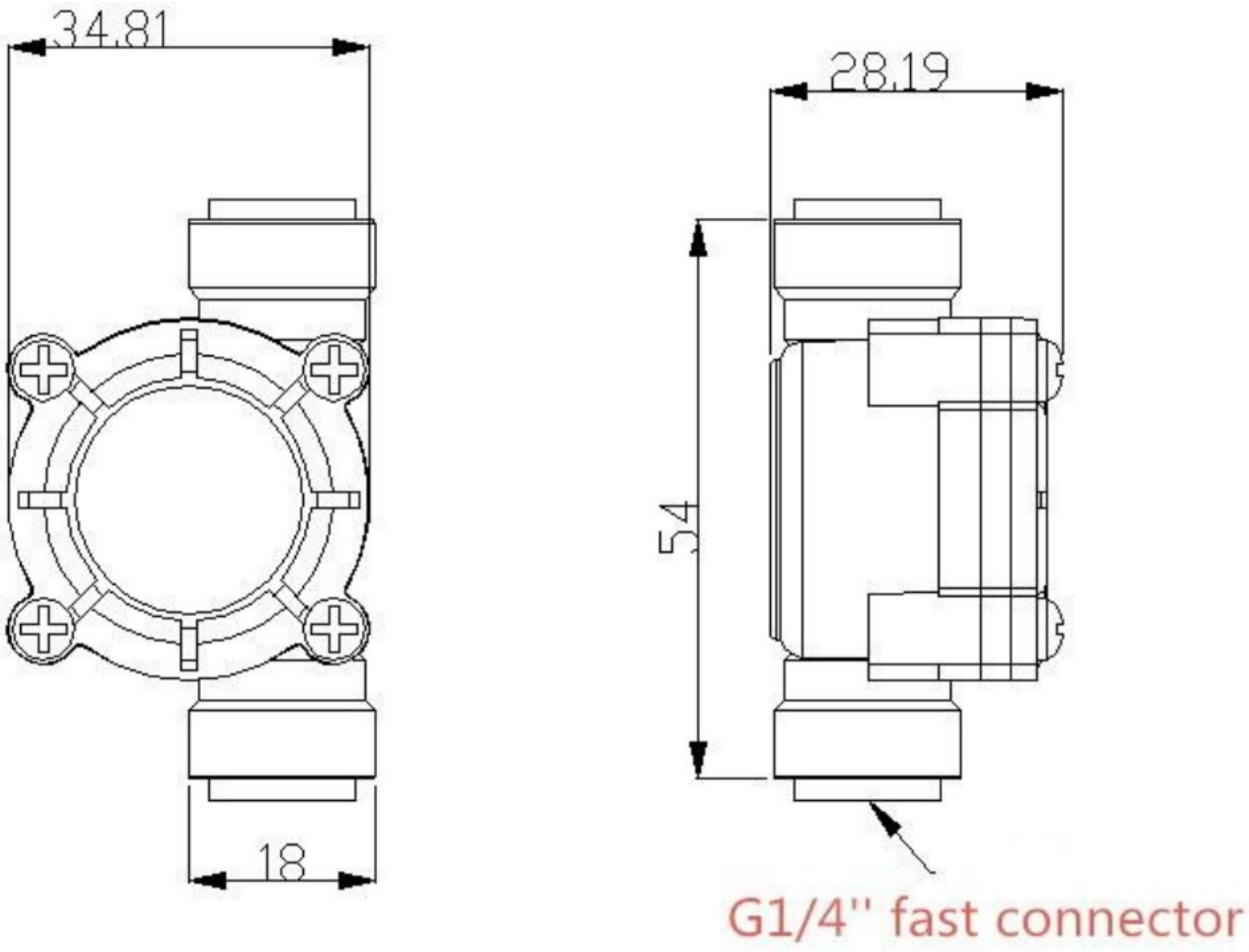
Lead Out Mode



Technical Parameters

Range of application		Apply to all automatic gas water heater
base	1 Custom Voltage	DC 3.5V-24V
	2 Maximum operating current	15 mA DC 5V
	3 Operating voltage range	DC 5 15 V
	4 Load capacity	≤10 mA DC 5V
	5 Using temperature range	≤80℃
	6 Use humidity scope	35% 90%RH Frost free condition
	7 Allow the pressure	< water pressure 1.75Mpa
	8 Storage temperature	-25 +80℃
	9 Storage Relative Humidity	25% 95%RH
Technical	1 Output pulse high level	>DC 4.5 V (input voltage DC 5 V)
	2 Output pulse low level	<DC 0.5 V (input voltage DC 5 V)
	3 Precise Flow rate – pulse output	0.3-6L/min
	4 Output pulse duty ratio	50±10%
	5 Output Rise Time	0.04μS
	6 Output Fall Time	0.18μS
	7 Flow-pulse characteristic	Horizontal test pulse frequency (Hz)=[32*Q] ±3%(horizontal test) (Q=L/min)
	8 Iimpact resistance	The product is well packed and falls freely from the X, Y and Z directions of 50cm height to the concrete surface without any abnormality. Accuracy changes by less than 3%.
	9 Insulation resistance	Insulation resistance between hall sensor and copper valve body 100MΩ (DC 500V)
	10 Heat resistance	In the 80 + 3 ℃ 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 Low temperature resistance	n the environment of -20 3 for 48h, no abnormality was found in the return temperature of 1-2h, and the parts were free from cracks, looseness and deformation, and the accuracy was within 10%
	12 Moisture-proof	In 40 + 2 ℃, relative humidity 90% ~ 95% RH environment put out 72 h after more than 1 m Ω insulation resistance.
	13 Pull strength	The pulling force of 10N is applied on the drawing line for 1 minute, no looseness, break and performance change.
	14 Drability	At room temperature, from the inlet to the 0.1 MPa water pressure, to get through 1 S, disconnect 0.5 S for a cycle, to test 300000 times without exception.

Product Drawing



YF-S402B

Documents / Resources

	YF S402B Water Flow Sensor [pdf] Instruction Manual S402B Water Flow Sensor, S402B, Water Flow Sensor, Flow Sensor, Sensor

References

- **User Manual**