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Controller >

DFR0182 Wirless GamePad V2.0

DFR0100 DFRduino Beginner Kit For Arduino V3

DFR0267 Bluno

DFR0282 Beetle

DFR0283 Dreamer Maple V1.0

DFR0296 Bluno Nano

DFR0302 MiniQ 2WD Plus

DFR0304 BLE Wireless Gamepad V2

DFR0305 RoMeo BLE

DFR0351 Romeo BLE mini V2.0

DFR0306 Bluno Mega 1280

DFR0321 Wido-WIFI IoT Node

DFR0323 Bluno Mega 2560

DFR0329 Bluno M3

DFR0339 Bluno Beetle

DFR0343 UHex Low-power Controller

DFR0355 SIM808 with Leonardo mainboard

DFR0392 DFRduino M0 Mainboard Arduino Compatible

DFR0398 Romeo BLE Quad Robot Controller

DFR0416 Bluno M0 Mainboard

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SKU:SEN0551

[(Product Link)]

Introduction

This Gravity: liquid flow sensor is designed based on the electromagnetic principle. It adopts O-ring rubber seal and uses silicone sealant at the outlet end to strength water-resistance. With high anti-interference and anti-impact, the sensor offers reliable performance and long service life. Also, it is designed with G3/4 thread connectors for easy installation.

The sensor can be used with microcontrollers like Arduino UNO to measure the flow of liquids with high concentration and low viscosity like water, diesel, engine oil, milk, paint, detergent, honey, etc. (no impurity in liquid)



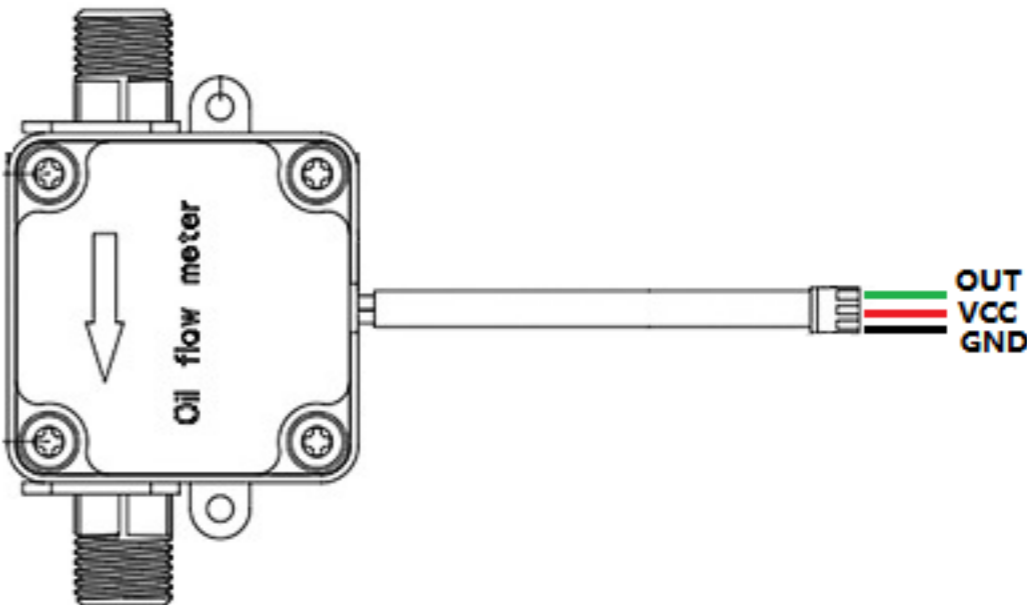
Features

- Gravity interface, easy to wire
- Wide voltage of 3.5~24V
- Measure the flow of the high-concentration but low-viscosity liquid
- RoHS compliant

