

FlexiForce 0-1lb. Resistive Force Sensor



Product Description

The FlexiForce sensor is an ultra-thin and flexible printed circuit, which can be easily integrated into most applications. With its paper-thin construction, flexibility and force measurement ability, the FlexiForce force sensor can measure force between almost any two surfaces and is durable enough to stand up to most environments.

FlexiForce has better force sensing properties, linearity, hysteresis, drift, and temperature sensitivity than any other thin-film force sensors.

The “active sensing area” is a 0.375” diameter circle at the end of the sensor.

Connection

This FSR connects to an InterfaceKit or Hub through a flexiforce adapter. See the “Compatible Products” tab for details.

Product Specifications

Sensor Properties

| | |
|-------------|--------------------------|
| Sensor Type | Force Sensitive Resistor |
| Force Min | 0 N |

| | |
|-----------------------------|---------------|
| Force Max | 4.4 N |
| Non-Linearity Max | ± 3 % |
| Repeatability Error Max | ± 2.5 % |
| Hysteresis Max | 4.5 % |
| Long-Term Drift Max | 5 % |
| Response Time Max | 5 s |
| Temperature Sensitivity Max | 0.36 % per °C |

Physical Properties

| | |
|---------------------------|----------------------|
| Sensing Area | 71.3 mm ² |
| Lifespan | 1 million actuations |
| IP Rating | IP64 |
| Operating Temperature Min | -9 °C |
| Operating Temperature Max | 60 °C |