

# Micro Water Flow Sensor

(SMWF-0420 H19)

#### 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 gas boiler and instantaneous warm-water appliance, and water filtering appliance.

### SPECIFICATIONS

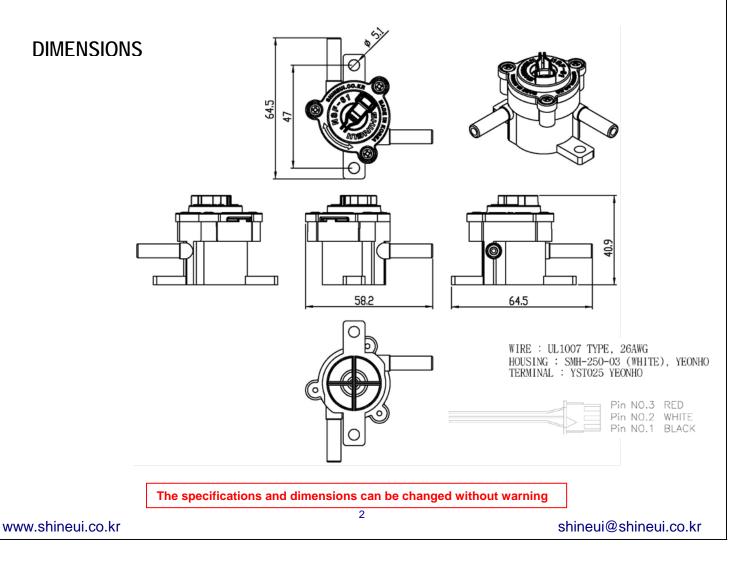
Туре	: Magnet sensor		
Installation	: Vertical with upward flow ( In case of horizontal, has to consider air-bubble)		
Water flow direction	: Free ( $\leftrightarrow$ )		
Ambient temperature	: 0 ~ 60 ℃		
Permissible fluid temperature	: $0 \sim 80^{\circ}$ (It shall not be frozen)		
Material	: Body	PC	
	Rotor	POM	
	Magnet	Ba – Ferrite	
	Stop ring	SUS304	

shineui@shineui.co.kr

#### MICRO WATER FLOW SENSOR

### **SPECIFICATIONS**

Efficiency	Fluid	: Water		
	Measuring range	: 0.2 ~1.6 ℓ / min		
Flow rate – pulse (Hz)		ℓ /min	Pulse signal (Hz)	
		0.2	15	
Red Black White White out ■ Over 4.7kΩ		0.3	22	
		0.4	30	Accuracy F.S ± 5%
		0.5	38	
		1	76	
		1.5	115	_
Working pressure		: 10 kg/cm <sup>2</sup> (Withstand pressure : 17.5kgf/cm <sup>2</sup> - 1min)		
Electrical rating		: DC 4.5V ~ 24V, 10 mA, Max.		
Insulation resistance		: Not less than 100 $\ensuremath{\mathbb{M}}\xspace$ (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 inch)		



### **APPLICATION CIRCUIT**

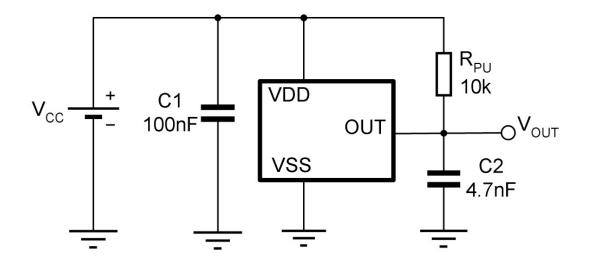
This product includes semiconductor IC.

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