Specification

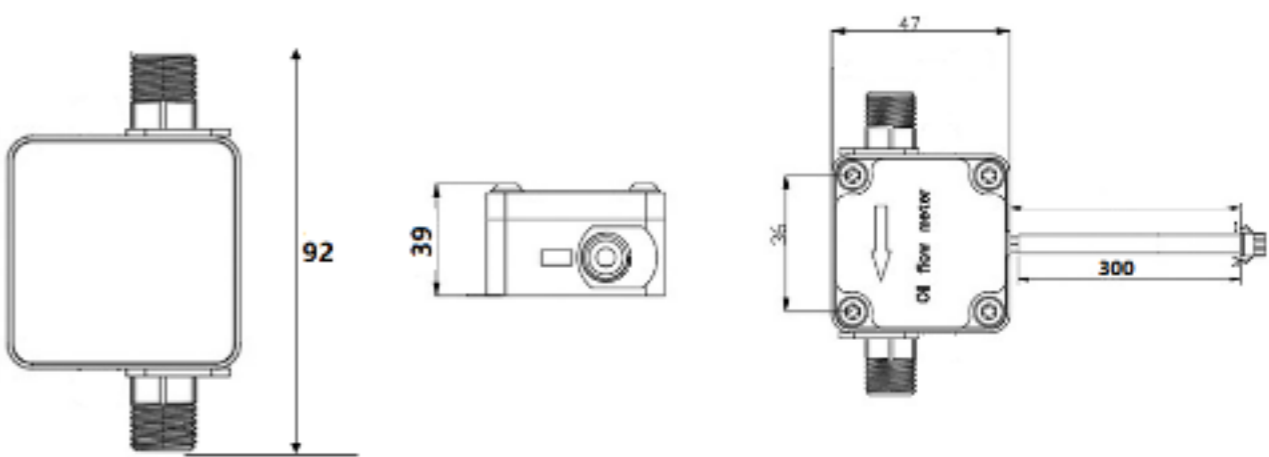
- Operating Voltage: DC3.5~24V
- Operating Current: ≤10mA (DC5V)
- Output Mode: NPN pulse signal
- Pipe Diameter: G3/4
- Thread I.D.: 16mm/0.63"
- Thread O.D.: 26mm/1.02"
- Thread Length: 18.7mm/0.74"
- Water Pressure Resistance: ≤1.2MPa
- Insulation Resistance: >100MΩ
- Flow Range: 30-3000L/H
- Error: ±1% (20-3000L/H)
- High Level of Output Pulse: >DC4.7V (input voltage DC5V)
- Low Level of Output Pulse: <DC0.5V (input voltage DC5V)
- Duty Cycle of Output Pulse: 50%±10%
- Flow & Pulse Correlation: 1L=75 pulses
- Operating Temperature: ≤80°C
- Operating Humidity: 35%~90%RH (no frosting)
- Storage Temperature: -25°~+80°C
- Storage Humidity: 25%~95%RH
- Dimensions: 92×47×39mm/3.62×1.85×1.54"

Pinout



| Num | Label | Description |
|------------|-------|--------------------------------|
| Green Wire | OUT | Signal Output |
| Red Wire | VCC | Positive Power Supply 3.5V-24V |
| Black Wire | GND | Negative Power Supply |

