



## Liquid handling



120

### “Assistant” Multichannel-Pipette

**120** variable with digital indication, conformity-certified

The ASSISTENT Multichannel-Pipette No. 120 ist designed for effortless dispensing of liquids precisely and safely. The operation principle of the pipette is air displacement, it has 8 channels, working-range 50–300  $\mu\text{l}$  in steps of 5  $\mu\text{l}$  with digital indication of the selected volume. High quality and technical perfection assure safe and precise working for all micro titration technics. The elastic tip cones and the light weight of the pipette provide a combination for true single handed operation.

Inaccuracy <1,5 % – <1,0 %

Imprecision <0,8 % – <0,5 %

**120/1** ASSISTENT special tips 300  $\mu\text{l}$  of polypropylene (PP), autoclavable at 121 °C/1ATM overpressure, available in single tray-racks of 96 pcs.

**120/2** or in the 1000-pcs-box.

## “Assistent” Dispenser digital conformity certified

- Safety is a special aspect for the ASSISTENT Dispensers.
- No risk of spilling, as the Dispenser are mounted directly on the reagent bottle, adapters are supplied with the unit, more adapters available.
- No risk of contact with aggressive media when used properly. The wetted plunger is fully encased when raised.
- The unit can be sterilized up to max. 121 °C, 2 bar.
- The discharge tube made of FEP is strengthened by means of a rigid collar, therefore practically no risk of liquid being flicked off the end of the tube.
- Connecting possibility for drying tube



## “Assistent” DISPENSER variable – conformity certified

The ASSISTENT Dispenser finds application for nearly all dispensing-works in the millilitre range. High quality materials as PTFE-coated plunger result in extreme resistance. Fast and simple handling allow easy working with the ASSISTENT Dispenser.

ASSISTENT-Dispenser digital and variable, volume stepless adjustable, in Styroporpackaging, with thread connection A 32, 1 FEP inlet tube 22,5 cm long, bent FEP discharge capillary, closurecap, directions for use.

The ASSISTENT-Dispenser is used in the medical and chemical laboratory for dosing of reagents and solutions and concentrated acids (except hydrofluoric acid). In the microbiological laboratory. In schools and universities, in the foodstuff industry and for water boards and clarification plants

### “ASSISTENT” DISPENSER digital

Without bottle	setting range (infinitely variable)	graduation	accuracy (R%)	Precision (V %)	with threadadapter				
<b>173/2</b>	0,2– 2 ml	0,01 ml	≤ ± 0,6	≤ 0,1	A 25	A 28	A 32	A 38	S 40
<b>173/5</b>	0,5– 5 ml	0,02 ml	≤ ± 0,6	≤ 0,1	A 25	A 28	A 32	A 38	S 40
<b>173/10</b>	1 – 10 ml	0,05 ml	≤ ± 0,6	≤ 0,1	A 25	A 28	A 32	A 38	S 40
<b>173/25</b>	2,5– 25 ml	0,10 ml	≤ ± 0,6	≤ 0,1	A 32	A 38	S 40		
<b>173/50</b>	5 – 50 ml	0,20 ml	≤ ± 0,6	≤ 0,1	A 32	A 38	S 40		

### „ASSISTENT“-DISPENSER variable

Without bottle	setting range (infinitely variable)	graduation	accuracy (R%)	Precision (V %)	with threadadapter				
<b>183/05</b>	0,05– 0,5 ml	0,01 ml	≤ ± 1,0	≤ 0,2	A 22	A 25	A 28	A 32	
<b>183/2</b>	0,2 – 2 ml	0,05 ml	≤ ± 0,6	≤ 0,1	A 25	A 28	A 32	A 38	S 40
<b>183/5</b>	0,5 – 5 ml	0,1 ml	≤ ± 0,6	≤ 0,1	A 25	A 28	A 32	A 38	S 40
<b>183/10</b>	1 – 10 ml	0,2 ml	≤ ± 0,6	≤ 0,1	A 25	A 28	A 32	A 38	S 40
<b>183/25</b>	2,5 – 25 ml	0,5 ml	≤ ± 0,6	≤ 0,1	A 32	A 38	S 40		
<b>183/50</b>	5 – 50 ml	1,0 ml	≤ ± 0,6	≤ 0,1	A 32	A 38	S 40		
<b>183/100</b>	10 – 100 ml	1,0 ml	≤ ± 0,6	≤ 0,1	A 32	A 38	S 40		



## Liquid handling



### “Assistent” Digital burette

**210** “Contiburette µ 10”, with certificate of conformity  $\mu$  up to 100 ml, with A 32 screw connections, bent discharge tube, filling tube as well as 2 additional screw adapters A 45 and A 40. CE

Continuous supply and measurement in the most customary volume range of 0,01 to 100 ml – using only one device.

(Beyond that, it is possible to titrate even larger volumes to max. 9999,99 ml.)

An electronic measuring system quantifies the amount of liquid supplied and indicates this to two decimal points.

Minimal setting in increments of 10 µl. (patent pending). The burette can be calibrated.

The mechanical core of this burette consists of largely acid-resistant aluminium oxide (99,8%  $Al_2O_3$ ) with very high wearing quality.

No glass cylinder – no valves

The pump components used have been designed in such a way as to keep dead space volume to a minimum. The burette vents itself automatically, thus eliminating any measuring errors due to trapped gas bubbles or air bubbles. Possibility to calibrate.

The measuring mechanism of the “Contiburette µ 10” has a low energy consumption using two standard 1.5 V mignon batteries (mignon accumulators can also be used).

One set of batteries is sufficient for approx. 500 operating hours.

**210/1** PTFE-discharge-tube alone for No. 210

**212** Motorized “Assistent” Digital-burette µ 10 CE

Technical data as No. 210

Delivery speed approx. 15 ml/min.

#### Accessories:

**212/1** Remote-controller with LCD-display

**212/2** – dto. –, with volume-preset