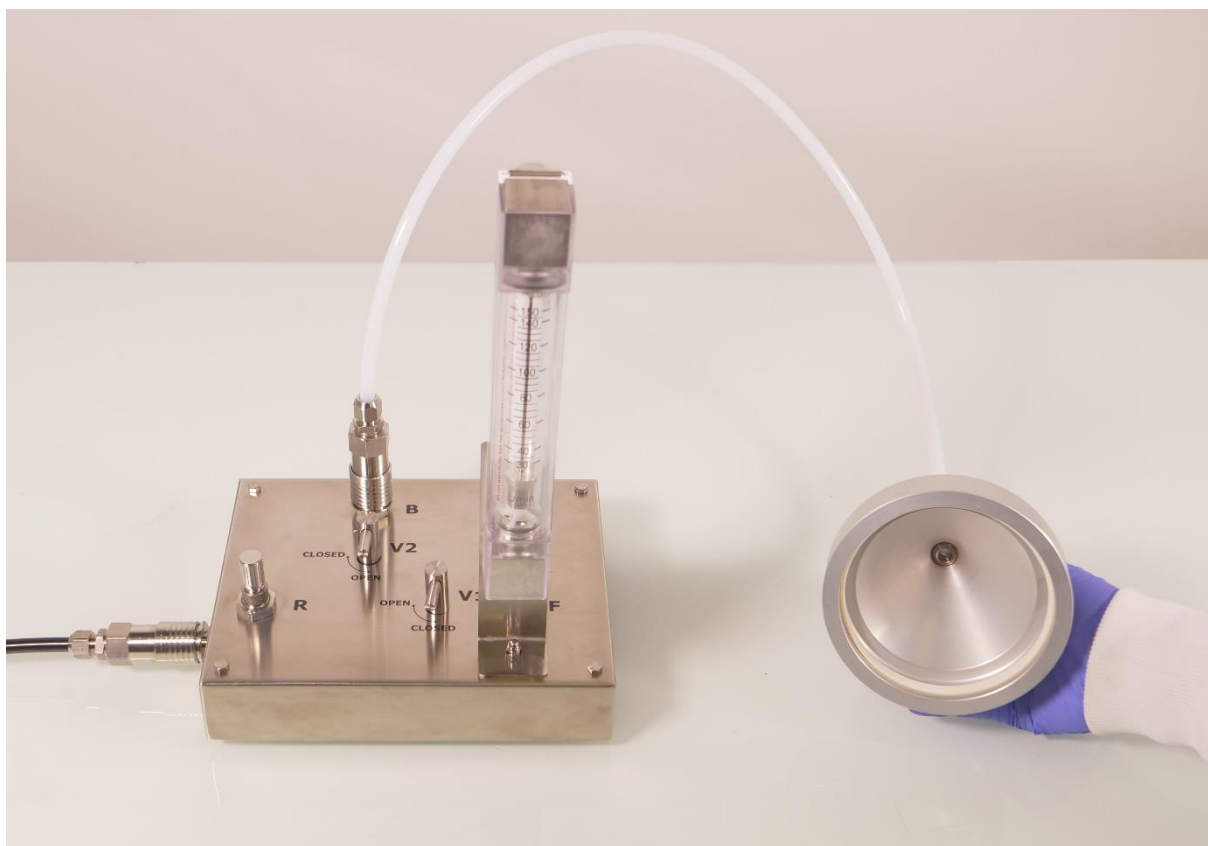


GAS STATION **COMPRESSED GAS SAMPLING**



User Manual

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Version	Date	Written by:	Checked by:	Modified chapters
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I. Description

