

# Micro Water Flow Sensor

(AMWF-0420)



## FEATURES

- This sensor has excellent character in low pressure.
- The out pulse frequency has linear character in flux change.
- This sensor has a half-permanent life by high sensitivity semiconductor sensor.

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## APPLICATION

This sensor is used in water flow sensing.

This sensor has application to gas boiler and instantaneous warm-water appliance, and water filtering appliance.

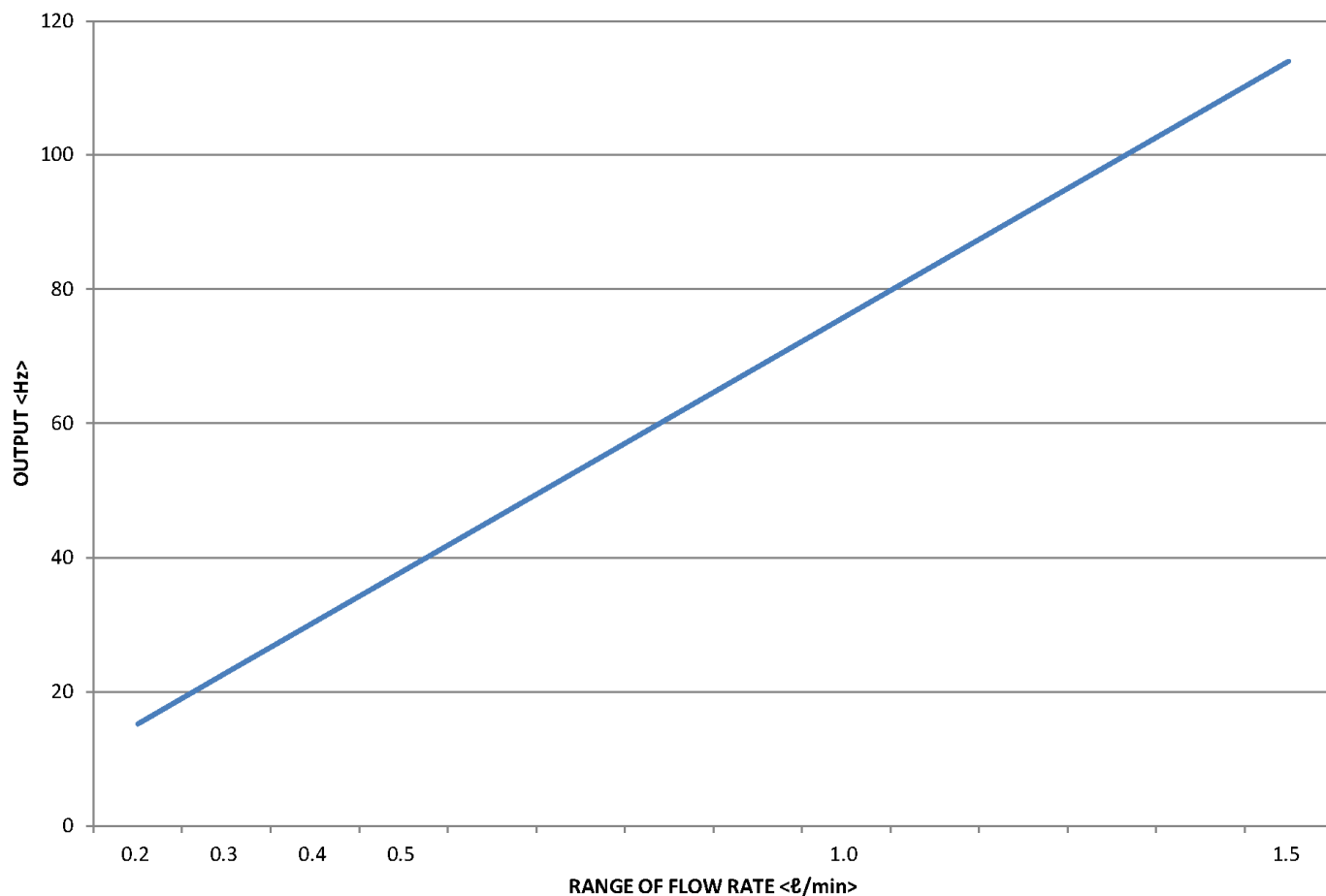
## SPECIFICATIONS

Type	: Magnet sensor	
Installation	: Vertical with upward flow ( In case of horizontal, has to consider air-bubble)	
Water flow direction	: Free ( ↔ )	
Ambient temperature	: 0 ~ 60℃ (Atmosphere shall not be condensed on the body)	
Ambient humidity	: Room humidity (40 ~ 60%)	
Permissible fluid temperature	: 0 ~ 60℃ (It shall not be frozen, and dew condensation)	
Material	: Body	POK
	: Rotor	POK
	: Magnet	Ba – Ferrite
	: Stop ring	SUS304

