



In touch with life




1. Pipetting and Dispensing

“We care for you and your
pipettes by providing
PhysioCare ergonomics
and epServices”

Summary of applications

Application	Product	Page
Manual pipetting		
Instruments		
Single-channel, combined tip ejection and pipetting button	Eppendorf Reference	45
Single-channel, separate tip ejection button	Eppendorf Research®, Research plus	33
Multichannel, separate tip ejection button	Eppendorf Research®, Research plus	33
Single-channel, combined tip ejection and pipetting button, positive displacement	BioMaster Positive Displacement Pipette	63
Single-channel, combined tip ejection and pipetting button, can be used as either a positive-displacement or an air-cushion pipette	Maxipettor®	64
Electronic pipetting, single-channel and multichannel, separate tip ejection button	Eppendorf Research pro	48
Pipet fillers for use with serological pipets	Easypet®/Pipet Helper®	73
Consumables		
Standard application	epT.I.P.S. Bulk/Racks/Reloads	53
Standard application, tips for Maxipettor	Maxitip P, Maxitip S	64
Contamination-free pipetting	ep Dualfilter T.I.P.S.	58
Contamination-free pipetting, tips for Positive Displacement Pipette	Positive Displacement Pipette Tips	63
Pipetting with the highest level of biological purity	epT.I.P.S. Racks/Singles, Eppendorf Biopur®	60
Applications with samples that contain detergents	epT.I.P.S. LoRetention	56
Manual dispensing (dispensing of partial volumes)		
Instruments		
Manual dispensing, single-channel, positive displacement, contamination-free	Repeater® Plus	65
Electronic dispensing, single-channel, positive displacement, contamination-free	Repeater stream/Xstream	65
Electronic dispensing, single-channel and multichannel separate tip ejection button	Eppendorf Research® pro	48
Consumables		
Tips for Repeater Plus and Repeater stream/Xstream, contamination-free, standard application and highest level of biological purity	Combitips Plus®, Standard, Sterile and Biopur	68
Tips for Eppendorf Research pro Contamination-free	epT.I.P.S. ep Dualfilter T.I.P.S.	58
Service products for manual pipetting		
Preventive Maintenance	QuickCheck PM SM	30
Pipette Calibration	Advantage Calibration	31
Pipette Calibration and Certification	Advantage Certification	31
Custom Calibration and Certification	GLP/GMP Custom Calibration	31

Summary of applications

Application	Product	Page
Automated pipetting and dispensing		
Instruments		
Fully automated, electronic pipetting and dispensing, single-channel and multichannel	epMotion® 5070 and 5075 automated pipetting systems	76
All routine pipetting, sample and reagent transfer, real-time PCR set-up, cell-based and immunoassay set-up	epMotion 5070	78
	epMotion 5075 LH	82
Cell culture and cell based assays in a hood	epMotion 5070 CB	80
Walk-away nucleic acid purification for MagBead protocols	epMotion 5075 TMX	86
Walk-away nucleic acid extraction with ready-to-go protocols filtration & SPE, <i>in vitro</i> plasmid amplification	epMotion 5075 VAC	84
Fully automated PCR: set-up and cycling	epMotion 5075 MC	88
Consumables		
Tips for epMotion workstations, standard application	epT.I.P.S. Motion	97
Tips for epMotion workstations, contamination-free applications	epT.I.P.S. Motion Filter	97
Service products for epMotion automated pipetting systems		
Performance Plans for epMotion	Preventive Maintenance	100
	Advantage Service	100
	Premium Service	100
Calibration for epMotion dispensing tools	Advantage epMotion Tool Certification	101
	epMotion Tool GLP/GMP Custom	101
Eppendorf purity levels		55
<p>The preceding table shows a selection of applications for pipetting and dispensing and serves as an overview. The complete product portfolio of Eppendorf Liquid Handling Systems is found on the following pages.</p> <p>All Pipetting and Dispensing products shown on the following pages can be provided as Customized Solutions. Further information on page 256.</p> 		

Eppendorf epGreen

Eppendorf recognizes its responsibility as a global citizen and is striving to reduce the environmental impact of its business operations and the products we produce, as well as to support the sustainable green initiatives of our customers. In this section you will find products with special epGreen features.



For more information on epGreen, see pages 312 and 313.