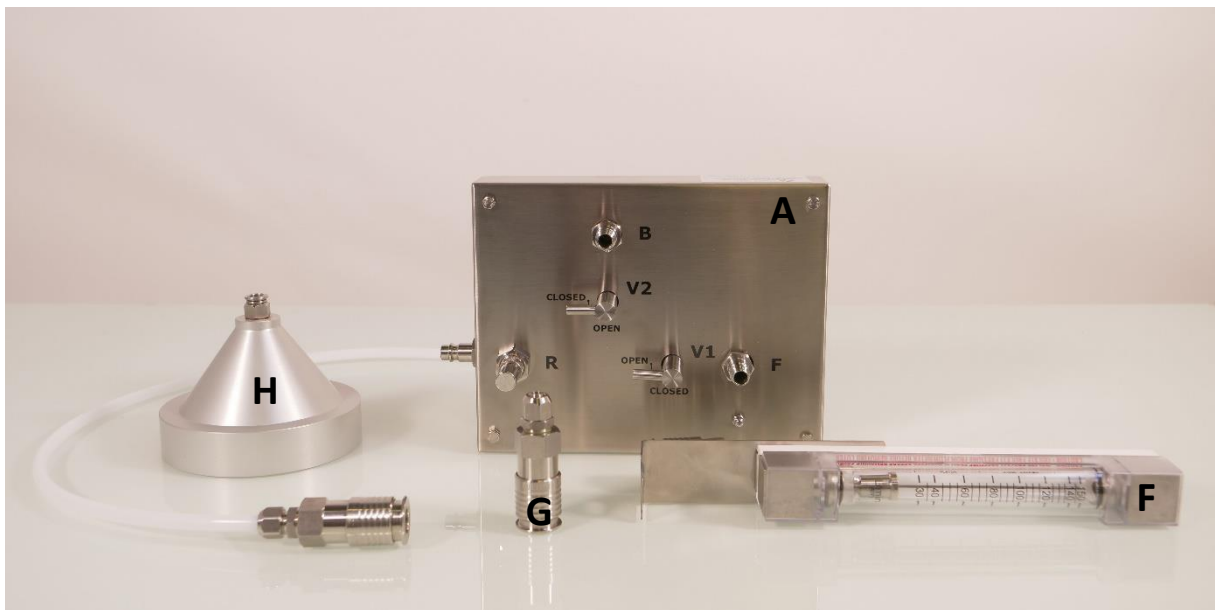
The GAS STATION is designed to test the presence of microorganisms in compressed gas samples supplied from tanks and pipes under pressure.

To perform the analysis it is necessary to have an AIRWEL air sampler with 100 lt/min air flow.

The 100 lt/min flow rate of “GAS SYSTEM” is guaranteed by a flow regulation system adjustable by the operator.

a. Composition

- Stainless steel base “A”
- Flow meter complete of fast system connection “F”.
- Air inlet fast system connection for input gas (on side of the s/s base) “G”, Input size: ¼”.
- Air inlet valve regulator for air flow adjustment (on top of the s/s base) “R”.
- Air inlet valve for connection to the flow regulator “V1”.
- Air inlet valve for microbiological gas test “V2”.
- Connection to the Bell to be applied to the aspirating head of the AIRWEL air sampler “B”.
- Bell complete of PPA tube and fast connection System “H”.



b. Technical features

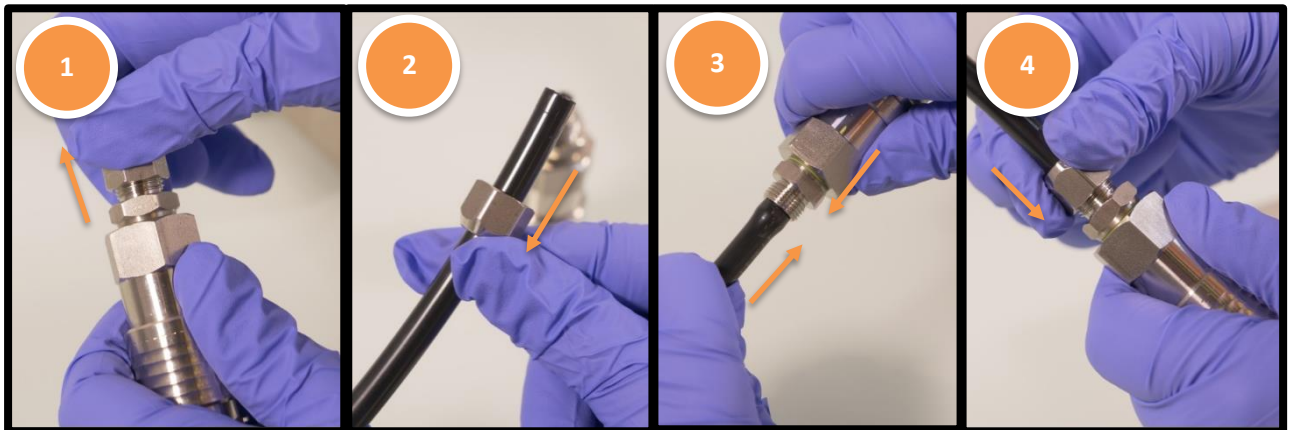
- Input size: 1/4”
- Input pressure: between 2 and 6 bars
- Vertical flow meter - flow rate: 100 lt/min
- Material: regulator, valve and fast connections: stainless steel AISI 316L
- Structure: AISI 304
- Bell: Aluminum
- Gaskets Bell: Silicon – Tube connection Bell: PPA
- Flow regulation: Manual
- Sterilization: By autoclave