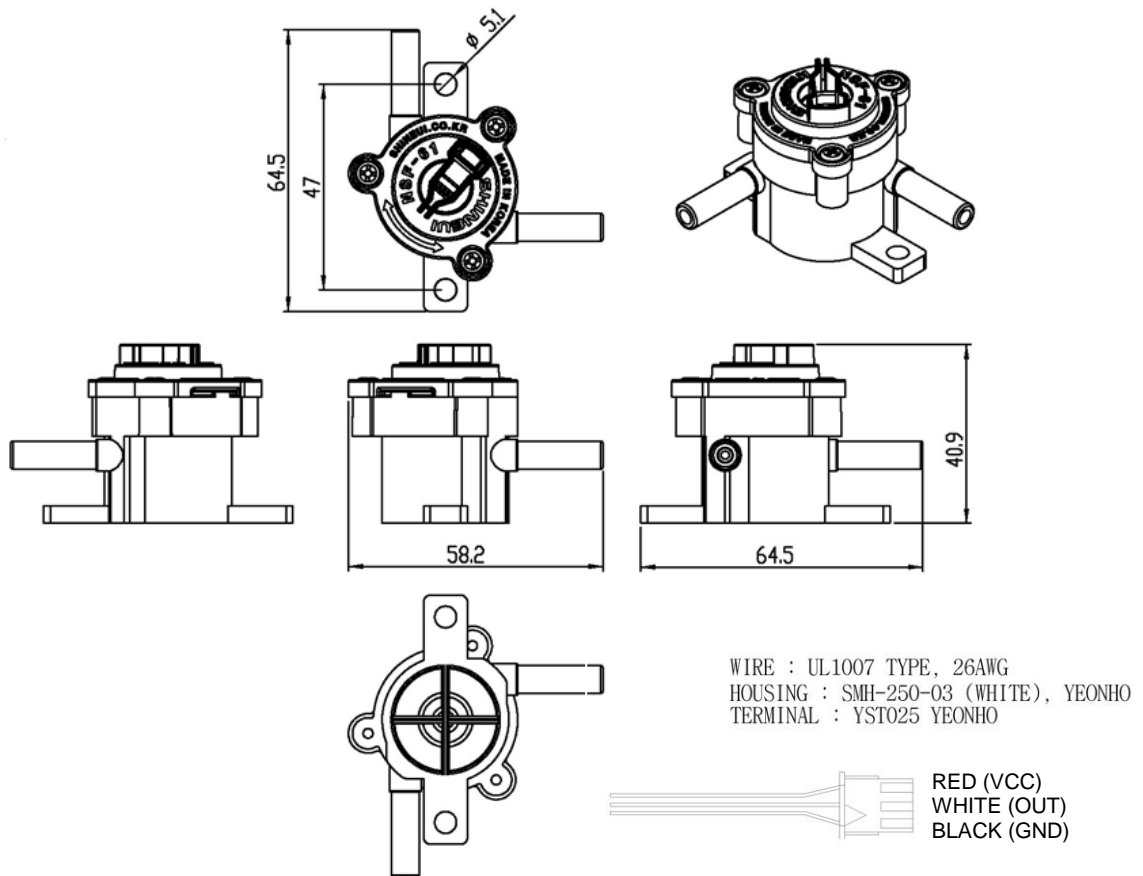
## SPECIFICATIONS

Efficiency	Fluid	: Water	
	Measuring range	: 0.2 ~1.5 ℓ / min	
Formula		: $F(\text{Hz})=76Q(\ell / \text{min})$	Accuracy F.S $\pm 10\%$
Working pressure		: 10 kg/cm <sup>2</sup> (Withstand pressure : 17.5kgf/cm <sup>2</sup> - 1min)	
Electrical rating		: DC 2.7V ~ 24V, 4.5mA	
Insulation resistance		: Not less than 100 MΩ (Between the connector and body)	
Dielectric strength		: When AC 600V(50/60 Hz) is added between the connector and body, detecting current is under 3 mA.	
Pipe Connection		: ONE TOUCH NIPPLE(6.5mm or 1/4 fast connector)	

## GRAPH



## DIMENSIONS



**The specifications and dimensions can be changed without warning**

- NOTE -

- Ensure there is no foreign substance.
- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)
- Avoid strong magnetic materials.
- Avoid operation by air-flow.
- Avoid using at the condition of circumstance occurring condensation.

## APPLICATION CIRCUIT

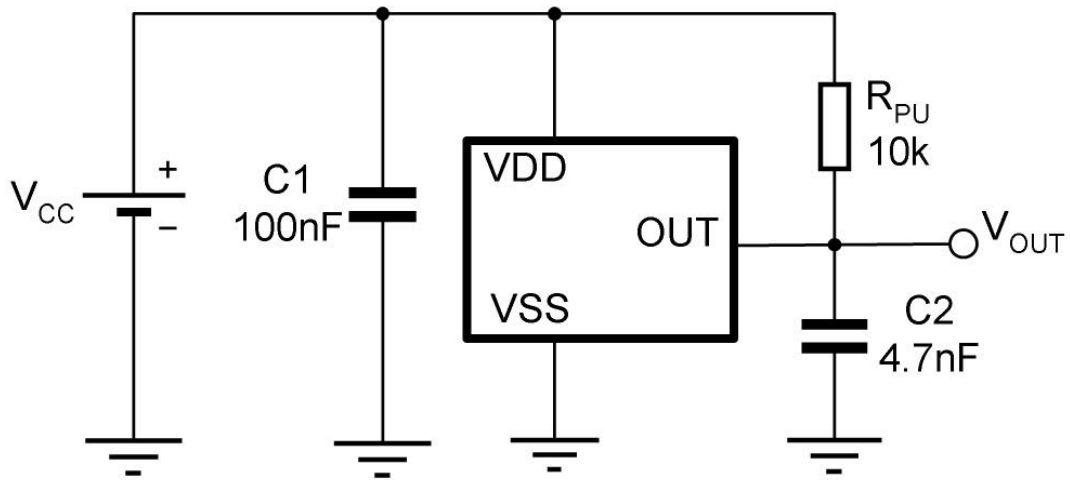
This product includes semiconductor IC.

So this have to be protected from noises of outside circuit.

Please refer to a circuit as below.

(This circuit for protecting from noise was supported by the supplier of semiconductor)

### *Typical Three-Wire Application Circuit*



### *Automotive and Harsh, Noisy Environments Three-Wire Circuit*

