

Measurements

May 27, 2022

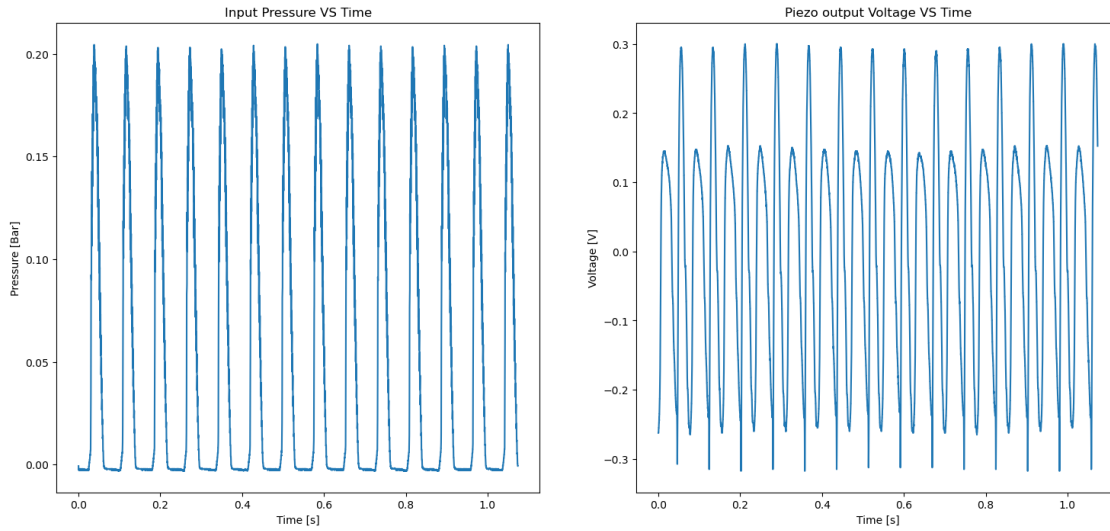
1 PARAMETERS

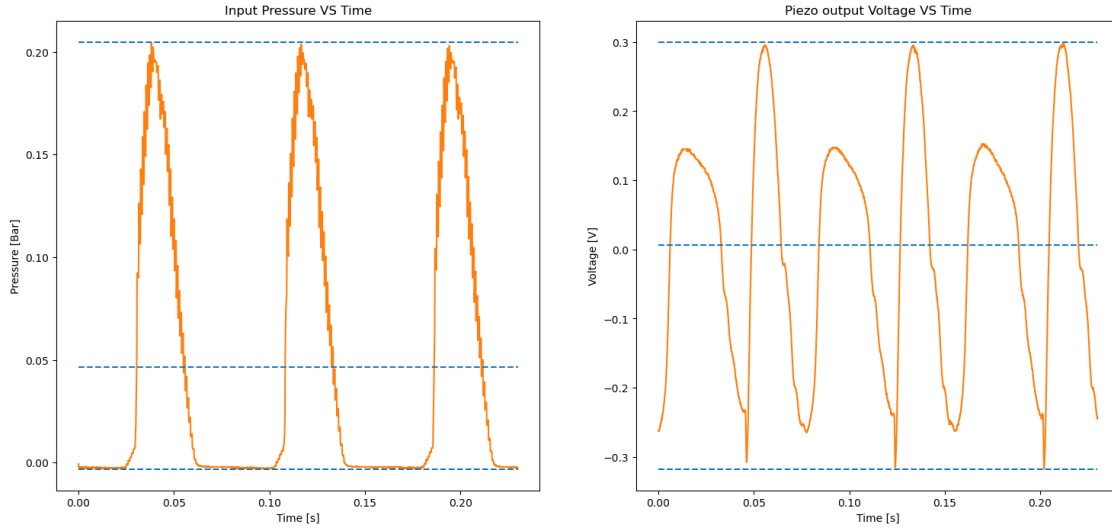
Sample name: PVDF-109-30min

| | Parameter | Value | Unit |
|---|------------------|----------------|--------|
| 0 | Sample name | PVDF-109-30min | |
| 1 | Measure duration | 1.073741824 | [s] |
| 2 | Rload | 2000000.0 | [Ohms] |
| 3 | Nb Periods | 3.0 | [1] |
| 4 | R Circuit | 1000000.0 | [Ohms] |
| 5 | Max Frequency | 100.0 | [Hz] |