- Sampling data transfer: Via Bluetooth® (with AIRWEL air sampler)
- Operating temperature: from +10 to +30 °C
- Dimensions: 21x17x5H cm (with flow meter 32,5 cm)
- Weight: 1,38 Kg (with flow meter 1,97 kg)

II. Installation

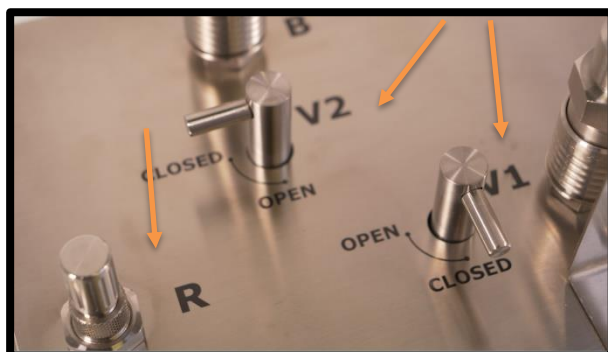
a. Gas inlet

Fix the quick connector « G » to your gas outlet, using an 8mm (1/4”).



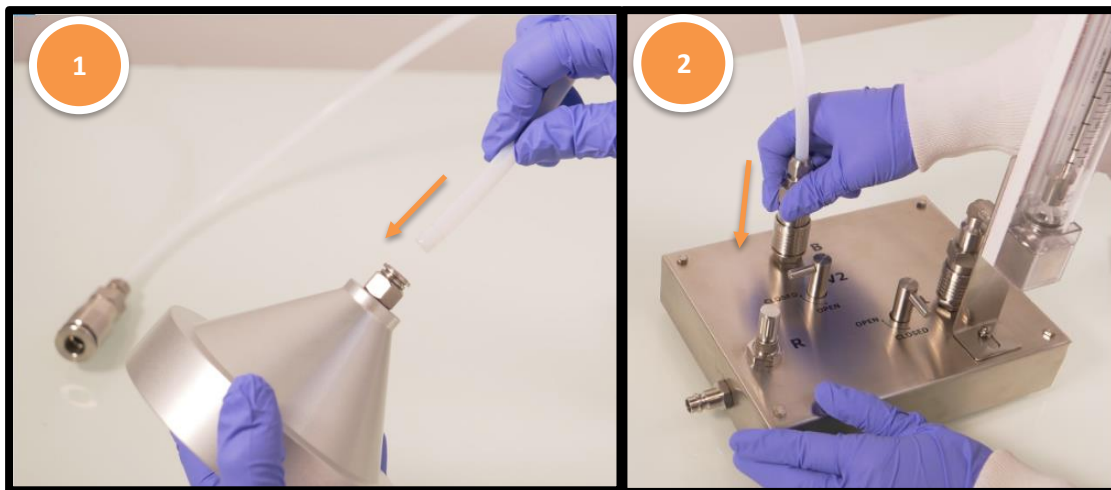
b. Gas Station

Connect the fast system vertical flow meter to the position “F”.
Check that the flow regulator “R” is completely closed.
“V1” and “V2” valves must be in the closed position.
Connect the gas delivery pipe to the input connection “G” on site of the base of the **GAS STATION**.



c. Gas outlet

Connect the PPA tubing to the bell and connect the quick connector on the other side of the tubing to the GAS STATION to port « B ».



