

PRO LIQUID

Sample Preparation for Analytical Chemistry



AutoDiluter-5.2

Reduce costs through automation

Dispensing, diluting, pipetting and the preparation of calibration solutions or addition solutions are still the most time- and labor-intensive operations in the chemical laboratory.

In many areas, and particularly in the analytical laboratory, the time required for sample preparation is the major limiting factor for an increase in sample throughput.

Fully Automatic Dispensing System

The AutoDiluter-5.2 automates these steps. It saves you time and money, and helps to prevent errors, whether in the clinical, industrial or research laboratory. AutoDiluter-5.2 dispenses, dilutes, mixes and pipets rapidly and reliably with unerring precision over long periods of time.

Versatility through PC control

AutoDiluter-5.2 is completely controlled from a PC running Microsoft Windows®. PC control offers enormous advantages with respect to programmability, data collection, evaluation and storage. You enter all parameters on the PC via menus. Standard programs provided with AutoDiluter-5.2 include 'Dilute Sample' and 'Prepare Standards'. You can also create your own programs, such as 'Multielement Standards', easily in a few minutes. Furthermore you can create pump programs to meet your own applications. You can save these programs and recall them easily for future use.

Reliability through precision

The importance of sample preparation in the chemical laboratory is frequently underestimated. Small errors in dispensing or diluting can ruin hours of work. AutoDiluter-5.2 has two pumps: a high-precision sampling pump of 1 mL volume and a 10 mL diluent pump. Thus even small sample volumes can be highly diluted and accurately dispensed.



Volumes higher than 10 mL are calculated by the application software and distributed over several pump strokes. For many applications the dispensing speed is already preselected, but you can also change the dispensing speed over a wide range to meet the properties of your samples, such as viscosity. Both pumps are fully inert and contamination-free in the area coming into contact with liquid.

Intelligent software

The AutoDiluter-5.2 application software is menu-driven and Windows-based; you have a choice of languages. You need no programming knowledge to use this software. The system guides you through operation and prompts you to enter all important parameters,

For example, if you wish to dilute a sample 1:n, you only need to enter the final volume and the value for n, which can be larger than or equal to 1.00. The necessary volumes of sample and diluent in μL are calculated by the software and assigned to the pumps. All you then need to do is to start the application.

If you want to prepare a calibration (standard) solution of a given concentration, you enter the initial concentration (1000 ppm is proposed, but you can change it), the required final concentration, and the final volume. The necessary volumes of higher concentration and diluent in mL are calculated by the software and assigned to the pumps. All you then need to do is to start the system.

The software also guides you if you wish to prepare a multielement standard. You only need to

AutoDiluter 5.2 – Fully Automatic Dispensing System

enter the required final volume and the partial concentrations. Air bubbles, used to separate the individual solutions, are automatically accounted for during the calculation of the final volume.

The AutoDiluter-5.2 application software offers numerous program structures. You can run complicated single programs, or you can develop composite programs to include an autosampler of your choice, which is then controlled by the system.

You can save your programs under a suitable filename with a short information text. You can then easily open your required application from the archive list.

AutoDiluter-5.2 is provided with important functions that offer you reliability through precision.

Together with a commercial autosampler, AutoDiluter-5.2 offers a flexible and versatile system that easily meets the increasing requirements of laboratory automation.

Note: Ask us about the integration of your desired autosampler!

Specifications

Dispensing system	Computer-controlled stepping motor driven pumps. Sampling pump resolution: 0.025 μL Diluent pump resolution: 0.25 μL
Dispensing range	Sampling pump: 1000 μL in 0.1 μL steps Diluent pump: 10 000 μL in 0.1 μL steps
Dispensing speed	Selectable from 0.1 mL/s to 40 mL/min.
Accuracy	1- 1000 μL : 1-0,5 % 10- 1000 μL : 1-0,5 %
Precision	1- 1000 μL : 1-0,5 % 10- 10000 μL : 1-0,5 %
Valve system	PVDF/ETFE valves controlled by stepping motors
Liquid uptake system	PFA tube, 1 mm i.d.
Computer	PC or compatible computer, Windows® 2000 or XP
Operation	Keyboard, menu-driven program display, program memory, archive data list, autosampler control
Dimensions	180 mm wide x 290 mm high x 300 mm deep
Weight	6.2 kg
Power requirements	100–240 V, 50/60 Hz, 1 A slow-blow

We reserve the right to change specifications without prior notice as part of our program of continuous product improvement.

Ordering information

Order no.	Description
206000	AutoDiluter-5.2

