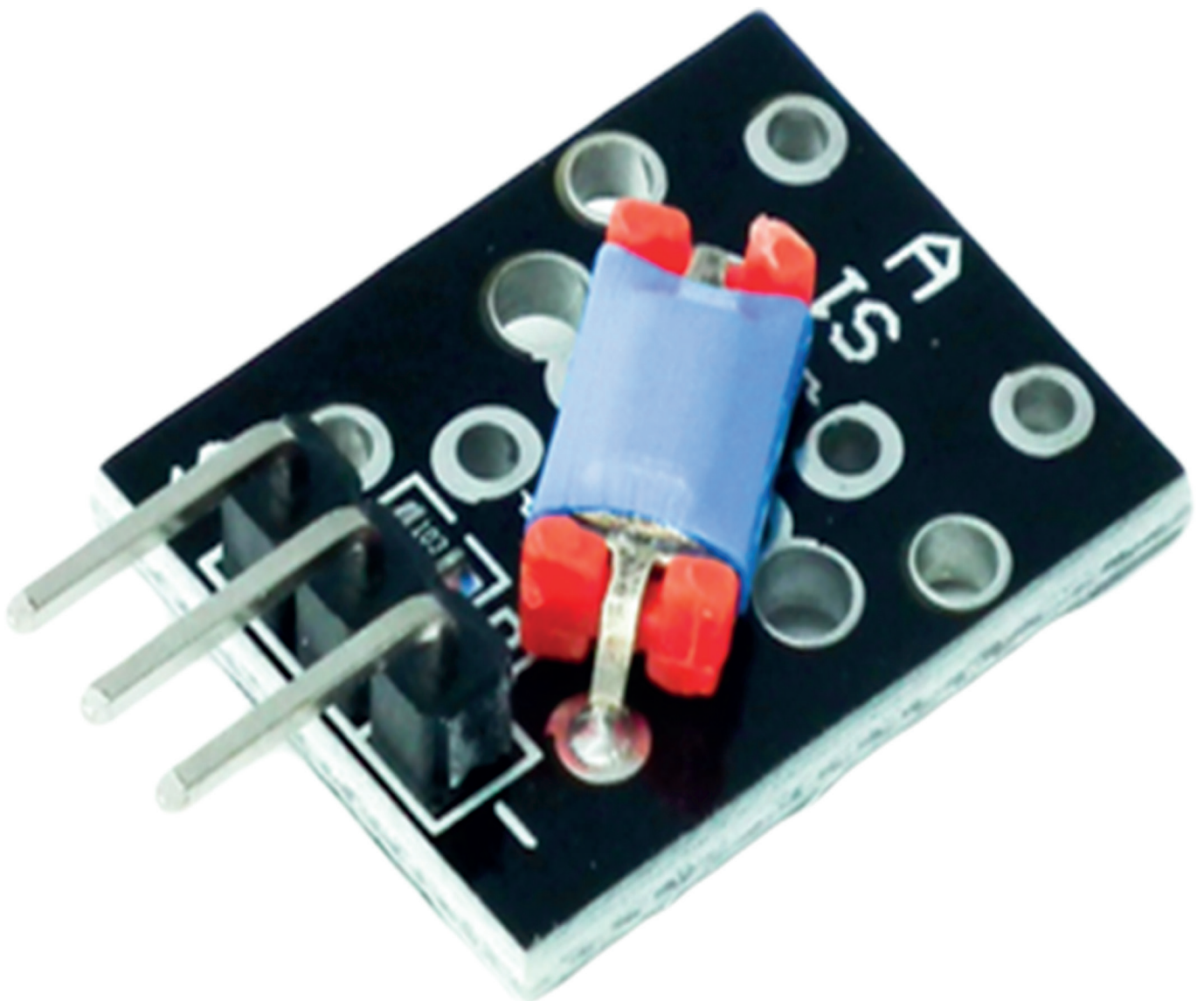


## Shake/Shock Sensor Modul Datenblatt



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## 1. Description

KY-020 Arduino tilt switch sensor module. Closes the circuit when it is tilted to the side as long as it is moved with enough force and degree of inclination to activate the ball switch inside.

