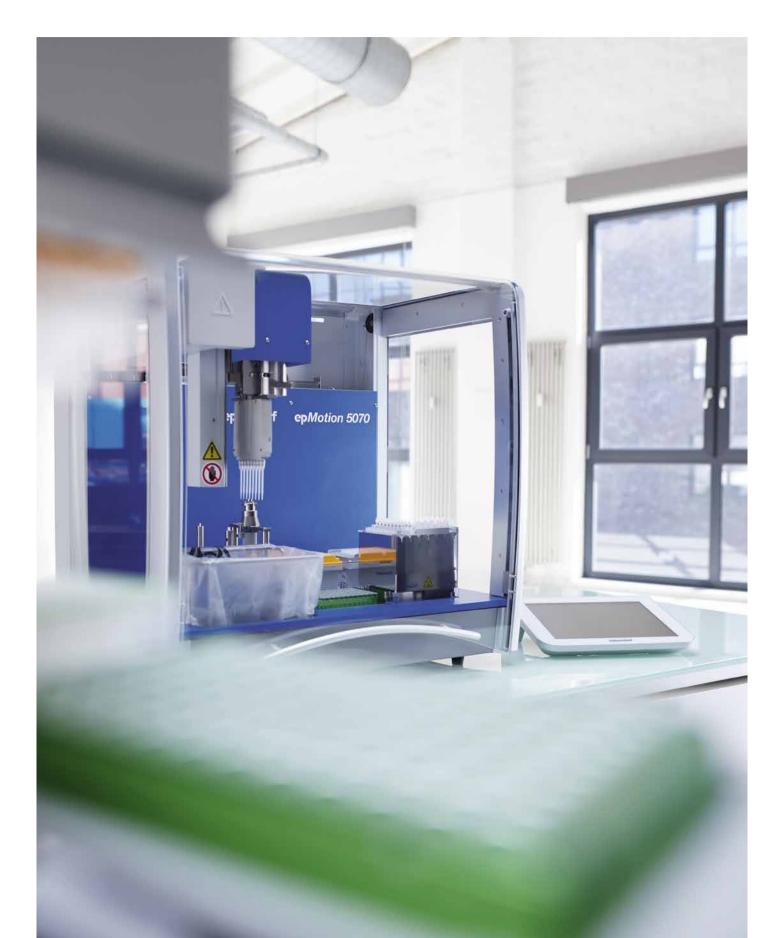
# eppendorf



# Natural Winners

You give your all to scientific research every day

Eppendorf liquid handling instruments help you grow beyond your limits



# »Global Research, Eppendorf Engineering.«

Perfection down to the smallest detail – this principle is adhered to in the design and functionality of Eppendorf pipettes, dispensers and laboratory consumables. The Eppendorf competence and expertise in liquid handling has resulted in many innovations, award-winning ergonomic designs, cutting edge production and the selection of optimal materials for our products.

### The Eppendorf Liquid Handling Instrument Portfolio

As the first company to launch a microliter pipette, we at Eppendorf have over 60 years' experience in precise manual and automatic pipetting/dispensing and transferring of the smallest quantities of liquids. Today, liquid handling systems from Eppendorf are used wherever accuracy, precision, and absolute reliability are important. In our product development, we strive to simplify cumbersome lab work and make it as safe and efficient as possible so you can concentrate on and accelerate your research.

#### Master Your Challenging Liquids!

Are you working with viscous, volatile, dense or foaming liquids? Become an expert and master even challenging liquids precisely with the right tool.



> See page 10 for more information

### **Eppendorf PhysioCare Concept®**

The use of our liquid handling products has been proven to reduce physical and psychological strain to a minimum by following the rules of the PhysioCare Concept.



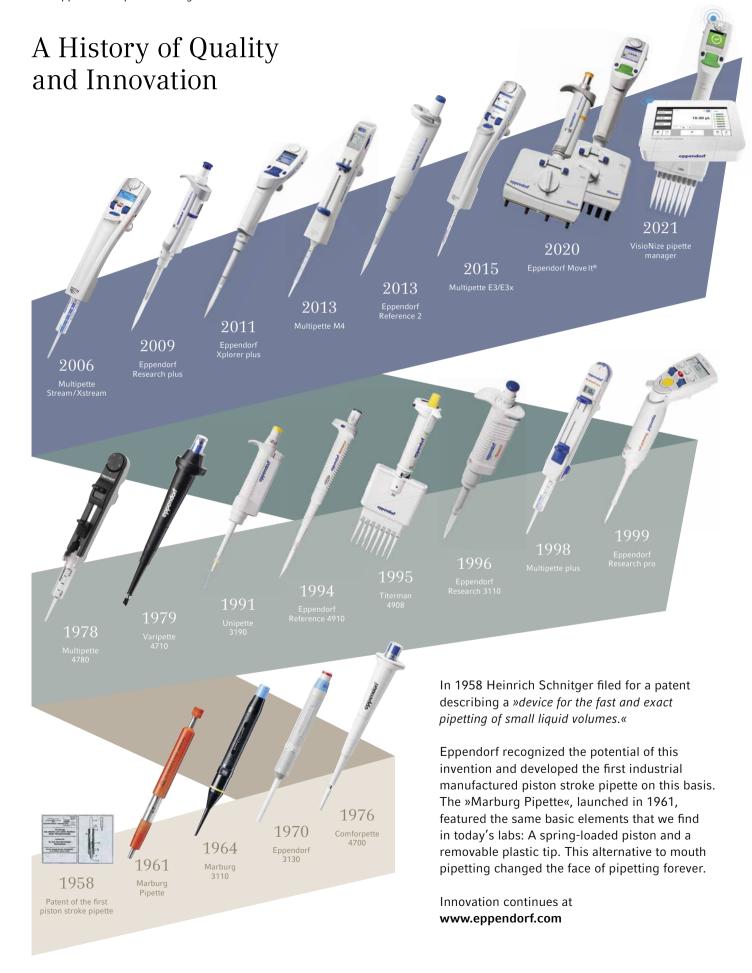
> See page 34 for more information

#### **Eppendorf Services**

A comprehensive range of service programs including maintenance, seminars, application, and technical support as well as certification services build the basis for premium support.



> See page 35 for more information



### Which instrument should you use?

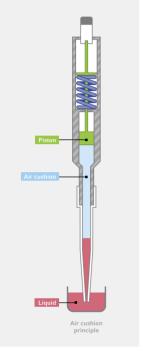
Selecting the right pipette or dispenser can be the key to success in your work. It can boost your efficiency and throughput and ensure reliable results for different use cases.

Should you be new to liquid handling, please refer to the information below for a quick introduction to the basics.

### What are air-cushion and positive displacement instruments?

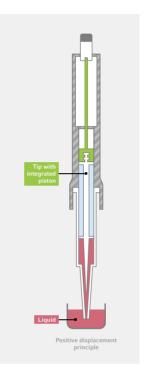
#### Air-cushion principle

Air-cushion pipettes are most commonly used in labs around the world and ideal for liquids with physical properties similar to water. In this instrument type, the piston is separated from the liquid sample by a small air cushion. Temperature or humidity changes, as well as the physical properties of different liquids can affect the performance of air-cushion instruments. To reduce these risks however, Eppendorf air-cushion pipettes work with extra small air cushions and may be temporarily adjusted to different liquids.



### Positive displacement principle

In positive displacement systems, the piston is part of the tip and in direct contact with the liquid. There is no air cushion that may be affected by liquid sample properties. These tools are therefore ideal for liquids with varying viscosity, volatility, surface tension or density as well as hot or cold liquids. The disposable tips with integrated pistons also prevent contamination and help to keep user and instrument safe when working with hazardous liquids.



### When should you use an electronic instrument?

The most important general benefits of using an electronic instrument are: better ergonomics by requiring almost no operating forces, a higher precision and reproducibility and an additional efficiency gain due to various operating modes (such as e.g. pipetting and dispensing with only one tool). Furthermore, electronic instruments are the basis for digital lab solutions supporting scientists with choosing settings for different liquid types, collaborating across the lab or documenting steps.

### When should you think about an automated solution?

Automated liquid handling systems such as the epMotion® family are ideal to take over routine and repetitive pipetting tasks that are commonly found in many molecular biological applications. They are ideally suited whenever complex processes need to be standardized, help to reduce the risk of manual pipetting errors, increase reproducibility and free up your valuable time for other tasks.





### Selection Guide

### Air-cushion principle







	uuddo	904			
Model	Eppendorf Research® plus	Eppendorf Reference® 2	Eppendorf Xplorer®/Xplorer® plus		
Application	Pipetting of aqueous liquids	Pipetting of aqueous liquids	Pipetting of aqueous liquids		
Product type	Pipette	Pipette	Pipette		
Compatible VisioNize® pipette manager		_	Yes		
Operation	Mechanical, separate control button and ejector	Mechanical, combined control button and ejector	Electronic, separate control button and ejector		
Pipetting type	Air-cushion	Air-cushion	Air-cushion		
Adjustable cone spacing	No	No	No No		
Positioning	Ultra light weight and pipetting force for ultimate ergonomics	Reliability in robustness and results	Intuitive and fast pipetting		
Volume range	0.1 μL-10 mL	0.1 μL-10 mL	0.5 μL-10 mL		
Available options	1-channel 8-channel 12-channel 16-channel 24-channel	1-channel 8-channel 12-channel	1-channel 8-channel 12-channel 16-channel 24-channel		
Autoclavable	Yes	Yes	Yes (lower part)		
Consumables	epT.I.P.S.® and ep Dualfilter T.I.P.S.® as well as other pipette tip brands	epT.I.P.S.® and ep Dualfilter T.I.P.S.® as well as other pipette tip brands	epT.I.P.S.® and ep Dualfilter T.I.P.S.® as well as other pipette tip brands		
Purity grades of consumables	> Eppendorf Quality <sup>TM</sup> > PCR clean & sterile > Eppendorf Biopur® > Forensic DNA Grade	> Eppendorf Quality <sup>TM</sup> > PCR clean & sterile > Eppendorf Biopur® > Forensic DNA Grade	> Eppendorf Quality <sup>TM</sup> > PCR clean & sterile > Eppendorf Biopur® > Forensic DNA Grade		
Page	12	14	16		

<sup>\*1</sup> Combitips advanced only

#### Positive displacement pr Eppendorf Research® plus / Eppendorf Easypet® 3 Eppendorf Pipet Helper® Multipette® M4 Xplorer® plus Move It® Pipetting of aqueous liquids Pipetting of aqueous liquids with Pipetting of aqueous liquids with Dispensing of up to 100 steps serological and volumetric pipettes serological and volumetric pipettes per Combitip filling of aqueous, viscous and volatile liquids Pipette controller Pipette controller Pipette Dispenser Yes Mechanical or electronic, separate Electronic Mechanical Mechanical control button and ejector Positive displacement Air-cushion Air-cushion Air-cushion Time savings for serial dispensing Double your performance when Overall ergonomic concept with A perfect instrument for and high accuracy for challenging transferring multiple samples new speed control for stress-free inexperienced users because of between changing formats its robust and intuitive design liquids pipetting 1 μL-10 mL 1-1,200 μL 0.1-100 mL 0.1-100 mL 4-channel (9-33 mm) 1-channel 1-channel 1-channel 6-channel (9-20 mm) 8-channel (9-14 mm) 8-channel (4.5-14 mm) 12-channel (4.5-9 mm) Yes (Xplorer plus only lower part) Yes (pipette adapter Yes No and aspirating cone) epT.I.P.S.® and **Eppendorf Serological Pipets Eppendorf Serological Pipets** Combitips advanced® ep Dualfilter T.I.P.S.® as well as and other volumetric and and other volumetric and ViscoTip® other pipette tip brands serological pipettes serological pipettes > Eppendorf Quality™ > Eppendorf Quality™ > Sterile > Sterile > PCR clean & sterile > PCR clean\*1 > Free of detectable > Free of detectable

RNase & DNase

> Free of detectable DNA

> Forensic DNA Grade

26

> Free of detectable pyrogens

> Eppendorf Biopur®

18

> Forensic DNA Grade

RNase & DNase

> Free of detectable DNA

> Forensic DNA Grade

26

> Free of detectable pyrogens

> Eppendorf Biopur®\*1

22

> Forensic DNA Grade\*1

#### Automated liquid h inciple Varispenser® 2/2x Multipette® E3/E3x Varipette® 4720 **Eppendorf Top Buret**™ epMotion® 96 and epMotion® 96xI Dispensing of up to 100 steps Contamination-free Single stroke dispensing of Titration of aqueous Pipetting of aqueous liquids with 96 channels at once per Combitip filling of aqueous, pipetting of aqueous, lyes, acids, bases, aqueous liquids viscous and volatile liquids viscous andvolatile liquids liquids or solvents Dispenser Bottletop dispenser Bottletop burette Semi-automated Pipette 96 channel pipette Yes Electronic Mechanical Mechanical Electronic Electronic Positive displacement Air-cushion Positive displacement Positive displacement Positive displacement and air-cushion No Pipetting with reduced Safe and easy dispensing Intuitive and fast pipetting Reduced strain for long dispens-Continuous and ing series and highest volume of liquid from supply and in 96 and 384 format outside pulse-free titration flexibility fault effects reagent bottles 1 μL-50 mL 0.1-999.9 mL epMotion 96: 0.5-300 μL, 1-10 mL 0.2-100 mL epMotion 96xI: 5-1,000 μL 2-position lifting table 1-channel 1-channel 1-channel 1-channel No Νo Yes Νo No

