

Micro Water Flow Sensor

(AMWF – 0.2)

PRODUCT SPECIFICATION SHEET

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.

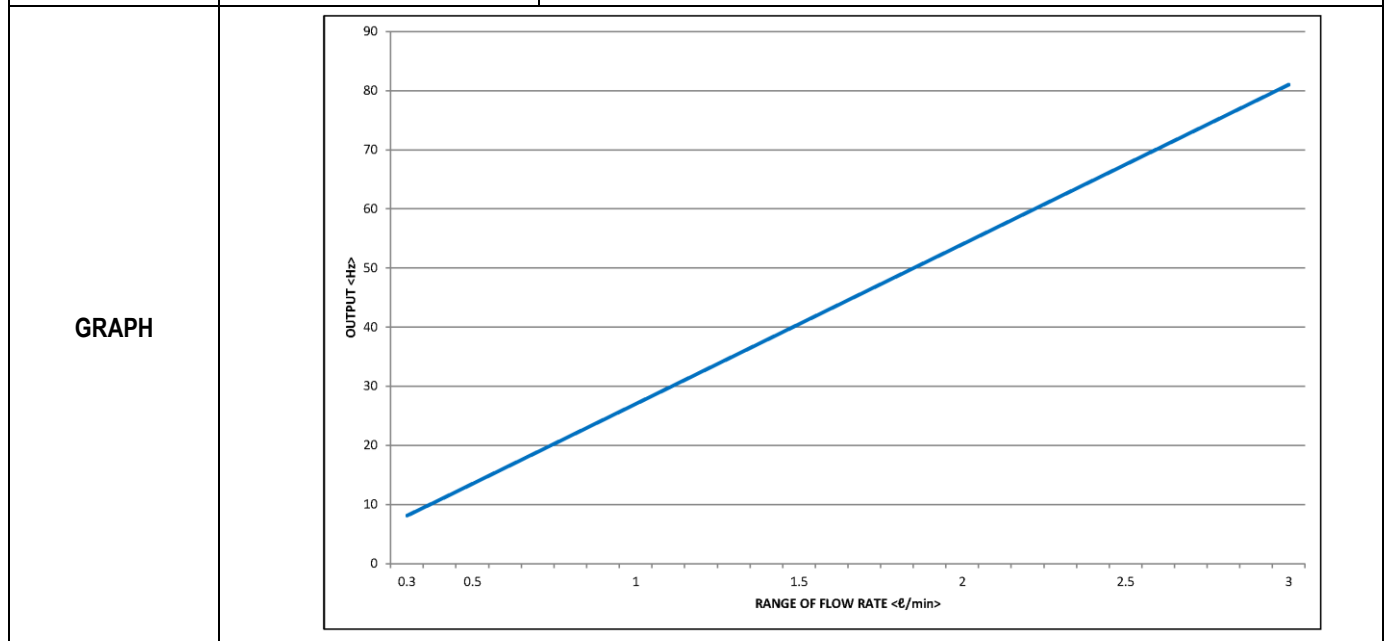
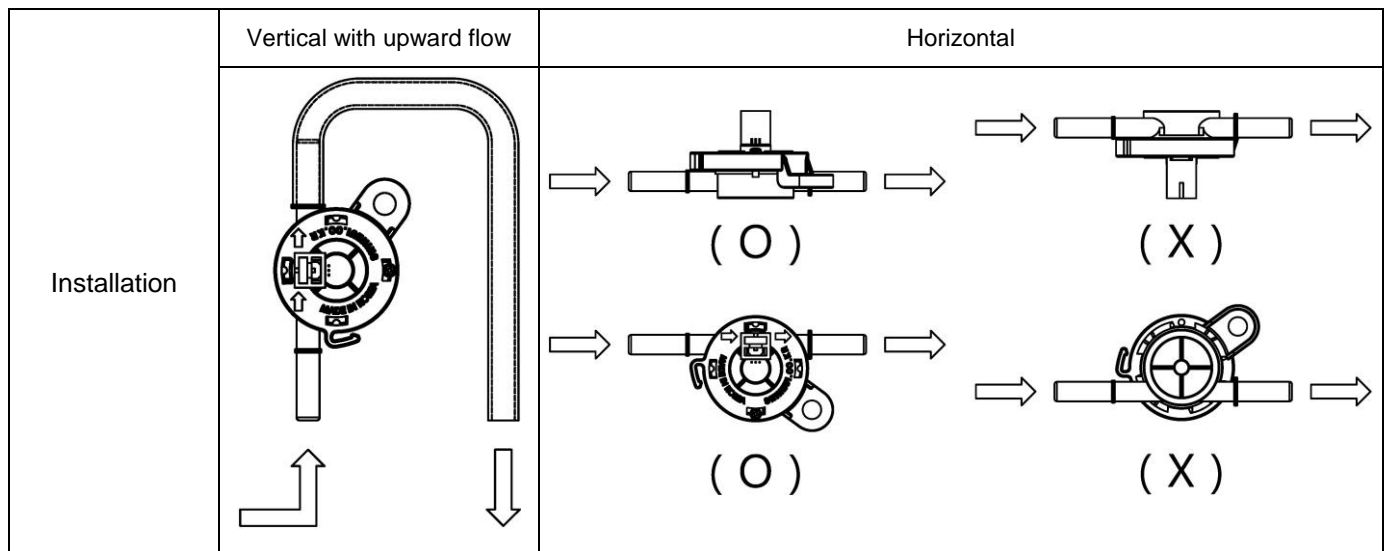
This sensor has application to water ionizer, water purifier, ice maker, coffee machine, and refrigerator appliance.

