

iPette Electronic Pipette

DRAGONLAB will launch iPette Electronic Pipette that enable fast, precise and comfortable pipetting. The iPette is available in single-channel models covering volume range of 0.5 to 5000µl and multi-channel models from 0.5 to 1200µl.



Features

- Comprehensive range of liquid handling protocols with easy programming
- DC motor with build-in error control improves pipetting precision and provides more reliable results
- Efficient lithium-ion battery offers long runtime on each charge
- 9 speeds for aspiration and dispensing
- Autoclavable low part
- Wireless charging

Specifications

Channels	Volume Range	Increment ul	Test Volume	Inaccuracy		Imprecision	
			ul	ul	%	s.d.*ul	CV%*
1	0.5-10ul	0.01ul	10	±0.10	±1.0	0.05	0.5
			1	±0.035	±3.5	0.03	3.0
1	5-50ul	0.1ul	50	±0.40	±0.8	0.15	0.3
			5	±0.15	±3.0	0.125	2.5
1	30-300ul	1ul	300	±1.8	±0.6	0.6	0.2
			30	±0.9	±3.0	0.21	0.7
1	100-1000ul	1ul	1000	±6.0	±0.6	2.0	0.2
			100	±3.0	±3.0	0.6	0.6
1	1000-5000ul	-	5000	±30.0	±0.6	10.0	0.2
			1000	±15.0	±3.0	4.0	0.8
8	0.5-10ul	0.1ul	10	±0.24	±2.4	0.16	1.6
			1	±0.12	±12.0	0.08	8.0
8	5-50ul	0.1ul	50	±0.75	±1.5	0.35	0.7
			5	±0.25	±5.0	0.10	2.0
8	30-300ul	1ul	300	±3.0	±1.0	0.9	0.3
			30	±0.3	±3.0	0.1	1.0
8	100-1200ul	-	1200	±12.0	±1.0	2.4	0.2
			100	±3.0	±3.0	0.9	0.9
12	0.5-10ul	0.1ul	10	±0.24	±2.4	0.16	1.6
			1	±0.12	±12.0	0.08	8.0
12	5-50ul	0.1ul	50	±0.75	±1.5	0.35	0.7
			5	±0.25	±5.0	0.10	2.0
12	30-300ul	1ul	300	±3.0	±1.0	0.9	0.3
			30	±0.3	±3.0	0.1	1.0
12	100-1200ul	-	1200	±12.0	±1.0	2.4	0.2
			100	±3.0	±3.0	0.9	0.9

* s.d. = Standard Deviation

* CV = Coefficient of Variation

TopPette Mechanical Pipettes

Features for TopPette

- Lightweight, 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 with tool supplied
- Design helps avoid repetitive strain injuries
- Calibrated in accordance with ISO8655. Each pipette supplied with individual test certificate
- The low part is available for autoclaving

Simply turn the plunger button for volume selection

Finger support with minimum user effort

Tip ejector allows convenient one-handed operation

Ejector collar and tip cone can be removed

Durable tip cone materials
Provide excellent chemical resistance





12 channels



8 channels

Features for multi-channel TopPette

- 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
- Can be used with universal style pipette tips



Pipette with switch

DRAGONLAB Pipettes are available to assembly with an on/off switch and cable. This can be used with coagulation analyzers or any other instruments that require precise timing.

MicroPette Mechanical Pipettes

Features for MicroPette

- Lightweight, 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 with tool supplied
- Design helps avoid repetitive strain injuries
- Calibrated in accordance with ISO8655. Each pipette supplied with individual test certificate
- The low part is available for autoclaving
- Manufactured from innovative materials



Simply turn the plunger button for volume selection

Finger support with minimum user effort

Tip ejector allows convenient one-handed operation

Ejector collar and tip cone can be removed

Durable tip cone materials provide excellent chemical resistance





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
- Can be used with universal style pipette tips