Combitips advanced®

> Eppendorf Quality™

> Eppendorf Biopur®\*1

> Forensic DNA Grade\*1

ViscoTip®

23

> PCR clean\*1

epT.I.P.S.® Motion reload syste

> Eppendorf Quality™

> PCR clean & sterile

> PCR clean

30

27

**Eppendorf Varitips** 

> Eppendorf Quality™

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### andling





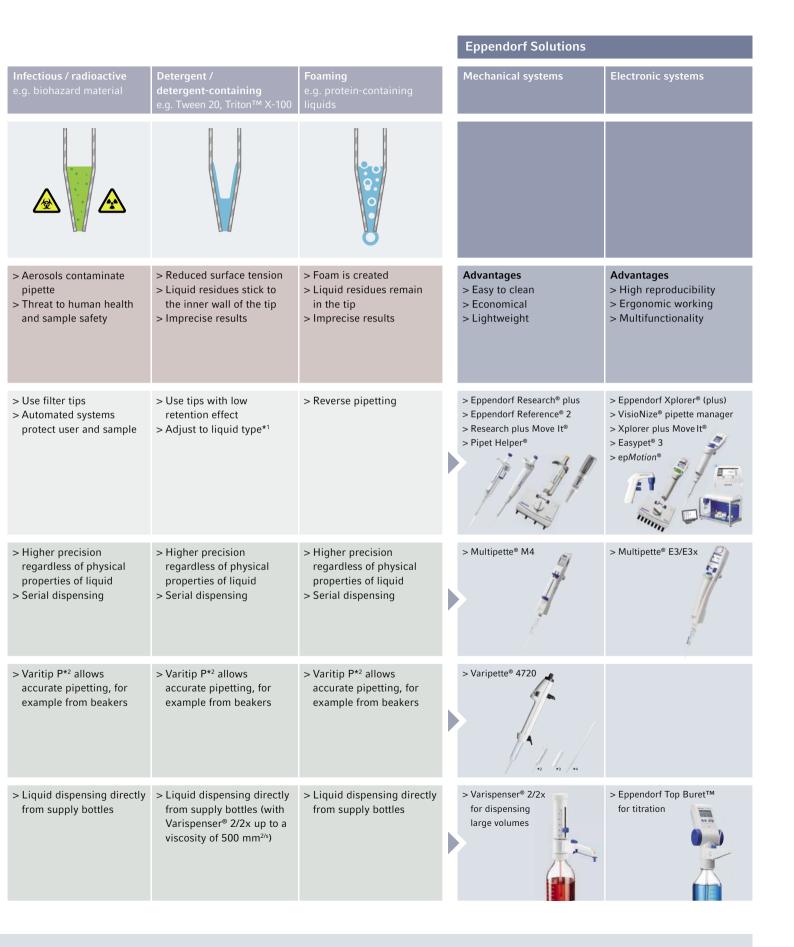


epMotion® 5070	epMotion® 5073	epMotion® 5075		
Serial pipetting of aqueous, viscous and volatile liquids in automated way for easy tasks on small foot print	Serial pipetting of aqueous, viscous and volatile liquids in automated way for routine tasks	Serial pipetting of aqueous, viscous and volatile liquids in automated way with highest flexibility and tool options		
Automated Liquid Handling	Automated Liquid Handling	Automated Liquid Handling		
_	-			
Automation	Automation	Automation		
Air-cushion	Air-cushion	Air-cushion		
No	No	No No		
Reproducible, contamination-free, contactless pipetting at high precision and accuracy	Same as 5070 but more flexibility with 6 deck positions and more features	Same as 5070 but full flexibility with 15 deck positions and even more features		
0.2–1,000 μL, 1 & 8 channel	0.2–1,000 μL, 1 & 8 channel	0.2–1,000 μL, 1 & 8 channel		
Automatic exchange of 2 dispensing tools, tablet or PC control	Same as 5070 plus gripper transport, 1 thermal module, ThermoMixer, magnetic separation HEPA filter & UV light	Same as 5073 plus 3 thermal modules, Automatic exchange of 4 dispensing tools, Vacuum separation		
Yes (tools)	Yes (tools), UV light and HEPA filter (optional)	Yes (tools), UV light and HEPA filter (optional)		
epT.I.P.S.® Motion tips as racks or reloads	epT.I.P.S.® Motion tips as racks or reloads	epT.I.P.S.® Motion tips as racks or reloads		
> Eppendorf Quality™	> Eppendorf Quality™	–		
> PCR clean > PCR clean & sterile	> PCR clean > PCR clean & sterile	> PCR clean > PCR clean & sterile		
 31	- <del>- 32</del>	- <del>33</del>		

# Master Any Type of Liquid

		Water	<b>Viscous</b> e.g. glycerol, oil	<b>Dense</b> e.g. sulfuric acid, caesium chloride	<b>Volatile</b> e.g. acetone, ethanol	
Type of Liquid					\$25	
Potential problems	Observations	> Air-cushion pipettes are optimized to the physical properties of water	<ul> <li>&gt; High resistance to flow</li> <li>&gt; Liquid residues stay         attached to inside tip wall</li> <li>&gt; Imprecise results</li> </ul>	<ul><li>Influence on size of air-cushion</li><li>Dispensed volume too low or too high</li></ul>	> Air-cushion expands > Liquid drips out of the tip > Imprecise results	
Workaround	Air-cushion pipettes	<ul><li>Optimally suitable for the use of water</li><li>No adaptation necessary</li></ul>	> Work slowly > Reverse pipetting > Adjust to liquid type*1	> Adjust pipette to liquid density > Adjust to liquid type*1	> Prewet at least 5 times > Reverse pipetting > Adjust to liquid type*1	
	Positive displacement dispenser	> Serial pipetting for multiple samples and vessel formats	<ul> <li>Higher precision regardless of physical properties of liquid</li> <li>Serial dispensing</li> <li>No adjustment to liquid type needed</li> </ul>	<ul> <li>Higher precision regardless of physical properties of liquid</li> <li>Serial dispensing</li> <li>No adjustment to liquid type needed</li> </ul>	<ul> <li>Higher precision regardless of physical properties of liquid</li> <li>Serial dispensing</li> <li>No adjustment to liquid type needed</li> </ul>	
Recommendations	Positive displacement pipettes	> Varitip S*3,4 system allows accurate pipetting from large bottles and narrow vessels	> Varitip P*2 allows accurate pipetting, for example from beakers	> Varitip P*2 allows accurate pipetting, for example from beakers	<ul> <li>Varitip P*² allows         accurate pipetting,         for example from beakers</li> <li>Varitip S system and valve         for drip-free dispensing</li> </ul>	
	Bottletop dispenser and burets	> Liquid dispensing directly from supply bottles	> Liquid dispensing directly from supply bottles (with Varispenser® 2/2x up to a viscosity of 500 mm <sup>2/s</sup> )	> Liquid dispensing directly from supply bottles up to a density of 2.2 g/cm <sup>3</sup>	> Liquid dispensing directly from supply bottles up to a vapor pressure of 500 mbar	

 $<sup>^{\</sup>star 1}$  This option is only available on automated systems and electronic pipettes  $^{\star 2, 2, 4}$  See Varipette® 4720 for corresponding Eppendorf Varitips®



### Eppendorf Research® plus

The Eppendorf Research plus combines about 60 years of innovation in liquid handling to provide you with one of the safest and most ergonomic pipettes available today. The Research plus is remarkably light, both in terms of weight and pipetting forces, setting new standards for ergonomic operation. It is comforting to know you are working with one of the most advanced pipettes in the world.

A spring loaded tip cone, a temporary adjustment option, an improved volume display - and all that in an ultra light, fully autoclavable pipette. The Research plus pipette will become an indispensable tool in your laboratory.





> Learn more about Eppendorf 16- & 24-channel pipettes at www.eppendorf.com/ready-set-pipette







### High flexibility

Your new pipette should offer all the flexibility you need. Adjust your Research plus to your needs, autoclave the entire pipette or only the lower part. Choose among single-channel, multi-channel and fix-volume pipettes in different sizes.

### Temporary adjustment option for various liquid classes

Adjust your pipette in seconds for better accuracy when pipetting various difficult liquids like ethanol or even when pipetting at high altitudes.



#### **Advanced ergonomics**

Feel the difference in weight, pipetting forces and the spring loaded tip cone\*.

#### Low tip attachment force

Achieve optimal tightness and minimal attachment forces with the Eppendorf Research plus. The spring loaded tip cone\* helps to reduce stress without sacrificing tightness.

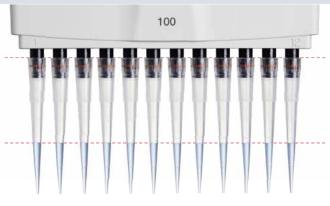
#### Low tip ejection force

How many tips do you use per day? Even small differences in the tip ejection force make a big change if you do it day by day. With the Eppendorf Research plus, you'll benefit from one of the lowest tip ejection forces on the market.

#### Spring-loaded tip cone\* for exactly reproducible tip fit

No need for rocking. Just a soft pressure is sufficient for tip attachment. Get extremely consistent sample pickup, even in multi-channel pipettes, and maximize user to user reproducibility for more uniform results among members of the lab.

<sup>\*</sup> Not available in all variants.



### Eppendorf Reference® 2

The name »Reference« stands for extraordinary precision and accuracy, a long service life, and an ergonomic design. With an innovative one-button operation, the Reference 2 allows fast and ergonomic handling with reduced operating efforts. Its unique smooth surface and autoclavability quarantee efficient decontamination making it the ideal companion when working under sterile conditions.

Our best material and the latest technologies are implemented in this pipette, making it a reliable partner for you and your demanding work.

#### Reference 2 benefits

- > High precision and accuracy provides reliable results
- > 4-digit display for a more accurate volume setting (clearly visible from every angle)
- > Quick and secure volume setting, including volume lock
- > Fully autoclavable and easy-to-clean smooth surface
- > Color coded and volume labeling for quick identification of the volume size/tip size
- > Round upper part makes it possible to work in every position
- > Available as a single-channel pipette in fixed or variable volume as well as 8- and 12-channel pipette





> Have a look in our brochure with this QR Code!



### User friendly temporary adjustment

For liquids other than aqueous solutions, pipettes have to be adjusted. The Reference 2 provides easy possibility to do so, leaving the factory settings untouched. Reset back to manufacturer setting just as quick and easy.



#### Stainless steel upper part

The external edges made from stainless steel equip the Reference 2 with outstanding robustness at potential impact sites. It includes a quick volume setting and secure volume lock.









eppendorf Reference 2

#### Spring-loaded tip cone

Attach every tip with the same force – regardless of the user. Achieve optimal tightness with low attachment and ejection forces.

#### Unique surface

Few grip marks and a smooth surface for comfortable working and simple cleaning. The Reference 2 is fully autoclavable without disassembling.

#### Sturdy upper handle

Guarantees long service life and increased robustness.

### Heightened traceability

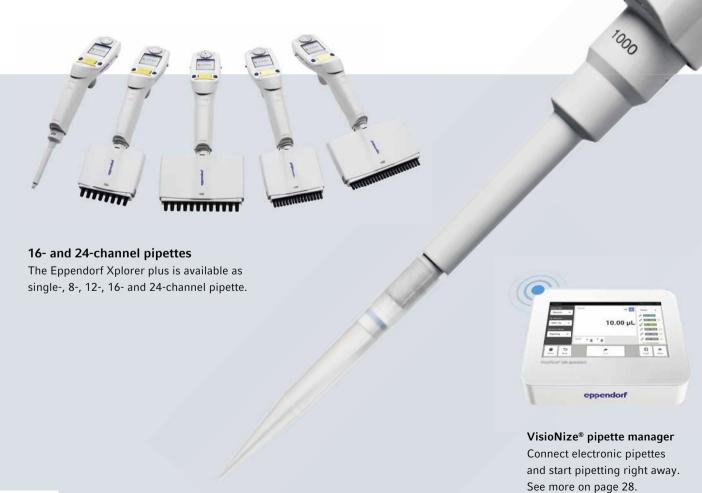
The serial number is printed on multiple components of the pipette. This prevents parts from being mixed up and indicates if one of the volume defining parts has been exchanged.

### Eppendorf Xplorer®/Eppendorf Xplorer® plus

People who give 100% every day deserve the best tools and the best equipment. You work on demanding problems, and important decisions depend on the results of your work. With the Eppendorf Xplorer and Xplorer plus, your work achieves a new level of simplicity, precision and reproducibility, which means no more delays due to complicated programming or inflexible processes.

