

# Measurements

April 22, 2022

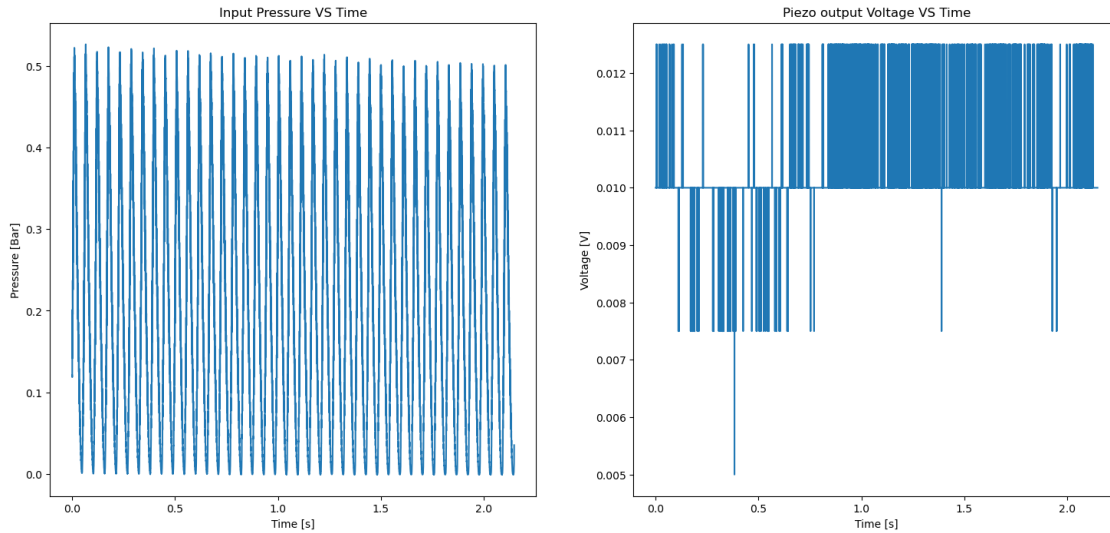
## 1 PARAMETERS

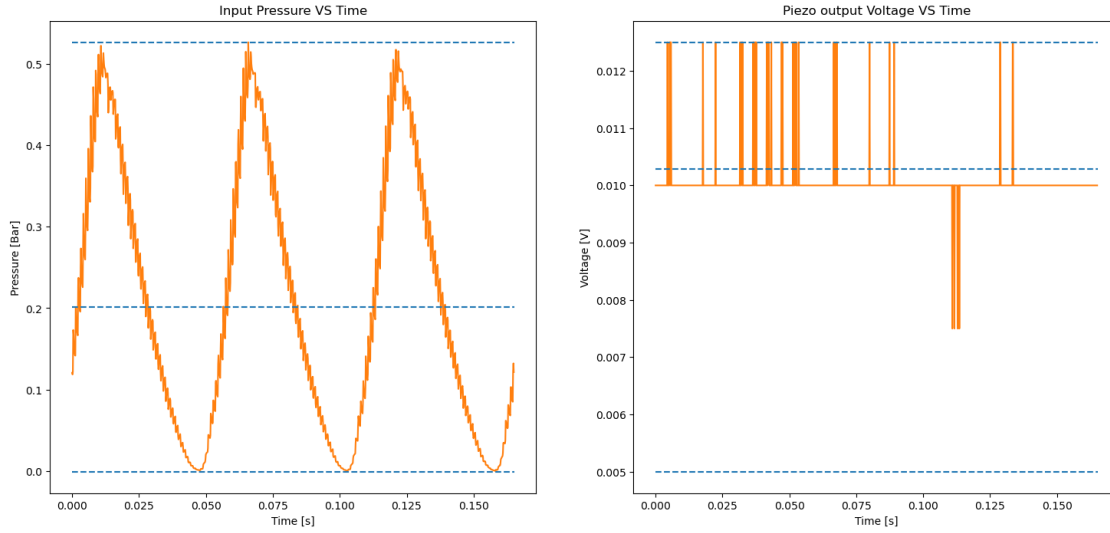
Sample name: AB-211206-085-ZNO

|   | Parameter        | Value             | Unit   |
|---|------------------|-------------------|--------|
| 0 | Sample name      | AB-211206-085-ZNO |        |
| 1 | Measure duration | 2.147483648       | [s]    |
| 2 | Rload            | 1000000.0         | [Ohms] |
| 3 | Nb Periods       | 3.0               | [1]    |
| 4 | R Circuit        | 1.0               | [Ohms] |
| 5 | Max Frequency    | 100.0             | [Hz]   |