III. Flow adjustment and air system purge

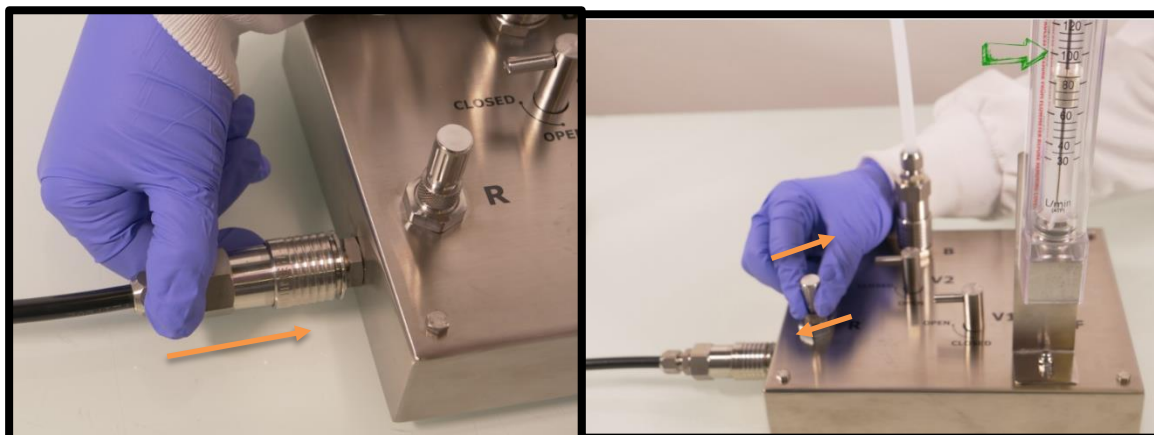
The GAS STATION allows a visual verification and correction of the airflow, to ensure that 100L/min will always be delivered.

Before connecting your gas inlet to the GAS STATION, check your inlet pressure:

It must be between 2 and 6 bars. The end-user will be responsible of any premature corrosion or accident if used out of these specifications.

After checking:

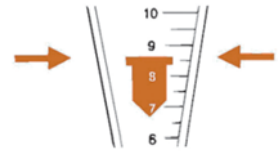
- Close the 2 valves
- Connect your gas outlet to the GAS STATION
- Open the "V1" valve
- Use "R" regulator to adjust the airflow: check with the vertical flowmeter "F", value must be 100 (100L/min). Don't forget to tighten the below ring to fix the airflow.
- Close the "V1" valve.