### Xplorer/Xplorer plus benefits

- > Intuitive handling: Selection dial and multifunction rocker
- > Optimal ergonomics: Designed according to Eppendorf PhysioCare Concept
- > High reproducibility: Spring loaded tip cone, individual adjustment, and a motorized piston
- > Ease of use: After tip ejection, the piston automatically returns to the zero
- > Includes a history function that automatically saves the last parameters for faster handling
- > Full control: Edit and Help at the push of a button
- > Available as single-, 8-, 12-, 16-, and 24-channel as well as adjustable tip spacing multi-channel pipette (Move It®)





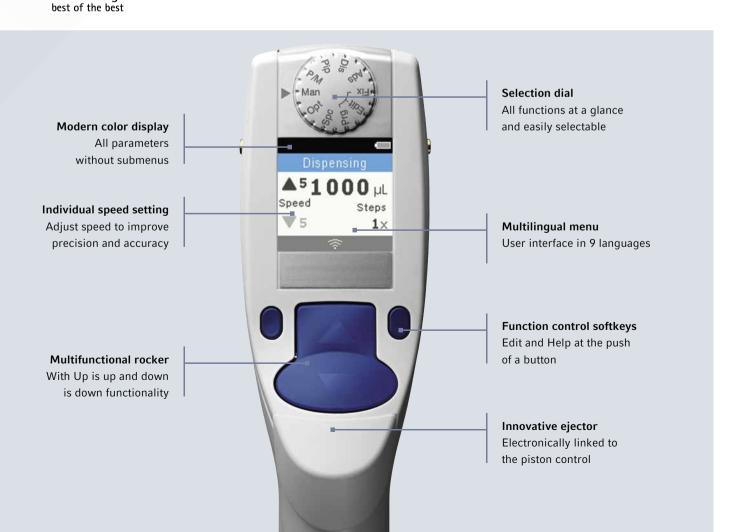
> Learn more about Eppendorf 16- & 24-channel pipettes at www.eppendorf.com/ready-set-pipette



#### **Expanded version**

The Eppendorf Xplorer plus is the perfect choice for all users who simply need a little extra - more safety and speed every day! With its additional intelligent modes, adjustable fixed volumes and individual settings, tasks are performed much faster and easier. A password can be entered to guarantee the highest degree of protection for your programming and settings.

To ensure adherence to service intervals and thus guarantee the accuracy of your results, the Xplorer plus offers an integrated service reminder. You can choose a reminder based on the period of time or on the frequency of use.



### Eppendorf Research® plus and Xplorer® plus Move It®

### Double your performance

Often, single-channel pipettes are used for multiple sample transfer from one vessel type to another, from tubes to plates for instance. This can be time-consuming and inconvenient, especially when throughput increases. Instead of pipetting many times, up to twelve samples can now be moved simultaneously with the 4-, 6-, 8- and 12-channel Move It® pipettes. Move It is equipped with adjustable cones for variable tip spacings according to your vessel format. This easy handling of format changes help reduce throughput time by 50 % and increase reproducibility of your results.

#### **Format limiter**

eppendorf

Enabling quick switches backwards and forwards between the formats



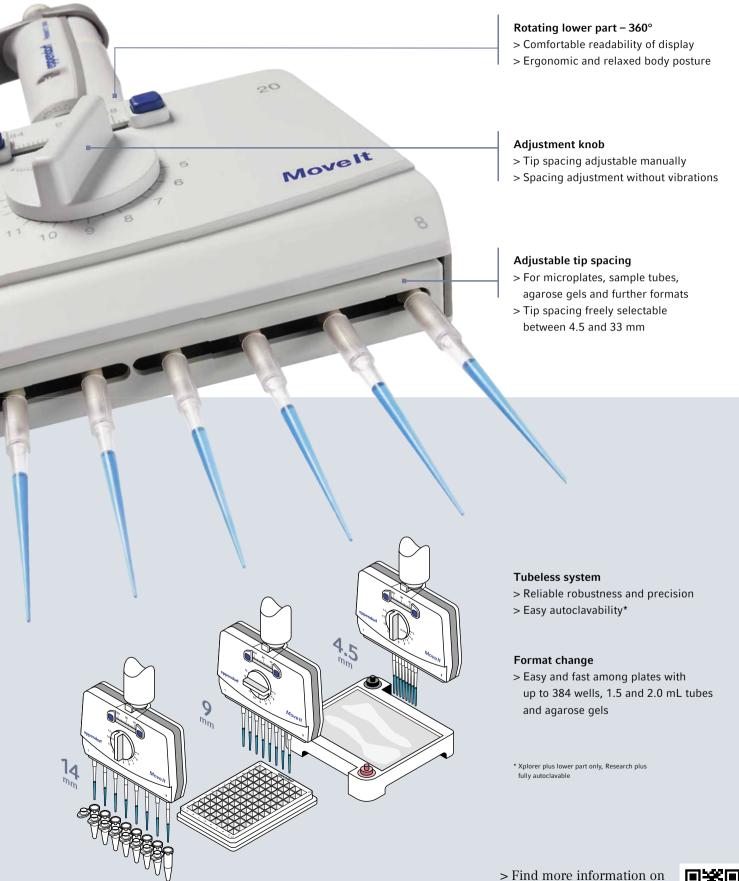


#### Move It benefits

- > Easy and fast format changes increasing your efficiency up to 50%
- > Less breaks needed thanks to an optimal balance in the hand
- > Rotatable pipette head 360° for fast identification of parameters
- > Tubeless design allows for increased durability, precision and autoclavibility









www.eppendorf.com/move-it

### epT.I.P.S.®

The fact that a tip fits onto a pipette cone does not say anything about the performance of the pipetting system comprising the components »Pipette and Tip«. The standard ISO 8655:2002 (1) considers pipettes and pipette tips as a system. Eppendorf as a system provider manufactures a system instead of single parts of it.

epT.I.P.S. piptte tips are available in purity grades of Eppendorf Quality, PCR clean and Biopur®. Packed as reloads, reusable boxes, racks for single-use and singles blistered in medical paper.



### epT.I.P.S.® 384

epT.I.P.S. 384 pipette tips are optimally coordinated to Eppendorf 16- and 24-channel pipettes Research plus and Xplorer plus. Process 384-well plates manually with highest level of tip tightness and coaxiality but extraordinary low operating forces.

epT.I.P.S. 384 are available in purity grades of Eppendorf Quality and PCR clean, packed as reusable box and reloads.





### Twice as Fast in 384-Well Applications

With the advent of the high-throughput screening approach, which is widely used in the pharmaceutical industry, the need for microplates with a larger number of wells arose.

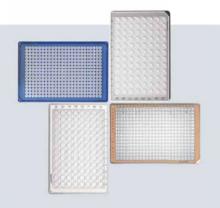
The 384-well microplate was then developed and implemented as a consumable for drug development assays.



### 16 / 24-channel pipettes and epT.I.P.S.® 384

With the lightweight Research plus or the fast and precise Xplorer plus you get a higher volume of precision work done. Get extremely consistent sample pickup across all channels and fill a complete 384-well plate within 1 minute. It couldn't be easier to perfectly hit all 384 wells as the epT.I.P.S. 384 have an extremely fine tip shape, and an extraordinary coaxiality which enables a perfect tip alignment.

www.eppendorf.com/ready-set-pipette



### 384-well Plates

Eppendorf consumables with their unique features make every day routines faster, easier, and more reliable. Eppendorf 384-well plates are available as Deep well plates (384/200 µL), Microplates (384/F and 384/V), Assay/Reader Microplates (384/V black and white), Protein and DNA LoBind and twin.tec® PCR plates.

www.eppendorf.com/plates

### Also interesting









### Multipette® M4

The Eppendorf Multipette M4 is the ideal precision instrument for completing long pipetting series without the need for repeated liquid aspiration.

The Multipette is the tool of choice when working with liquids that possess demanding physical properties like high viscosity, density or volatility. With the Multipette/Combitip system, volumes are dispensed using the positive displacement principle. The liquid is directly dispensed without an air-cushion, ensuring highest precision regardless of the physical properties of the liquid.

### Multipette M4 benefits

- > Automatic Combitip advanced recognition eliminates time-consuming volume calculations
- > Dispensing up to 100 times without refilling the Combitip
- > Wide dispensing range: 1 µL to 10 mL
- > Stress-free work via integrated step counter: Dispensing procedures can be continued error-free after an interruption or distraction
- > Fully emptied Combitip can be easily ejected with one hand using the operating lever





Precision for challenging liquids The Multipette M4 can precisely dispense even viscous, volatile, foaming and high-density liquids.



Time saving The Multipette M4 helps to make long dispensing series easier, safer, and faster.



> Pipette even challenging liquids like an expert: www.eppendorf.com/pipetting

### Multipette® E3/E3x

The Multipettes E3 and E3x make your everyday pipetting routines faster, easier and more precise. They combine the advantages of a positive displacement dispenser, time saving and precise handling of challenging liquids, with those of an electronic pipette. Even tough-to-handle liquids like cream can be dispensed in combination with the ViscoTip®.

The Multipette E3 and E3x offer the same benefits as the M4.

### Additional benefits of the Multipette E3 and E3x

- > Defined aspiration and dispensing speed for highest reproducibility of results (eight different speed levels)
- > Easy to read: Enlarged color display, optimized contrast, clear arrangement of all parameters
- > Store up to 225 different parameter settings to save programming time for routine applications
- > All selected parameters shown at one glance
- > Display/operating menu in 9 different languages
- > RFID chip contains all relevant data regarding the Multipette



🔥		
Feature	Multipette E3	Multipette E3x
High speed aspiration and dispensing with motorized piston	72 0.	
Automatic Combitips advanced® tip recognition		
One button tip ejection	900	
Volume range from 1 µl to 50 ml		
Li-ion battery		
Illuminated display		
Automatic dispensing		
Pipetting S/g		
Dispensing		
Aspirate (aspiration of supernatants)		
Titrate		
Sequential dispensing		
Combined aspiration and dispensing mode		

> Multipette E3 and Multipette E3x are the experts for long series pipetting and liquids with demanding physical properties: www.eppendorf.com/multipette-system



### Combitips advanced®

In combination with the Multipette M4 and E3/E3x, Combitips advanced form an ideal system for a broad range of liquid handling applications.

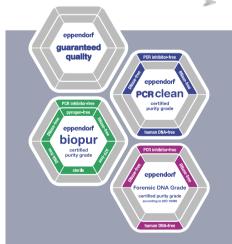
### Combitips advanced benefits

- > Time savings for long dispensing/pipetting series
- > High-precision dispensing regardless of the physical properties of the liquid (e.g., viscosity, volatility, density, temperature...)
- > Prevention of aerosol contamination with hermetically sealed piston
- > Protection from radioactive and toxic substances
- > 9 available volume sizes (0.1 mL-50 mL) offer a maximum range of dispensing volumes
- > Individually color coded: Quick identification of the desired Combitips facilitates the workflow (color coding is also visible on packaging)





Elongated tips (for 2.5 mL, 5 mL, 10 mL) Complete emptying of all common tubes prevents sample loss



#### Variety and selection

With 9 volume sizes (0.1 mL to 50 mL) and 4 purity grades (Eppendorf Quality™, PCR clean, Eppendorf Biopur®, and Forensic DNA grade) you will always find the perfect Combitip for your application!



> Choose the optimal Combitip for your volume with the help of our Combitip selection guide: www.eppendorf.com/combitips-advanced

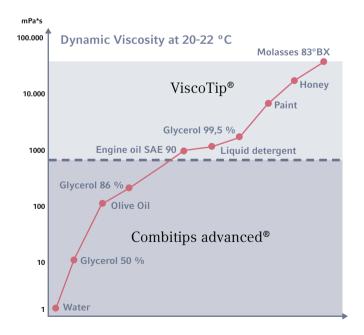
### ViscoTip®

Let it flow! The new Multipette consumable ViscoTip® is specialized on tough-to-handle liquids like cream. Therefore, ViscoTip naturally expands the broad range of applications for our often copied, never equaled Combitips advanced® / Multipette system. For fast, precise and safe liquid handling.

### ViscoTip benefits

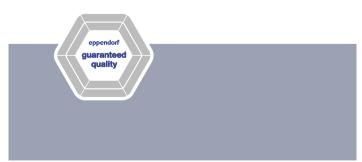
- > Specialized for liquids with a dynamic viscosity from 200 mPa\*s to 14.000 mPa\*s
- > For dispensing volumes from 100 µL to 10 mL in increments of 10 µL
- > Significantly lower operation force, thus speeding up work and reducing energy consumption
- > Automatic tip recognition and volume calculation
- > Free of experiment-interfering leachables and slip agents





#### Dynamic viscosity

The ViscoTip is specifically designed and optimized for handling high viscosity liquids up to 14,000 mPa\*s such as Glycerol 99.5%, Tween, oils, cremes, shampoos or honey. It sharply reduces operating forces while handling such liquids leading to enhanced ergonomics, increased working speed and longer charge life time of your Multipette battery.





## Easypet® 3

It has never been easier to combine speed, safety, precision and comfort. Experience a new dimension of speed control and precision by intuitive, convenient speed adjustment. You will always be informed about your battery status with the vibrantly backlit LED battery meter.







### Pipet Helper®

The Eppendorf Pipet Helper is a pipet controller which covers the range of bulb and graduated pipettes from 0.1 to 200 mL. The valve system allows for convenient operation without effort. Low weight and optimized design with ergonomic arrangement of functions.

### **Eppendorf serological pipets**

The serological pipets are made of ultra-clear virgin polystyrene. They have a sterility assurance level of 10-6 and a certified absence of detectable pyrogens, DNA, RNase and DNase, non-cytotoxic.

### Varipette® 4720

The Varipette is a continuously adjustable pipette that works according to the air-cushion and positive displacement principle. Thus the pipette is especially designed for precise pipetting of liquids with high vapor pressure or viscosity. The Varitip® P and S system are tailored to different vessels.

## Varispenser® 2/2x

Varispenser 2/2x are ideal for dispensing aliquots of liquid from supply bottles. Available in 6 sizes for 0.2-100 mL and fully autoclavable. Varispenser 2x has a recirculation valve which prevents reagent loss while ventilating.

### Eppendorf Top Buret<sup>™</sup>

The Eppendorf Top Buret sets standards for manual titration. Its pulse-free dispensing technique allows continuous dispensing of liquid with precision values within required limits.



