



# SEA YF-B1-S-SM G 1/2 Inch Flow Sensor



## Description:

The SEA YF-B1-S-SM Brass Water Flow Sensor is a high-quality flowmeter designed for precise measurement of liquid flow in automation, home appliances, and industrial control systems. Constructed with a durable brass body, this sensor is engineered to withstand high pressure, corrosion, and long-term operation in demanding environments. It features a G1/2 inch threaded interface, making it compatible with standard water pipe fittings.

Using an internal hall-effect sensor, it generates digital pulses relative to the rate of water flow, ensuring fast, stable, and accurate signal output. Operating over a wide voltage range of 3.5V to 24V, and supporting a flow rate of 1–25 liters per minute, this sensor is ideal for integration with Arduino, ESP32, Raspberry Pi, and other controller boards.

Whether used in water heaters, vending machines, smart irrigation systems, or liquid dispensing equipment, the SEA YF-B1-S-SM offers reliable performance and flexible integration for both DIY and professional automation needs.

## Features:

- Brass body construction for durability and pressure resistance
- Wide working voltage from DC 3.5V to 24V
- Flow rate measurement range: 1–25 L/min
- Accurate hall-effect pulse output signal
- G1/2 inch standard threaded interface
- Compatible with Arduino, ESP32, STM32, Raspberry Pi, and PLCs
- Operating pressure up to 1.75 MPa
- Temperature resistant up to 80°C
- Fast response and low power consumption
- Simple 3-wire signal connection for easy integration

## Specifications:

Parameter	Value
<b>Model Number</b>	YF-B1-S
<b>Output Signal</b>	NPN Pulse Output
<b>Material</b>	Stainless Steel
<b>Pipe Connection</b>	G1/2 inch DN15
<b>Operating Voltage</b>	DC 3 to 24V
<b>Max Current</b>	Less than 15 mA
<b>Working Temperature</b>	Minus 20 to 80 Celsius
<b>Pulse High Level</b>	Above DC 4.7V at 5V input
<b>Pulse Low Level</b>	Below DC 0.5V at 5V input
<b>Flow Range</b>	1 to 25 liters per minute
<b>K Factor Frequency</b>	18 times Q minus 3 Q in liters per minute

<b>Flow Pulse Ratio</b>	1 liter water equals 1077 pulses
<b>Pressure Resistance</b>	Up to 1.75 MPa
<b>Cable and Connector</b>	SM-3P 50 cm cable customizable
<b>Net Weight</b>	95 grams

### **Applications:**

- Water heaters
- Beverage vending machines
- Water purifiers and RO systems
- Smart faucets and dispensers
- Industrial automation systems