## Water Flow Sensor SEN-HZ21WI (Brass-1/2")



It can easily measure water (liquid) flow in your application using this 1/2" Brass water flow sensor. This is good quality flow sensor with brass body and can be used for industrial and commercial applications. This half inch water flow sensor is used extensively is various types of vending machines.

## **SPECIFICATIONS:**

- Model: SEN-HZ21WI
- Water quality requirement: Drinking water health standards,  $0 \sim 80$ °C
- Flow range:  $1 \sim 30$  Liter/min
- Withstand hydraulic pressure: ≤1.75 MPa
- Voltage/electric current: DC4.5~18V, ≤15mA
- Insulation resistance:  $>100M\Omega$
- Electrical strength: AC500V, 50HZ
- Output level: Rated voltage DC 5 Volt, high level  $\geq$ 4.5 Volt, low level  $\leq$  0.5 Volt
- Pulse duty cycle: 50%
- Flow characteristic: F=10 Q-4, F:HZ, Q:L/min, ±10%
- Cumulative flow conversion: 1 Liter water = 553 pulses, accuracy: 10%

RG Rajguru Electronics (I) Pvt. Ltd.

## WORKING PRINCIPLE:

Water flow sensor consists of a copper body, a water rotor, and a hall-effect sensor. When water flows through the rotor, rotor rolls, its speed changes with different rate of flow. And the hall-effect sensor outputs the corresponding pulse signal.

This water flow sensor is connected in line with the liquid whose flow rate has to be measured. There is a simple rotating wheel with a magnet and when the liquid flows the wheel is rotated and a hall effect sensor measures how many times he wheel is rotated and accordingly gives pulses. By counting the number of pulses you can easily calculate the flow rate as well as the amount of liquid dispensed.

The sensor comes with a 3 pin JST connector.

Red: Vcc 5 to 18 volts

Black: Ground

Yellow: Pulse Output signal

## **APPLICATIONS:**

Widely used in water industrial field, such as thermostatic water heater, water purifier, water dispenser, smart card equipment, coffee machine etc.