Product selection guide for pipetting and dispensing

		Volumes 0.1 µl – 1,250 µl			
		Instruments	Page	Consumables	Page
Aqueous solutions	Single dispensing	Eppendorf Research® ¹	40	epT.I.P.S.	53
		Eppendorf Research plus	33	epT.I.P.S.	53
		Eppendorf Reference ²	45	epT.I.P.S.	53
		Eppendorf Research pro ³	48	epT.I.P.S.	53
		BioMaster Positive Displacement Pipette	63	Positive Displacement Pipette Tips	63
		Repeater® stream	65	Combitips® Plus ⁴	68
		Repeater Xstream	65	Combitips Plus	68
	Multiple dispensing	epMotion®	76	epT.I.P.S. Motion	97
		Repeater Plus ⁵	65	Combitips Plus	68
		Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68
		Eppendorf Research pro	48	epT.I.P.S.	53
		epMotion	76	epT.I.P.S. Motion	97
Liquids with high vapor pressure and/or high viscosity	Single dispensing	BioMaster Positive Displacement Pipette	63	Positive Displacement Pipette Tips	63
		Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68
	Multiple dispensing	Repeater Plus	65	Combitips Plus	68
		Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68

		Volumes up to 25 ml			
		Instruments	Page	Consumables	Page
Aqueous solutions	Single dispensing	Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68
		Easypet®/Pipet Helper®	73		
	Multiple dispensing	Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68
Liquids with high vapor pressure and/or high viscosity	Single dispensing	Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68
	Multiple dispensing	Repeater stream	65	Combitips Plus	68
		Repeater Xstream	65	Combitips Plus	68

¹ U.S. Pats. 5,531,131/6,199,435² U.S. Pat. 5,511,433³ U.S. Pats. 6,499,365/6,778,917⁴ U.S. Pats. 5,620,660/5,620,661⁵ U.S. Pats. 5,620,660/5,620,661/5,591,408/5,573,729

Product selection guide for pipetting and dispensing

Volumes 1,250 µl–2,500 µl					Volumes 2.5 ml–10 ml			
	Instruments	Page	Consumables	Page	Instruments	Page	Consumables	Page
	Eppendorf Research ^{®1}	40	epT.I.P.S.	53	Eppendorf Research	40	epT.I.P.S.	53
	Eppendorf Research plus	33	epT.I.P.S.	53	Eppendorf Research plus	33	epT.I.P.S.	53
	Eppendorf Reference ²	45	epT.I.P.S.	53	Repeater stream	65	Combitips Plus	68
	Repeater [®] stream	65	Combitips Plus ^{®3}	68	Repeater Xstream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68	Easypet/Pipet Helper	73		
	Easypet [®] /Pipet Helper [®]	73						
					Maxipettor	64	Maxitip P, Maxitip S	64 64
	Maxipettor [®]	64	Maxitip P	64				
	Repeater Plus ⁴	65	Combitips Plus	68	Repeater Plus	65	Combitips Plus	68
	Repeater stream	65	Combitips Plus	68	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68	Repeater Xstream	65	Combitips Plus	68
	Repeater stream	65	Combitips Plus	68	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68	Repeater Xstream	65	Combitips Plus	68
	Maxipettor	64	Maxitip P	64	Maxipettor	64	Maxitip P, Maxitip S	64 64
	Repeater Plus	65	Combitips Plus	68	Repeater Plus	65	Combitips Plus	68
	Repeater stream	65	Combitips Plus	68	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68	Repeater Xstream	65	Combitips Plus	68

Volumes up to 50 ml				
	Instruments	Page	Consumables	Page
	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68
	Easypet [®] /Pipet Helper [®]	73		
	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68
	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68
	Repeater stream	65	Combitips Plus	68
	Repeater Xstream	65	Combitips Plus	68

Pipette Calibration and Repair Services

For over 65 years Eppendorf has been an innovator and leading provider of liquid handling systems, which include pipetting devices and consumables. This total approach philosophy extends beyond products to our quality pipette calibration, certification, maintenance and repair services—**for all major brands of pipettes**, not just our own. We offer a range of service options from basic calibration at an economical price to GLP/GMP custom-designed calibration services.

Your results depend on the integrity of your pipettes. Trust in Eppendorf, your satisfaction is guaranteed!

We deliver on our promises and your peace of mind is our utmost concern. We approach **every pipette** as the instrument of your success. We know the pipette we service today will be needed for a breakthrough discovery or critical result. It has to be right. Attention to detail and exceptional quality and care highlight every plan we offer.

Get started today at: www.pipettecalibration.com

Speed. Accuracy. Reliability.

- Full flexibility—any mix to meet your needs
 - Our value plans for your custom protocols
 - One lab or global multinational service
 - On site and in our state of the art facilities
- Full service consultation services
 - Technician training and seminars
 - Custom protocol development
 - Documentation management
 - PhysioCare® ergonomics and pipette clinics
- Fully equipped and trained calibration professionals
 - Complete on site calibration and repair available
 - Proprietary Eppendorf calibration software
 - Environmentally robust, semi-micro, NIST traceable balances
 - ISO 9001:2000 Registered

Procedures	QuickCheck PM SM	
Internal and external inspection of pipette	✓	
Internal and external cleaning of pipette	✓	
Replacement of worn or broken parts, if needed*	✓	
Pipette calibration performed using NIST-traceable, semi-micro (0.00001g) balance	-	
Number of measuring points		
single-channel, fixed-volume:	-	
single-channel, adjustable-volume:	-	
multichannel:	-	
Calibration label applied to pipette	-	
Individual weighing results, mean volume, inaccuracy and imprecision values		
measured:	-	
recorded:	-	
Calibration report supplied	-	
Single-channel manual or electronic pipette*		
List USD	\$20.00 + shipping	
Catalog No.	901510186	
Multichannel manual or electronic pipette*		
List USD	\$48.00 + shipping	
Catalog No.	901510187	

*1 Handgrip, motor and PCB are priced separately.

