Anton Paar

::: Superior Optical Instruments

Diludos

Automated Dilution and Dosage System

General

One of the most frequent tasks in a chemical laboratory is routine preparation of solutions. These dosages must be done at accurate weight/weight or weight/volume ratios – tedious work that requires skill, careful handling and much time.

The corresponding weight measurements and volume adjustments are frequently subject to handling errors. In this case the solution has to be discarded and newly prepared.

The Diludos automatic dilution and dosage system automates routine preparation of solutions. The PC operated system performs gravimetric dilutions or dosages under continuous weight control by a digital laboratory balance, while the flow of liquids is controlled by up to eight solenoid valves. Due to gravimetric dosages the sample preparation is free of temperature errors.

Depending on the chosen combination of system components, dilutions and dosages are performed at ± 0.1 g or ± 0.01 g precision and at flow rates up to 6 ml/s. All calculations, e.g. for determining the weight of solvent for a given weight of sample, are automatically performed.

Specifications		
Standard Components		
Standbase	Base plate for set-up of the balance, pillars of stainless steel, and height-adjustable holder for the dosing unit	
Dosing unit	Anodised aluminium case with mounting rail for max. 8 solenoid valves, support plate for max. 8 nozzles, 8 fittings for hose connections to fluid containers, and cable, length 2.5 m, for connection to controller module and power supply unit	
Power requirements	Power supply unit for solenoid valves, self- adapting to any mains voltage of 100/120 V or 220/240 V +10 %/-15 %, 45-65 Hz	
Personal computer	Actual specifications on request	
Diludos software	Operating software for definition, storage and performance of sample-related dilutions and dosages. Supports printout of barcode labels and data lists.	
Application-Related Components		
Laboratory balance	Range	Reproducibility
	2200 g	± 0.1 g or ± 0.01 g
	3200 g	± 0.1 g or ± 0.01 g
	4200 g	± 0.1 g or ± 0.01 g
Solenoid valve	Dosing Accuracy	Max. flow rate
Coarse valve	± 0.1 g	4 mL/s (water at 20 °C)
Fine valve	± 0.01 g	1 mL/s (water at 20 °C)
Fluid containers	Polypropylene, 5.5 L or 22.0 L	
Support bridge	Acrylic glass, for bench set-up of fluid containers, also serving as wind shield, dimensions 50 x 41 x 72 cm (W x D x H)	
Funnel for solids	Stainless steel, diameter 70 mm	

Anton Paar® GmbH
A-8054 Graz, Anton-Paar-Str. 20
Tel.: +43 (0)316 257-0, E-mail: info@anton-paar.com
Fax: +43 (0)316 257-257, Web:www.anton-paar.com

Instruments for:

Density & concentration measurement
Rheometry and viscometry
Sample preparation
Microwave synthesis
Colloid science
High-precision temperature measurement
Refractometry
Polarimetry
X-ray structure analysis

Your distributor:

01/09 D04IP01-A