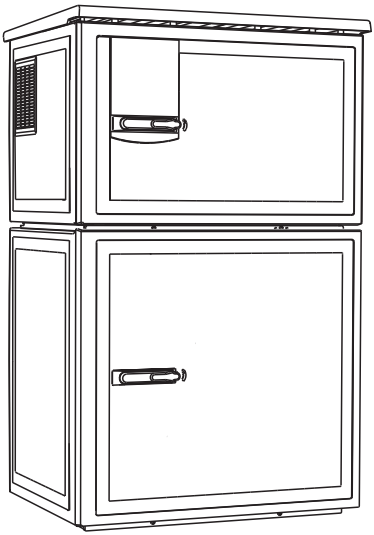
Level Pressure Flow Temperature Liquid Analysis Registration Systems Components Services Solutions

Operating Instructions

Liquistation CSF33

Automatic sampler for liquid media

Calibration



Liquistation CSF33
BA489C/07/EN/14.11
71134636

Valid as of:
Software version 01.02.00

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About this manual

This manual describes how to calibrate the distribution arm and the sample volume.

This manual does not include the following:

- Setup/General settings
  —> Operating Instructions BA479C "Commissioning"
- Display/Operation
  —> Operating Instructions BA479C "Commissioning"
- Inputs
  —> Operating Instructions BA487C "Operation & settings"
- Outputs
  —> Operating Instructions BA487C "Operation & settings"
- Sampling programs
  —> Operating Instructions BA487C "Operation & settings"
- Data management
  —> Operating Instructions BA487C "Operation & settings"
- Diagnostics
  —> Operating Instructions BA488C "Maintenance & diagnostics"
- Expert
  —> Internal Service Manual

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1 Calibrating the distribution arm

It is only possible to calibrate the distribution arm in the version with multiple bottles.

The distribution arm must be calibrated if:
- The distribution arm motor has been replaced
- Error message "F236 Distribution arm" appears on the display

Proceed as follows to calibrate the distribution arm:

Path: Menu/Calibration

Function	Options	Info
▶ Distribution arm		
▷ Go to ref. point	Action	The reference run is started. The reference point is in the middle at the front. In the case of the distributor plate, the reference point is at the arrow on the plate.

With ▷ Adjust you can correct the distribution arm if the unit does not move to the reference point correctly. Use the two arrow keys to correct the position.

2 Calibrating the sample volume

2.1 Vacuum pump

The desired sample volume is set by manually adjusting the dosing tube.

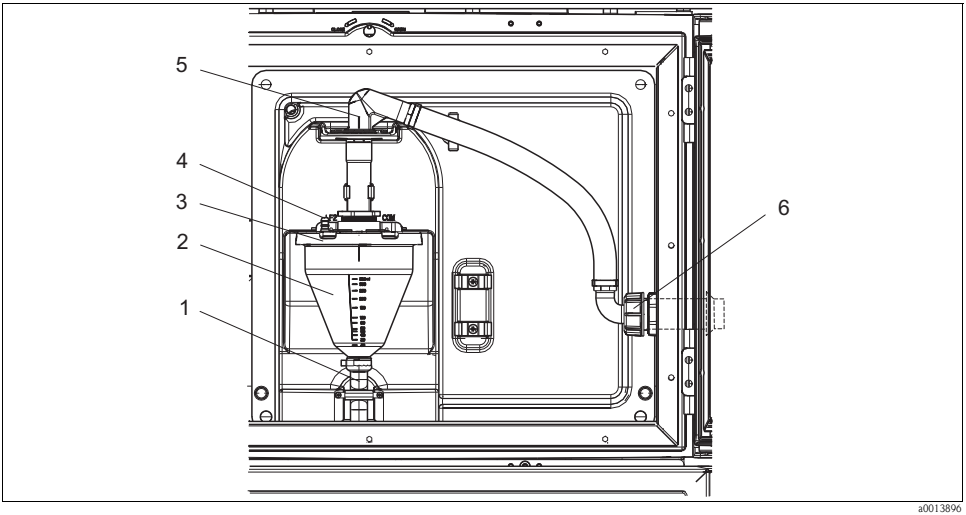
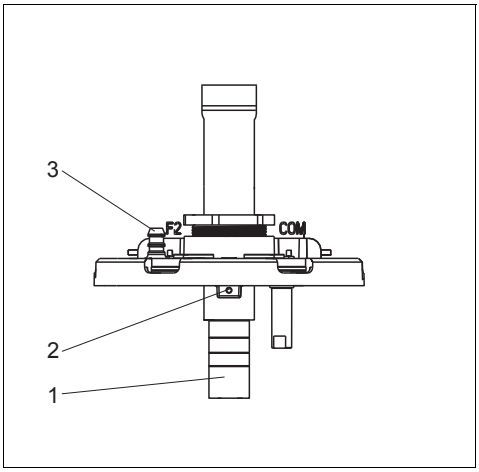


Fig. 1: Vacuum pump

1 Outlet hose
2 Dosing chamber
3 Dosing chamber cover
4 Air hose connection
5 Lock for intake hose
6 Thread adapter nut for intake hose

Proceed as follows to calibrate the sample volume:

1. Check the sample volume set under Menu/Setup/General settings/Sampling/Dosing volume.
2. Release the thread adapter nut on the intake hose (item 6).
3. Turn the intake hose to the "open" position at the hose lock (item 5) and remove the hose from above.
4. Release the air hose (item 4) and remove the dosing chamber (item 2) from the front along with the outlet hose (item 1).
5. Open the bayonet lock (item 3) and open the dosing chamber.



1 Dosing tube
2 Allen screw
3 Air hose connection

Fig. 2: Vacuum pump

1. Release the Allen screw (pos. 2) with the key provided.
2. Set the sample volume by adjusting the dosing tube. Secure the dosing tube with the screw.
   Use the white scale (A) to dose without pressure.
   Use the blue scale (B) to dose with pressure.

3. Reinstall the parts in reverse order. Make sure that the contacts of the conductivity sensors are in the correct position.
4. Check that the dosing tube is set correctly by triggering a manual sampling routine.

2.2 Peristaltic pump

In order to calibrate the sample volume, a measurement beaker with a volume of at least 200 ml is required.

Proceed as follows to calibrate:

Path: Menu/Calibration

Function	Options	Info
▶ Sample volume		
▶ 1-point calibration		
Distributor position	Options - Front - Bottle x - Back	Select the distributor position.
Sample volume	50 to 2000 ml **Factory setting** 100 ml	Set the sample volume.
▷ Start sampling	Action	The progress of the sampling operation is displayed.
Check whether the sample volume is correct. Use ▶ No to enter the sample volume actually taken, e.g. 110 ml. Use ▷ Yes to repeat the sampling.		
▶ 2-point calibration		
Use 2-point calibration for levels that fluctuate greatly. The second sampling point must be either higher or lower (height difference of at least 1 m).		
Distributor position	Options - Front - Bottle x - Back	Select the distributor position.
Sample volume	50 to 2000 ml **Factory setting** 100 ml	Set the sample volume.
▷ Start 1. sampling	Action	The progress of the sampling operation is displayed.
Check whether the sample volume is correct. Use ▶ No to enter the sample volume actually taken, e.g. 110 ml. Use ▷ Yes to repeat the sampling.		
▷ Start 2. sampling	Action	The progress of the sampling operation is displayed.
Check whether the sample volume is correct. Use ▶ No to enter the sample volume actually taken, e.g. 110 ml. Use ▷ Yes to repeat the sampling.		

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