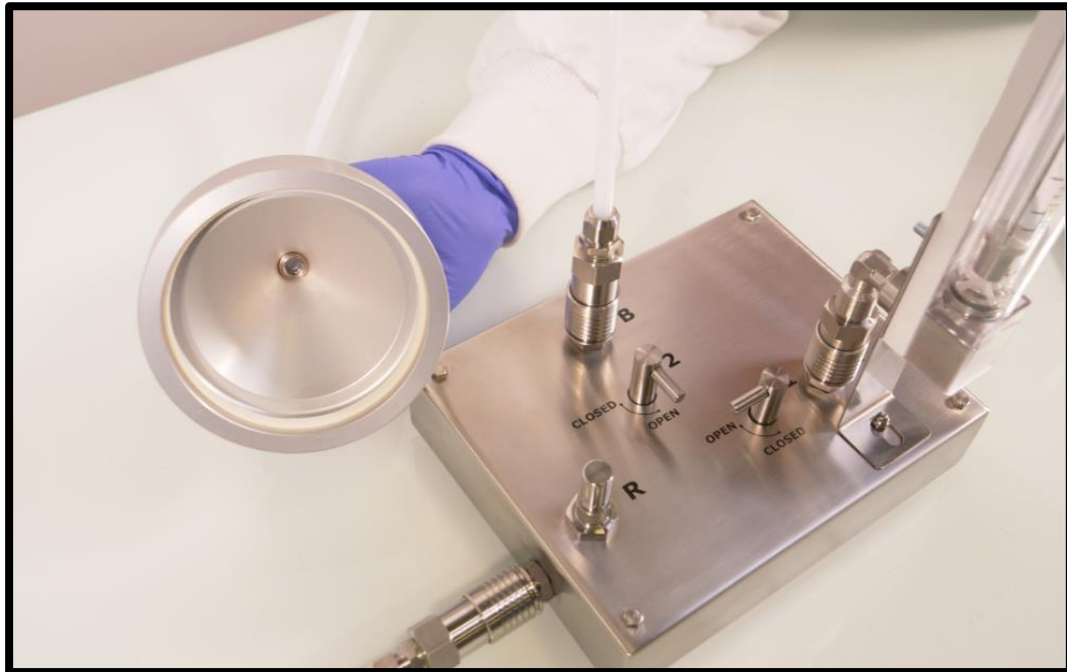
Ensure an accurate measurement through the flowmeter!

Flow up the tapered tube lift the float to an equilibrium position. Flow rate is then measured against the flat top edge of the float.



Purge the air system:

- Open the "V2" valve for 1 minute with the empty bell.
- Close the "V1" valve.

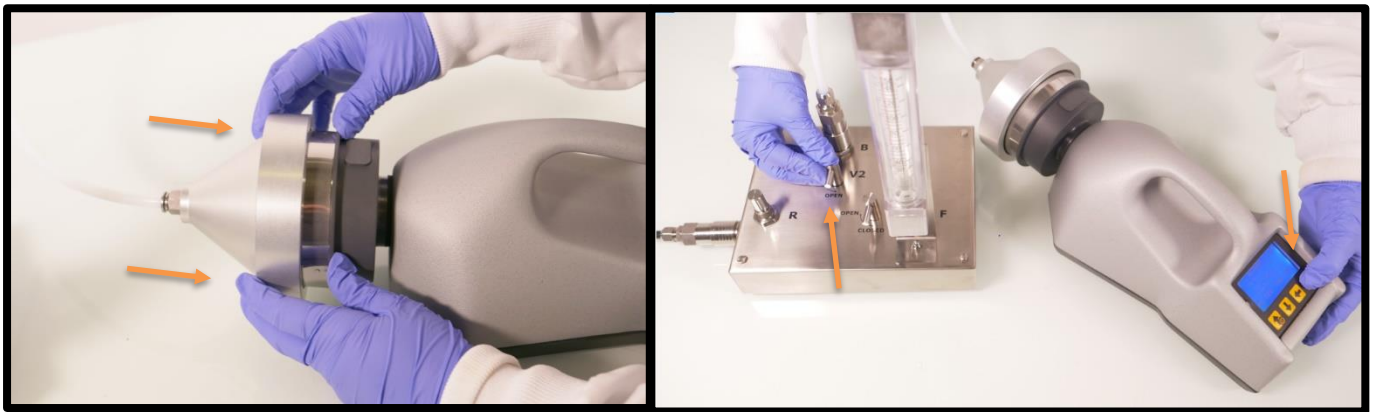


IV. Sampling

The Petri dish, of the size required by your AIRWEL sampler, must be aseptically inserted on aspirating chamber of the AIRWEL air sampler. It is important that the bell is strongly inserted in the air sampler head. A program has been previously set up on the AIRWEL, with the volume of gas to be sampled (1.000 liters):

- Select the program
- Start the program by pressing “GO” and at the same time, open “V2” valve.
- Sampling is over when the program ends
- Close the valve “V2”
- Remove the bell from the AIRWEL

Remove the Petri culture dish from the AIRWEL for incubation.



V. Cleaning

All the components of the GAS STATION are autoclavable (excluding the vertical flow meter “F”).