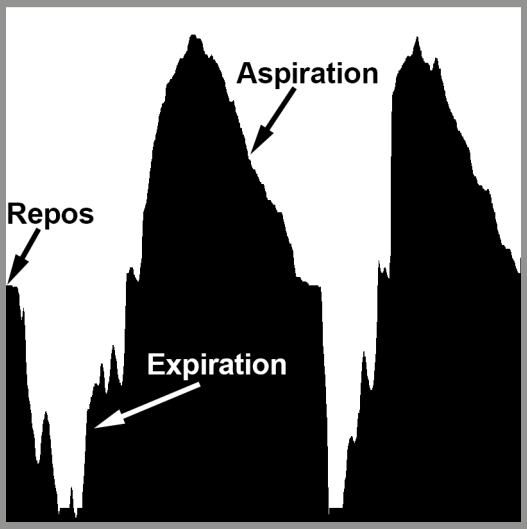
ATMOSPHERIC PRESSURE DIFFERENCE

ASPIRATION
EXPIRATION



WEIGHING SCALE

WEATHER

POSTURE

Sensor

Air Pressure Sensor

Detection

- Compares the air pressure from both inputs of the sensor's module = measures the difference in pressure between the ambient atmosphere and the air being blown into the module.
- Strength of breath / blowing
- Weight of an object or person
- Attach a tube on one of the module's inputs and leave the other input free to ambient air
- Do not obstruct the two input points, nor get them wet.

Range

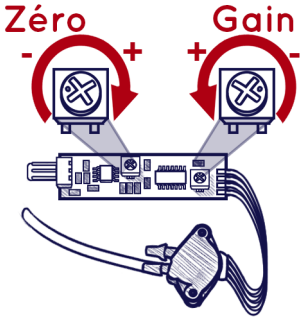
- From a light breath to a few kg of pressure

Analog signal

- The data increases while exhaling/blowing in the tube and decreases on inspiration / inhaling
- At rest the data is at half of the maximum value by default
- Linear, in proportion to the exercised pressure

Settings

- Gain = amplifies or diminishes sensitivity
- Zero = value at rest, while the sensor is not being used
  - In the middle for the two breaths
  - High or low for selecting only one



Interference

- Sensitive to the quality of the electrical current

Possible interpretations

- Distinguish exhaling / inhaling
- Weighing = measure of mass / weight

Application examples

- Environment, weather / meteorological sensor
- Art work with people with motor disabilities
- Interactive scale : the tube is sealed on the other end and placed under the weighing area.
- Posture detecting board : distribute the weight with one sensor on a single axis or over two axes with two sensors. In this case, each module is equipped with two sealed tubes and the sensor compares the pressure variations caused by the squashing of the tubes.