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# Adjustment and calibration certificate #0000211741

**Object**

| | |
|---|---|
| Instrument: | MAS-100 NT / NT Ex Microbial AirSampler |
| Serial number: | 0000121475 |
| FW version: | 1.7.18 |
| HW version: | 8 |
| Name: | Head 1 |
| Department: | Location 1 |
| Perforated lid: | 400 × 0.7 mm |
| Calibration procedure: | MBV SOP / Version 1.6.31 |

**Adjustment equipment**

| | |
|---|---|
| Serial number: | 18007 |
| Adjustment date: | 31.7.2021 |
| Deviation: | 0.0 [l/min] |

**Adjustment data**

| | |
|---|---|
| Adjustment date: | 13.04.2022 |
| Adjustment conditions: | Temp.: 24.0 [°C], Amb. Pressure: 975 [mbar] |
| ADC at 0 flow: | 794 [mV] |
| ADC at target flow: | 3019 [mV] |
| Gain: | 78 |

**Calibration equipment**

| | |
|---|---|
| Serial number: | 18007 |
| Adjustment date: | 31.7.2021 |
| Deviation: | 0.0 [l/min] |

**Calibration data**

| | |
|---|---|
| Calibration date: | 13.04.2022 |
| Calibration conditions: | Temp.: 24.0 [°C], Amb. Pressure: 975 [mbar] |
| Run time check: | Passed |

**Calibration results:**

| | | Sequence | | | Result |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | |
| **Target air flow** | SLPM | 100.0 | 100.0 | 100.0 | 100.0 |
| **Air flow on anemometer measurement 1** | SLPM | 99.8 | 99.8 | 99.8 | NA |
| **Air flow on anemometer measurement 2** | SLPM | 99.8 | 100.0 | 99.9 | NA |
| **Air flow on anemometer measurement 3** | SLPM | 100.0 | 99.6 | 99.8 | NA |
| **Air flow** | SLPM | 99.9 | 99.8 | 99.8 | NA |
| **Flow deviation of the anemometer [1]** | l/min | 0.0 | 0.0 | 0.0 | NA |
| **Calibration result (corr. air flow of anemometer)** | SLPM | 99.9 | 99.8 | 99.8 | 99.8 |
| **Deviation from target air flow**<br>**Maximum allowable deviation: ± 2.5%** | % | -0.1 | -0.2 | -0.2 | **-0.2** |
| **Calibration check status:** | | | | | Accepted |

[1]) For the DA-100 NT the deviation mentioned on the calibration certificate is not normalized to SLPM conditions (20°C; 1013 mbar) as it is not significant: The correction would be 0.34% per °C (1/293) and 0.09% (1/1013) per mbar difference to the SLPM standard conditions. E.g. a 0.2 l/min deviation measured at 25°C and 940 mbar leads to an error of 8.8% or 0.018 l/min.

Calibrated by: J. Guevara Signature: J Guevara

This report has been produced by an electronic system and is valid with a single signature of the calibrator.

Date of activation by user: _____ Signature: _____

Due date: [2] _____

[2]) 12 months after the first activation