### The Future is Now! Connect your pipetting network

Who doesn't enjoy greater freedom and convenience when it comes to pipetting? Be ahead of the curve! Switch to connected electronic pipettes and boost your individual pipetting skills while bringing teamwork up to a new level.

- > How quickly can you set your parameters?
- > How accurate are your results?
- > How do you work in teams when pipetting at the bench?

### Evolve your electronic pipette with the VisioNize® pipette manager

Our system connects multiple electronic pipettes, thereby not only improving speed and accuracy for a single user, but across your entire lab. Easily convert your Eppendorf Xplorer® and Eppendorf Xplorer® plus electronic pipettes into a connected electronic pipette with the WiFi module.

Connect to the VisioNize pipette manager and take your pipetting to the next level.





### How does the VisioNize pipette manager system works?



- 1. Convert Eppendorf Xplorer® and Xplorer® plus pipettes into connected electronic pipettes.
- 2. VisioNize pipette manager External touch server establishes communication with connected electronic pipettes and tablets via WiFi technology.
- 3. Connect your tablet (Android and iOS) to work in parallel with other lab users.



### Eppendorf Pipette Holder System

Carousels, stands and wall mount devices: The Pipette Holder System is perfect for all users of handheld liquid handling instruments, who need a highly flexible system for their Eppendorf pipettes and Multipettes®.

To save precious bench-top space carousels carry both mechanical and electronic instruments.









Rotatable carousel holder in two variants to hold or hold and charge up to six instruments. High flexibility due to exchangeable adapters



Pipette stands as holder or including a charging function for single devices. High flexibility due to exchangeable adapter



Various holders for wall-mounting, installation on a shelf above the bench or inside biological safety cabinets

### epMotion® 96 and epMotion® 96xl

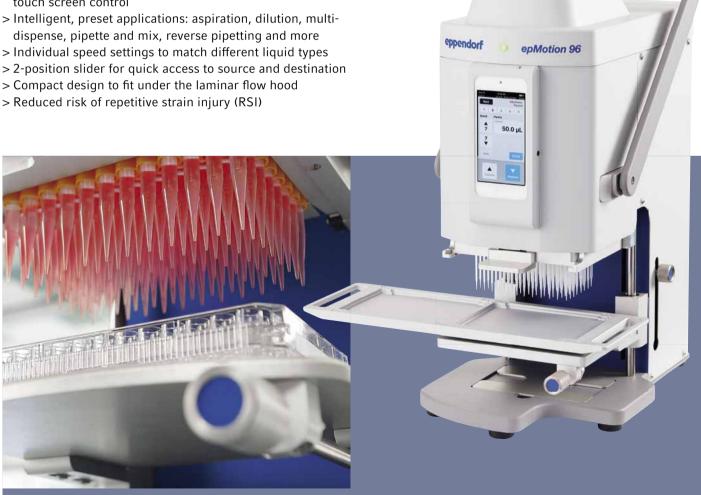
The Eppendorf epMotion 96 is an easy to use bench top system for high precision pipetting in 96- and 384-well plates. As an affordable solution it overcomes the limits of manual multi-channel pipetting and will optimize your applications by faster and more precise simultaneous 96-well pipetting.

#### **Features**

- > Large volume range of 0.5–300 μL (epMotion 96) or 5-1,000 μL (ep*Motion* 96xl)
- > Use of different tip sizes without changing the pipetting head
- > Auto-detection of tip size
- > Intuitive and App-based software and convenient touch screen control
- > Individual speed settings to match different liquid types

### **Applications**

- > Replication and reformatting of 96- or 384-well plates
- > PCR set-up in whole plates
- > Cell seeding and media change
- > Reagent and compound addition
- > 384 wells by 4 times 96 well pipetting
- > Cell-based assays
- > ELISA and other immuno-assays in plates
- > Biochemical assays





> Watch our video for easy operation of epMotion 96 on our YouTube channel

### epMotion® 5070

Our small member of the epMotion family is the most compact solution for accurate and reproducible automated liquid handling. This makes the epMotion 5070 a perfect match for any routine application in your laboratory.

#### **Features**

- > 4 SBS/SLAS worktable and 3 virtual positions
- > Maximum pipetting accuracy from 200 nL to 1,000 μL
- > Automatic exchange of two dispensing tools
- > Use of 1-channel and 8-channel dispensing tools
- > Optical sensor\*1 for detecting liquids, labware and tips
- > Completely contained housing including door safety mechanism
- > Option for EasyCon tablet or MultiCon PC controller by touch, mouse or keyboard, upgradable for barcode tracking and GLP software versions





### **Applications**

- > Serial dilutions
- > Liquid transfer from individual tubes to plates
- > Assay set-up
- > Reformatting plates
- > Simple PCR set-up
- > Normalization of sample concentrations or volumes
- > Cell media exchange



epMotion 5070 is your ideal partner for easy and reliable liquid handling, such as PCR, normalizations and serial dilutions.

### epMotion® 5073

The midsize epMotion 5073 is a flexible system for automating time-consuming and complex pipetting procedures. With its intuitive software, routine liquid handling tasks are easier than ever. The pipetting procedure is more precise, reproducible, and fully standardized, making your workplace more ergonomic and safer.

#### **Features**

- > Same as 5070 plus
- > 6-position worktable
- > Option for gripper transport, 1 thermal module or Eppendorf MagSep™ 3D module
- > CleanCap option for UV decontamination and HEPA air filter
- > Optional MultiCon touch PC controller

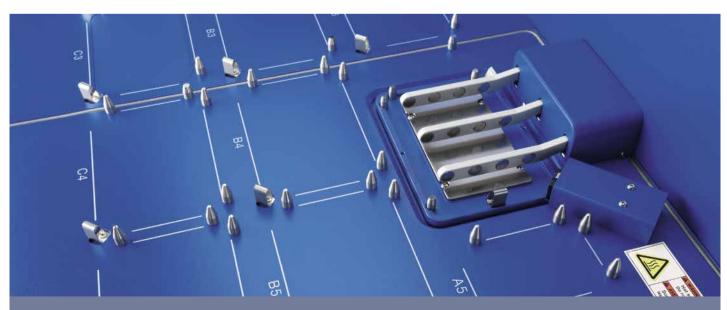
### **Applications**

- > DNA and RNA purification
- > PCR set-up
- > Sample or reagent transfer
- > Sample mixing and temperature incubation
- > Assay set-up
- > Media change and other cell culture applications
- > NGS library preparation



### Eppendorf MagSep™ 3D Technology

Combination of magnetic finger module and Eppendorf ThermoMixer facilitates magnetic separation, mixing and temperature control in one location.





> Watch our video for flexible use of epMotion 5073 on our YouTube channel

### epMotion® 5075

With 12 to 15 worktable positions and many additional features the epMotion 5075 versions have a higher application flexibility. The epMotion 5075 is the ideal solution for advanced liquid handling demands. It offers the same outstanding accuracy and precision as epMotion 5070 & 5073.

#### **Features**

- > Same as 5073 plus
- > Up to 15 worktable positions
- > MultiCon PC controller with simulation, network and software upgrade options
- > Automatic exchange of 4 dispensing tools
- > Option for gripper and 1–3 thermal modules
- > System control by touch, mouse, keyboard or network
- > Available Eppendorf ThermoMixer®, Vacuum manifold, and magnetic separation options
- > Available as CleanCap versions

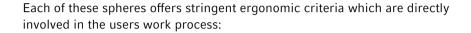
### **Applications**

- > NGS library preparation
- > Distributing reagents and serial dilutions
- > Sample transfer from individual tubes to plates
- > Solid phase extraction
- > Bead applications with mixing and temperature incubation
- > Sequencing and PCR clean-up
- > Nucleic acid purification



### The Eppendorf PhysioCare Concept®

The mission of Eppendorf has always been to improve the living conditions of our customers. Nowadays, where people spend a lot of their time at work, the ergonomics of their tools and the whole work environment is becoming more important for your well-being. Thus the development of each Eppendorf pipette is based on three spheres that support the health of our customers.







#### The User:

The PhysioCare Concept guarantees an ergonomic design and an optimized product performance according to the needs of the individual.

### The Lab:

The PhysioCare Concept allows the uncomplicated integration of instruments in the lab as well as adhering to its specific requirements.

### The Laboratory Workflow:

The PhysioCare Concept ensures general support to enhance processes around the lab and improve the results of the whole organization.



- > Further information: www.eppendorf.com/physiocare
- > Have a look in our brochure with this QR Code!

### Supporting You – Eppendorf Services





**Application** Support



**Seminars** and Training



**Technical** Support



Maintenance and Certification

At Eppendorf, we are committed to providing reliable services to help you maintain premium performance, and maximum safety of your Eppendorf instruments. Our carefully designed service solutions are performed by our dedicated Application, Training and Technical Service teams worldwide.

Especially the precision and accuracy of the pipettes and the dispensing tools of semi-/automated liquid handling devices are important for the quality and reproducibility of all your work results. With the Performance Plans from Eppendorf we offer you a range of quality maintenance and certification services for different user requirements.

### **Pipette Performance Plans**

Pipettes are precision instruments with parts subject to normal wear and tear. This leads to imprecision over the time. Therefore, regular maintenance and calibration of your pipettes are fundamental to their proper function, precision, and accuracy. With our Pipette Performance Plans we offer certified calibration services for all pipettes - not only Eppendorf: from quick economical calibration to ISO 17025 accredited calibration services.

### **Liquid Handling Training**

The operator's experience is also very important for achieving good pipetting results. In our most popular training you will learn about the principles of pipetting ergonomics, correct pipetting techniques, routine maintenance and pipette calibration.

### epMotion® 96 Performance Plans

Maintaining and verifying your semi-automated pipette accuracy and precision makes sure your system still dispenses according to the manufacturer specifications. In the end you will receive assured results with your downstream applications and your valuable samples and reagents.

### epMotion® Performance Plans

Our qualified service technicians will take care of the maintenance of your epMotion® to ensure its long life-time. Our Certification Services include all tests, calibration services and documentation needed for Installation and Operational Qualification (IQ/OQ).





> For more information, service ordering details and contact form please visit www.eppendorf.com/epServices



# Eppendorf Research® plus

Eppendorf Research® plus, single-channel, variable volume\*1

Volume range	Color code	Volume	System	atic error*2	Rando	om error*2	Order no.
0.1-2.5 μL	adark gray	0.1 μL	±48.0%	±0.048 μL	±12.0%	±0.012 μL	3123 000 012
	(for epT.I.P.S.® 10 μL)	0.25 μL	±12.0%	±0.03 μL	±6.0%	±0.015 μL	
		1.25 μL	±2.5%	±0.031 μL	±1.5%	±0.019 μL	
		2.5 μL	±1.4%	±0.035 μL	±0.7%	±0.018 μL	
0.5-10 μL	medium gray (for epT.I.P.S.® 20 μL)	 0.5 μL	±8.0%	±0.04 μL	±5.0%	±0.025 μL	3123 000 020
		1 μL	±2.5%	±0.025 μL	±1.8%	±0.018 μL	
		5 μL	±1.5%	±0.075 μL	±0.8%	±0.04 μL	
		10 μL	±1.0%	±0.1 μL	±0.4%	±0.04 μL	
2–20 μL	light gray	2 μL	±5.0%	±0.1 μL	±1.5%	±0.03 μL	3123 000 098
	(for epT.I.P.S.® 20 μL L)	10 μL	±1.2%	±0.12 μL	±0.6%	±0.06 μL	
		20 μL	±1.0%	±0.2 μL	±0.3%	±0.06 μL	
2-20 μL	yellow	2 μL	±5.0%	±0.1 μL	±1.5%	±0.03 μL	3123 000 039
	(for epT.I.P.S.® 200 μL)	10 μL	±1.2%	±0.12 μL	±0.6%	±0.06 μL	
		20 μL	±1.0%	±0.2 μL	±0.3%	±0.06 μL	
10–100 μL		10 μL	±3.0%	±0.3 μL	±1.0%	±0.1 μL	3123 000 047
·		50 μL	±1.0%	±0.5 μL	±0.3%	±0.15 μL	
		100 μL	±0.8%	±0.8 μL	±0.2%	±0.2 μL	
20-200 μL		20 μL	±2.5%	±0.5 μL	±0.7%	±0.14 μL	3123 000 055
		100 μL	±1.0%	±1.0 μL	±0.3%	±0.3 μL	
		200 μL	±0.6%	±1.2 μL	±0.2%	±0.4 μL	
30-300 μL	■ orange (for epT.I.P.S.® 300 µL)	30 μL	±2.5%	±0.75 μL	±0.7%	±0.21 μL	3123 000 101
		150 μL	±1.0%	±1.5 μL	±0.3%	±0.45 μL	
		300 μL	±0.6%	±1.8 μL	±0.2%	±0.6 μL	
100–1,000 μL	blue (for epT.I.P.S.® 1,000 μL)	100 μL	±3.0%	±3.0 μL	±0.6%	±0.6 μL	3123 000 063
		500 μL	±1.0%	±5.0 μL	±0.2%	±1.0 μL	
	<u> </u>	1,000 μL	±0.6%	±6.0 μL	±0.2%	_±2.0 μL	
0.25-2.5 mL	red (for epT.I.P.S.® 2.5 mL)	0.25 mL	±4.8%	±0.012 mL	±1.2%	±0.003 mL	3123 000 144
		1.25 mL	±0.8%	±0.01 mL	±0.2%	±0.0025 mL	
		2.5 mL	±0.6%	±0.015 mL	±0.2%	±0.005 mL	
0.5–5 mL	purple (for epT.I.P.S.® 5 mL)	0.5 mL	±2.4%	±0.012 mL	±0.6%	±0.003 mL	3123 000 071
		2.5 mL	±1.2%	±0.03 mL	±0.25%	±0.006 mL	
		5 mL	±0.6%	±0.03 mL	±0.15%	±0.008 mL	
1–10 mL	turquoise	1 mL	±3.0%	±0.03 mL	±0.6%	±0.006 mL	3123 000 080
	(for epT.I.P.S.® 10 mL)	5 mL	±0.8%	±0.04 mL	±0.2%	±0.01 mL	
		10 mL	±0.6%	±0.06 mL	±0.15%	±0.015 mL	

