

Generation E

Multipette® E3 and E3x: Multi-dispensing without compromise on accuracy and precision



> Multipette E3 and Multipette E3x are the experts for long series pipetting and non-aqueous liquids.
www.eppendorf.com/e3

»There are many reasons for a Multipette®. You are the most important one!«

In 1979, 17 years after introducing the first piston-stroke pipette, Eppendorf revolutionized the Life Science Market again – always having customer needs in mind.
The first positive displacement pipette with multi-dispensing feature, the Multipette, made serial pipetting without repeated liquid aspiration possible. Since then several generations of mechanical and electronic Multipette multi-dispensers have facilitated your daily laboratory work. The latest model in the Multipette family are our electronic Multipette E3 and E3x dispensers.
Read how a Multipette makes your everyday routines faster and easier.



Save time
The Multipette pipettes make long pipetting series faster and easier. The aspirated liquid can be dispensed up to 100 times without a refill. It is an ideal and smart solution for filling plates or large series of tubes (e.g., when working with nucleic acid purification kits).



Relax
With the lightweight Multipette E3 the risk of repetitive strain injuries can be reduced in various ways: It minimizes operation forces through an electronic motor drive, and buttons are positioned to accommodate natural hand movements. A large display reduces eyes strain when reviewing settings.



Work precisely and safely
The optimized system of Multipette and Combitips® advanced allows automatic tip recognition for ease of use. The syringe-style Combitip maximizes pipetting accuracy and precision. It is not affected by liquid properties, most manual pipetting errors, and provides protection from aerosol contamination.

The One Pipette Missing in Your Pipette Set.

Save time and money.
Work ergonomically and stress-free.
Get reliable results.



Automatic tip recognition:
Perfected system with Combitips® advanced for reproducible dispensing results

One instrument only
for precise pipetting from 1 µL to 50 mL (dispenser tip limits the volume)

ACT.
The Environmental Impact Factor Label

In 2023, Multipette E3/E3x pipettes and Combitips advanced tips have been awarded the ACT® label. ACT certificates reflect the sustainability rating of our products, offering laboratories a transparent view of our eco-friendly practices.
You can download the certificate at www.eppendorf.com/e3.



One button tip ejection enables one handed operation

Selectable dispensing speed increases the reproducibility of results

> Eight different speed levels allow the optimum speed for each application
> Reduced minimum speed increases the limit of viscosity of dispensable liquids
> Increased maximum speed saves time without splashing

Easy to read: Large color display, optimal contrast, clear arrangement of all adjustable parameters

View all selected **parameters at one glance;** proven intuitive software navigation – updates available via www.eppendorf.com/software-downloads

Display in 9 different languages

Selection wheel with seven operation modes with Multipette E3x

> *Dispensing (Dis):* Serial pipetting for up to 100 steps in a row.
> *Automatic dispensing (Ads):* Volume is dispensed at fixed intervals between 0.1 s and 10 s.
> *Pipetting (Pip):* Precise liquid transfer of up to 50 mL.
> *Sequential dispensing (Seq):* Individual volume setting for up to 16 dispensing steps.
> *Multi-aspirate (Asp):* Consecutive aspiration of liquid of the same volume into one Combitip.
> *Aspirate and dispensing (A/D):* Uptake and volume calculation of an unknown volume with immediate dispense in desired partial volumes.
> *Titrate (Ttr):* Sensitive dosing of liquids while volume is displayed.
> *Store up to 225 different parameter settings* to save programming time for routine applications.
> *Sleep Mode* saves battery when not in use, and wakes up when Multipette is moved; Long life lithium-ion battery allows filling of more than hundred 96-well plates in a row.

Positive Displacement Principle

With the Multipette/Combitips system volumes are dispensed using the positive displacement principle.
The liquid is directly dispensed without an air cushion, ensuring the correct volume is always dispensed regardless of the density, viscosity and volatility of the liquid.
In addition to serial dispensing, the Multipette/Combitips system is the perfect instrument to go beyond the limitations of a standard pipette.

Your benefits:

> Allows high-precision dispensing regardless of the physical properties of the liquid*
> Prevents aerosol contamination with hermetically sealed piston for secure dispensing
> Provides protection from radioactive and toxic substances
> Enables quick dispensing of long series with precise, repeated dispensing of identical volumes

*Viscous liquids with high resistance to flow e. g. glycerol, liquids with a different density than water, liquids with high vapor pressure e. g. acetone, liquids containing detergent lowering the surface tension, foaming liquids and liquids with different temperatures.



User Quotes

Participants of an independent usability study conducted at the Institute of Human Factors Engineering, Technical University Darmstadt, Germany, showed positive responses.

» *The display always shows exactly what to do.* «

Anonymous Tester

» *User-friendly operation and clear menu navigation – complex settings made easy.* «

M. Reinhard
Dipl.-Biol., Darmstadt, Germany

» *Aspirating liquid and dispensing in individual steps was easy. The settings were also easily made.* «

C. Bender
Biology student, Darmstadt, Germany

Multipette® E3 and Multipette® E3x at a Glance

Feature	Multipette E3	Multipette E3x
High speed dispensing with motorized piston	■	■
Automatic Combitips® advanced tip recognition	■	■
One button tip ejection	■	■
Volume range from 1 µL to 50 mL	■	■
Rechargeable lithium-ion battery	■	■
Illuminated display	■	■
Automatic dispensing (Ads)	■	■
Pipetting (Pip)	■	■
Dispensing (Dis)	■	■
Aspirate (pipetting of supernatants) (Asp)		■
Titrate (Ttr)		■
Sequential dispensing (Seq)		■
Combined aspiration and dispensing mode (A/D)		■