12 channels



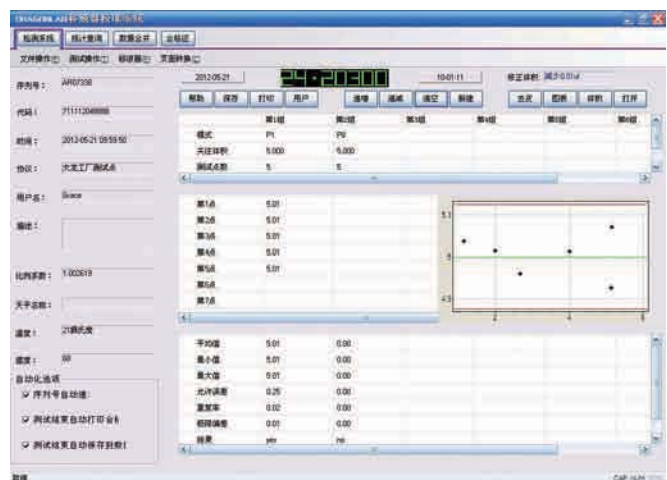
8 channels

Calibration

All DRAGONLAB pipettes have been quality tested according to ISO8655-2:2002 with calibration certificate. The quality control involves gravimetric testing of each pipette with distilled water at 22°C.

Please visit DRAGONLAB website for online calibration at www.dragonlab.com. Through the online calibration software, users can perform simple, accurate and timely calibration with free cost, and avoid the calibration error due to non-professional operation.

We will support and help you to achieve consistently excellent results.



MicroPette Plus Autoclavable Pipette



Features for MicroPette plus

- Fully autoclavable
- Lightweight, 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 with tool supplied
- Design helps avoid repetitive strain injuries
- Manufactured from innovative material
- Calibrated in accordance with ISO8655. Each pipette supplied with individual test certificate



Simply turn the plunger button for volume selection

Finger support with minimum user effort

Tip ejector allows convenient one-handed operation



Ejector collar and tip cone can be removed

Durable tip cone materials provide excellent chemical resistance





Features for multi-channel MicroPette plus

- 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
- Can be used with universal style pipette tips



12 channels



8 channels



Fully autoclavable

The MicroPette plus pipettes can be fully autoclaved and withstood steam sterilizes at 121°C, 1 atm for 20 minutes.

The pipettes can be autoclaved without special preparations. After autoclaving the pipette must be cooled down and left to dry over 12 hours.

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.

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

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

8-channel Adjustable Volume Pipettes					
Volume Range	Test Volume	Maximum permissible systematic error (Inaccuracy)		Maximum permissible random error (Imprecision)	
		%	µl	%	µl
0.5-10µl	10µl	1.50%	0.15	1.50%	0.15
	5µl	2.50%	0.125	2.50%	0.125
	1µl	4.00%	0.04	4.00%	0.04
5-50µl	50µl	1.00%	0.5	0.50%	0.25
	25µl	1.50%	0.375	1.00%	0.25
	5µl	3.00%	0.15	2.00%	0.1
50-300µl	300µl	0.70%	2.1	0.25%	0.75
	150µl	1.00%	1.5	0.50%	0.75
	50µl	1.50%	0.75	0.80%	0.4

12-channel Adjustable Volume Pipettes					
Volume Range	Test Volume	Maximum permissible systematic error (Inaccuracy)		Maximum permissible random error (Imprecision)	
		%	µl	%	µl
0.5-10µl	10µl	1.50%	0.15	1.50%	0.15
	5µl	2.50%	0.125	2.50%	0.125
	1µl	4.00%	0.04	4.00%	0.04
5-50µl	50µl	1.00%	0.5	0.50%	0.25
	25µl	1.50%	0.375	1.00%	0.25
	5µl	3.00%	0.15	2.00%	0.1
50-300µl	300µl	0.70%	2.1	0.25%	0.75
	150µl	1.00%	1.5	0.50%	0.75
	50µl	1.50%	0.75	0.80%	0.4

