

Lab1st Precision Plus

Fully Autoclavable Mechanical Pipette

121°C
FULLY
Autoclavable

Features

- Fixed volume or adjustable volume from 0.1µL to 5000µL
- Single, 8 and 12 channel pipette options
- Fully autoclavable, mechanical operation
- Easy Calibration and maintenance
- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assembly
- Spring loaded tip cones for easy cleaning and maintenance
- Compound material-made tip cone secures high performance



Mechanical Pipette Volume Selection

Specifications

This volume list is for Lab1st Precision Plus (Adjustable and Fixed volume)

Single-channel Adjustable Volume Pipettes						
Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			Systematic Error		Random Error	
μL	μL	μL	μL	%	μL	%
0.1-2.5	0.05	2.5	± 0.0625	± 2.50	± 0.05	± 2.00
		1.25	± 0.0375	± 3.00	± 0.0375	± 3.00
		0.25	± 0.03	± 12.00	± 0.015	± 6.00
0.5-10	0.1	10	± 0.1	± 1.00	± 0.08	± 0.80
		5	± 0.075	± 1.50	± 0.075	± 1.50
		1	± 0.025	± 2.50	± 0.015	± 1.50
2-20	0.5	20	± 0.18	± 0.90	± 0.08	± 0.04
		10	± 0.12	± 1.20	± 0.1	± 1.00
		2	± 0.06	± 3.00	± 0.04	± 2.00
5-50	0.5	50	± 0.3	± 0.60	± 0.15	± 0.30
		25	± 0.225	± 0.90	± 0.15	± 0.60
		5	± 0.1	± 2.00	± 0.1	± 2.00
10-100	1	100	± 0.8	± 0.80	± 0.15	± 0.15
		50	± 0.5	± 1.00	± 0.2	± 0.40
		10	± 0.3	± 3.00	± 0.15	± 1.50
20-200	1	200	± 1.2	± 0.60	± 0.3	± 0.15
		100	± 0.8	± 0.80	± 0.3	± 0.30
		20	± 0.6	± 3.00	± 0.2	± 1.00
50-200	1	200	± 1.2	± 0.60	± 0.3	± 0.15
		100	± 0.8	± 0.80	± 0.3	± 0.30
		50	± 0.5	± 1.00	± 0.2	± 0.40
100-1000	5	1000	± 6	± 0.60	± 2	± 0.20
		500	± 3.5	± 0.70	± 1.25	± 0.25
		100	± 2	± 2.00	± 0.7	± 0.70
200-1000	5	1000	± 6	± 0.60	± 2	± 0.20
		500	± 3.5	± 0.70	± 1.25	± 0.25
		200	± 1.8	± 0.90	± 0.6	± 0.30
1000-5000	50	5000	± 25	± 0.50	± 7.5	± 0.15
		2500	± 15	± 0.60	± 7.5	± 0.30
		1000	± 7	± 0.70	± 3	± 0.30

User calibration should refer to the industrial standard ISO8655-2.

Fixed Volume Pipettes						
Volume Range	Increment	Test Volume	Systematic Error		Random Error	
μL	-	μL	μL	%	μL	%
5	-	5	± 0.065	± 1.3	± 0.06	± 1.2
10	-	10	± 0.08	± 0.8	± 0.08	± 0.8
20	-	20	± 0.12	± 0.6	± 0.1	± 0.5
25	-	25	± 0.125	± 0.5	± 0.075	± 0.3
50	-	50	± 0.25	± 0.5	± 0.15	± 0.3
100	-	100	± 0.5	± 0.5	± 0.3	± 0.3
200	-	200	± 0.8	± 0.4	± 0.4	± 0.2
250	-	250	± 1.0	± 0.4	± 0.5	± 0.2
500	-	500	± 1.5	± 0.3	± 1.0	± 0.2
1000	-	1000	± 3.0	± 0.3	± 2.0	± 0.2
2000	-	2000	± 6.0	± 0.3	± 3.0	± 0.15
5000	-	5000	± 15	± 0.3	± 7.5	± 0.15

8-channel Adjustable Volume Pipettes						
Volume Range	Increment	Test Volume	Systematic Error		Random Error	
μL	μL	μL	μL	%	μL	%
0.5-10	0.1	10	± 0.15	± 1.50	± 0.15	± 1.50
		5	± 0.125	± 2.50	± 0.125	± 2.50
		1	± 0.04	± 4.00	± 0.04	± 4.00
5-50	0.5	50	± 0.5	± 1.00	± 0.25	± 0.50
		25	± 0.375	± 1.50	± 0.25	± 1.00
		5	± 0.15	± 3.00	± 0.1	± 2.00
50-300	5	300	± 2.1	± 0.70	± 0.75	± 0.25
		150	± 1.5	± 1.00	± 0.75	± 0.50
		50	± 0.75	± 1.50	± 0.4	± 0.80

12-channel Adjustable Volume Pipettes						
Volume Range	Increment	Test Volume	Systematic Error		Random Error	
μL	μL	μL	μL	%	μL	%
0.5-10	0.1	10	± 0.15	± 1.50	± 0.15	± 1.50
		5	± 0.125	± 2.50	± 0.125	± 2.50
		1	± 0.04	± 4.00	± 0.04	± 4.00
5-50	0.5	50	± 0.5	± 1.00	± 0.25	± 0.50
		25	± 0.375	± 1.50	± 0.25	± 1.00
		5	± 0.15	± 3.00	± 0.1	± 2.00
50-300	5	300	± 2.1	± 0.70	± 0.75	± 0.25
		150	± 1.5	± 1.00	± 0.75	± 0.50
		50	± 0.75	± 1.50	± 0.4	± 0.80

* Lab1st Specifications are used as guidelines and the user calibration should refer to the industrial standard ISO 8655

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.;	
	ComPette Pro	Aqueous solution	Mechanical	25-300 µL	Single Channel Fixed	NO	
Electronic Pipette		EliPette Pro	Aqueous solution	Electronic	0.5-1000µL	Single Channel Adj.	YES (lower part)
					0.5-300 µL	8 Channel Adj.	
	EliPette	Aqueous solution	Electronic	0.5-1000µL	Single Channel Adj.	YES (lower part)	
Pipette Filler		Eva Pro	Aqueous solution	Electronic	0.1-100mL	Single channel	YES (silicon adapter&nozzle)
		Eva Plus	Aqueous solution	Electronic	0.1-100mL	Single channel	YES (silicon adapter&nozzle)
Pipette Controller		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

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 pipetting and liquid dispensing			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