

Tekscan's potentiometers, FlexiPot Strip and Ring, are customizable membrane position sensors with a flexible, ultra-thin, lightweight profile. The low power requirements and linear output make FlexiPot the ideal position sensor for test and measurement or embedded applications. Both form factors can be used with our test & measurement, prototyping, and embedding electronics, including the FlexiForce Sensor Characterization Kit, FlexiForce Prototyping Kit, FlexiForce Quickstart Board, and the ELF™ System. You can also use your own electronics or multimeter.

## Physical Properties

### FlexiPot Strip

<b>Thickness</b>	0.203 mm (0.008 in.)
<b>Length of Rectangle Sensing Area</b>	63.5 mm (2.50 in.)
<b>Sensor Length</b>	91.2 mm (3.59 in.)**
<b>Width of Rectangle Sensing Area</b>	4.3 mm (0.17 in.)
<b>Sensor Width</b>	11.6 mm (0.46 in.)
<b>Connector</b>	3-pin Male Square Pin
<b>Substrate</b>	Polyester

### FlexiPot Ring

<b>Thickness</b>	0.203 mm (0.008 in.)
<b>Outer Sensing Area Diameter</b>	42.4 mm (1.67 in.)
<b>Sensor Length</b>	74.4 mm (2.93 in.)**
<b>Inner Sensing Area Diameter</b>	33.8 mm (1.33 in.)
<b>Total Outer Diameter</b>	49.0 mm (1.93 in.)
<b>Total Inner Diameter</b>	27.2 mm (1.07 in.)
<b>Connector</b>	3-pin Male Square Pin
<b>Substrate</b>	Polyester

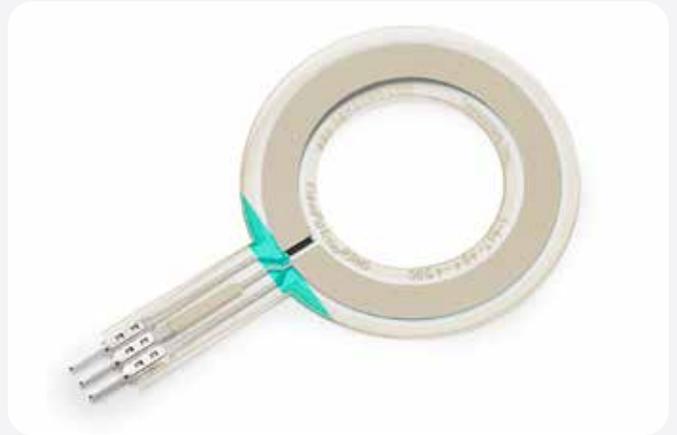
\* Custom dimensions are available for the strip and ring sensors

\*\* Length does not include pins, please add approximately 6mm (0.25 in.) for pin length

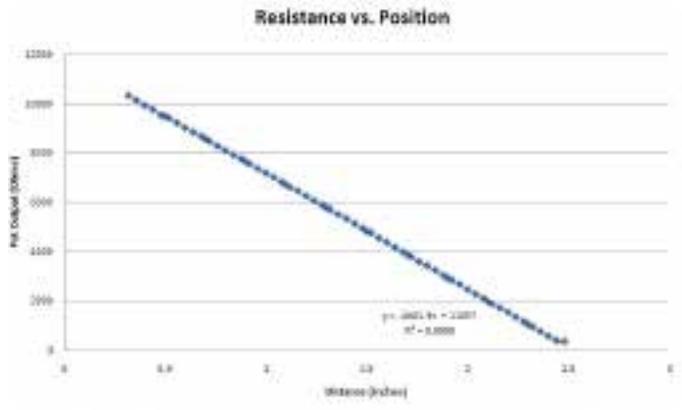
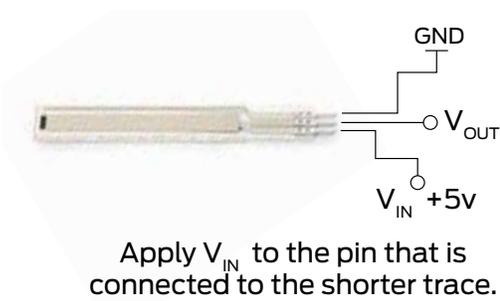
Example of FlexiPot Strip



Example of FlexiPot Ring



## Recommended Circuit



Typical Performance	
Linearity (Error)	< $\pm 2.0\%$ of full scale
Repeatability	< $\pm 1.0\%$ of full scale
Spatial Resolution	< 2% of full scale
Operating Temperature	-40°C - 60°C (-40°F - 140°F)

Force reading change per degree of temperature change = 0.36%/°C ( $\pm 0.2\%/^{\circ}\text{F}$ )