Fixed Volume Pipettes					
Volume Range	Test Volume	Maximum permissible systematic error (Inaccuracy)		Maximum permissible random error (Imprecision)	
		%	µl	%	µl
5µl	5µl	1.3%	0.065	1.2%	0.06
10µl	10µl	0.8%	0.08	0.8%	0.08
20µl	20µl	0.6%	0.12	0.5%	0.1
25µl	25µl	0.5%	0.125	0.3%	0.075
50µl	50µl	0.5%	0.25	0.3%	0.15
100µl	100µl	0.5%	0.5	0.3%	0.3
200µl	200µl	0.4%	0.8	0.2%	0.4
250µl	250µl	0.4%	1.0	0.2%	0.5
500µl	500µl	0.3%	1.5	0.2%	1.0
1000µl	1000µl	0.3%	3.0	0.2%	2.0
2000µl	2000µl	0.3%	6.0	0.15%	3.0
5000µl	5000µl	0.3%	15	0.15%	7.5

Ordering Information

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

Single-channel Adjustable Volume Pipettes			
Cat. No.			
TopPette	MicroPette	MicroPette Plus	Volume Range
711111010000	712111010000	713111010000	0.1-2.5µl
711111040000	712111040000	713111040000	0.5-10µl
711111060000	712111050000	713111050000	5-50µl
711111050000	712111060000	713111060000	2-20µl
711111080000	712111080000	713111080000	10-100µl
711111090000	712111090000	713111090000	20-200µl
711111110000	712111110000	713111110000	50-200µl
711111140000	712111140000	713111140000	100-1000µl
711111160000	712111160000	713111160000	200-1000µl
711111170000	712111170000	713111170000	1000-5000µl
711111330000	712111330000	713111330000	2-10ml
8-channel Adjustable Volume Pipettes			
711112040000	712112040000	713112040000	0.5-10µl
711112060000	712112060000	713112060000	5-50µl
711112120000	712112120000	713112120000	50-300µl
12-channel Adjustable Volume Pipettes			
711113040000	712113040000	713113040000	0.5-10µl
711113060000	712113060000	713113060000	5-50µl
711113120000	712113120000	713113120000	50-300µl
Fixed Volume Pipettes			
711121180000	712121180000	713121180000	5µl
711121190000	712121190000	713121190000	10µl
711121200000	712121200000	713121200000	20µl
711121210000	712121210000	713121210000	25µl
711121220000	712121220000	713121220000	50µl
711121230000	712121230000	713121230000	100µl
711121240000	712121240000	713121240000	200µl
711121250000	712121250000	713121250000	250µl
711121260000	712121260000	713121260000	500µl
711121270000	712121270000	713121270000	1000µl
711121280000	712121280000	713121280000	2000µl
711121290000	712121290000	713121290000	5000µl



Pipette Stand



The linear and round stands have been designed to fit perfectly of DRAGONLAB Pipette range, TopPette, MicroPette and MicroPette Plus Autoclavable Pipettes. The stands are convenient to hold up to 6 pipettes both of single and multi-channel.



The round stand can be rotating smoothly and comfortably hold up to 6 pipettes

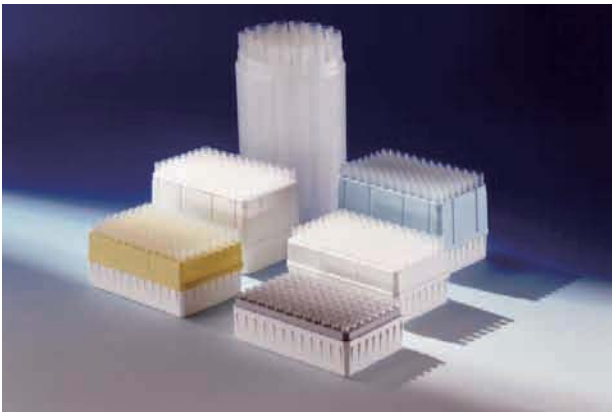


The linear stand can hold of single and multi-channel pipettes up to 6

Ordering Information

Cat. No.	Descriptions
710000840000	Round stand holds up to 6 pipettes, fit of TopPette, MicroPette and MicroPette Plus
710000850000	Linear stand holds up to 6 pipettes, fit of TopPette, MicroPette and MicroPette Plus

