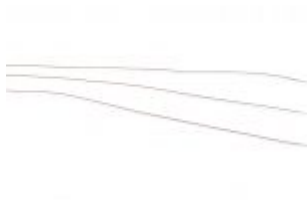


# Half-bridge Steel Torque Strain Gauge (Bag of 2)



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 steel structures. It can be used with other materials, but using steel will result in the lowest sensitivity to changes in temperature. The double shear pattern makes it easy to mount for torsional strain measurement.

## **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                      Torque Half-bridge Strain Gauge  
Strain Gauge Mount Type Steel

**Electrical Properties**

Resistance Value                      (per quarter-bridge) 1 k $\Omega$

**Physical Properties**

Backing Material                      Phenolic Resin  
Active Area Length                      3 mm