

## **Water Flow Sensor YF-S402**



This water flow sensor is basically a small turbine whose output signal is a series of digital pulses. The frequency of the pulses is proportional to the flow rate of the liquid passing through the sensor. That digital signal, whose frequency is in the range between 0Hz and 100Hz, can be read directly through one of the digital input/output pins of a microcontroller.

### **Features**

- Compact, Easy to Install
- High Sealing Performance
- High Quality Hall Effect Sensor
- RoHS Compliant

### **Specifications**

- Mini. Working Voltage: DC 4.5V
- Max. Working Current: 15mA (DC 5V)
- Working Voltage: DC 5V~24V
- Flow Rate Range: 1~ 5L/min
- Load Capacity:  $\leq 10\text{mA}$  (DC 5V)
- Operating Temperature:  $\leq 80^{\circ}\text{C}$
- Liquid Temperature:  $\leq 120^{\circ}\text{C}$
- Operating Humidity: 35% ~ 90% RH
- Water Pressure: 0.35 MPa
- Storage Temperature:  $-25 \sim +80^{\circ}\text{C}$
- Storage Humidity: 25% ~ 95% RH
- Insulation resistance  $> 100\text{M}\Omega$
- Pipe Gauge: 1/4 inch outer diameter
- Error:  $\pm 2\text{L/min}$ ;
- Flow pulse characteristic  $f = (73 * Q) \pm 2\%$   $Q = \text{L} / \text{MIN}$
- Output pulse duty cycle  $50\% \pm 10\%$

## Other Features

- Light weight, small, easy to install;
- With stainless steel axis in the wheel, abrasion resistant;
- Sealing ring would never leak water;
- All material meets RoHS standard

## Application

- Suitable for water heater, POS terminal, automatic water dispenser etc.

## Caution

- Non-violent shocks and chemical erosion.
- Non-throwing or collision.
- Install it in vertical, inclination should not beyond 5 degree;
- Medium temperature should not exceed 120°C.
- Current can not exceed 10mA,

## Connector Details

- Red : IN positive
- Yellow : OUT signal output
- Black : GND negative

## Dimensions / Weight

- Dimensions : 2.28 in x 1.38 in x 1.06 in (5.8 cm x 3.5 cm x 2.7 cm)
- Weight : 1.02 oz (29 g)
- Thread Size : G 1/4"