Dimensions

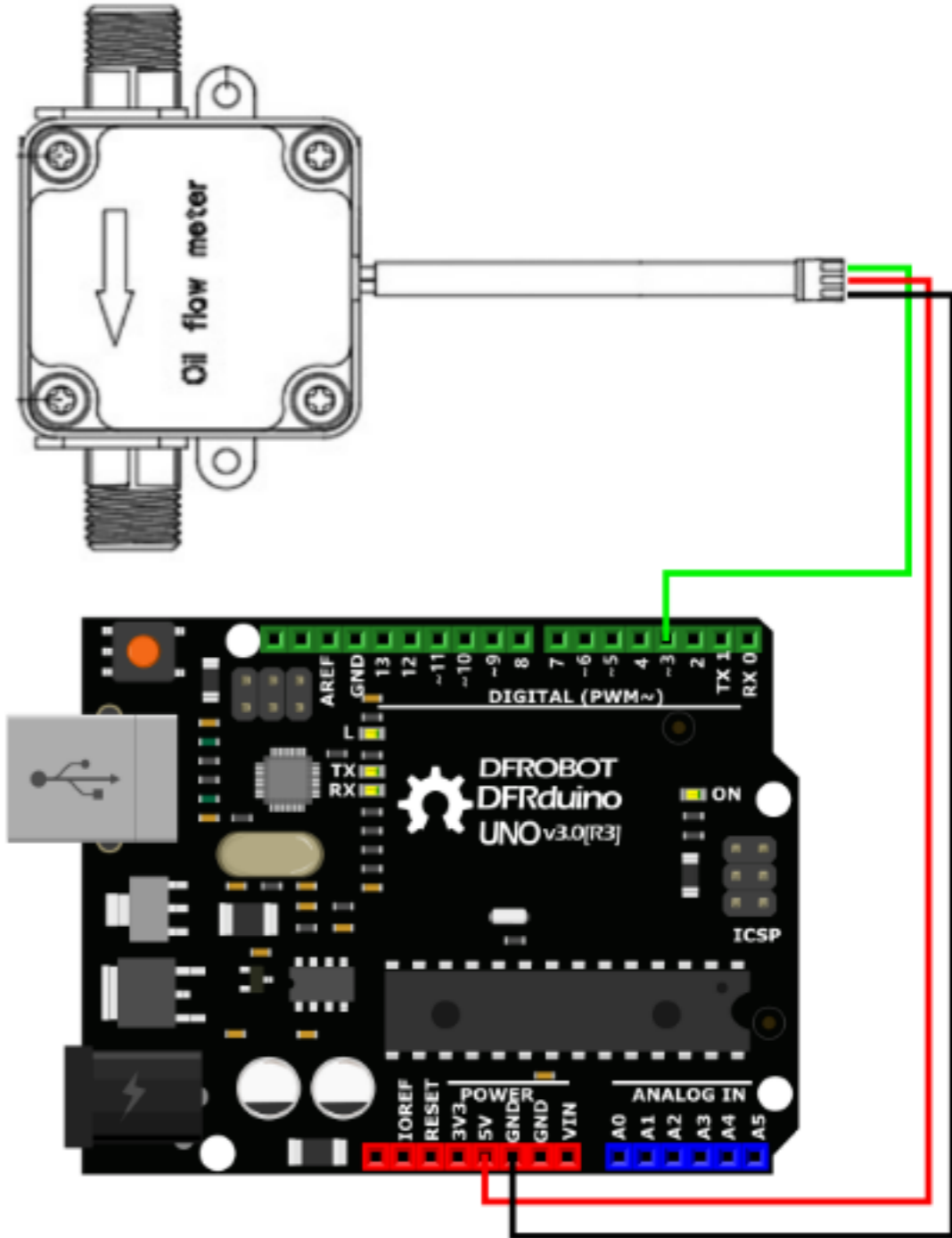


Tutorial

Requirements

- Hardware
 - [DFRduino UNO R3](#) (or similar) x 1
 - Water Flow Sensor x 1
- Software
 - [Arduino IDE](#)

Connection Diagram



Sample Code


```
volatile double waterFlow;
void setup() {
  Serial.begin(9600); //baudrate
  waterFlow = 0;
  attachInterrupt(1, pulse, RISING); //DIGITAL Pin 3: Interrupt
}
void loop() {
  Serial.print("waterFlow:");
  Serial.print(waterFlow);
  Serial.println("  L");
  delay(500);
}

void pulse() //measure the quantity of square wave
{
  waterFlow += 1.0 / 75.0; // 75 pulses=1L (refer to product s
}
```

FAQ

For any questions, advice or cool ideas to share, please visit the [DFRobot Forum](#).

More Documents

 Get [Gravity: Water Flow Sensor \(G3/4\)](#) from DFRobot Store or [DFRobot Distributor](#).

[Turn to the Top](#)