<sup>\*1</sup> Eppendorf Research® plus single-channel variable volume pipettes up to 1,000 µL include an epT.I.P.S.® box. The 5 mL and 10 mL versions include an epT.I.P.S.® sample bag.
\*2 The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

# Eppendorf Research® plus

Eppendorf Research® plus, multi-channel, variable volume\*1

Volume range	Channels	Color code	Volume		System	atic error*2	Rand	om error*2
0.5.40								
0.5–10 μL		medium gray (for epT.I.P.S.® 20 μL)	0.5 μL		±12.0%	±0.06 μL	±8.0%	<u>±0.04 μL</u>
		(101 ερ1.1.ε.3. 20 με/	1 μL		±8.0%	±0.08 μL	±5.0%	<u>±0.05 μL</u>
			5 μL		±4.0%	±0.2 μL	±2.0%	±0.1 μL
10 100 1			_ <u>10 μL</u>		±2.0%	±0.2 μL	±1.0%	±0.1 μL
10–100 μL		yellow (for epT.I.P.S. <sup>®</sup> 200 μL)	10 μL		±3.0%	±0.3 μL	±2.0%	±0.2 μL
		(for ep1.1.P.S.° 200 μL)	50 μL		±1.0%	±0.5 μL	±0.8%	<u>±0.4 μL</u>
	-	·	_ 100 μL		±0.8%	±0.8 μL	±0.3%	±0.3 μL
30–300 μL		orange	30 μL		±3.0%	±0.9 μL	±1.0%	±0.3 μL
		(for epT.I.P.S. <sup>®</sup> 300 μL)	150 μL		±1.0%	±1.5 μL	±0.5%	±0.75 μL
			300 μL		±0.6%	<u>±1.8 μL</u>	±0.3%	±0.9 μL
50–1,200 μL	8 -channel	dark green	120 μL		±6.0%	±7.2 μL	±0.9%	<u>±1.08 μL</u>
			600 μL		±2.7%	<u>±16.2 μL</u>	±0.4%	±2.4 μL
		- <u></u>	1.200 μL		±1.2%	<u>±14.4 μL</u>	±0.3%	±3.6 μL
50–1,200 μL	12-channel	dark green	120 μL		±6.0%	±7.2 μL	±0.9%	±1.08 μL
			600 μL		±2.7%	±16.2 μL	±0.4%	±2.4 μL
			1.200 μL		±1.2%	<u>±14.4 μL</u>	±0.3%	±3.6 μL
1–100 μL	16-channel	light pink	1–20 μL	1 μL	±12%	±0.12 μL	±8%	±0.08 μL
		(for epT.I.P.S.® 384 20 μL)		2 μL	±8%	±0.16 μL	±5%	<u>±0.1 μL</u>
				10 μL	±4%	±0.4 μL	±2%	±0.2 μL
				20 μL	±2%	±0.4 μL	±1%	±2.0 μL
		light yellow	5-100 μL	5 μL	±6%	±0.3 μL	±4%	±0.2 μL
		(for epT.I.P.S. <sup>®</sup> 384 100 μL)		10 μL	±3%	±0.3 μL	±2%	±0.2 μL
				50 μL	±1.2%	±0.6 μL	±0.8%	±0.4 μL
			_	100 μL	±1%	±1 μL	±0.6%	±0.6 μL
	24-channel	■ light pink	1–20 μL	1 μL	±12%	±0.12 μL	±8%	±0.08 μL
		(for epT.I.P.S. <sup>®</sup> 384 20 μL)		2 μL	±8%	±0.16 μL	±5%	±0.1 μL
				10 μL	±4%	±0.4 μL	±2%	±0.2 μL
			_	20 μL	±2%	±0.4 μL	±1%	±0.2 μL
		light yellow	5-100 μL	5 μL	±6%	±0.3 μL	±4%	±0.2 μL
		(for epT.I.P.S. <sup>®</sup> 384 100 μL)		10 μL	±3%	±0.3 μL	±2%	±0.2 μL
				50 μL	±1.2%	±0.6 μL	±0.8%	±0.4 μL
				100 μL	±1%	±1 μL	±0.6%	±0.6 μL

<sup>\*1</sup> Eppendorf Research® plus multi-channel variable volume pipettes include an epT.I.P.S.® box.

For 96-w	ell plates	For 384-well plates				
Order no. 8-channel	Order no. 12-channel	Order no. 16-channel	Order no. 24-channel			
Cone d	istance	Cone distance				
9 mm	9 mm	4.5 mm	4.5 mm			
3125 000 010	3125 000 028	_	_			
3125 000 036	3125 000 044	_	_			
3125 000 052	3125 000 060	_	_			
3125 000 214	_	_	_			
_	3125 000 222	_	_			
		3125 000 079	_			
-	-	3125 000 095	-			
_	_	_	3125 000 087			
-	-	-	3125 000 109			

#### Eppendorf Research® plus

Eppendorf Research® plus, single-channel, fixed volume

Option 1: 0.5–10  $\mu L,\,10–100~\mu L,\,100–1,000~\mu L$ 

**Option 3:** 100–1,000  $\mu$ L, 0.5–5 mL, 1–10 mL

**Option 2:** 2–20 μL yellow, 20–200 μL, 100–1,000 μL

Volume	Color code	Sys	tematic error*1	R	Random error*1		
10 μL	medium gray (for epT.I.P.S.® 20 μL)	±1.2%	±0.12 μL	±0.6%	±0.06 μL	3124 000 016	
20 μL	light gray (for epT.I.P.S.® 20 μL L)	±0.8%	±0.16 μL	±0.3%	±0.06 μL	3124 000 032	
10 μL	yellow	±1.2%	±0.12 μL	±0.6%	±0.06 μL	3124 000 024	
20 μL	(for epT.I.P.S. <sup>®</sup> 200 μL)	±1.0%	±0.2 μL	±0.3%	±0.06 μL	3124 000 040	
25 μL		±1.0%	±0.25 μL	±0.3%	±0.08 μL	3124 000 059	
50 μL		±0.7%	±0.35 μL	±0.3%	±0.15 μL	3124 000 067	
100 μL		±0.6%	±0.6 μL	±0.2%	±0.2 μL	3124 000 075	
200 μL		±0.6%	±1.2 μL	±0.2%	±0.4 μL	3124 000 083	
200 μL	blue	±0.6%	±1.2 μL	±0.2%	±0.4 μL	3124 000 091	
250 μL	(for epT.I.P.S. <sup>®</sup> 1,000 μL)	±0.6%	±1.5 μL	±0.2%	±0.5 μL	3124 000 105	
500 μL		±0.6%	±3.0 μL	±0.2%	±1.0 μL	3124 000 113	
1000 μL		±0.6%	±6.0 μL	±0.2%	±2.0 μL	3124 000 121	

<sup>\*1</sup> The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

Accessories	Order no.
Tip-Tub reagent reservoir, autoclavable reservoir for aspirating liquids with multi-channel pipettes,	0030 058 607
1 set = 10 reservoirs and 10 lids	
Eppendorf TrackIT	3903 000 014
Eppendorf Research® plus 3-pack including epT.I.P.S.® box and Eppendorf ballpoint pen	Order no.

3123 000 900

3123 000 918

3123 000 926

## Eppendorf Reference® 2

Eppendorf Reference® 2, single-channel, variable volume\*1

0.1–2.5 μL  0.5–10 μL  2–20 μL  10–100 μL  20–200 μL	Idark gray (for epT.I.P.S.® 10 μL)  medium gray (for epT.I.P.S.® 20 μL)  light gray (for epT.I.P.S.® 20 μL L)  yellow (for epT.I.P.S.® 200 μL)	0.1 μL 0.25 μL 1.25 μL 2.5 μL 1 μL 5 μL 10 μL 2 μL 10 μL 20 μL 2 μL 10 μL 2 μL 10 μL	±48.0% ±12.0% ±2.5% ±1.4% ±8.0% ±2.5% ±1.5% ±1.0% ±3.0% ±1.0% ±0.8% ±5.0% ±1.2%	±0.048 μL ±0.03 μL ±0.031 μL ±0.035 μL ±0.040 μL ±0.075 μL ±0.10 μL ±0.10 μL ±0.16 μL ±0.16 μL	± 12.0% ±6.0% ±1.5% ±0.7% ±5.0% ±1.8% ±0.8% ±0.4% ±1.5% ±0.6% ±0.3% ±1.5%	$\begin{array}{l} \pm 0.012 \; \mu L \\ \pm 0.015 \; \mu L \\ \pm 0.019 \; \mu L \\ \pm 0.018 \; \mu L \\ \pm 0.025 \; \mu L \\ \pm 0.018 \; \mu L \\ \pm 0.04 \; \mu L \\ \pm 0.04 \; \mu L \\ \pm 0.03 \; \mu L \\ \pm 0.06 \; \mu L \\ \pm 0.06 \; \mu L \\ \end{array}$	4924 000 010 4924 000 029 4924 000 037
2–20 μL 2–20 μL 10–100 μL 20–200 μL	medium gray (for epT.I.P.S.® 20 μL)  light gray (for epT.I.P.S.® 20 μL L)	1.25 μL 2.5 μL 0.5 μL 1 μL 5 μL 10 μL 2 μL 10 μL 20 μL 2 μL 10 μL	±2.5% ±1.4% ±8.0% ±2.5% ±1.5% ±1.0% ±3.0% ±1.0% ±0.8% ±5.0%	±0.031 μL ±0.035 μL ±0.040 μL ±0.025 μL ±0.075 μL ±0.10 μL ±0.10 μL ±0.16 μL ±0.16 μL ±0.10 μL	±1.5% ±0.7% ±5.0% ±1.8% ±0.8% ±0.4% ±1.5% ±0.6% ±0.3%	$\begin{array}{l} \pm 0.019 \; \mu L \\ \pm 0.018 \; \mu L \\ \pm 0.025 \; \mu L \\ \pm 0.018 \; \mu L \\ \pm 0.04 \; \mu L \\ \pm 0.04 \; \mu L \\ \pm 0.03 \; \mu L \\ \pm 0.06 \; \mu L \\ \pm 0.06 \; \mu L \\ \end{array}$	· ·
2–20 μL 2–20 μL 10–100 μL 20–200 μL	(for epT.I.P.S.® 20 μL)  light gray (for epT.I.P.S.® 20 μL L)	2.5 µL 0.5 µL 1 µL 5 µL 10 µL 2 µL 10 µL 20 µL 2 µL 10 µL	±1.4% ±8.0% ±2.5% ±1.5% ±1.0% ±3.0% ±0.8% ±5.0%	±0.035 μL ±0.040 μL ±0.025 μL ±0.075 μL ±0.10 μL ±0.10 μL ±0.16 μL ±0.16 μL ±0.10 μL	±0.7% ±5.0% ±1.8% ±0.8% ±0.4% ±1.5% ±0.6% ±0.3%	$\begin{array}{l} \pm 0.018 \; \mu L \\ \pm 0.025 \; \mu L \\ \pm 0.018 \; \mu L \\ \pm 0.04 \; \mu L \\ \pm 0.04 \; \mu L \\ \pm 0.03 \; \mu L \\ \pm 0.06 \; \mu L \\ \pm 0.06 \; \mu L \\ \end{array}$	· ·
2–20 μL 2–20 μL 10–100 μL 20–200 μL	(for epT.I.P.S.® 20 μL)  light gray (for epT.I.P.S.® 20 μL L)	0.5 μL 1 μL 5 μL 10 μL 2 μL 10 μL 20 μL 2 μL 10 μL	±8.0% ±2.5% ±1.5% ±1.0% ±3.0% ±1.0% ±0.8% ±5.0%	± 0.040 μL ±0.025 μL ±0.075 μL ±0.10 μL ±0.10 μL ±0.10 μL ±0.16 μL ±0.10 μL	±5.0% ±1.8% ±0.8% ±0.4% ±1.5% ±0.6% ±0.3%	±0.025 μL ±0.018 μL ±0.04 μL ±0.03 μL ±0.06 μL ±0.06 μL	· ·
2–20 μL 2–20 μL 10–100 μL 20–200 μL	(for epT.I.P.S.® 20 μL)  light gray (for epT.I.P.S.® 20 μL L)	1 μL 5 μL 10 μL 2 μL 10 μL 20 μL 2 μL 10 μL	±2.5% ±1.5% ±1.0% ±3.0% ±1.0% ±0.8% ±5.0%	±0.025 μL ±0.075 μL ±0.10 μL ±0.06 μL ±0.10 μL ±0.16 μL ±0.10 μL	±1.8% ±0.8% ±0.4% ±1.5% ±0.6% ±0.3%	±0.018 μL ±0.04 μL ±0.04 μL ±0.03 μL ±0.06 μL ±0.06 μL	· ·
2–20 μL 10–100 μL 20–200 μL	light gray (for epT.I.P.S.® 20 μL L)	5 μL 10 μL 2 μL 10 μL 20 μL 2 μL 10 μL	±1.5% ±1.0% ±3.0% ±1.0% ±0.8% ±5.0%	±0.075 μL ±0.10 μL ±0.06 μL ±0.10 μL ±0.16 μL ±0.10 μL	±0.8% ±0.4% ±1.5% ±0.6% ±0.3%	±0.04 μL ±0.04 μL ±0.03 μL ±0.06 μL ±0.06 μL	4924 000 037
2–20 μL 10–100 μL 20–200 μL	(for epT.Í.P.S.® 20 μL L) yellow	10 μL 2 μL 10 μL 20 μL 2 μL 10 μL	±1.0% ±3.0% ±1.0% ±0.8% ±5.0%	±0.10 μL ±0.06 μL ±0.10 μL ±0.16 μL ±0.10 μL	±0.4% ±1.5% ±0.6% ±0.3%	±0.04 μL ±0.03 μL ±0.06 μL ±0.06 μL	4924 000 037
2–20 μL 10–100 μL 20–200 μL	(for epT.Í.P.S.® 20 μL L) yellow	2 μL 10 μL 20 μL 2 μL 10 μL	±3.0% ±1.0% ±0.8% ±5.0%	±0.06 μL ±0.10 μL ±0.16 μL ±0.10 μL	±1.5% ±0.6% ±0.3%	±0.03 μL ±0.06 μL ±0.06 μL	4924 000 037
2–20 μL 10–100 μL 20–200 μL	(for epT.Í.P.S.® 20 μL L) yellow	10 μL 20 μL 2 μL 10 μL	±1.0% ±0.8% ±5.0%	±0.10 μL ±0.16 μL ±0.10 μL	±0.6% ±0.3%	±0.06 μL ±0.06 μL	4924 000 037
10–100 μL 20–200 μL	yellow	20 μL 2 μL 10 μL	±0.8% ±5.0%	±0.16 μL ±0.10 μL	±0.3%	±0.06 μL	
20–200 μL		2 μL 10 μL	±5.0%	±0.10 μL		<del></del>	
20–200 μL		10 μL			±1.5%		
20–200 μL	(for epT.I.P.S.® 200 μL)		±1.2%			±0.03 μL	4924 000 045
· 20–200 μL		20 μL		±0.12 μL	±0.6%	±0.06 μL	
20–200 μL			±1.0%	±0.2 μL	±0.3%	±0.06 μL	
		10 μL	±3.0%	±0.3 μL	±0.7%	±0.07 μL	4924 000 053
		50 μL	±1.0%	±0.5 μL	±0.3%	±0.15 μL	
		100 μL	±0.8%	±0.8 μL	±0.20%	±0.20 μL	
80-300 μL		20 μL	±2.5%	±0.5 μL	±0.7%	±0.14 μL	4924 000 061
30–300 μL		100 μL	±1.0%	±1.0 μL	±0.3%	±0.3 μL	
30-300 μL		200 μL	±0.6%	±1.2 μL	±0.2%	±0.4 μL	
	orange	30 μL	±2.5%	±0.75 μL	±0.7%	±0.21 μL	4924 000 070
	(for epT.I.P.S.® 300 μL)	150 μL	±1.0%	±1.5 μL	±0.3%	±0.45 μL	
		300 μL	±0.6%	<u>±1.8 μL</u>	±0.2%	±0.6 μL	
00–1,000 μL	■ blue	100 μL	±3.0%	±3.0 μL	±0.6%	±0.6 μL	4924 000 088
	(for epT.I.P.S.® 1,000 μL)	500 μL	±1.0%	±5.0 μL	±0.2%	±1.0 μL	
		1,000 μL	±0.6%	±6.0 μL	±0.2%	±2.0 μL	•
).25–2.5 mL	red red	0.25 mL	±4.8%	±0.012 mL	±1.2%	±0.003 mL	4924 000 096
	(for epT.I.P.S.® 2.5 mL)	1.25 mL	±0.8%	±0.010 mL	±0.2%	±0.0025 mL	
		2.5 mL	±0.6%	±0.015 mL	±0.2%	±0.005 mL	
).5–5 mL	purple	0.5 mL	±2.4%	±0.012 mL	±0.6%	±0.003 mL	4924 000 100
	(for epT.I.P.S.® 5 mL)	2.5 mL	±1.2%	±0.030 mL	±0.25%	±0.006 mL	
		5.0 mL	±0.6%	±0.030 mL	±0.15%	±0.0075 mL	•
I–10 mL	■ turquoise	1.0 mL	±3.0%	±0.030 mL	±0.6%	±0.006 mL	4924 000 118
		5.0 mL	±0.8%	±0.040 mL	±0.2%	±0.010 mL	
	(for epT.I.P.S.® 10 mL)	10.0 mL	±0.6%	±0.060 mL	±0.15%	±0.015 mL	

