### **Eckstein**

# Keyestudio

#### **Keyestudio Thin-film Pressure Sensor**



### **Description:**

This sensor adopts the flexible nano pressure-sensitive material with an ultra-thin film pad. It has the functions of water-proof and pressure detection.

When the sensor detects the outside pressure, the resistance of sensor will make a change. So we can use the circuit to convert the pressure signal that senses pressure change into the corresponding electric signal output.

In this way, we can know the conditions of pressure changes by detecting the signal changes.

#### **Parameters**

1. Working Voltage: DC 3.3V—5V

2. Range: 0-0.5KG

3. Thickness: < 0.25mm

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4. Response Point: <20g

5. Repeatability:  $\leq \pm 5.8\%$  (50% load)

6. Accuracy: ±2.5% (85% range interval)

7. Durability: >100 thousand times

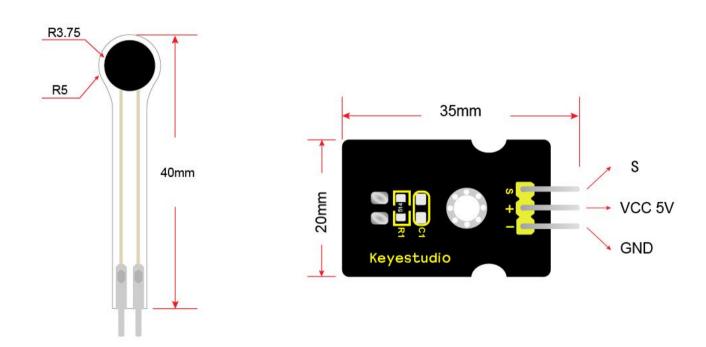
8. Initial Resistance:  $> 100 M\Omega$  (no load)

9. Response Time: <1ms

10. Recovery Time: <15ms

11. Working Temperature: - 20°C to 60°C

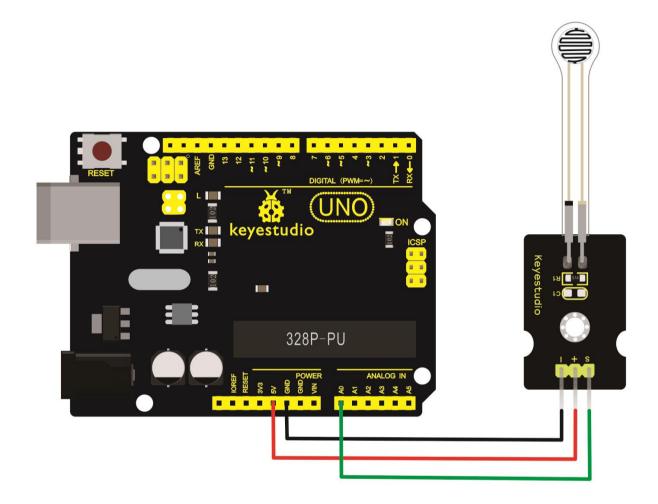
#### **Dimensions:**



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#### **Connection Diagram**

Connect the S pin to A0, negative pin to GND, positive pin to 5V.



### **Sample Code**

Wire it up well, upload the below code to Arduino IDE

```
int s_pin = A0;
void setup()
{
```

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```
Serial.begin(9600);
pinMode(s_pin,INPUT);

void loop()
{
    Serial.println(analogRead(s_pin));
    delay(500);
}
```

#### **Test Result**

Done uploading the above code, open the serial monitor. Then, press the sensor with your hand, the value shown on the monitor is increasing. So it works normally.

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