

## Pipettes

### TopPette-Mechanical Pipettes

#### Features for TopPette:

- \* Light weight, ergonomic, low force design
- \* Digital display clearly reads volume setting
- \* The pipettes cover volume range of 0.1µl to 10ml
- \* Easy to calibrate and maintain
- \* The lower part is autoclavable
- \* Design helps avoid repetitive strain injuries

#### Features for Multi-channel TopPette:

- \* 8-and 12-channel pipettes are available for standard 96-well plate
- \* Dispensing head rotates ensures optimum pipetting convenience
- \* Individual piston/tip cone assemblies allow easy repair and maintenance
- \* Compound material tip cone design allows visual seal verification
- \* Universal pipette tips can be used



### MicroPette Mechanical Pipettes

#### Features for MicroPette:

- \* Light weight, ergonomic, low force design
- \* Digital display clearly reads volume setting
- \* The pipettes cover volume range of 0.1µl to 10ml
- \* Easy to calibrate and maintain
- \* The lower part is autoclavable
- \* Design helps avoid repetitive strain injuries
- \* Manufactured from innovative materials



#### Features for multi-channel MicroPette:

- \* 8 and 12 channel pipettes are available for standard 96-well plate
- \* Dispensing head rotates for optimum pipetting convenience
- \* Individual piston and tip cone assemblies allow easy repair and maintenance
- \* Compound material tip cone design allows visual seal verification
- \* Universal pipette tips can be used

### MicroPette Plus Autoclavable Pipette

#### Fully Autoclavable:

The MicroPette plus pipettes can be fully autoclaved at 121°C, 1 atm for less than 20 mins. The pipettes can be autoclaved without special preparations. After autoclaving the pipette must be cooled down and dried over 12 hours.



#### Features for MicroPette plus:

- \* Fully autoclavable
- \* Light weight, ergonomic, low force design
- \* Digital display clearly reads volume setting
- \* The pipettes cover volume range of 0.1µl to 10ml
- \* Easy to calibrate and maintain
- \* Design helps avoid repetitive strain injuries
- \* Manufactured from innovative materials

#### Features for multi-channel MicroPette plus:

- \* 8 and 12 channel pipettes are available for standard 96-well plate
- \* Individual piston and tip cone assemblies allow easy repair and maintenance
- \* Compound material tip cone design allows visual seal verification
- \* Universal pipette tips can be used
- \* Dispensing head rotates for optimum pipetting convenience

**Note:** It is recommended to check the performance of the pipette after each autoclaving. It is also recommended to grease the piston and seal of the pipette after each 10 autoclaving.

**Technical Parameters:**

TopPette Mechanical Pipettes/ MicroPette Mechanical Pipettes / MicroPette Plus Autoclavable Pipettes (Adjustable and Fixed Volume)

Single-channel Adjustable Volume Pipettes					
Volume Range	Increment	Test Volume(μl)	Maximume Permissible Systematic Error	Maximume Permissible Random Error	
0.1-2.5μl	0.05μl	2.5	2.50%	0.0625μl	2.00% 0.05μl
		1.25	3.00%	0.0375μl	3.00% 0.0375μl
		0.25	12.00%	0.03μl	6.00% 0.015μl
0.5-10μl	0.1μl	10	1.00%	0.1μl	0.80% 0.08μl
		5	1.50%	0.075μl	1.50% 0.075μl
		1	2.50%	0.025μl	1.50% 0.015μl
2-20μl	0.5μl	20	0.90%	0.18μl	0.40% 0.08μl
		10	1.20%	0.12μl	1.00% 0.1μl
		2	3.00%	0.06μl	2.00% 0.04μl
5-50μl	0.5μl	50	0.60%	0.3μl	0.30% 0.15μl
		25	0.90%	0.225μl	0.60% 0.15μl
		5	2.00%	0.1μl	2.00% 0.1μl
10-100μl	1μl	100	0.80%	0.8μl	0.15% 0.15μl
		50	1.00%	0.5μl	0.40% 0.2μl
		10	3.00%	0.3μl	1.50% 0.15μl
20-200μl	1μl	200	0.60%	1.2μl	0.15% 0.3μl
		100	0.80%	0.8μl	0.30% 0.3μl
		20	3.00%	0.6μl	1.00% 0.2μl
50-200μl	1μl	200	0.60%	1.2μl	0.15% 0.3μl
		100	0.80%	0.8μl	0.30% 0.3μl
		50	1.00%	0.5μl	0.40% 0.2μl
100-1000μl	5μl	1000	0.60%	6μl	0.20% 2μl
		500	0.70%	3.5μl	0.25% 1.25μl
		100	2.00%	2μl	0.70% 0.7μl
200-1000μl	5μl	1000	0.60%	6μl	0.20% 2μl
		500	0.70%	3.5μl	0.25% 1.25μl
		200	0.90%	1.8μl	0.30% 0.6μl
1000-5000μl	50μl	5000	0.50%	25μl	0.15% 7.5μl
		2500	0.60%	15μl	0.30% 7.5μl
		1000	0.70%	7μl	0.30% 3μl
2-10ml	0.1ml	10ml	0.60%	60μl	0.20% 20μl
		5ml	1.20%	60μl	0.30% 15μl
		2ml	3.00%	60μl	0.60% 12μl

