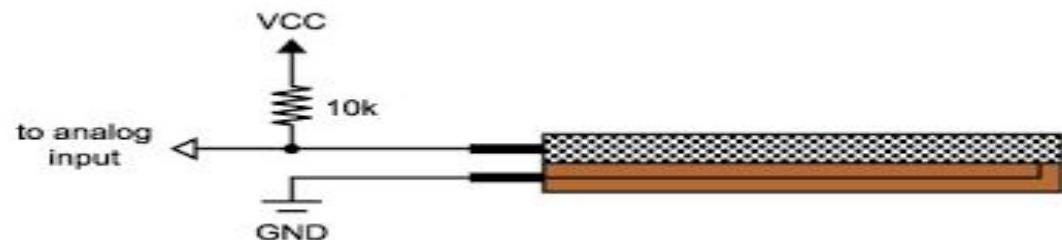


Interfacing of Flex sensor



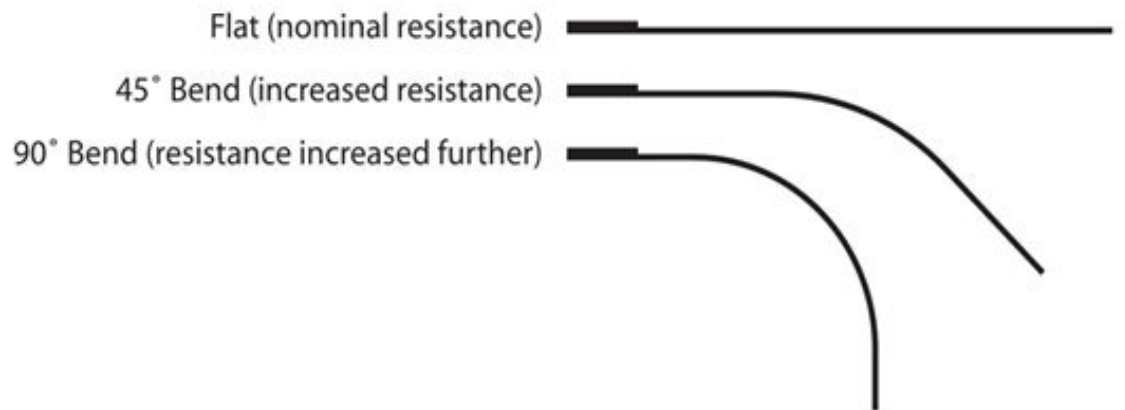
Flex sensor

A **Flex sensor** or **Bend sensor** is a sensor that measures the amount of deflection or bending . Usually, the sensor is stuck to the surface, and resistance of sensor element is varied by bending the surface. Since the resistance is directly proportional to the amount of bend it is used as goniometer, and often called flexible potentiometer.



