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# Gravity: Water Flow Sensor (1/2") For Arduino

SKU:SEN0217



## *INTRODUCTION*

The Gravity Water Flow sensor measures the rate of a liquid flowing through it.

The YF-S201 water flow sensor consists of a plastic valve body, flow rotor and hall effect sensor. It is usually used at the inlet end to detect the amount of flow.

When liquid flows through the sensor, a magnetic rotor will rotate and the rate of rotation will vary with the rate of flow. The hall effect sensor will then output a pulse width signal. Connect it to a microcontroller and you can monitor multiple devices such as your coffee maker, sprinkler or anything else, and control the water flow rate to suit your needs!

The [Gravity](#) interface make it be compatible with [Arduino IO Expansion Shield](#).

Note:

\*A 20 mm rifled pipe is recommended

\*Avoid unit contact with corrosive chemicals

\*The unit must be installed vertically, tilted no more than 5 degrees



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\*Liquid temperature should be less than 120 C to avoid damage to unit

## *SPECIFICATION*

- Inner Diameter: 11 mm
- Outside diameter: 20 mm
- Proof Water Pressure: <1.75 MPa
- Water Flow Range: 1-30 L/min
- Voltage Range: 3.5~12 V
- Operating Current: 15 mA (DC 5V)
- Insulation Resistance: >100 MΩ
- Accuracy: ±5% (2~30L/min)
- The Output Pulse High Level: >4.7 VDC (DC input voltage 5 V)
- The Output Pulse Low Level: <0.5 VDC (DC input voltage 5 V)
- Output Pulse Duty Ratio: 50% ± 10%
- Water-flow Formula: 1L = 450 square waves
- Working Humidity Range: 25% ~ 95% RH (no frost)
- Dimension: 62\*36\*35 mm/2.44\*1.37\*1.37 inches
- Weight: 52g