



THERMAL CONTROL



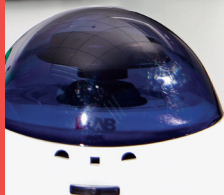
MISCELLANEOUS



DISTILLING



CENTRIFUGES



MIXING & HEATING



LIQUID HANDLING



## Company Profile

DLAB Scientific Co., Ltd, known as Dragon Lab - founded in 2002, is now one of the leading companies worldwide for high quality laboratory instruments and equipment for chemical, biological and clinical diagnostical labs.

All our products are designed and manufactured in accordance with ISO9001/13485 by our dedicated and experienced R&D Engineering team. Our quality control processes start from the metal processing all the way through to the final inspections of the end products and adhere to worldwide accepted quality standards.

With growing international presence and to create a new corporate identity, we have created a new brand "DLAB". Consequently, Dragon Laboratory Instruments changed to DLAB Scientific, the original manufacturer of bench top equipments. DLAB has subsidiaries in USA as DLAB Scientific Inc., in Europe as DLAB Scientific S.A.S and in India as DLAB Scientific Private Limited.

DLAB Scientific is committed to become a one-stop partner for distributors worldwide with a growing range of general laboratory instruments. Our products are characterized by reliability, high accuracy and have a highly competitive value along with skilled application and after-sales support.

Our brands include: DRAGONLAB™, DLAB™, DRAGONMED™, DRAGON™ and so on.

*"DLAB, your accessible solution"*



[www.dlabsci.com](http://www.dlabsci.com)













# Liquid Handling



DLAB liquid handling range includes micropipettes(electronic pipettes & mechanical pipettes), pipette filler, pipette controller and stepper.

#### List of DLAB models:

Series	Image	Model	Application	Operation Method	Volume Range	Channel Option	Autoclavable	Page
Electronic Pipette		dPette+	Aqueous solution	Electronic	0.5-1000ul	Single Channel Adj.	YES (lower part)	P.05
		dPette	Aqueous solution	Electronic	0.5-1000ul	Single Channel Adj.	YES (lower part)	P.05
		MicroPette	Aqueous solution	Manual	0.1ul-10ml	Single Channel Adj. & Fixed; 8 Channel Adj.; 12 Channel Adj.;	YES (lower part)	P.09
		MicroPette Plus	Aqueous solution	Manual	0.1ul-5000ul	Single Channel Adj. & Fixed; 8 Channel Adj.; 12 Channel Adj.;	YES	P.07
		MiniPette	Aqueous solution	Manual	25-200ul	Single Channel Fixed	NO	P.15
Pipette Filler		Levo Plus	Aqueous solution	Electronic	0.1-100ml	Single channel	YES (silicon adapter&nozzle)	P.13
		Levo Me	Aqueous solution	Electronic	0.1-100ml	Single channel	YES (silicon adapter&nozzle)	P.14
Pipette Controller		Levo	Aqueous solution	Manual	0.1-100ml	Single channel	YES (silicon adapter&nozzle)	P.15
Pipette Pump		Levo E	Aqueous solution	Manual	2-25ml	Single channel	NO	P.15
Stepper		StepMate	Aqueous solution, high viscosity or volatile solution	Manual	0.5-50ml	Single channel	NO	P.16



In addition to pipettes, liquid handling series products also include various dispensers, electronic titrator and vacuum aspiration system, which are used for the pipetting, dispensing, and collection of reagents with a wider range.

#### List of DLAB models:



Product Name	Bottle-Top Dispenser	New Bottle-Top Dispenser	Electronic Bottle-Top Dispenser	Electronic Titrator	Vacuum Aspiration System	Economical Vacuum Aspirator
Model	DispensMate	DispensMate-Pro/S	dFlow	dTrite	SAFEVAC	EcoVAC
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	0.5-5ml 1.0-10ml 2.5-25ml 5.0-50ml	0.5-5ml 1.0-10ml 2.5-25ml 5.0-50ml 10-100ml	0.1ml-99.9ml	0.01ml-99.99ml	Vacuum range: 0-600mbar Bottle volume:4L	Vacuum range: 0-500mbar Bottle volume:2L
Reagent Recovery Function	No	Yes	Yes	Yes	No	No
Features		-S Enhanced seal -Pro Glass piston	-	-	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
Page	P.21	P.20	P.19	P.18	P.22	P.24

## dPette+

### Multifunction Electronic Pipette

## dPette

### Simple Electric Pipette

#### Features

- High accuracy, high performance stepper motor ensures accuracy and repeatability, eliminating manual pipetting errors
- A motor driven digital control pipette with multifunction
- 2 buttons handle all operational settings
- Light weight, ergonomic design, small body dimension for easy handling that guarantees fatigue free pipetting
- Pipetting, Mixing, Stepper and Dilution(Only dPette+)
- Pipetting, Mixing(dPette)
- Adjustable speeds for aspiration and dispensing
- Li-ion battery and dual charging modes enable longer operation time
- Self calibration



