# Compact Flow Sensor (AMWF-015 H21)

#### PRODUCT SPECIFICATION SHEET

#### FEATURES

- It has very excellent characteristics in low flow rate.
- It has very high sensitivity in low flow rate and it is very stable in low range of water flow rate.
- The output has linear character in flux change.
- This sensor has a half-permanent life by high sensitivity semiconductor sensor.
- It is a compact size, so it is so convenient to use a small space.

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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.

Туре	: Hall sensor	
Installation	: vertical (standard)	
Ambient temperature	: 0~50°C	
Permissible fluid temperature	: 0~50°C(It shall not be frozen)	
Material	Plastic	POK (Optional : FDA approved)
	Stopper	POK or SUS304
	Magnet	Sr–Fe
	Molding	Epoxy (IP54)

### SPECIFICATIONS

Fluid	: Filtered Water	
Working Range	: 0.2 ~ 1.2 <i>l</i> / min	
Linear Range	: 0.3 ~ 1.0ℓ / min	
Accuracy in Linear	+/- 10% F.S	
Pulse per Liter	: 9,300	
Working pressure (Max)	: 10 bar	
Supply voltage	: DC 2.7V ~ 24V	
Electrical wire connection	: Red = VCC, Black = GND, Output Signal = White	
Electrical terminal pin connection	: Housing : SMH-25-03, Terminal : YST025 (YEONHO) ( Optional : Housing : 5264-03, Terminal : 5263 (Molex) )	
Life cycles	: 100,000cycles (working : 5sec, stop : 5sec)	
Pipe Connection (Fittings)	:Inlet:1/4", outlet:5/16"	

## **DIMENSIONS & Standard Installation**



#### 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



#### INSTALLATION DIRECTION



#### NOTE

#### - 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
- · Do not mechanically load electrical contacts
- · Avoid moisture on the electrical contacts
- · 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 contacting chemical materials directly or indirectly.
- Avoid operating for more than 10mins non-stop.
- · When using, use filtered water.