<sup>\*</sup>¹ Eppendorf Reference\* 2 single-channel variable volume pipettes up to 1,000 µL include an epT.I.P.S.\* box. The 2.5 mL, 5 mL and 10 mL versions include an epT.I.P.S.\* sample bag. \*² The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

Accessories	Order no.
Tip-Tub reagent reservoir, autoclavable reservoir for aspirating liquids with multi-channel pipettes,	0030 058 607
1 set = 10 reservoirs and 10 lids	
Eppendorf TrackIT	3903 000 014

### Eppendorf Reference® 2

Eppendorf Reference® 2, m	nulti-channel.	, variable volume*1
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Eppendorf Ro	For 96-well plates							
Volume range	Color code	Volume	Systematic error*2		Systematic error*2		Order no. 8-channel	Order no. 12-channel
,							Cone	distance
							9 mm	9 mm
0.5-10 μL	medium gray (for epT.I.P.S.® 20 μL)	 0.5 μL	±12.0%	±0.06 μL	±8.0%	±0.04 μL	4926 000 018	4926 000 026
		1 μL	±8.0%	±0.08 μL	±5.0%	±0.05 μL		
		5 μL	±4.0%	±0.2 μL	±2.0%	±0.1 μL		
		10 μL	±2.0%	±0.2 μL	±1.0%	±0.1 μL		
10–100 μL yello	yellow	10 μL	±3.0%	±0.3 μL	±2.0%	±0.2 μL	4926 000 034	4926 000 042
	(for epT.I.P.S.® 200 μL)	50 μL	±1.0%	±0.5 μL	±0.8%	±0.4 μL		
		100 μL	±0.8%	±0.8 μL	±0.3%	±0.3 μL		
30-300 μL	orange	30 μL	±3.0%	±0.9 μL	±1.0%	±0.3 μL	4926 000 050	4926 000 069
	(for epT.I.P.S.® 300 μL)	150 μL	±1.0%	±1.5 μL	±0.5%	±0.75 μL		
		300 ul	+0.6%	+1.8 µl	+0.3%	+0.9 11		

#### Eppendorf Reference® 2, single-channel, fixed volume

Volume	Color code	Sys	tematic error*2	Rai	Random error*2		
1 μL	dark gray	±2.5%	±0.025 μL	±1.8%	±0.018 μL	4925 000 014	
2 μL	(for epT.I.P.S.® 10 μL)	±2.0%	±0.04 μL	±1.2%	±0.024 μL	4925 000 022	
5 μL	medium gray	±1.2%	±0.06 μL	±0.6%	±0.03 μL	4925 000 030	
10 μL	(for epT.I.P.S.® 20 μL)	±1.0%	±0.1 μL	±0.5%	±0.05 μL	4925 000 049	
20 μL	■ light gray (for epT.I.P.S.® 20 μL L)	±0.8%	±0.16 μL	±0.3%	±0.06 μL	4925 000 065	
10 μL	yellow	±1.2%	±0.12 μL	±0.6%	±0.06 μL	4925 000 057	
20 μL	(for epT.I.P.S.® 200 μL)	±1.0%	±0.2 μL	±0.3%	±0.06 μL	4925 000 073	
25 μL		±1.0%	±0.25 μL	±0.3%	±0.075 μL	4925 000 081	
50 μL		±0.7%	±0.35 μL	±0.3%	±0.15 μL	4925 000 090	
100 μL		±0.6%	±0.6 μL	±0.2%	±0.2 μL	4925 000 103	
200 μL		±0.6%	±1.2 μL	±0.2%	±0.4 μL	4925 000 111	
200 μL	blue	±0.6%	±1.2 μL	±0.2%	±0.4 μL	4925 000 120	
250 μL	(for epT.I.P.S.® 1,000 μL)	±0.6%	±1.5 μL	±0.2%	±0.5 μL	4925 000 138	
500 μL		±0.6%	±3.0 μL	±0.2%	±1.0 μL	4925 000 146	
1,000 μL		±0.6%	±6.0 μL	±0.2%	±2.0 μL	4925 000 154	
2 mL	red	±0.6%	±0.012 mL	±0.2%	±0.004 mL	4925 000 162	
2.5 mL	(for epT.I.P.S.® 2.5 mL)	±0.6%	±0.015 mL	±0.2%	±0.005 mL	4925 000 170	

Eppendorf Reference® 2, 3-Pack, incl. epT.I.P.S.® Box and Eppendorf ballpoint pen	Order no.
<b>Option 1:</b> 0,5–10 μL, 10–100 μL, 100–1,000 μL	4924 000 908
<b>Option 2:</b> 2–20 μL yellow, 20–200 μL, 100–1,000 μL	4924 000 916
<b>Option 3:</b> 100–1,000 μL, 0.5–5 mL, 1–10 mL	4924 000 924

<sup>\*1</sup> All Eppendorf Reference® 2 multichannel variable volume pipettes include an epT.I.P.S.® box.
\*2 The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

# Eppendorf Xplorer®

Eppendorf Xplorer®, single-channel, variable volume, incl. charger

Volume range	Color code	Volume	Syste	matic error*	Rand	lom error*	Order no.
0.5-10 μL	dark gray	1 μL	±2.5 %	±0.025 μL	±1.8 %	±0.018 μL	4861 000 015
	(for epT.I.P.S.® 20 μL)	5 μL	±1.5 %	±0.075 μL	±0.8 %	±0.04 μL	_
		10 μL	±1.0 %	±0.1 μL	±0.4%	±0.04 μL	_
1–20 μL	light gray	2 μL	±5.0 %	±0.1 μL	±1.5 %	±0.03 μL	4861 000 017
	(for epT.I.P.S.® 20 μL)	10 μL	±1.2 %	±0.12 μL	±0.6 %	±0.06 μL	_
		20 μL	±1.0 %	±0.2 μL	±0.3 %	±0.06 μL	_
5–100 μL	yellow	10 μL	±2.0 %	±0.2 μL	±1.0 %	±0.1 μL	4861 000 023
	(for epT.I.P.S.® 200 μL)	50 μL	±1.0 %	±0.5 μL	±0.3 %	±0.15 μL	_
		100 μL	±0.8 %	±0.8 μL	±0.2 %	±0.2 μL	_
10-200 μL	yellow	20 μL	±2.5 %	±0.5 μL	±0.7 %	±0.14 μL	4861 000 027
	(for epT.I.P.S.® 200 μL)	100 μL	±1.0 %	±1.0 μL	±0.3 %	±0.3 μL	_
		200 μL	±0.6 %	<u>±1.2 μL</u>	±0.2 %	±0.4 μL	_
15-300 μL	orange	30 μL	±2.5 %	±0.75 μL	±0.7 %	±0.21 μL	4861 000 031
	(for epT.I.P.S.® 300 μL)	150 μL	±1.0 %	<u>±1.5 μL</u>	±0.3 %	±0.45 μL	_
		300 μL	±0.6 %	±1.8 μL	±0.2 %	±0.6 μL	_
50–1,000 μL	■ blue	100 μL	±3.0 %	±3 μL	±0.6 %	±0.6 μL	4861 000 040
	(for epT.I.P.S.® 1,000 μL)	500 μL	±1.0 %	±5 μL	±0.2 %	±1 μL	_
		1,000 μL	±0.6 %	<u>±6 μL</u>	±0.2 %	±2 μL	_
0.125-2.5 mL	red	250 μL	±4.8 %	<u>+12 μL</u>	±1.2 %	±3.0 μL	4861 000 044
	(for epT.I.P.S.® 2.5 mL)	1,250 μL	±0.8 %	<u>±10 μL</u>	±0.2 %	±2.5 μL	_
		2,500 μL	±0.6 %	<u>+15 μL</u>	±0.2 %	±5.0 μL	_
0.25-5 mL	purple	500 μL	±3.0 %	<u>+15 μL</u>	±0.6 %	±3 μL	4861 000 058
	(for epT.I.P.S.® 5 mL)	2,500 μL	±1.2 %	±30 μL	±0.3 %	±6.25 μL	_
		5,000 μL	±0.6 %	±30 μL	±0.15 %	±7.5 μL	_
0.5-10 mL	turquoise	1,000 μL	±3.0 %	±30 μL	±0.6 %	±6 μL	4861 000 066
	(for epT.I.P.S.® 10 mL)	5,000 μL	±0.8 %	±40 μL	±0.2 %	±10 μL	_
		10,000 μL	±0.6 %	±60 μL	±0.15 %	±15 μL	_
				<del>_</del>		<del> · _ · · </del>	