2 PRESSURE AND VOLTAGE MEASUREMENTS

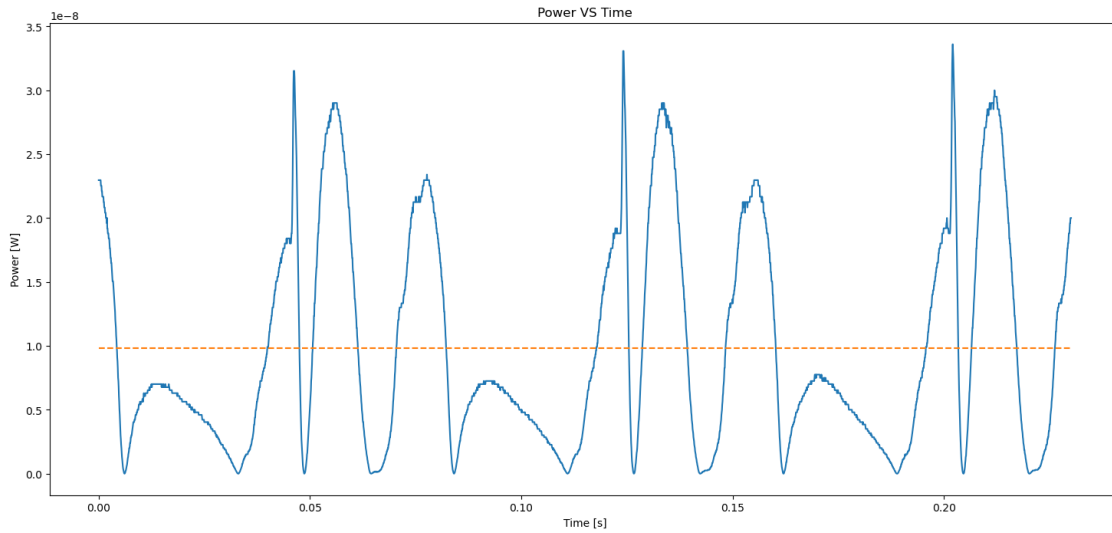
The input frequency is: 13.04 Hz





| | Variable | Min | Max | Peak to peak | Mean | Mean of absolute value |
|---|----------------|-----------|----------|--------------|----------|------------------------|
| 0 | Pressure [Bar] | -3.15e-03 | 2.05e-01 | 2.08e-01 | 4.66e-02 | 4.91e-02 |
| 1 | Voltage [V] | -3.18e-01 | 3.00e-01 | 6.17e-01 | 6.34e-03 | 1.54e-01 |

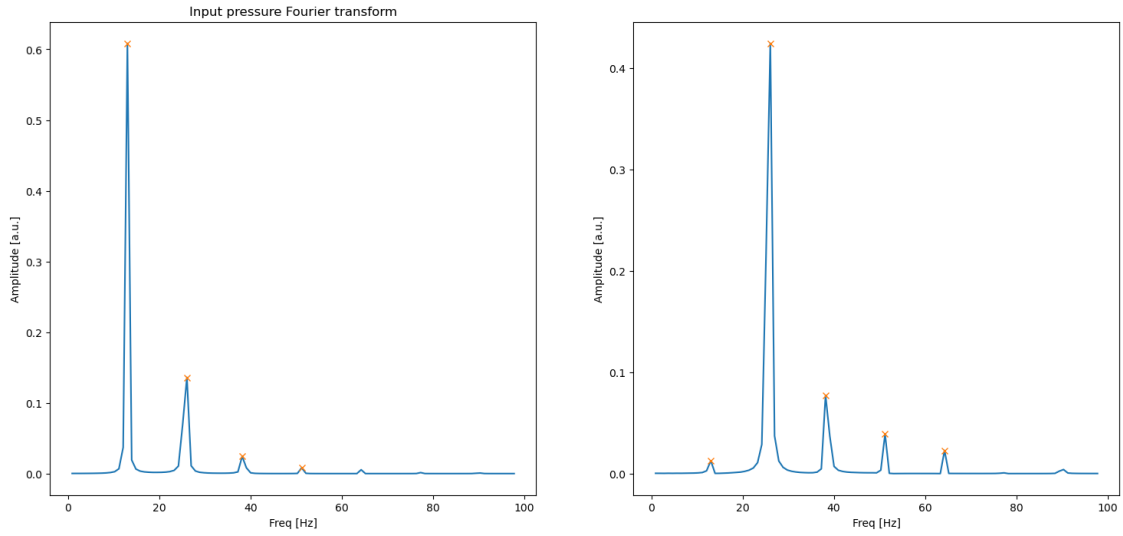
3 POWER



Mean power: 9.82e-09 [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 | 13.04 | 1.27 |
| 1 | 26.08 | 42.41 |
| 2 | 38.19 | 7.71 |
| 3 | 51.23 | 3.90 |
| 4 | 64.27 | 2.29 |

4.2 Pressure frequency peaks

| | Freq [Hz] | Amplitude percentage |
|---|-----------|----------------------|
| 0 | 13.04 | 60.84 |
| 1 | 26.08 | 13.60 |
| 2 | 38.19 | 2.43 |
| 3 | 51.23 | 0.81 |