

Parameter:

Output signal: default output NPN pulse signal

Model: YF-B5

Interface size: 6 points (G3/4)

Working voltage range: DC 5~18V

Inner diameter/outer diameter: 17.9/25.8mm

Thread length: 11mm

Material: Zinc alloy shell\set of heat shrinkable tubing

Water pressure resistance: $\leq 1.75\text{MPa}$

Output pulse high level: $> \text{DC}4.7\text{V}$ (input voltage DC 5V)

Output pulse duty cycle: $50\% \pm 10\%$

Insulation resistance: $>100\text{M}\Omega$

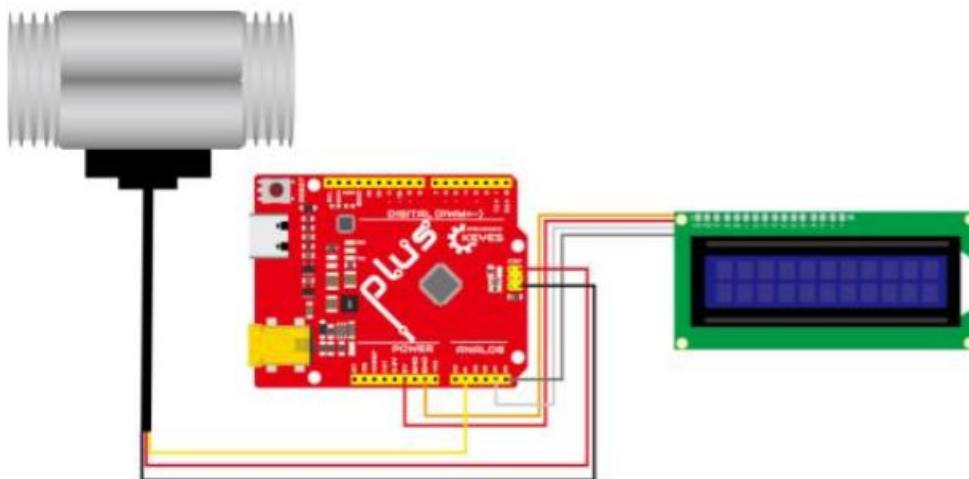
Flow range: [at 1~40L\MIN] $\pm 3\%$

Tightness: sealing each hole, adding 1.7MPa water pressure test for 1 minute without leakage and deformation

Flow pulse characteristics: $(6.6 * Q) Q = \text{Min} \pm 3\%$

Note: The direction of the water flow should be consistent with the arrow direction of the sensor when in use, otherwise it cannot be measured

Wiring



Test code (coding software version: arduino-1.8.12)

```
#include <Wire.h> //Call the I2C library that comes with arduino
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27,16,2);
int X;
int Y;
float TIME = 0;
```

```

float FREQUENCY = 0;
float WATER = 0;
float TOTAL = 0;
float LS = 0;
const int input = A1;
void setup()
{
  Serial.begin(9600);
  Wire.begin(); //initialization I2C
  lcd.init();
  lcd.backlight();
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("Water Flow Meter");
  lcd.setCursor(0,1);
  lcd.print("*****");
  delay(500);
  pinMode(input,INPUT);
}
void loop()
{
  X = pulseIn(input, HIGH);
  Y = pulseIn(input, LOW);
  TIME = X + Y;
  FREQUENCY = 1000000/TIME;
  WATER = FREQUENCY/7.5;
  LS = WATER/60;
  if(FREQUENCY >= 0)
  {
    if(!isnan(FREQUENCY))
    {
      lcd.clear();
      lcd.setCursor(0,0);
      lcd.print("VOL. :0.00");
      lcd.setCursor(0,1);
      lcd.print("TOTAL:");
      lcd.print( TOTAL);
      lcd.print(" L");
    }
  }
  else
  {
    TOTAL = TOTAL + LS;
    Serial.println(FREQUENCY);
    lcd.clear();
  }
}

```

```
lcd.setCursor(0,0);  
lcd.print("VOL.: ");  
lcd.print(WATER);  
lcd.print(" L/M");  
lcd.setCursor(0,1);  
lcd.print("TOTAL:");  
lcd.print( TOTAL);  
lcd.print(" L");  
}  
}  
delay(100);  
}
```

Test Results

Connect the wires according to the above figure, burn the code, connect the water flow, and after power on, we can display the water flow and flow rate in the display, as shown in the figure below.