Eppendorf Xplorer®, multi-channel, variable volume, incl. charger

For 96-well plates

-ppendent stpreter , main enames, tanasie telame, men enanger									
Volume range	Color code	Volume	Systemat	ic error*	Random e	rror*	Order no. 8-channel	Order no. 12-channel	
							Cone	distance	
							9 mm	9 mm	
0.5–10 μL	medium gray	1 μL	±5.0 %	±0.05 μL	±3.0 %	±0.03 μL	4861 000 104	4861 000 112	
	(for epT.I.P.S.® 20 μL)	5 μL	±3.0 %	±0.15 μL	±1.5 %	±0.075 μL			
		10 μL	±2.0 %	±0.2 μL	±0.8 %	±0.08 μL			
5–100 μL	yellow (for epT.I.P.S.® 200 μL)	10 μL	±2.0 %	±0.2 μL	±2.0 %	±0.2 μL	4861 000 120	4861 000 139	
			±1.0 %	±0.5 μL	±0.8 %	±0.4 μL			
		100 μL	±0.8 %	±0.8 μL	±0.25 %	±0.25 μL			
15–300 μL	orange (for epT.I.P.S.® 300 μL)	30 μL	±2.5 %	±0.75 μL	±1.0 %	±0.3 μL	4861 000 147	4861 000 155	
		150 μL	±1.0 %	±1.5 μL	±0.5 %	±0.75 μL			
		300 μL	±0.6 %	±1.8 μL	±0.25 %	±0.75 μL			
50–1, 200 μL	green	120 μL	±6.0 %	±7.2 μL	±0.9 %	±1.08 μL	4861 000 163	4861 000 171	
	(for epT.I.P.S.® 1,200 μL)	600 μL	±2.7 %	±16.2 μL	±0.4 %	±2.4 μL			
		1,200 μL	±1.2 %	±14.4 μL	±0.3 %	±3.6 μL			

<sup>\*</sup> The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

# Eppendorf Xplorer® plus

Eppendorf Xplorer® plus, single-channel, variable volume, incl. charger

Volume range	Color code	Volume	Systemati	c error*	Random ei	rror*	Order no.
0.5–10 μL	medium gray	1 μL	±2.5 %	±0.025 μL	±1.8 %	±0.018 μL	4861 000 708
	(for epT.I.P.S.® 20 μL)	5 μL	±1.5 %	±0.075 μL	±0.8 %	±0.04 μL	_
		10 μL	±1.0 %	±0.1 μL	±0.4%	±0.04 μL	_
1–20 μL	light gray	2 μL	±5.0 %	±0.1 μL	±1.5 %	±0.03 μL	4861 000 710
	(for epT.I.P.S.® 20 μL)	10 μL	±1.2 %	±0.12 μL	±0.6%	±0.06 μL	_
		20 μL	±1.0 %	±0.2 μL	±0.3 %	±0.06 μL	_
5–100 μL	yellow	10 μL	±2.0 %	±0.2 μL	±1.0 %	±0.1 μL	4861 000 716
	(for epT.I.P.S.® 200 μL)	50 μL	±1.0 %	±0.5 μL	±0.3 %	±0.15 μL	_
		100 μL	±0.8 %	±0.8 μL	±0.2 %	±0.2 μL	_
10-200 μL	yellow	20 μL	±2.5 %	±0.5 μL	±0.7 %	±0.14 μL	4861 000 720
	(for epT.I.P.S.® 200 μL)	100 μL	±1.0 %	±1.0 μL	±0.3 %	±0.3 μL	_
		200 μL	±0.6 %	±1.2 μL	±0.2 %	±0.4 μL	_
15-300 μL	orange	30 μL	±2.5 %	±0.75 μL	±0.7 %	±0.21 μL	4861 000 724
	(for epT.I.P.S.® 300 μL)	150 μL	±1.0 %	±1.5 μL	±0.3 %	±0.45 μL	_
		300 μL	±0.6 %	±1.8 μL	±0.2 %	±0.6 μL	_
50–1,000 μL	blue	100 μL	±3.0 %	±3 μL	±0.6%	±0.6 μL	4861 000 732
	(for epT.I.P.S.® 1,000 μL)	500 μL	±1.0 %	±5 μL	±0.2 %	±1 μL	_
		1,000 μL	±0.6 %	±6 μL	±0.2 %	±2 μL	_
0.125–2.5 mL	red	250 μL	±4.8 %	±12 μL	±1.2 %	±3.0 μL	4861 000 736
	(for epT.I.P.S.® 2.5 mL)	1,250 μL	±0.8 %	±10 μL	±0.2 %	±2.5 μL	_
		2,500 μL	±0.6 %	<u>+</u> 15 μL	±0.2 %	±5.0 μL	_
0.25-5 mL	purple	500 μL	±3.0 %	±15 μL	±0.6%	±3 μL	4861 000 740
	(for epT.I.P.S.® 5 mL)	2,500 μL	±1.2 %	±30 μL	±0.3 %	±6.25 μL	_
		5,000 μL	±0.6 %	±30 μL	±0.15 %	±7.5 μL	_
0.5-10 mL	turquoise	1,000 μL	±3.0 %	±30 μL	±0.6%	±6 μL	4861 000 759
	(for epT.I.P.S.® 10 mL)	5,000 μL	±0.8 %	±40 μL	±0.2 %	±10 μL	_
		10,000 μL	±0.6 %	±60 μL	±0.15 %	±15 μL	_

#### Eppendorf Xplorer® plus, 8/12-channel, variable volume, incl. charger

Volume range	Color code	Volume	Systemat	ic error*	Random e	error*	Order no. 8-channel	Order no. 12-channel
							Cone	distance
							9 mm	9 mm
0.5–10 μL	medium gray	1 μL	±5.0 %	±0.05 μL	±3.0 %	±0.03 μL	4861 000 767	4861 000 775
	(for epT.I.P.S.® 20 μL)	5 μL	±3.0 %	±0.15 μL	±1.5 %	±0.075 μ	•	
		10 μL	±2.0 %	±0.2 μL	±0.8 %	±0.08 μL	•	
5–100 μL	yellow	10 μL	±2.0 %	±0.2 μL	±2.0 %	±0.2 μL	4861 000 783	4861 000 791
	(for epT.I.P.S. <sup>®</sup> 200 μL)	50 μL	±1.0 %	±0.5 μL	±0.8 %	±0.4 μL	•	
		100 μL	±0.8 %	±0.8 μL	±0.25 %	±0.25 μL	•	
15–300 μL	orange	30 μL	±2.5 %	±0.75 μL	±1.0 %	±0.3 μL	4861 000 805	4861 000 813
	(for epT.I.P.S.® 300 μL)	150 μL	±1.0 %	±1.5 μL	±0.5 %	±0.75 μL	•	
		300 μL	±0.6 %	±1.8 μL	±0.25 %	±0.75 μL	•	
50-1,200 μL	green	120 μL	±6.0 %	±7.2 μL	±0.9 %	±1.08 μL	4861 000 821	4861 000 830
	(for epT.I.P.S.® 1,200 μL)	600 μL	±2.7 %	±16.2 μL	±0.4%	±2.4 μL	•	
		1,200 μL	±1.2 %	±14.4 μL	±0.3 %	±3.6 μL	•	

<sup>\*</sup> The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

#### Eppendorf Xplorer® plus, 16-/24-channel, variable volume, incl. charger for 384-well plates

Volume range	Channels	Color code	Volume	System	atic error*	Rando	om error*	Order no. 16-channel	Order no. 24-channel
								Cone o	listance
								4.5 mm	4.5 mm
1–20 μL	16	light pink	2 μL	±8.0 %	±0.16 μL	±5.0 %	±0.1 μL	4861 000 778	_
		(for epT.I.P.S.® 384	10 μL	±4.0 %	±0.4 μL	±2.0 %	±0.2 μL		
		20 μL)	20 μL	±2.0 %	±0.4 μL	±1.0 %	±0.2 μL	-	
5–100 μL	16	light yellow	10 μL	±3.0 %	±0.3 μL	±2.0 %	±0.2 μL	4861 000 792	_
		(for epT.I.P.S.® 384	50 μL	±1.2 %	±0.6 μL	±1.0 %	±0.4 μL	-	
		100 μL)	100 μL	±1.0 %	±1.0 μL	±0.6 %	±0.6 μL	-	
1–20 μL	24	light pink	2 μL	±8.0 %	±0.16 μL	±5.0 %	±0.1 μL	_	4861 000 779
		(for epT.I.P.S.® 384	10 μL	±4.0 %	±0.4 μL	±2.0 %	±0.2 μL	-	
		20 μL)	20 μL	±2.0 %	±0.4 μL	±1.0 %	±0.2 μL	-	
5–100 μL	24	light yellow	10 μL	±3.0 %	±0.3 μL	±2.0 %	±0.2 μL	_	4861 000 793
		(for epT.I.P.S.® 384	50 μL	±1.2 %	±0.6 μL	±0.8 %	±0.4 μL	=	
		100 μL)	100 μL	±1.0 %	±1.0 μL	±0.6 %	±0.6 μL	-	
	_								

<sup>\*</sup> The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

## VisioNize® pipette manager

Description	Order no.
VisioNize® pipette manager, an external touch server enabling communication with connected electronic pipettes	1004 000 001
Eppendorf Xplorer® connect, WiFi module incl. battery for Eppendorf Xplorer	4861 000 970

Note: The VisioNize pipette manager is not available worldwide. Please contact your Eppendorf Sales Representative for more information.

### Eppendorf Move It®

#### Eppendorf Research® plus Move It®,

mechanical, multi-channel, variable volume

No. of Volume		Color code	Order no.
channels			
4-channel	30–300 μL	orange	3125 000 150
	120-1,200 μL	dark green	3125 000 184
6-channel	30–300 μL	orange	3125 000 168
	120–1,200 μL	dark green	3125 000 192
8-channel	1–20 μL	light pink	3125 000 117
	5–100 μL	light yellow	3125 000 133
	30-300 μL	orange	3125 000 176
	120-1,200 μL	dark green	3125 000 206
12-channel	1–20 μL	light pink	3125 000 125
	5–100 μL	light yellow	3125 000 141

#### Eppendorf Xplorer® plus Move It®,

electronic, multi-channel, variable volume, incl. charger

Ciccironic, mai	electronic, multi-chamier, variable volume, mci. charger					
No. of Volume		Color code	Order no.			
channels						
4-channel	15-300 μL	orange	4861 000 816			
	50–1,200 μL	green	4861 000 833			
6-channel	15-300 μL	orange	4861 000 817			
	50–1,200 μL	green	4861 000 834			
8-channel	1–20 μL	light pink	4861 000 781			
	5–100 μL	light yellow	4861 000 794			
	15-300 μL	orange	4861 000 818			
	50–1,200 μL	green	4861 000 835			
12-channel	1–20 μL	light pink	4861 000 782			
	5–100 μL	light yellow	4861 000 795			

All models available as electronic Xplorer plus and mechanical Research plus.



Type of tips			epT.I.P.S.®		epT.I.P.S	5.® 384
Vessel Format	Pipette Electronic Mechanical	Eppendorf Xplorer® plus, Eppendorf Research® plus			Eppendorf X <sub>I</sub> Eppendorf Re	
	No. of channels	4	6	8	8	12
	Volume (μL)	300 / 1,200	300 / 1,200	300 / 1,200	20 / 100	20 / 100
	Tip distance (mm)	9–33	9–20	9–14	4.5–14	4.5-9
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	384 Wells (Tip distance 4.5 mm)	-	-	-	-	•
	96 Wells (Tip distance 9 mm)	•	-	•	-	•
	48 Wells (Tip distance 13 mm)	•	•	•	•	-
	24 Wells (Tip distance 19 mm)	•	•	-	-	-
	12 Wells (Tip distance 26 mm)	•	-	-	-	-
	1.5 / 2.0 / 5.0 mL Tube (Tip distance min. – max.: 9 mm – 33 mm)	•				-
	1.5 / 2.0 / 5.0 mL Tube (Tip distance min. – max.: 9 mm – 20 mm)					-
	1.5 / 2.0 / 5.0 mL Tube (Tip distance min. – max.: 9 mm – 14 mm 4.5 mm – 14 mm)			•	•	-
	Agarose gel	•	<b>a</b> i	<b>a</b> '	•	•

<sup>\*</sup> Limited suitability due to volume and size of tips

### Easypet® 3

Description	Order no.
Easypet® 3, incl. power supply and Lithium-polymer rechargeable battery, wall mount, shelf stand,	4430 000 018
and two membrane filters (unsterile) 0.45 μm	
Membrane filter, sterile, 0.45 μm, set of 5	4421 601 009
Membrane filter, sterile, 0.2 μm, pack of 5	4430 606 005
Lithium-polymer rechargeable battery for Easypet® 3	4430 605 009
Pipette Holder, for one Eppendorf Easypet® 3, for wall mounting, sticky tape included	4430 604 002