Technical specifications (information refers to the Multipette E3/Multipette E3x/Combitips advanced system)

Combitips advanced	Min. dispensing volume	Increment/step size	Max. dispensing volume	Volume	Systematic error*1	Random error*1
0.1 mL	1 µL	0.1 µL	100 µL	10 µL 50 µL 100 µL	±1.6% ±1.0% ±1.0%	±2.5 % ±1.5 % ±0.5 %
0.2 mL	2 µL	0.2 µL	200 µL	20 µL 100 µL 200 µL	±1.3% ±1.0% ±1.0%	±1.5 % ±1.0 % ±0.5 %
0.5 mL	5 µL	0.5 µL	500 µL	50 µL 250 µL 500 µL	±0.9% ±0.9% ±0.9%	±0.8 % ±0.5 % ±0.3 %
1 mL	10 µL	1 µL	1 mL	100 µL 500 µL 1,000 µL	±0.9% ±0.6% ±0.6%	±0.55 % ±0.3 % ±0.2 %
2.5 mL	25 µL	2.5 µL	2,5 mL	250 µL 1,250 µL 2,500 µL	±0.8% ±0.5% ±0.5%	±0.45 % ±0.3% ±0.15%
5 mL	50 µL	5 µL	5 mL	500 µL 2,500 µL 5,000 µL	±0.8% ±0.5% ±0.5%	±0.35% ±0.25% ±0.15%
10 mL	100 µL	10 µL	10 mL	1,000 µL 5,000 µL 10,000 µL	±0.5% ±0.4% ±0.4%	±0.25% ±0.25% ±0.15%
25 mL	250 µL	25 µL	25 mL	2,500 µL 12,500 µL 25,000 µL	±0.3% ±0.3% ±0.3%	±0.35% ±0.25% ±0.15%
50 mL	500 µL	50 µL	50 mL	5,000 µL 25,000 µL 50,000 µL	±0.3% ±0.3% ±0.3%	±0.5% ±0.2% ±0.15%

*1 The data for imprecision (random error) and inaccuracy (systematic error) according to EN ISO 8655 only apply when using original Eppendorf Combitips advanced, speed 5, dispensing mode.

Multipette® E3/E3x ordering information

Description	Order number
Multipette® E3 incl. charging cable and Combitips® advanced assortment pack (1 tip of each size)	4987 000 010
Multipette® E3 bundle incl. Charger Stand 2, charging cable and Combitips® advanced assortment pack	4987 000 371
Multipette® E3x incl. charging cable and Combitips® advanced assortment pack (1 tip of each size)	4987 000 029
Multipette® E3 bundle incl. Charger Stand 2, charging cable and Combitips® advanced assortment pack	4987 000 380
Charger Stand 2 for Multipette® stream/Multipette® Xstream/Multipette® E3 & E3x, for one device	3116 000 031
Pipette Holder 2 for one Multipette® E3/E3x, for Pipette Carousel 2 or wall mounting, sticky tape included, without charging functionality	3116 000 120
Lithium ion rechargeable battery for Multipette® E3/E3x	4986 602 009

Ordering information

Combitips® advanced	Color code	Eppendorf Quality 100 pcs. (4 bags × 25 pcs.)	PCR clean 100 pcs. (4 recl. bags × 25 pcs.)	Biopur® 100 pcs., ind. blister-wrapped	Forensic DNA Grade 100 pcs., ind. blister-wrapped
0.1 mL	white	0030 089 405	0030 089 766	0030 089 618	
0.2 mL	light blue	0030 089 413	0030 089 774	0030 089 626	
0.5 mL	violet	0030 089 421	0030 089 782	0030 089 634	
1.0 mL	yellow	0030 089 430	0030 089 790	0030 089 642	0030 089 855
2.5 mL	green	0030 089 448	0030 089 804	0030 089 650	0030 089 863
5.0 mL	blue	0030 089 456	0030 089 812	0030 089 669	0030 089 871
10 mL	orange	0030 089 464	0030 089 820	0030 089 677	
25 mL [1]	red	0030 089 472	0030 089 839	0030 089 685	
50 mL [1]	light gray	0030 089 480	0030 089 847	0030 089 693	
ViscoTip®					
10 mL	orange	0030 089 502			
Accessories					
Adapter advanced					
25 mL, autoclavable, 1 piece	red	0030 089 715			
25 mL, autoclavable, 7 pcs., individually wrapped	red			0030 089 731	
50 mL, autoclavable, 1 piece	light gray	0030 089 723			
50 mL, autoclavable, 7 pcs., individually wrapped	light gray			0030 089 740	
Combitips® advanced Box 2.0, empty box for 8 Combitips advanced (0.1 - 10 mL), Eppendorf Quality.		0030 089 952			
Combitips® advanced Assortment Pack, contains one Combitips® advanced sample of each size and Adapter advanced 25 and 50 mL, Eppendorf Quality		0030 089 936			

[1] 4 boxes of 25 pcs. each. Each box containing one adapter.

Care for Your Pipettes

Regular maintenance and calibration ensure that your pipettes continue to generate reproducible results. With our pipette calibration service offering, we provide validated and reliable services according to ISO 8655 in ISO 17025 accredited Service Centers to help you maintain premium performance.

> More details: www.eppendorf.com/pipette-service

Your local distributor: www.eppendorf.com/contact
Eppendorf SE · Barkhausenweg 1 · 22339 Hamburg · Germany
eppendorf@eppendorf.com · www.eppendorf.com

www.eppendorf.com/e3

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