### Measurements

May 6, 2022

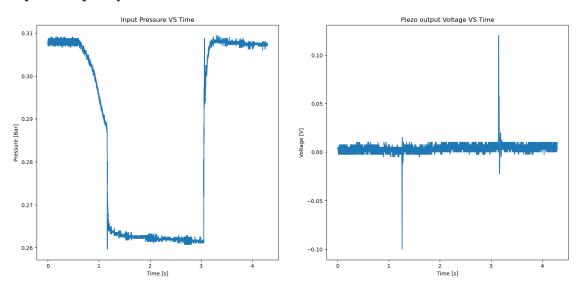
#### 1 PARAMETERS

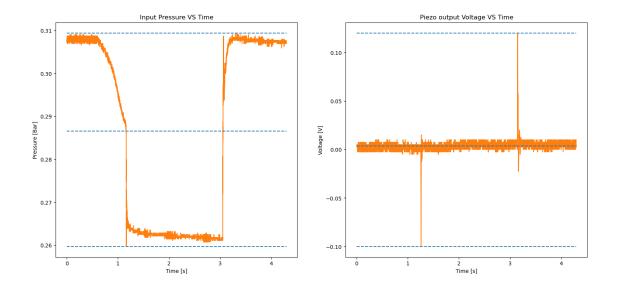
Sample name: AB-211206-085-ZNO

|   | Parameter        | Value             | Unit   |
|---|------------------|-------------------|--------|
| 0 | Sample name      | AB-211206-085-ZNO |        |
| 1 | Measure duration | 4.294967296       | [s]    |
| 2 | Rload            | 1000000.0         | [Ohms] |
| 3 | Nb Periods       | 3.0               | [1]    |
| 4 | R Circuit        | 1.0               | [Ohms] |
| 5 | Max Frequency    | 164.0             | [Hz]   |

### 2 PRESSURE AND VOLTAGE MEASUREMENTS

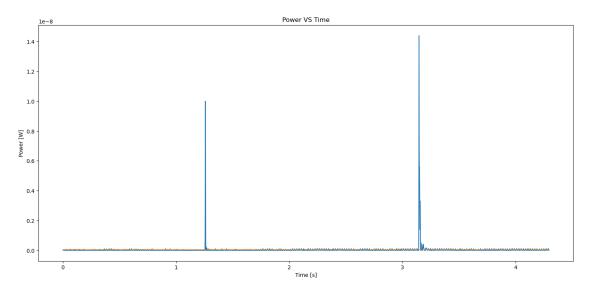
The input frequency is: 0.23 Hz





|   | Variable       | Min       | Max       | Peak to peak | Mean                       | Mean of absolute value |
|---|----------------|-----------|-----------|--------------|----------------------------|------------------------|
| 0 | Pressure [Bar] | 2.60e-01  | 3.09e-01  | 4.97e-02     | 2.87e-01                   | 2.87e-01               |
| 1 | Voltage [V]    | -1.00e-01 | 1.20 e-01 | 2.20 e-01    | $3.55\mathrm{e}\text{-}03$ | 4.12e-03               |

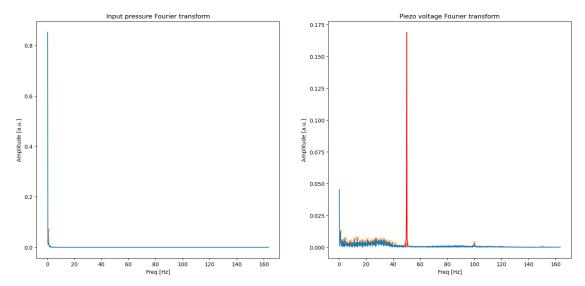
# 3 POWER



Mean power: 4.62e-11 [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  | 1.16      | 1.28                 |
| 1  | 2.33      | 0.58                 |
| 2  | 4.42      | 0.73                 |
| 3  | 5.59      | 0.43                 |
| 4  | 8.15      | 0.52                 |
| 5  | 9.78      | 0.41                 |
| 6  | 11.41     | 0.64                 |
| 7  | 13.51     | 0.74                 |
| 8  | 15.60     | 0.51                 |
| 9  | 17.23     | 0.52                 |
| 10 | 18.86     | 0.48                 |
| 11 | 20.96     | 0.61                 |
| 12 | 23.52     | 0.49                 |
| 13 | 25.15     | 0.53                 |
| 14 | 26.78     | 0.69                 |
| 15 | 28.87     | 0.60                 |
| 16 | 30.97     | 0.62                 |
| 17 | 33.06     | 0.63                 |
| 18 | 34.69     | 0.51                 |
| 19 | 36.79     | 0.47                 |
| 20 | 39.35     | 0.39                 |
| 21 | 41.45     | 0.28                 |
| 22 | 48.90     | 0.33                 |
| 23 | 99.89     | 0.34                 |

## 4.2 Pressure frequency peaks

|   | Freq [Hz] | Amplitude percentage |
|---|-----------|----------------------|
| 0 | 0.70      | 7.13                 |