### Eppendorf Pipette Holder System

Description	Order No.
Pipette Carousel 2, for 6 Eppendorf Research®, Eppendorf Research® plus, Eppendorf Reference®,	3116 000 015
Eppendorf Reference® 2 or Biomaster®, additional pipette holders are optionally available	2117 000 022
Charger Carousel 2, for 6 Eppendorf Xplorer® or Eppendorf Xplorer® plus, mains/power adapter included,	3116 000 023
additional charger shells and pipette holders are optionally available	
Charger Stand 2, for one Eppendorf Xplorer® or Eppendorf Xplorer® plus, operated with mains/power adapter	3116 000 031
supplied with Eppendorf Xplorer® or Eppendorf Xplorer® plus	
Charger Stand 2, for one Eppendorf Multipette® E3/E3x or Multipette® stream/Xstream, operated with mains/	3116 000 040
power adapter supplied with Eppendorf Multipette® E3/E3x or Multipette® stream/Xstream	
Pipette Stand 2, for one Eppendorf Multipette® M4, without charging functionality, additional pipette holders	3116 000 058
are optionally available	
Pipette Holder 2, for one Eppendorf Research®, Eppendorf Research® plus, Eppendorf Reference®,	3116 000 112
Eppendorf Reference® 2 or Biomaster®, for Pipette Carousel 2 and Charger Carousel 2 or wall mounting,	
sticky tape included	
Pipette Holder 2, for one Eppendorf Xplorer® or Eppendorf Xplorer® plus, for Pipette Carousel 2 or	3116 000 120
wall mounting, sticky tape included, without charging functionality	
Pipette Holder 2, for one Eppendorf Multipette® E3/E3x or Multipette® stream/Xstream, for Pipette Carousel 2	3116 000 139
or wall mounting, sticky tape included, without charging functionality	
Pipette Holder 2, for one Eppendorf Multipette® M4, for Pipette Carousel 2 and Charger Carousel 2	3116 000 147
or wall mounting, sticky tape included, without charging functionality	
Charger Shell 2, for one Eppendorf Xplorer® or Eppendorf Xplorer® plus, for Charger Carousel 2,	3116 602 007
with charging functionality	
Charger Shell 2, for one Eppendorf Multipette® E3/E3x or Multipette® stream/Xstream, for Charger Carousel 2, with charging functionality	3116 603 003
	_

### Pipet Helper®

Description	Order no.
Pipet Helper®, 0.1–100 mL	4423 000 010
Membrane filter, for Pipet Helper®, 3 μm, not sterile, (pack of 10)	4423 601 014

#### Multipette® M4

Description	Order no.
Multipette® M4 incl. holder (for wall and/or pipette carousel)	4982 000 012
Multipette® M4 Starter Kit, Multipette® M4, incl. holder Combitip Rack, Combitip assortment pack	4982 000 314

#### Multipette® E3/E3x

Description	Order no.
Multipette® E3 with charging adapter and 2 Combitips advanced® assortment pack	4987 000 010
Multipette® E3 with charger stand, 2 Combitips advanced® assortment pack, and charging stand	4987 000 371
Multipette® E3x with charging adapter and 2 Combitips advanced® assortment pack	4987 000 029
Multipette® E3x with charger stand, 2 Combitips advanced® assortment pack, and charging stand	4987 000 380

## Combitips advanced®

Volume	Color code	Order no. Eppendorf Quality box of 100 pcs. (4 bags x 25 pcs.)	Order no. PCR clean*1 box of 100 pcs., 4 bags (zip-lock) x 25 pcs.	Order no. Eppendorf Biopur®*2 box of 100 pcs. (individually wrapped)	Order no. Forensic DNA Grade box of 100 pcs. (individually 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	Purple	0030 089 421	0030 089 782	0030 089 634	_
1 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 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*3	Red	0030 089 472	0030 089 839	0030 089 685	_
50 mL*3	Light gray	0030 089 480	0030 089 847	0030 089 693	_
ViscoTip®					
10 mL	Orange	0030 089 936	_	_	_
Accessories					
25 mL adapter (1 pc.)	Red	0030 089 715			
25 mL adapter (7 pcs.)	Red			0030 089 731	
50 mL adapter (1 pc.)	Light gray	0030 089 723			
50 mL adapter (7 pcs.)	Light gray			0030 089 740	
Combitip Rack (for 8 Combitips advanced	d®, 0.1 mL-10 mL)	0030 089 758			
Combitips advanced® Ass (1 Combitip of each size,	ortment pack	0030 089 936			

<sup>\*</sup>¹ PCR clean: batch tested and certified to be free of: human DNA, DNase, RNase, PCR inhibitors
\*² Eppendorf Biopur®: batch tested and certified to be sterile and free of: human and bacterial DNA, DNase, RNase, PCR inhibitors, ATP, pyrogen
\*² 4 boxes of 25 pcs. each. Each box contains an adapter.

### Varipette® 4720

Description	Order no.
Eppendorf Varipette® 4720, with continuous volume selection in the 1–10 mL range	4720 000 011
Eppendorf Varitips® S Starter Kit, consisting of 100 Maxitips, 10 dispensing parts, 10 valves	0030 050 525
Eppendorf Varitips® P, to remove liquid from smaller vessels, 100 pieces	0030 048 130
Eppendorf Varitips® S dispensing part, 30 pieces	0030 050 533
Eppendorf Varitips® S, graduated, 200 pieces	0030 050 568
Eppendorf Varitips® S valve, 100 pieces	0030 050 541

#### Varispenser® 2/2x

Volume	Thread	Thread adapter incl.	Order no.
Varispenser® 2			
0.2-2 mL	GL 45	GL 25, GL 28/ S 28, GL 32, GL 38, S 40	4966 000 010
0.5-5 mL	GL 45	GL 25, GL 28/ S 28, GL 32, GL 38, S 40	4966 000 029
1–10 mL	GL 45	GL 25, GL 28/ S 28, GL 32, GL 38, S 40	4966 000 037
2.5–25 mL	GL 45	GL 32, GL 38, S 40	4966 000 045
5–50 mL	GL 45	GL 32, GL 38, S 40	4966 000 053
10–100 mL	GL 45	GL 32, GL 38, S 40	4966 000 061
Varispenser® 2x			
0.2-2 mL	GL 45	GL 25, GL 28/ S 28, GL 32, GL 38, S 40	4967 000 014
0.5–5 mL	GL 45	GL 25, GL 28/ S 28, GL 32, GL 38, S 40	4967 000 022
1–10 mL	GL 45	GL 25, GL 28/ S 28, GL 32, GL 38, S 40	4967 000 030
2.5–25 mL	GL 45	GL 32, GL 38, S 40	4967 000 049
5-50 mL	GL 45	GL 32, GL 38, S 40	4967 000 057
10–100 mL	GL 45	GL 32, GL 38, S 40	4967 000 065

#### Eppendorf Top Buret™

Description	Volume	With three adapters for outer diameter (mm)	Order no.
Eppendorf Top Buret™ M	2.5 mL per rotation	32, 38, 40	4965 000 017
<b>Eppendorf Top Buret</b> <sup>™</sup> H	5.0 mL per rotation	32, 38, 40	4965 000 025
Dry tube			4960 851 000

## $epMotion^{\tiny{\circledR}}$

Description	Order no.
<b>epMotion® 96,</b> semi-automated electronic pipette for parallel 96 channel microplate processing (without iPod® controller), $100-240 \text{ V} \pm 10 \text{ \%}/50-60 \text{ Hz} \pm 5 \text{ \%}, 0.5-300 \text{ µL}$	5069 000 012
epMotion® 96, with 2-position slider, semi-automated electronic pipette for parallel 96 channel microplate processing (without iPod® controller), 100–240 V ±10 %/50–60 Hz ±5 %, 0.5–300 μL	5069 000 110
<b>epMotion® 96xI,</b> semi-automated electronic pipette for parallel 96 channel microplate processing (without iPod® controller), 5–1,000 μL	5069 000 217
epMotion® 96xI, with 2-position slider, semi-automated electronic pipette for parallel 96 channel microplate processing (without iPod® controller), 5–1,000 μL	5069 000 314
<b>epMotion® 5070 EasyCon,</b> completely contained housing, system incl. Eppendorf EasyCon, epBlue™ software and LH assistant, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5070 006 032
<b>epMotion® 5070 MultiCon,</b> completely contained housing, system incl. Eppendorf MultiCon, epBlue™ software and LH assistant, keyboard, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5070 000 282
<b>epMotion® 5073I EasyCon,</b> completely contained housing system incl. Eppendorf EasyCon, epBlue™ software and LH assistant, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5073 000 582
<b>epMotion® 5073I MultiCon,</b> completely contained housing system incl. Eppendorf MultiCon, epBlue <sup>TM</sup> software and LH assistant, keyboard, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL–1 mL	5073 000 590
epMotion® 5073lc EasyCon, CleanCap, system incl. Eppendorf EasyCon, epBlue™ software and LH assistant, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL−1 mL	5073 000 604
epMotion® 5073lc MultiCon, CleanCap, system incl. Eppendorf MultiCon, epBlue™ software and LH assistant, keyboard, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL−1 mL	5073 000 612
epMotion® 5073m EasyCon, completely contained housing, system incl. Eppendorf EasyCon, MagSep module, Eppendorf ThermoMixer®, epBlue™ software and Prep assistant, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5073 000 787
epMotion® 5073m MultiCon, completely contained housing, system incl. Eppendorf MultiCon, MagSep module, Eppendorf ThermoMixer®, epBlue™ software and Prep assistant, keyboard, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL−1 mL	5073 000 795
epMotion® 5073m EasyCon NGS solution, includes EasyCon and integrated ThermoMixer, Enhanced feature set 1 software upgrade, dispensing tools (TS 50, TS 300, TM 300-8), NGS specific accessories, NGS specific consumables, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL–1 mL	5073000930
epMotion® 5073m MultiCon NGS solution, includes EasyCon and integrated ThermoMixer, Enhanced feature set 1 software upgrade, dispensing tools (TS 50, TS 300, TM 300-8), NGS specific accessories, NGS specific consumables, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL-1 mL	5073000949
<b>epMotion® 5073mc EasyCon,</b> CleanCap, system incl. Eppendorf EasyCon, MagSep module, Eppendorf ThermoMixer®, CleanCap, epBlue™ software and Prep assistant, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5073 000 809
epMotion® 5073mc MultiCon, CleanCap, system incl. Eppendorf MultiCon, MagSep module, Eppendorf ThermoMixer®, CleanCap, epBlue™ software and Prep assistant, keyboard, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL−1 mL	5073 000 817
epMotion® 5073mc EasyCon NGS solution, includes EasyCon and integrated ThermoMixer with CleanCap, Enhanced feature set 1 software upgrade, dispensing tools (TS 50, TS 300, TM 300-8), NGS specific accessories, NGS specific consumables, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL-1 mL	5073000957
epMotion® 5073mc MultiCon NGS solution, includes EasyCon and integrated ThermoMixer with CleanCap, Enhanced feature set 1 software upgrade, dispensing tools (TS 50, TS 300, TM 300-8), NGS specific accessories, NGS specific consumables, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 µL-1 mL	5073000965
<b>epMotion® 5075I,</b> basic device incl. epBlue™ software, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5075 000 301
<b>epMotion® 5075I with CleanCap,</b> 100–240 V ±10 %/50–60 Hz ±5 %, incl. MultiCon all-in-one PC, epBlue™ software, LH Assistant, keyboard, mouse and waste box	on request
<b>epMotion® 5075v</b> , basic device incl. vacuum system, gripper, vac frame 2, vac frame holder, epBlue™ software, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	5075 000 303
<b>epMotion® 5075v with CleanCap,</b> with integrated vacuum system, 100–240 V ±10 %/50–60 Hz ±5 %, incl. MultiCon all-in-one PC, epBlue <sup>™</sup> software, keyboard, mouse, gripper, Vac Frame 2, Vac Frame holder and waste box	on request
	-

Description	Order no.
epMotion® 5075t, basic device incl. Eppendorf ThermoMixer®, epBlue™ software, mouse, waste box,	5075 000 302
_100-240 V ±10 %/50-60 Hz ±5 %, 0.2 μL-1 mL	
epMotion® 5075t with CleanCap, with integrated ThermoMixer, 100–240 V ±10 %/50–60 Hz ±5 %, incl. MultiCon all-in-one PC,	on request
epBlue™ software, keyboard, mouse and waste box	
epMotion® 5075t NGS solution, package with completely contained housing, MultiCon PC, Enhanced feature set 1, C2 thermal	5075000962
module, dispensing tools, plus NGS specific accessories, plus NGS specific consumables to start automated library preparation,	
100-240 V ±10 %/50-60 Hz ±5 %	
epMotion® 5075tc NGS solution, package with CleanCap, MultiCon PC, Enhanced feature set 1, C2 thermal module,	5075000963
dispensing tools, plus NGS specific accessories, plus NGS specific consumables to start automated library preparation,	
100-240 V ±10 %/50-60 Hz ±5 %	
epMotion® 5075vt, basic device incl. vacuum system, gripper, vac frame 2, vac frame holder, Eppendorf ThermoMixer®,	5075 000 304
epBlue™ software, mouse, waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL−1 mL	
epMotion® 5075vt with CleanCap, with integrated vacuum system and ThermoMixer, 100–240 V ±10 %/50–60 Hz ±5 %,	on request
incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse, gripper, Vac Frame 2, Vac Frame holder and waste box	
epMotion® 5075m, basic device incl. Eppendorf MagSep™ module, Eppendorf ThermoMixer®, epBlue™ software, mouse,	5075 000 305
waste box, 100–240 V ±10 %/50–60 Hz ±5 %, 0.2 μL–1 mL	
epMotion® 5075m with CleanCap, with integrated ThermoMixer and MagSep module, 100–240 V ±10 %/50–60 Hz ±5 %,	on request
incl. MultiCon all-in-one PC, epBlue™ software, PREP Assistant, PCR Assistant, keyboard, mouse and waste box	



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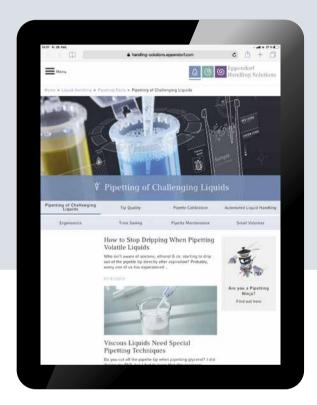
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