**dPette+**

**dPette**

#### Specifications

Channels	Volume Range	Increment	Test Volume	Error limits in accordance to ISO8655-2			
				accuracy error		precision error	
	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	%	s.d.* $\mu\text{L}$	CV%*
1	0.5-10	0.01	10	$\pm 0.10$	$\pm 1.00$	0.05	0.50
			1	$\pm 0.035$	$\pm 3.50$	0.03	3.00
1	5-50	0.1	50	$\pm 0.40$	$\pm 0.80$	0.15	0.30
			5	$\pm 0.15$	$\pm 3.00$	0.125	2.50
1	30-300	1	300	$\pm 1.80$	$\pm 0.60$	0.60	0.20
			30	$\pm 0.90$	$\pm 3.00$	0.21	0.70
1	100-1000	5	1000	$\pm 6.00$	$\pm 0.60$	2.00	0.20
			100	$\pm 3.00$	$\pm 3.00$	0.60	0.60

\* s.d. = Standard Deviation

\*CV = Coefficient of Variation

DLAB specifications are used as guidelines and the user calibration should refer to the industrial standard ISO 8655

Parameter Knob

Function Wheel

Display

Pipette Tipcone



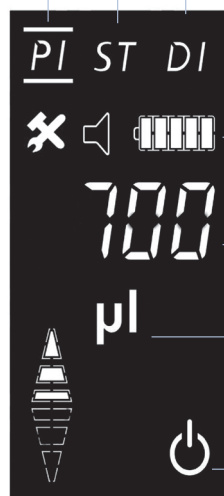
dPette is an innovative electronic pipette developed by DLAB. It combines the feature of manual pipette as ergonomic and light weight with the feature of electronic pipette as labor-saving and high performance, it offers new pipetting experience to the users.

Diluting Mode  
Dispensing Mode

Pipetting Mode

Buzzer & Settings

Indicator



Battery Indicator

Volume Range  
Parameter

Unit

Power off







## MicroPette plus

121°C  
FULLY  
Autoclavable

### Features

- Fully autoclavable
- Ergonomic design provides excellent operating experience
- Easy-to-read volume display
- The pipettes cover the volume range from 0.1µL to 5mL
- Easy calibration and maintenance
- Manufactured from innovative materials
- Each MicroPette Plus supplied with an Individual calibration certificate according to ISO8655
- Online calibration is available



## MicroPette plus multi-channel

121°C  
FULLY  
Autoclavable

### Features

- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assembly allow for easy repair and maintenance
- Compound material-made tip cone secures high sealing performance
- Compatible with most universal tip brands
- Online calibration is available





## Fully autoclavable

The MicroPette Plus pipettes are fully autoclavable, enable easy cleaning and reduce the risk of contamination. Steam autoclaving can be performed at 121°C, 1 bar for 20 minutes. After autoclaving, the pipette must be cooled down and left to dry for 12 hours before use.

It is recommended to check the performance of the pipette after each autoclaving. Greasing and sealing of the pipette piston after every 10th autoclaving will secure an enhanced function.



## MicroPette

### Features

- Pipettes cover a volume range from 0.1 µL to 10 mL
- Ergonomic design provides excellent operating experience
- Large display window allows for easy volume identification
- Easy calibration and maintenance
- Each MicroPette supplied with an individual calibration certificate according to ISO8655
- Online calibration is available

121°C  
HALF  
Autoclavable



## MicroPette multi-channel

### Features

- 8 and 12 channel pipettes are appropriate for 96 well plates
- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assemblies allowing easy repair and maintenance
- Compound material-made tip cone secures high sealing performance
- Compatible with most universal tip brands
- Online calibration is available

121°C  
HALF  
Autoclavable







### Calibration

All DLAB pipettes have been quality tested according to ISO8655-2:2002 and are supplied with individual calibration certificates. The quality control includes gravimetric testing of each pipette with distilled water at 22°C. Our website **[www.dlabsci.com](http://www.dlabsci.com)** allows users to access DLAB online calibration software and achieve accurate and timely calibration.