Pipette Tips



Ordering Information

Pipette Tips (Non-sterilizing packing)

Cat. No.	Descriptions
17400024	FT10 μ l (1pc, 1000 tips/bag)
17400023	FT200 μ l (1pc, 1000 tips/bag)
17400012	FT1000 μ l (1pc, 500 tips/bag)
17400025	FT5000 μ l (1pc,100 tips/bag)

Pipette Pump

Pipette Pump easy one hand operates. Optimally located thumbwheel rotates easily for precision aspirating or dispensing. By depressing the side lever, entire contents can be dispensed rapidly.

Features

- Volume capacity 2ml, 10ml and 25ml
- Color coded by volume with green, blue and red
- Thumbwheel for precision operation
- Resistant to acids, alkalis
- Easily disassembly for cleaning

Cat. No.	Descriptions
740300018888	2ml, blue (blank LOGO)
740300028888	10ml, green (blank LOGO)
740300038888	25ml, red (blank LOGO)



StepMate Stepper

Optimized for smooth dispensing of even the smallest volumes

Five easy-to-select settings control dispensing volume

By pushing the slide upwards, the syringe is filled up

The stop lever secures the syringe inserted



Features

- Lightweight and ergonomic
- One-hand operation
- Factory calibrated
- Volume range of 1µl to 5ml can be dispensed
- Maintenance free
- Equipped with durable tip insertion lever
- Works with seven sizes of disposable, polypropylene syringes from 0.5ml to 50ml

Select the Dispensing Volume

- Find the required dispensing volume
- Use the adjusting wheel to set the required volume
- Select and inserting suitable tips
- Confirm the maximum dispensing steps