Working of Flex sensor

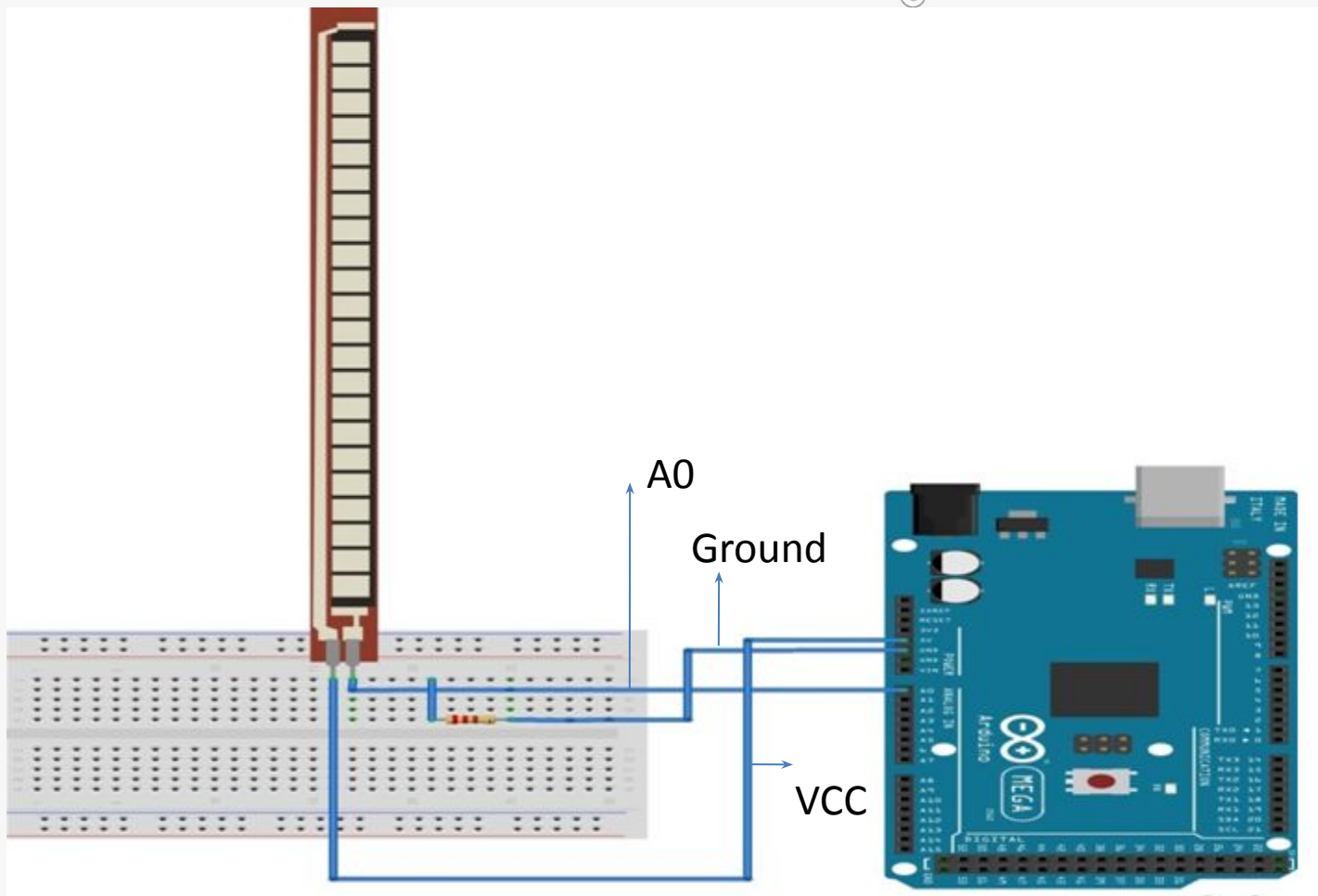
This **sensor works** on the bending strip principle which means whenever the strip is twisted then its resistance will be changed. This can be measured with the help of any controller. This **sensor works** similar to a variable resistance because when it twists then the resistance will be changed.



Components Required

- Arduino Mega
- Flex Sensor
- LED
- BreadBoard
- Resistor 10kohms
- Jumper wires

Connection Diagram



Connections

- Connect first pin of flex sensor with Ao of Arduino.
- Connect first pin again with resistor of 10k and then connect resistor with ground pin of Arduino.
- Connect another pin of flex sensor with Vcc (+5V) of Arduino.
- Now connect positive of LED with 22 pin of Arduino.
- Connect negative of LED with ground of Arduino.

Code

interfacing_of_flex_sensor | Arduino 1.8.19

File Edit Sketch Tools Help



interfacing_of_flex_sensor

```
const int flexPin = A0;
const int ledPin = 22;

void setup()
{
  Serial.begin(9600);
  pinMode(ledPin, OUTPUT);
}

void loop()
{
  int flexValue;
  flexValue = analogRead(flexPin);
  Serial.print("sensor: ");
  Serial.println(flexValue);

  if(flexValue<180)
    digitalWrite(ledPin, HIGH);
  else
    digitalWrite(ledPin, LOW);

  delay(20);
}
```

Arduino Uno on COM6

35°C
Hot weather

Search



ENG
IN 13:32
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Project link : <https://youtu.be/W9sVoowZa78>