SPECIFICATIONS

Type	: Hall sensor	
Ambient temperature	: 0 ~ 60℃	
Ambient humidity	: Room humidity (40 ~ 60%)	
Permissible fluid temperature	: 0 ~ 60℃ (It shall not be frozen)	
Material	: Body	POM (※ Optional)
	: Rotor	POM (※ Optional)
	: Magnet	Sm-Co
	: Stop ring	SUS304
	※ Optional : FDA certified materials.	

SPECIFICATIONS

Efficiency	Fluid	: Water	
	Measuring range	: 0.2 ~ 3.2(ℓ / min)	
	Linearity range	: 0.3 ~ 3.0(ℓ / min)	
Formula at Linearity Range (0.3 ~ 3.0 (ℓ / min))		: $F(\text{Hz}) = 27Q(\ell / \text{min})$	Accuracy at Linearity range F.S ± 5%
Working pressure (Max)		: 5 kg/cm ²	
Electrical rating		: DC 2.7V ~ 24V, MAX 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		: Refer to DIMENSIONS	



DIMENSIONS

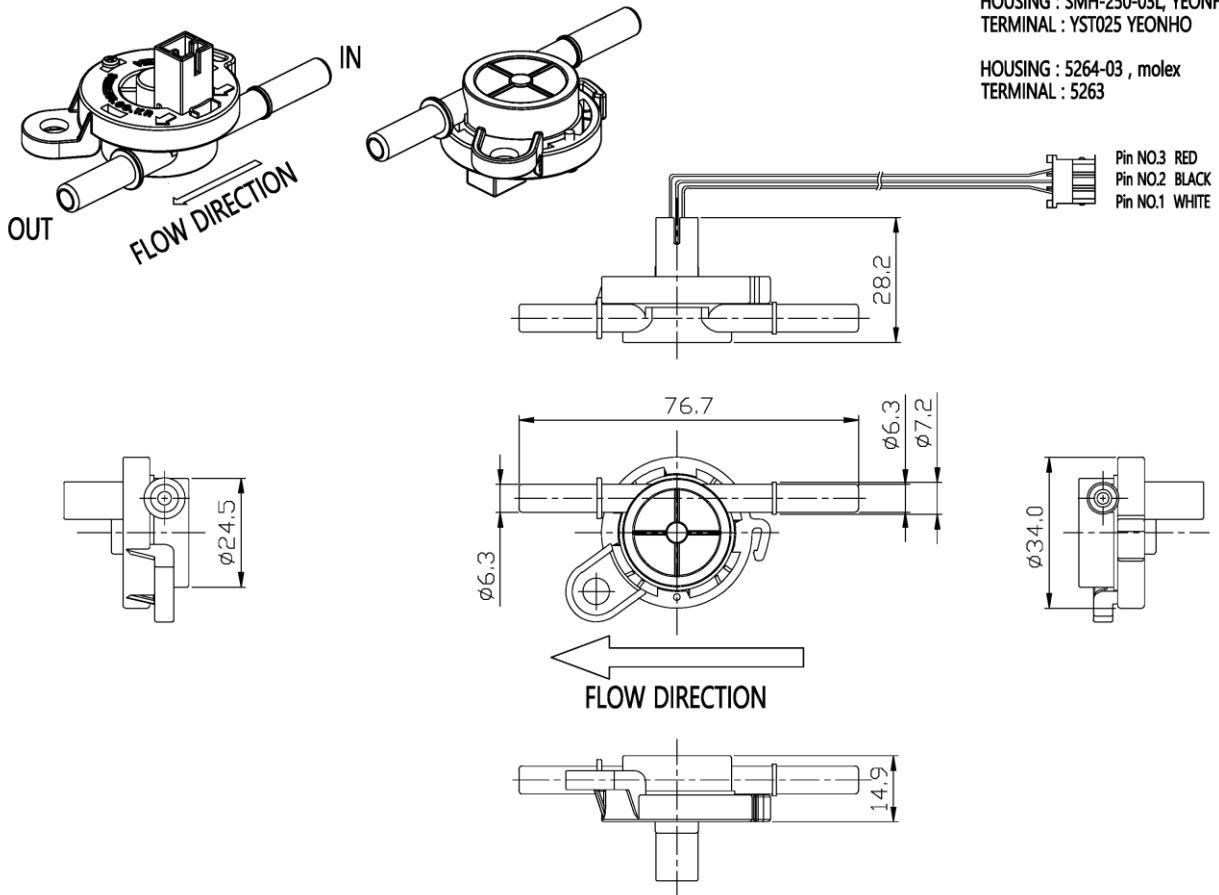


Fig 1. Micro water flow sensor

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

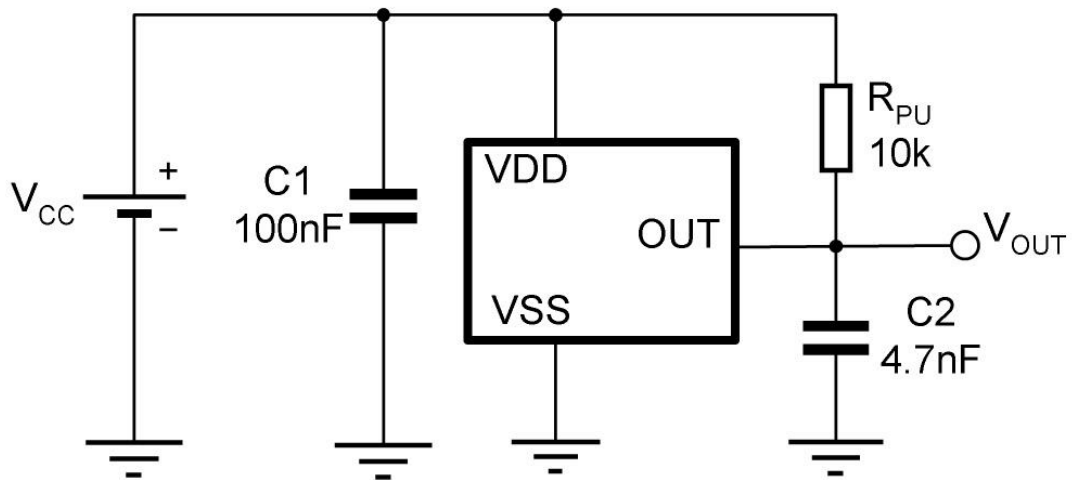
This product includes semiconductor IC.

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