Dispensing Volume

Select suitable tips

Steps

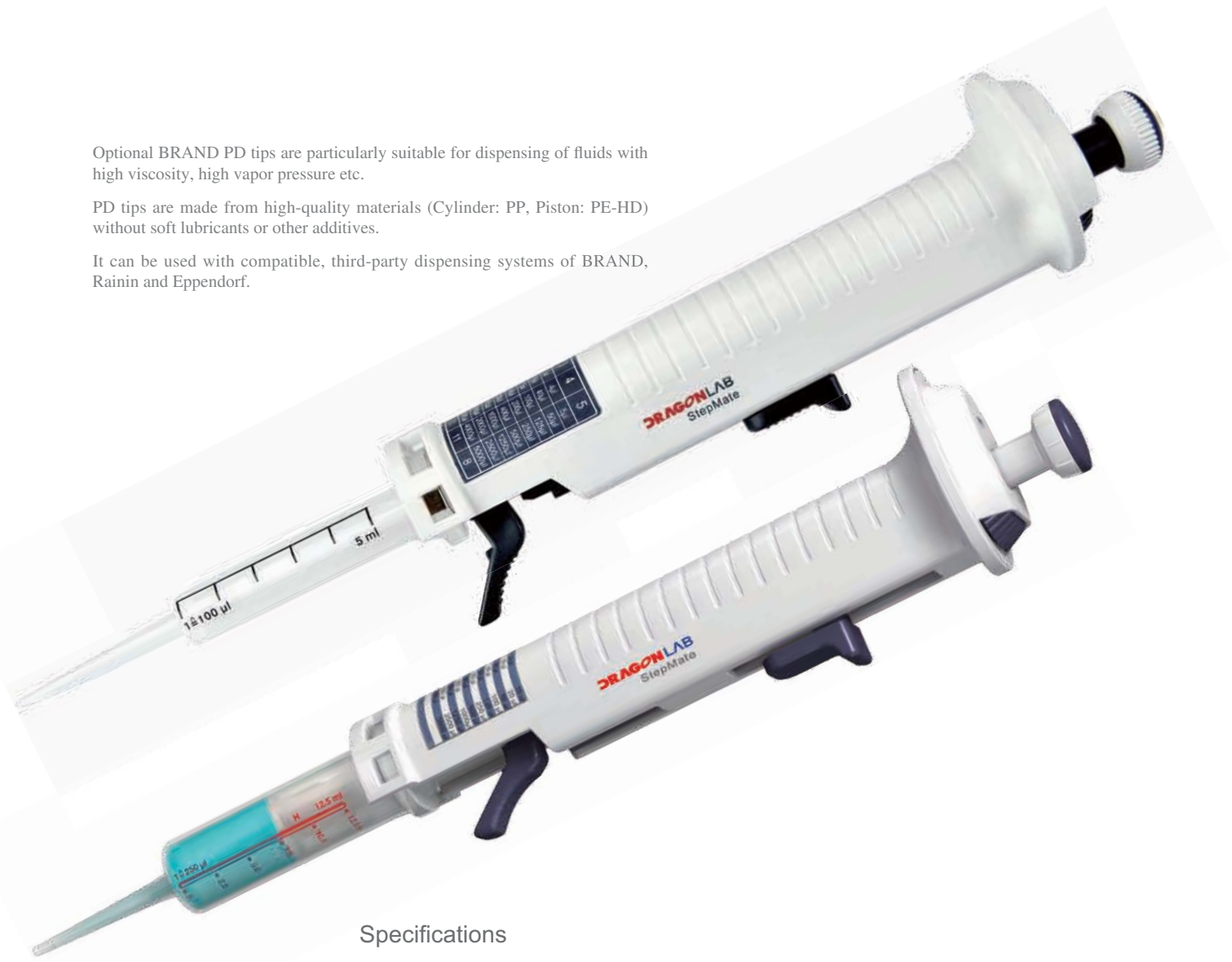
Tips \ Sel.	1	2	3	4	5
0.05ml	1µl	2µl	3µl	4µl	5µl
0.50ml	10µl	20µl	30µl	40µl	50µl
1.25ml	25µl	50µl	75µl	100µl	125µl
2.50ml	50µl	100µl	150µl	200µl	250µl
5.00ml	100µl	200µl	300µl	400µl	500µl
12.50ml	250µl	500µl	750µl	1000µl	1250µl
25.00ml	500µl	1000µl	1500µl	2000µl	2500µl
50.00ml	1000µl	2000µl	3000µl	4000µl	5000µl
Steps	48	23	15	11	8



Optional BRAND PD tips are particularly suitable for dispensing of fluids with high viscosity, high vapor pressure etc.

PD tips are made from high-quality materials (Cylinder: PP, Piston: PE-HD) without soft lubricants or other additives.

It can be used with compatible, third-party dispensing systems of BRAND, Rainin and Eppendorf.



Specifications

Dial setting	1	2	3	4	5		
Number of steps	48	23	15	11	8		
Syringe volume (ml)	Sample volume (µl)					A %	P %
0.50	10	20	30	40	50	± 0.8	≤ 0.7
1.25	25	50	75	100	125	± 0.8	≤ 0.5
2.50	50	100	150	200	250	± 0.8	≤ 0.4
5.00	100	200	300	400	500	± 0.4	≤ 0.3
12.50	250	500	750	1000	1250	± 0.3	≤ 0.3
25.00	500	1000	1500	2000	2500	± 0.2	≤ 0.3
50.00	1000	2000	3000	4000	5000	± 0.2	≤ 0.2

Note: The first and last dispensing liquid should be discarded or back into container vessel.