Online calibration software is FREE to DLAB pipette users

## Specifications

This list is appropriate for MicroPette and MicroPette plus (Adjustable and Fixed volume)

Single-channel Adjustable Volume Pipettes						
Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
0.1-2.5µL	0.05µL	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	0.1µL	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	0.5µL	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	0.5µL	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	1µL	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	1µL	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	1µL	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	5µL	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	5µL	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	50µL	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	0.1mL	10mL	0.60%	60	0.20%	20
		5mL	1.20%	60	0.30%	15
		2mL	3.00%	60	0.60%	12

DLAB specifications are used as guidelines and the user calibration should refer to the industrial standard ISO 8655



### 8-channel Adjustable Volume Pipettes

Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
0.5-10µL	0.1µL	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	0.5µL	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	5µL	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	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
0.5-10µL	0.1µL	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	0.5µL	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	5µL	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	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	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

DLAB specifications are used as guidelines and the user calibration should refer to the industrial standard ISO 8655



# Levo Plus

## Pipette Filler

### Features

- Compatible with most of the plastic and glass pipettes from 0.1 -100mL
- Six different speed modes for aspiration and dispensing different liquids
- Large LCD display showing low battery warning and speed settings
- Enables single-handed operation with minimum effort
- Light and ergonomic design providing easy usability
- High capacity Li-ion battery enable long runtime of operation
- Powerful pump fills a 25mL pipette in <5 seconds
- 0.45µm replaceable hydrophobic filter
- Rechargeable during use

Large LCD display showing low battery warning and speed settings

Select the desired coarse speed by pressing the button +/-



Aspiration operation buttons

Operating button for motor and gravity dispensing

Hydrophobic filter 0.45µm

Silicone adapter for 0.1-100mL pipette tip, fully autoclavable

### Specifications

Aspiration Speed	25mL<5s (6 shift)
Dispensing Speed	Motor (6 shift)/Gravity
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	0.45µm Hydrophobic
Weight	200g

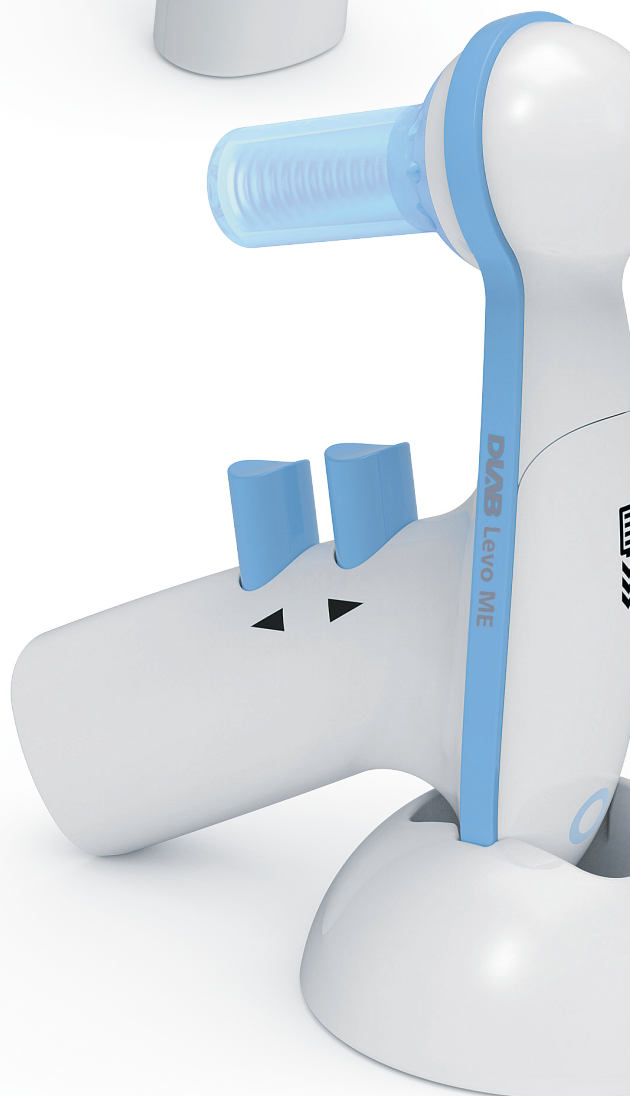
## Levo ME

### Pipette Filler

Levo ME pipette filler has an excellent feature and ergonomic design, suitable for almost all commonly used glass or plastic pipettes.

#### Features

- Enables single-handed operation with minimum effort
- Compatible with most of the plastic and glass pipettes from 0.1-100mL
- Easily adjustable speed control
- 0.45µm replaceable hydrophobic filter
- Stable and reliable performance, elegant appearance
- High capacity Li-ion battery enable long operation time.



