

## Features

- Linear and bidirectional response measures angular displacement with absolute accuracy of better than 1 degree
- Zero drift technology means high repeatability of better than 1 degree
- Made of highly flexible, soft, silicone elastomer for unrestricted bending
- Differential capacitance measurement has high CMRR to both electrical and mechanical noise
- Ultra low power consumption of less than 200uA at 1.3V and sample rates as high as 1kHz
- Convenient I<sup>2</sup>C and SPIE interface with onboard calibration and filtering functions
- Water/weather resistant and highly durable



## How It Works

The Nano Flex Sensor provides a differential capacitance measurement that is linearly proportional to the angular displacement of the sensor. Unlike traditional flex sensors, the Nano Flex Sensor produces repeatable and precise angular output regardless of path, bending radius, or strain. Although these sensors are stretchable, the differential measurement assures that common mode signals such as stretching are rejected and only flexion is measured.

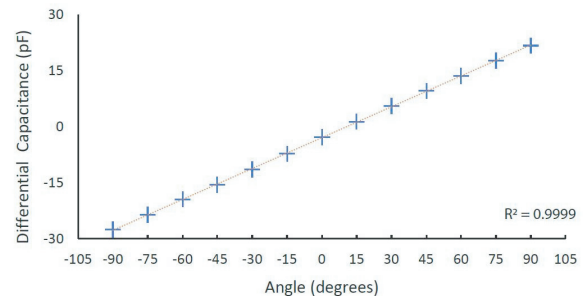
## Key Specifications

- Dimensions: 150mm x 14mm x 2mm  
(5.906in x 0.551in x 0.079in)
- Average Sensitivity: 0.274 pF/°
- Repeatability: <1°
- Life Cycle: >10M cycles
- Operating Temperature: 0°C - 60°C

## Graphs

*The Nano Flex Sensor provides angular displacement data in degrees via an I<sup>2</sup>C bus. Values reported on this sheet are indicative of this class of sensors.*

### Linearity



### Repeatability