Ordering information

Cat No.	Descriptions
720100000000	StepMate
17900024	0.5ml, piston PE-HD, cylinderPP,non-sterile, 1 pc, 100pcs/packing
17900025	1.25ml, piston PE-HD, cylinderPP,non-sterile, 1 pc, 100pcs/packing
17900026	2.5ml, piston PE-HD, cylinderPP,non-sterile, 1 pc, 100pcs/packing
17900027	5.0ml, piston PE-HD, cylinderPP,non-sterile, 1 pc, 100pcs/packing
17900028	12.5ml, piston PE-HD, cylinderPP,non-sterile, 1 pc, 100pcs/packing
17900029	25ml, piston PE-HD, cylinder PP, non-sterile, 1 pc, 50pcs/packing with adaptor
17900030	50ml, piston PE-HD, cylinder PP, non-sterile, 1 pc, 25pcs/packing with adaptor

Levo Pipette Controller

Compress the suction bellows before attaching the pipette

Button to expel residual liquid when using blow-out pipets

Filling and delivery are easily controlled with the small sensitive lever



Features

- Five colors optional
- Comfortable and simple to use
- Precise pipetting control
- Robust and lightweight
- 0.1-100ml volumetric or serological pipettes can be used
- Filling and delivery are easily controlled with a small sensitive lever
- Uses integral and replaceable 3µm filter
- Easy to maintain and clean
- Autoclavable silicone pipette holder



The 3.0µm filter and adapter can be integral and replaceable

Silicone adapter suitable for 0.1-100ml pipette

Ordering information

Cat No.	Descriptions
740100010000	Levo-Blue
740100020000	Levo-Red
740100030000	Levo-Green
740100040000	Levo-Yellow
740100050000	Levo-Pink
Accessories	
Cat No.	Descriptions
17000110	Filter 3.0µm, 1pc/ pk



Levo Plus Motorized Pipette Filler



Large LCD display provides visual confirmation of remaining battery charge and coarse speed settings

Select the desired speed by turning the speed adjustment wheel

Comfortable aspirate and dispense triggers

The dispense button is pressed only up to a point where a check can be felt, the dispensing function will be based on the force of gravity and the liquid will simply flow out



The 0.45µm filter and adapter can be integral and replaceable

Silicone adapter suitable for 0.1-100ml pipette, can be fully autoclaved at 121°C



Features

- Full volume range of 0.1-100ml
- Easy to one-handed operation
- Lightweight, ergonomic designs allow longer, fatigue-free pipetting
- Efficient lithium-ion battery offers long runtime on each charge
- Low battery alert
- Powerful motor fills a 25ml pipette in <5 seconds
- Supplied with integral but replaceable 0.45µm filter
- Can be used while charging
- Large LCD display provides visual confirmation of remaining battery charge and speed settings
- Eight speeds are available for aspirate and dispense liquid



Two-position stand

Specifications

Aspirate Speeds	8
Dispense Speeds	8 Gravity Dispense
Battery	Lithium-Ion
Battery Service Life	More than 8 Hours of Intermittence Use
Charging Time	2-3 Hours
Pipette Types	Glass or Plastic Pipette(0.1-100ml), Pasteur Pipettes
Filter	0.45 μ m Hydrophobic

Ordering information

Cat. No.	Descriptions
740200010000	Levo Plus with AC adapter , spare 0.45 μ m filter and wall stand, Euro plug
740200020000	Levo Plus c/w AC adapter , spare 0.45 μ m filter and wall stand, North-America plug
740200050000	Levo Plus c/w AC adapter , spare 0.45 μ m filter and wall stand, UK plug
Accessories	
Cat. No.	Descriptions
17000103	Filter 0.45 μ m, 1pc each pk

DispensMate plus Bottle-top Dispenser

Quick and easy volume adjustment

Smooth piston design provides effortless dispensing

Closure cap protects, against reagent contact and is easy to attach and remove, even while wearing gloves

Free of adapters allow fitting to standard reagent bottles

Filling tube adjusts easily to different size bottles



Features

- Excellent chemical resistance
- Fully autoclavable at 121°C
- Four ranges of bottle-top dispenser cover a volume range from 0.5ml to 50ml
- Easy to clean and maintain
- The optional flexible discharge tube with safety handle permits fast and precise dispensing
- Made of PTFE, FEP, BSG, PP
- Vapor pressure Max. 500mbar, viscosity max. 500mm²/s, temperature max. 40°C, density max. 2.2g/cm³
- DispensMate plus is supplied with S40, GL32, GL38, GL25, GL28 sized adapters