#### Specifications

Aspiration Speed	25ml<7s
Dispensing Speed	Motor/Gravity
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	0.45µm Hydrophobic
Weight	200g

## Levo Pipette Controller

### Features

- Ease of use
- Precise pipetting control
- Robust and light weight
- Compatible with most of the plastic and glass pipettes from 0.1 -100mL
- 3µm replaceable hydrophobic filter
- Easy for cleaning and maintenance



Compress the suction bellows before attaching the pipette

Button to expel residual liquid when using blow-out pipette

Aspiration and dispensing comfortably achieved with a sensitive lever

## Levo E Pipette Pump

### Features

- Volume capacity 2mL, 10mL and 25mL
- Colour-coded by volume with green, blue and red
- Thumb wheel guarantees precise operation
- Resistant to acids and alkalis
- Easy for cleaning and maintenance



3µm replaceable Hydrophobic filter

Silicone adapter for 0.1-100mL pipette tip, fully autoclavable

Designed for single-handed operation, Pipette Pump identifies itself with a thumbwheel, allowing precise aspiration or dispensing. The feature of side lever enables complete liquid dispensing, without a droplet remaining.

## Mini Pipette

### Features

- Ergonomic design provides excellent operation experience;
- Smart body, ideal to combine with IVD reagents;
- Compatible with universal 200µl tips;
- Various volumes from 25ul to 200ul, different color for different volumes, easy to choose;
- Entire body by one-time molding, robust to use.



Volumes	Color
200ul	Gray
100ul	Blue
75ul	Red
50ul	Orange
30ul	Yellow
25ul	Dark Green
OEM	Optional



Based on the principle of positive displacement, StepMate Stepper is designed for trouble-free and reliable dispensing of liquids, especially for high viscosity, high density and high vapor pressure. The 48-step dispensing allows for enhanced accuracy and usability.

## StepMate Stepper

### Features

- Light and ergonomic solution provides easy usability
- Single-handed operation
- Volume range from 10µL to 5mL
- Up to 48 dispensing steps
- Maintenance free
- Equipped with durable tip
- insertion lever
- Fits seven sizes of disposable polypropylene syringes from 0.5mL to 50mL

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

### How to select dispensing volume

Find the required dispensing volume in the table  
Use the adjusting wheel to set the required volume  
Select and insert a suitable tip  
Follow the maximum dispensing steps

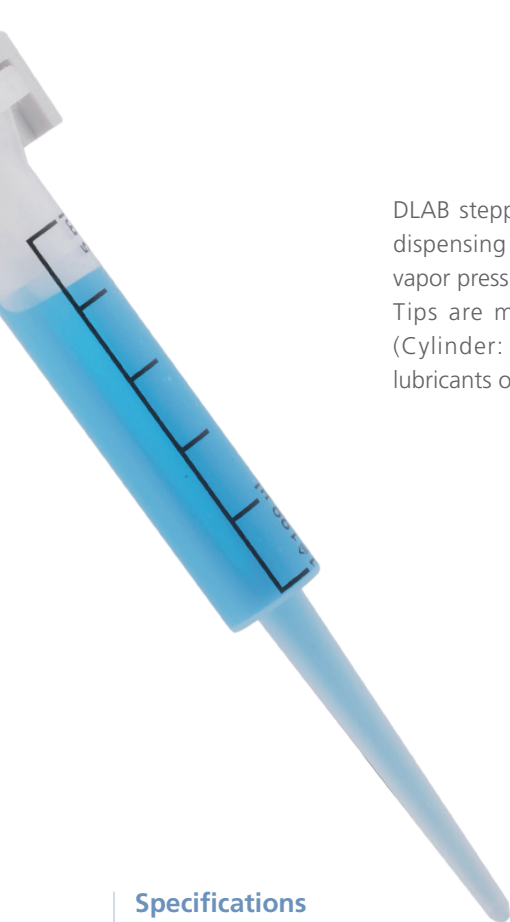
Tip volume

Dispensing Volume

Tips	Sel.	1	2	3	4	5
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

Steps

The stop lever secures the syringe



DLAB stepper tips are particularly suitable for dispensing of fluids with high viscosity, high vapor pressure etc.

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



## Specifications

Note: The first and last dispensing liquid should be discarded for precision.

Dial setting		1	2	3	4	5			
Number of steps		48	23	15	11	8			
Cat. No.	Syringe volume (mL)	Sample volume (μL)					A %	P %	Description
17900032	0.50	10	20	30	40	50	± 0.8	≤ 0.7	0.5mL, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900033	1.25	25	50	75	100	125	± 0.8	≤ 0.5	1.25mL, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900034	2.50	50	100	150	200	250	± 0.8	≤ 0.4	2.5mL, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900035	5.00	100	200	300	400	500	± 0.4	≤ 0.3	5mL, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900036	12.50	250	500	750	1000	1250	± 0.3	≤ 0.3	12.5ml, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900037	25.00	500	1000	1500	2000	2500	± 0.2	≤ 0.3	25mL, piston PE-HD, cylinder PP, 1 packing, 2pcs/packing with 1 pc adapter
17900038	50.00	1000	2000	3000	4000	5000	± 0.2	≤ 0.2	50mL, piston PE-HD, cylinder PP, 1 packing, 2pcs/packing with 1 pc adapter