Table 1. Weights of different masses that were attached onto the plunger platform.

|  |  |
| --- | --- |
| **Material** | **Weight (g)** |
| Plunger | 35 +/- 0.5 |
| Weight 1 | 79.790 +/- 0.001 |
| Weight 2 | 73.692 +/- 0.001 |
| Weight 3 | 78.298 +/- 0.001 |
| Weight 4 | 74.259 +/- 0.001 |

Calibration trials use a cumulative sum of the weights. Explicitly, Calibration\_1 only has the plunger weight, Calibration\_2 consists of the plunger and weight 1, Calibration\_3 consists of plunger and weights 1 and 2, etc. Osc\_Mass 1 trials consist of the plunger and weight 1. Osc\_Mass2 trials consist of the plunger, weight 1, and weight 2. Five trials were provided for each experimental condition, indexed by the last digit in the filename.

Table 2. Length measurements of experimental equipment and setup. Tube refers to the tubing connecting the main air chamber to the pressure sensor.

|  |  |
| --- | --- |
| **Material** | **Length (mm)** |
| Plunger diameter | 32.56 +/- 0.01 |
| Height from base of chamber to plunger | 80.0 +/- 0.1 |
| Tube length | 280 +/- 1 |
| Tube inner diameter (from 3 measurements) | 3.59 +/- 0.02 |