## 2 PRESSURE AND VOLTAGE MEASUREMENTS

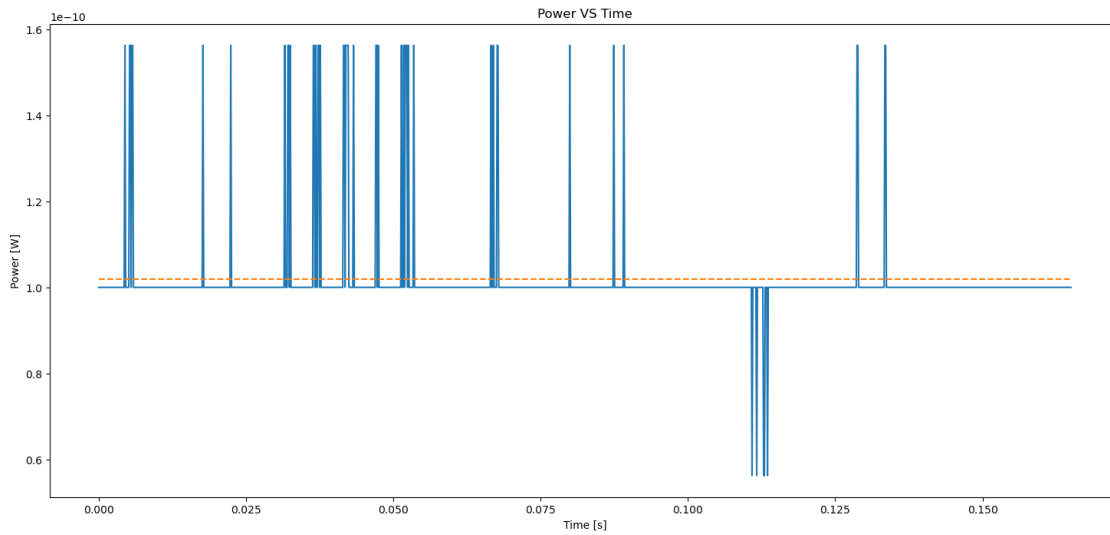
The input frequency is: 18.16 Hz





|   | Variable       | Min       | Max      | Peak to peak | Mean     | Mean of absolute value |
|---|----------------|-----------|----------|--------------|----------|------------------------|
| 0 | Pressure [Bar] | -7.00e-04 | 5.26e-01 | 5.27e-01     | 2.01e-01 | 2.01e-01               |
| 1 | Voltage [V]    | 5.00e-03  | 1.25e-02 | 7.50e-03     | 1.03e-02 | 1.03e-02               |

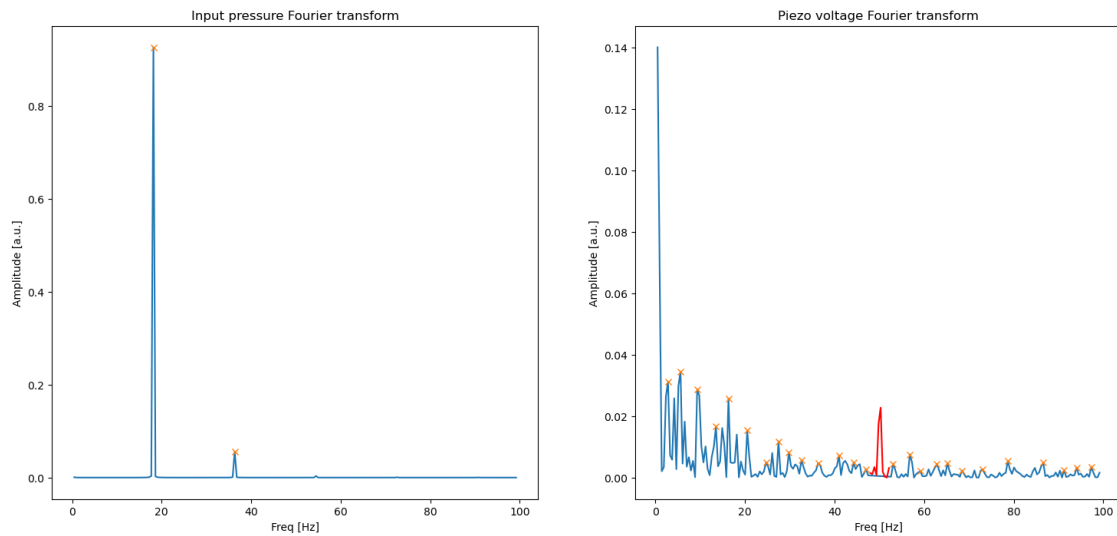
### 3 POWER



Mean power: 1.02e-10 [W]

## 4 FREQUENCY ANALYSIS

If an harmonic appears in the pressure Fourier transform. The piston has to be set to atmospheric pressure.



#### 4.1 Voltage frequency peaks

|    | Freq [Hz] | Amplitude percentage |
|----|-----------|----------------------|
| 0  | 2.79      | 3.12                 |
| 1  | 5.59      | 3.45                 |
| 2  | 9.31      | 2.86                 |
| 3  | 13.51     | 1.67                 |
| 4  | 16.30     | 2.57                 |
| 5  | 20.49     | 1.53                 |
| 6  | 24.68     | 0.49                 |
| 7  | 27.48     | 1.18                 |
| 8  | 29.80     | 0.82                 |
| 9  | 32.60     | 0.56                 |
| 10 | 36.32     | 0.47                 |
| 11 | 40.98     | 0.71                 |
| 12 | 44.24     | 0.48                 |
| 13 | 47.03     | 0.28                 |
| 14 | 53.09     | 0.45                 |
| 15 | 56.81     | 0.76                 |
| 16 | 59.14     | 0.21                 |
| 17 | 62.87     | 0.44                 |
| 18 | 65.20     | 0.47                 |
| 19 | 68.46     | 0.23                 |
| 20 | 73.11     | 0.26                 |
| 21 | 78.70     | 0.54                 |
| 22 | 86.62     | 0.49                 |
| 23 | 91.28     | 0.25                 |
| 24 | 94.07     | 0.33                 |
| 25 | 97.33     | 0.34                 |

#### 4.2 Pressure frequency peaks

|   | Freq [Hz] | Amplitude percentage |
|---|-----------|----------------------|
| 0 | 18.16     | 92.65                |
| 1 | 36.32     | 5.55                 |