

Micro Water Flow Sensor

(SMWF-0420 H21 / H27 / H29)

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.

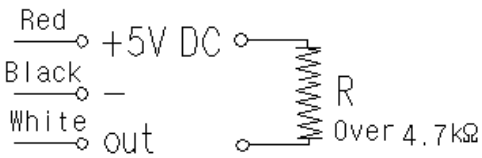
This sensor has application to gas boiler and instantaneous warm-water appliance, and water filtering appliance.

SPECIFICATIONS

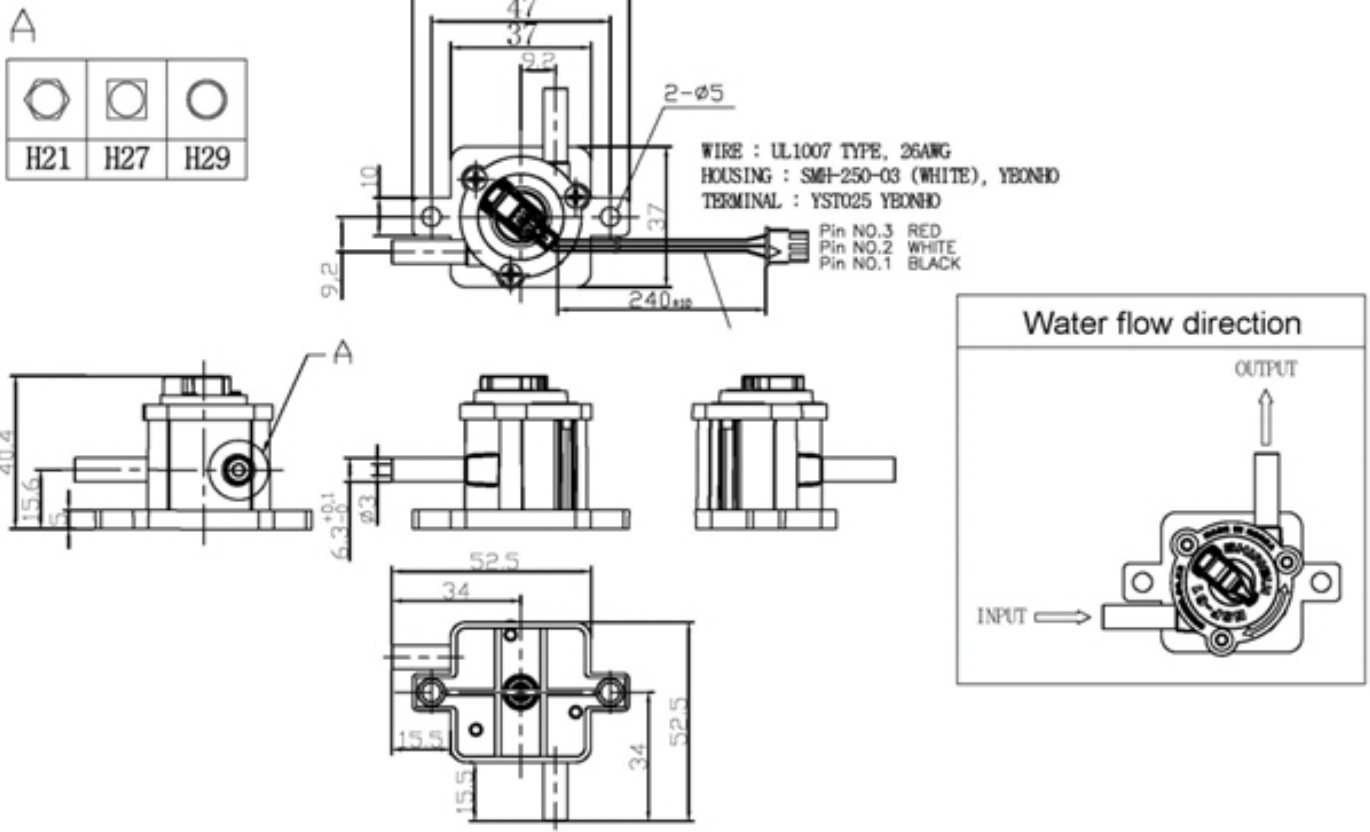
Type	: Magnet sensor	
Installation	: Vertical with upward flow (In case of horizontal, has to consider air-bubble)	
Water flow direction	: Free (↔)	
Ambient temperature	: 0 ~ 60℃	
Permissible fluid temperature	: 0 ~ 60℃ (It shall not be frozen)	
Material	: Body	PC
	: Rotor	POM
	: Magnet	Ba – Ferrite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

SPECIFICATIONS

Efficiency	Fluid	: Water		
	Measuring range	: 0.3 ~1.4 (ℓ / min) / 0.4 ~2.0 (ℓ / min) / 0.5 ~2.0 (ℓ / min)		
Flow rate – pulse (Hz) (Accuracy F.S)	Model	SMWF-0420 H21	SMWF-0420 H27	SMWF-0420 H29
	ℓ / min			
	0.3	23 ± 5%	-	-
	0.4	-	22 ± 5%	-
	0.5	40 ± 5%	28 ± 5%	22 ± 5%
	0.7	58 ± 5%	40 ± 5%	-
	1.0	84 ± 5%	58 ± 5%	47 ± 5%
	1.4	118 ± 5%	-	-
Working pressure	1.5	-	88 ± 5%	72 ± 5%
	2.0	-	118 ± 5%	97 ± 5%
Working pressure	: 10 kg/cm ² (Withstand pressure : 17.5kgf/cm ² - 1min)			
Electrical rating	: DC 4.5V ~ 24V, 10 mA, Max.			
Duty cycle	: 30 ~ 70%			
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 inch)			
Weight	: 31g			



DIMENSIONS



The specifications and dimensions can be changed without warning

APPLICATION CIRCUIT

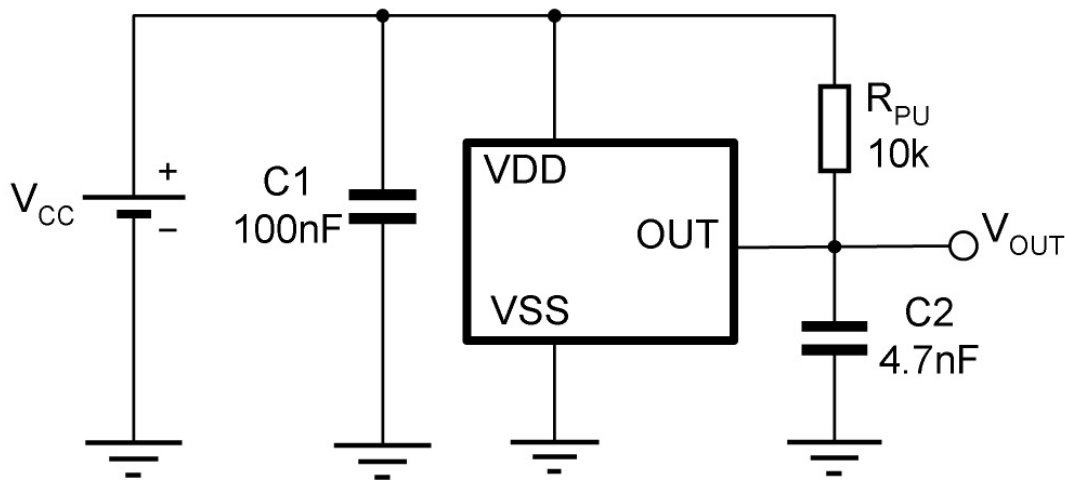
This product includes semiconductor IC.

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