## 2. Specifications

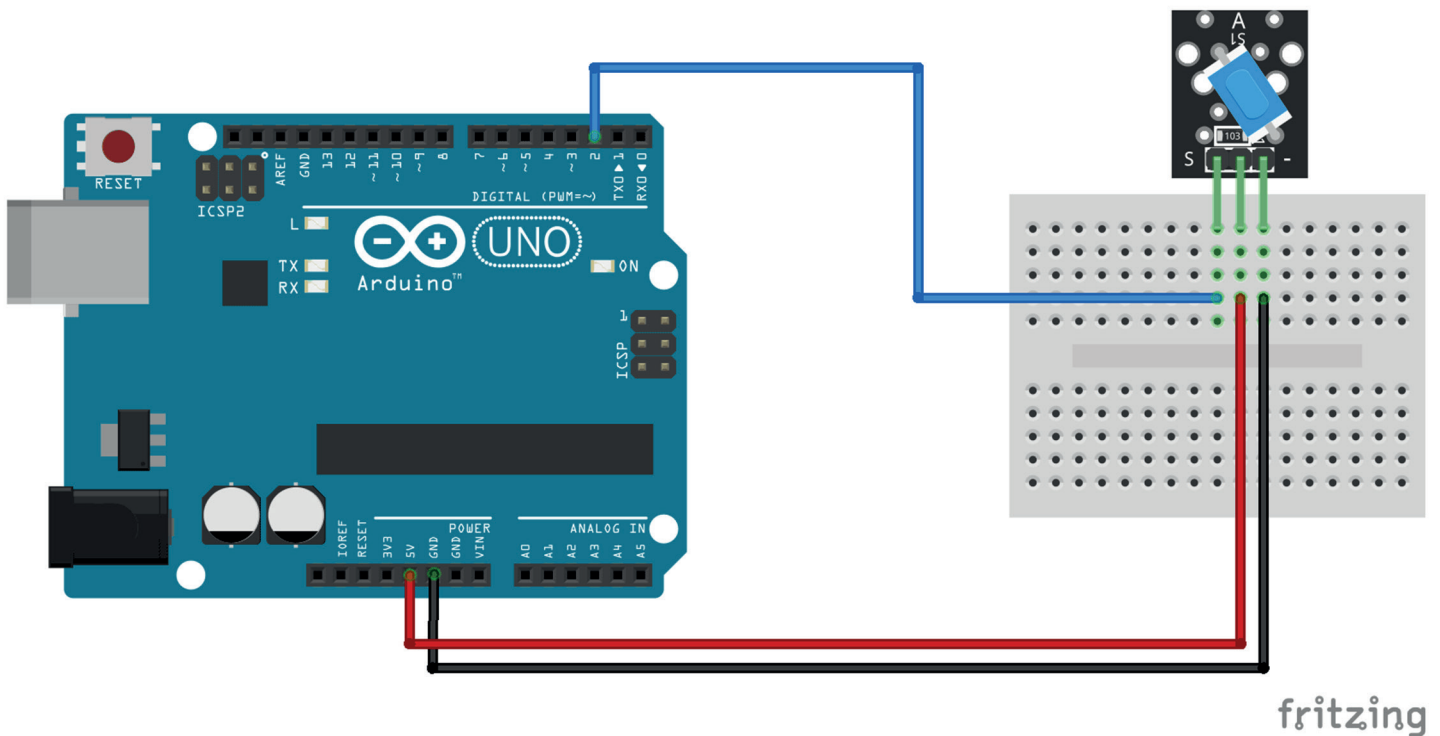
The KY-020 consists of a 10k $\Omega$  resistor and a metallic ball switch with bidirectional conduction that will open/close the circuit depending on its tilt degree. It does not measure tilt angle.

Operating Voltage	3.3V to 5v
Output Type	Digital

## 3. KY-020 Connection Diagram

Connect the module's Power line (middle) and ground (-) to +5 and GND respectively.  
Connect signal (S) to pin 2 on the Arduino.

KY-020	Arduino
S	2
middle	+5V
-	GND



### 4. KY-020 Arduino Example Code

The following sketch will turn on the LED on pin 13 of the Arduino when the module detects a change in inclination degree. Tilt the KY-020 to turn the LED on/off.

```

1  int tiltPin = 2;      // pin number for tilt switch signal
2  int ledPin = 13;     // pin number of LED
3  int tiltState = 0;   // variable for reading the tilt switch status
4
5  void setup() {
6    pinMode(ledPin, OUTPUT); // set the LED pin as output
7    pinMode(tiltPin, INPUT); // set the tilt switch pin as input
8  }
9
10 void loop(){
11   // get the tilt switch state
12   tiltState = digitalRead(tiltPin);
13
14   // check if tilt switch is tilted.
15   if (tiltState == HIGH) {
16     digitalWrite(ledPin, HIGH);
17   }
18   else {
19     digitalWrite(ledPin, LOW);
20   }
21 }

```