Note: 2~10ml is not available for micropette plus autoclaveable pipettes.

8-channel Adjustable Volume Pipettes					
Volume Range	Increment	Test Volume(μl)	Maximume Permissible Systematic Error	Maximume Permissible Random Error	
0.5-10μl	0.1μl	10	1.50%	0.15μl	1.50% 0.15μl
		5	2.50%	0.125μl	2.50% 0.125μl
		1	4.00%	0.04μl	4.00% 0.04μl
5-50μl	0.5μl	50	1.00%	0.5μl	0.50% 0.25μl
		25	1.50%	0.375μl	1.00% 0.25μl
		5	3.00%	0.15μl	2.00% 0.1μl
50-300μl	5μl	300	0.70%	2.1μl	0.25% 0.75μl
		150	1.00%	1.5μl	0.50% 0.75μl
		50	1.50%	0.75μl	0.80% 0.4μl
12-channel Adjustable Volume Pipettes					
Volume Range	Increment	Test Volume(μl)	Maximume Permissible Systematic Error	Maximume Permissible Random Error	
0.5-10μl	0.1μl	10	1.50%	0.15μl	1.50% 0.15μl
		5	2.50%	0.125μl	2.50% 0.125μl
		1	4.00%	0.04μl	4.00% 0.04μl
5-50μl	0.5μl	50	1.00%	0.5μl	0.50% 0.25μl
		25	1.50%	0.375μl	1.00% 0.25μl
		5	3.00%	0.15μl	2.00% 0.1μl
50-300μl	5μl	300	0.70%	2.1μl	0.25% 0.75μl
		150	1.00%	1.5μl	0.50% 0.75μl
		50	1.50%	0.75μl	0.80% 0.4μl
Fixed Volume Pipettes					
Volume Range	Increment	Test Volume(μl)	Maximume Permissible Systematic Error	Maximume Permissible Random Error	
5μl	/	5μl	1.3%	0.065μl	1.2% 0.06μl
10μl	/	10μl	0.8%	0.08μl	0.8% 0.08μl
20μl	/	20μl	0.6%	0.12μl	0.5% 0.1μl
25μl	/	25μl	0.5%	0.125μl	0.3% 0.075μl
50μl	/	50μl	0.5%	0.25μl	0.3% 0.15μl
100μl	/	100μl	0.5%	0.5μl	0.3% 0.3μl
200μl	/	200μl	0.4%	0.8μl	0.2% 0.4μl
250μl	/	250μl	0.4%	1.0μl	0.2% 0.5μl
500μl	/	500μl	0.3%	1.5μl	0.2% 1.0μl
1000μl	/	1000μl	0.3%	3.0μl	0.2% 2.0μl
2000μl	/	2000μl	0.3%	6.0μl	0.15% 3.0μl
5000μl	/	5000μl	0.3%	15μl	0.15% 7.5μl