

# Thin Force Sensor



## **Product Description**

With its paper-thin construction, flexibility and force measurement ability, the Thin Force sensor can measure force between almost any two surfaces, up to 2 kg.

To ensure the most accuracy, a small disc (included) can be placed directly on the sensing pad before applying force to the disc. This will ensure that all the force is applied directly to the sensing pad and not to the surrounding surface.

Force Sensing Resistors (FSRs) are very thin, robust, polymer thick film (PTF) devices that decrease in resistance when increased pressure is applied to the surface of the sensor. FSRs are not a load cell or strain gauge devices though they have many similar properties.

They are more appropriate for qualitative rather than precision measurements.

## **Comes packaged with**

- [3002 – 60cm Phidget Cable](#)
- 2 Rubber discs (Diameter: 12.7mm; Height 2m)

## **Product Specifications**

## **Sensor Properties**

|                       |                          |
|-----------------------|--------------------------|
| Sensor Type           | Force Sensitive Resistor |
| Sensor Output Type    | Ratiometric              |
| Force Min             | 1 N                      |
| Force Max             | 100 N                    |
| Measurement Error Max | 10 %                     |

**Electrical Properties**

|                         |          |
|-------------------------|----------|
| Current Consumption Max | 1.5 mA   |
| Output Impedance        | 3.3 k?   |
| Input Voltage Min (DC)  | 4.5 V DC |
| Input Voltage Max (DC)  | 5.3 V DC |

**Physical Properties**

|                           |                       |
|---------------------------|-----------------------|
| Operating Temperature Min | -30 °C                |
| Operating Temperature Max | 70 °C                 |
| Lifespan                  | 10 million actuations |