Half-bridge Aluminum Strain Gauge (Bag of 2)

A strain gauge is a small sensor whose resistance changes depending on the strain experienced by the structure it is attached to. They are similar to Load Cells, but are useful for applications where the structure has already been built. For example, you could use a strain gauge and a bridge interface to measure the strain on various segments of the chassis of a robot or vehicle.

For more information on the different types of strain gauges and how to properly install them, have a look at our Strain Gauge Primer.

This strain gauge is designed to be used with aluminum structures. It can be used with other materials, but using aluminum alloys will result in the lowest sensitivity to changes in temperature.

Connection

This is a half-bridge strain gauge. You can either use two to form a full-bridge circuit, or use resistors with a half-bridge. For more information on bridge circuits, see the Strain Gauge Primer. Strain gauges require power and produce a small voltage differential when under load. In order to read this small signal, you'll need an amplifier or a board with a high-precision analog-to-digital converter. See the "Compatible Products" tab for a list of Phidgets that will connect to this strain gauge.

Comes Packaged with:

- Strip of six solder pads

Product Specifications

Sensor Properties	
Controlled By	Bridge Input
Sensor Type	Half-bridge Strain Gauge
Strain Gauge Mount Type	Aluminum
Electrical Properties	
Resistance Value	(per quarter-bridge) 1 k?©
Physical Properties	
Backing Material	Phenolic Resin
Active Area Length	3 mm