Specifications

Volume Range ml	Graduation ml	A \leq ±		CV \leq	
		%	μ l	%	μ l
0.5-5	0.1	0.5	25	0.1	5
1.0-10	0.2	0.5	50	0.1	10
2.5-25	0.5	0.5	125	0.1	25
5.0-50	1.0	0.5	250	0.1	50

A = Accuracy; CV = Coefficient of variation

Ordering information

Cat. No.	Volume Range (ml)
731100010000	0.5-5
731100020000	1-10
731100030000	2.5-25
731100040000	5-50
Accessories	
Cat. No.	Descriptions
17000069	S40, Adapter, 45/40mm
17400017	GL32, Adapter, 45/32mm
17400018	GL38, Adapter, 45/38mm
17400019	GL25, Adapter, 32/25mm
17400020	GL28, Adapter, 32/28mm
17400037	Reagent Bottle (Brown, 1L)
17400021	Filling tube (m)
17400073	Discharge tube (m)

DispensMate plus Bottle-top Dispenser Chemical Compatibility at 20°C

The devices of Dragonlab-DispensMate plus which contact with dispensed liquid consist of BSG, PTFE, FEP, and closure cap of outlet is PP; non contact liquids parts consist of PC and other materials. Please note that these tables are just a directional guide not the manufacturer's commitment. Please read the user manual carefully before use and to do related experiments necessarily, which can be used to determine whether should be used. Good laboratory practice would be to rinse out the liquid handling unit at the end of each day with distilled water to prevent corrosive liquids being left in contact with the parts for too long.

We referred to the general technical data and public information from related companies. The table below is not our proprietary data, for user's reference only.

CHEMICAL	BSG	PTFE	FEP	PC	PP
Acids					
Acetic, Glacial	R			NR	R
Acetic, 25%	R	R	R	R	R
Hydrochloric, Concentrated	R				
Hydrochloric, 20%	R	R	R	SR	R
Sulphuric, concentrated	R				
Sulphuric, 25%	R	R	R	R	R
Nitric, Concentrated	R				
Nitric, 30%	R	R	R	R	SR
Phosphoric, 25%	R	R	R		4
Formic, 25%	R	R	R		
Trichloroacetic, 10%	R	R	R	SR	SR
Formic Acid, 85%	R	R	R	R	R
Arsenic Acid	R				
Boric Acid, 10%	R	R	R	R	R
Chromic Acid, 10%	R	R	R	R	R
Hydrofluoric Acid, 35%	NR	Exceptions	R	NR	R
Phosphoric Acid 85%	R	R	R	R	R
Nitric Acid, 50%	R	R	R		
Sulphuric Acid, 95%	R	R	R	NR	NR
Alkalies					
AmmoniumHydroxide,25%	R	R	R	NR	R
Potassium Hydroxide	R	R	R	NR	R
Sodium Hydroxide	R	R	R	NR	R
Alcohols					
Methanol, 98%	R	R		R	R
Ethanol, 98%	R			R	R
Ethanol, 70%	R			R	R
Isopropanol,n-Propanol	R			R	R
Amyl Alcohol, Butanol	R				
Benzyl Alcohol	R	R	R	SR	SR
Ethylene Glycol	R	R	R	R	R
Propylene Glycol	R	R	R	R	R
Glycerol	R	R	R	R	R
Hydrocarbons					
Hexane, Xylene	R	R	R	NR	R
Toluene, Benzene	R	R	R	NR	SR
Kerosene, Gasoline	R				
Tetralin, Decalin	R				
Halogenated Hydrocarbons					
Methyl Chloride	R			NR	SR
Chloroform	R	R	R	NR	NR
Trichloroethylene	R	R	R	NR	NR
Monochlorobenzene, Freon	R				
Carbon Tetrachloride	R	R	R	NR	NR

