

# **Frespenser Plus**

### **Premium Bottle-Top Dispenser**

Designed for safe, sturdy & stable dispensing directly from the bottle in the range of volumes up to 100  $\,$  mL  $\,$ 

- Fast, precise, and reproducible volume locking mechanism on a clear scale
- Reagent recovery function reduces reagent waste and prevents dripping when not in use
- 6 adapters to comfortably fit most laboratory reagent bottles
- Adjustable aspirating tube for different bottle heights

## **Features**

- High chemical compatibility with use of inert materials and glass/PTFE piston
- Easy to disassemble and clean for periodic maintenance
- Fully autoclavable at 121°C to ensure sterility
- Available in 5 dispensing volume ranges from 0.5mL to 100mL
- Supplied with most popular adapters (S40, GL32, GL38, GL25, GL28)

## **Specifications**

Cat. No.	Volume Range	Graduation	Systema	tic Error	Random Error	
	mL	mL	μL	%	μL	%
9181005	0.5-5	0.1	±25	±0.5	±10	±0.2
9181006	1.0-10	0.2	±50	±0.5	±20	±0.2
9181007	2.5-25	0.5	±125	±0.5	±50	±0.2
9181008	5.0-50	1.0	±250	±0.5	±100	±0.2
9181009	10-100	2.0	±500	±0.5	±200	±0.2

Cat. No.	9182006 9182008	9182009 918201	9182005 9	9182003	9182014	9182015	9182016	9182017	9182018
Accessories	GL32, GL38, Adapter, Adapter, 45/32 mm 45/38 mm	1 1 1	Adapter,	Reagent Bottle (Brown,	Filling tube combination	Discharge tube (m) (adapter 25 mL \ 50 mL  100 mL)	Discharge tube (m) (adapter 5 mL、 10 mL)	Discharge tube combination (adapter 25 mL、 50 mL、100 mL)	(

Lab1st Liquid Handling range includes Pipettes (Electronic Pipettes & Mechanical Pipettes), Pipette Filler, Pipette Controller and Stepper.

#### **List of Lab1st models**

Series	Image	Model	Application	Operation Method	Volume Range	Channel Option	Autoclavable	
Mechanical Pipette		Lab1st Unique	Aqueous solution	Mechanical	0.1-10000μL	Single channel	YES	
		Lab1st Precision Plus	Aqueous solution	Mechanical	0.1-5000 μL	Single Channel Adj. & Fixed;	YES	
					0.5-300 μL	8 Channel Adj.; 12 Channel Adj.;		
	1	ComPette Pro	Aqueous solution	Mechanical	25-300 μL	Single Channel Fixed	NO	
	Î	EliPette Pro	Aqueous solution	Electronic	0.5-1000 μL	Single Channel Adj.		
Electronic					0.5-300 μL	8 Channel Adj.	YES (lower part)	
Pipette	100	EliPette	Aqueous solution	Electronic	0.5-1000 μL	Single Channel Adj.	YES (lower part)	
Pipette Filler		Eva Pro	Aqueous solution	Electronic	0.1-100mL	Single channel	YES (silicon adapter&nozzle)	
	1	Eva Plus	Aqueous solution	Electronic	0.1-100mL	Single channel	YES (silicon adapter&nozzle)	
Pipette Controller	E.	Eva +	Aqueous solution	Mechanical	0.1-100mL	Single channel	YES (silicon adapter&nozzle)	
Pipette Pump		Eva	Aqueous solution	Mechanical	2-25 mL	Single channel	NO	
Stepper		Stepette	Aqueous solution, high viscosity or volatile solution	Mechanical	0.5-50 mL	Single channel	NO	

# Liquid Handling

In addition to Pipettes, Liquid Handling series also include various Dispensers, Electronic Burette and Vacuum Aspiration System, which are used for the pipetting, dispensing, and collection of reagents with a wider range.

#### List of Lab1st models













Product Name	Bottle-Top Dispenser	New Bottle-Top Dispenser	Electronic Bottle-Top Dispenser	Electronic Burette	Vacuum Aspiration System	Economical Vacuum Aspirator
Model	Frespenser	Frespenser Plus	Frespenser Pro	Lab1st Patience	Vacpette Plus	Vacpette
Application	Reagent p	pipetting and liquid dispe	Used in titration operations in chemical analysis, food industry, environmental analysis	Liquid collection and storage treatment, including cell culture medium, suspension, supernatant.		
Operation	Manual	Manual	Electronic	Electronic	Electronic	Electronic
Volume Range	0.5-5 mL 1.0-10mL 2.5-25 mL 5.0-50 mL	0.5-5 mL 1.0-10mL 2.5-25 mL 5.0-50 mL 10-100mL	0.1-99.9 mL	0.01-99.99 mL	Vacuum range: 0-600mbar Bottle volume:4L	Vacuum range: 0-500mbar Bottle volume:2L
Reagent Recovery Function	NO	Yes	Yes	Yes	NO	NO
Features	-	-Pro Glass piston (Part volume)	-	-	Sensitive level sensor,Self-closing connector	1L bottle optional, Switch manual and continuous aspiration
Fully autoclavable	The part where the liquid flows	Whole	-	-	The part where the liquid flows	The part where the liquid flows
Accessories	Screw adapter	Screw adapter	Spiral dispensing pipe	Spiral dispensing pipe	Handle adapter	Handle adapter