

Strain Gauge Load Cell - 4 Wires - 20Kg

Product ID: 4543

20Kg - 75mm long

Description

A strain gauge is a type of electronic sensor used to measure force or strain (big surprise there).

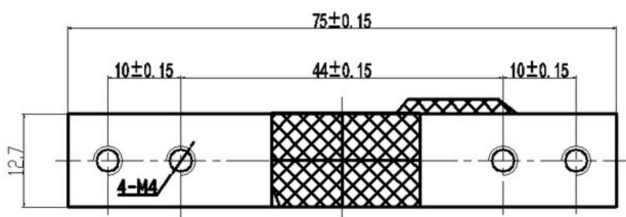
They are made of an insulating flexible backing with a metallic foil pattern. The resistance of a strain gauge changes when force is applied and the object is deformed along with the foil and this change will give a different electrical output. However, these thin foils are very delicate and are easy to over-bend.

In this product, the gauge is attached with epoxy to a chunk of strong aluminum. The metal keeps the strain gauge from being damaged, and constrains the amount of movement. Attach one side to a fixed enclosure or ground, using the mounting holes, to keep them from moving. Then apply weight to the other side in the direction indicated on the side, either by gravity (so arrow pointing down) or by pulling (arrow facing up). The output resistance will change with the amount of deflection and is measured with a precision ADC or Wheatstone bridge.

Strain gauges are useful for projects when you need to measure pressure, force, weight, and tension. Note that this is just the load cell, no ADC or converter is included! Also, like all load cells, the sensor must be calibrated with known weights once installed!

This is a 20 Kg Strain Gauge. We also carry it in 1 Kg, 5 Kg, and 10 Kg. Pick the one that has at least 2x the max force/weight you intend to apply so you get the most precision with the right range.

Technical Details



Product Dimensions: 75.0mm x 12.7mm x 12.7mm / 3.0" x 0.5" x 0.5"