Ketones					
Acetone	R	R	R	NR	R
Methyl Ethyl Ketone	R	R			
Isopropylacetone	R				
Methyl Isobutyl Ketone	R				
Esters					
Ethyl Acetate	R	R		NR	R
Methyl Acetate	R				
Amyl & Propyl Acetate	R				
Butyl Acetate	R	R	R	NR	NR
Propylene Glycol Acetate	R				
2-Ethoxyethyl Acetate	R				
Methyl Cellosolve Acetate	R				
Benzyl Benzoate	R				
Isopropyl Myristate	R				
Tricresol Phosphate	R				
Oxides – Ethers					
Ethyl Ether	R				
1,4 Dioxane & Tetrahydrofuran	R	R	R	NR	SR
Dimethylsulphoxide (DMSO)	R	R	R	NR	R
Isopropyl Ether	R			NR	NR
Solvents with Nitrogen					
Dimethyl Formamide	R	R	R		
Diethylacetamide	R	R			
Triethanolamine	R				
Aniline	R	R	R	SR	R
Pyridine	R	R	R	NR	SR
Miscellaneous					
Phenol, Aqueous, 10%	R				
Formaldehyde Solution, 30%	R	R	R	R	R
Hydrogen Peroxide, 30%	R	R	R	R	R
Silicone Oil & Mineral Oil	R				
Pyridine	R	R	R	NR	SR
Acetaldehyde	R	R	R	SR	R
Ammonia, 25% ac. Sol.	R	R		NR	R
Ammonium	R				
Calcium Chloride aq. Sol	R	R	R	R	R
Chlorine	R	R	R		
Chlorobenzene	R			NR	NR
Fluorinated Hydrocarbons	R				
Hexane	R	R	R	R	R
Iodine (tincture of)	R	R			
Potassium Chloride aq. Sol.	R			R	R
Potassium Permanganate aq. Sol.	R			R	R
Magnesium Chloride aq. Sol.	R				
Methylene Chloride	R	R	R	NR	SR
Sodium Carbonate	R				
Sodium Dichromate	R	R	R	R	R
Phenol, 100%	R	R	R	NR	R
Mercury	R	R	R	R	R
Silver Nitrate	R	R	R	R	R
Toluene	R	R	R	NR	SR
Hydrogen Peroxide, 30%	R	R	R	NR	R
Xylene	R	R	R	NR	NR
Zinc Chloride, 10%	R	R	R	R	R
Zinc Sulphate, 10%	R	R	R	R	R
KEY: R = RESISTANT NR = NON-RESISTANT SR = SLIGHTLY RESISTANT EXCEPTIONS = RESISTANT WITH EXCEPTIONS					

Notes

1. **Hydrochloric acid** — in the presence of oxidising may cause slight attack on prolonged boiling
 2. **Sulphuric acid** — will dull the surface with prolonged heating at above 250°C
 3. **Nitric acid (fuming)** — may dull the surface with prolonged heating
 4. **Phosphoric acid** — may dull the surface with prolonged heating
 5. **Potassium hydroxide** — the fused salt will cause slight attack
 6. **Sodium hydroxide** — the fused salt will cause slight attack
 7. **Hydrogen peroxide 30%** — in the presence of hydrochloric acid may cause slight attack on prolonged boiling
 8. **Ammonia** — heating in an ammonia atmosphere will darken and dull the surface, leading to a porous crystalline appearance.
 9. **Chlorine** — in the presence of hydrochloric acid may cause slight attack on prolonged boiling
 10. Potassium permanganate — in the presence of hydrochloric acid may cause slight attack on prolonged boiling
 11. **Sodium carbonate** — the fused salt may cause slight attack
 12. **Mercury** — will readily attack at any temperature
 13. **Silver nitrate** — the fused salt may cause slight attack and discolour the surface
 14. **Organic compounds** — there is no data available on most of the organic compounds listed, it is unlikely they would have any detrimental effect but we can give no guarantee to this statement.
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