*2 Is included in the 10 measurements

*3 Standard value, deviations possible, excl. shipping duration

*4 Other services may be available upon request

Order direct from Eppendorf North America.

Product appearance, specifications, and/or prices are subject to change without notice.

Online epExpressSM Pipette Calibration Center

Now it's easier than ever to send us your pipettes for calibration and repair. Visit our new online epExpress Pipette Calibration Center at www.pipettecalibration.com. Here you can complete our online Service Authorization Form and get a real-time quotation based on your specific calibration service requirements.

As a registered Eppendorf North America pipette calibration/repair customer, you will not only enjoy fast and easy online ordering, but also gain access to a private log-in area where you can:

- View calibration and repair service history for individual pipettes
- Get reminders for pipettes that are coming due for calibration
- View your mail-in pipette service order history
- And more!



i For more information visit www.pipettecalibration.com

	Advantage Calibration	Advantage Certification	GLP/GMP Custom Calibration
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	8	8	As requested, based on customer requirements; may include "as found" data
	4 low/4 high	4 low/4 high	
	1 reading per channel low/high	1 reading per channel low/high	
	✓	✓	✓
	✓	✓	✓
	–	✓	✓
	–	✓	✓
	\$25.00 + shipping	\$35.00 + shipping	Determined based upon level of service required
	901510184	901510180	
	\$60.00 + shipping	\$75.00 + shipping	Determined based upon level of service required
	901510185	901510181	

Changing the face of pipetting.

The Eppendorf PhysioCare Concept:

The new standard for integrated liquid handling systems and work processes



The Eppendorf PhysioCare Concept (PCC) differentiates Eppendorf® pipettes and hand dispensers from other brands by addressing all relevant aspects of pipetting: PhysioCare focuses on the whole person, not just the human hand or the device.

And there are very specific criteria that our pipettes must fulfill — see our eight points below. When you take all of these factors into account, it's evident that Eppendorf offers the most powerful liquid handling systems on the market today.

All Eppendorf PhysioCare Concept pipettes fulfill the following eight criteria:

- **Integrated systems**
Complete pipette and pipette tip program to fit any application and budget.
- **Exceptional durability**
Made of state-of-the-art materials, up to three-year warranty.
- **Optimized form and function**
Easy operation throughout all work steps, even for complex pipetting tasks.
- **Perfectly balanced**
Designed to fit comfortably in the hand, with models weighing up to 30% less than other brands (see graph on page 34).
- **Intuitive operation**
Color-coded pipette-and-tip matching system for easy identification saves time and streamlines tasks.
- **Minimal user exertion**
Designed to minimize stress, with manual models requiring up to 50% less pipetting force than other brands (see graph on page 35).
- **Simple maintenance**
Easy to clean and repair, reducing maintenance time and related expenses.
- **Total support**
Eppendorf PCC pipettes arrive certified and ready to use; reliable calibration service and maintenance is available through Eppendorf North America Services (see pages 30 and 31).

For more information visit: www.physiocare-concept.info

NEW! Eppendorf Research® plus



Eppendorf sets a new standard in pipetting. The ultra light Eppendorf Research plus pipette meets the highest needs in precision and accuracy—combined with ultimate ergonomics and increased flexibility.

It is a good feeling to know you are working with one of the most advanced pipettes in the world. A spring loaded tip cone, a secondary adjustment option, an improved volume display—and all that in an ultra light, fully autoclavable pipette: That is the new Eppendorf Research plus pipette.

Ergonomics: Feel the difference in weight, pipetting forces and the spring loaded tip cone.

Flexibility: Your next experiment will need new pipetting demands. Your new laboratory might have different sources of contamination. 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, multichannel and fix-volume pipettes in different sizes.

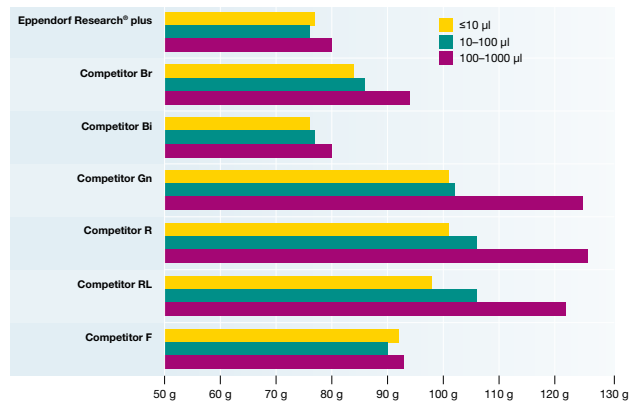
Robustness: Durability was tested thoroughly and has met our highest quality requirements. Made with space-age materials, resistance to chemical, thermal and mechanical stress is now continuously achieved!

NEW! Eppendorf Research® plus



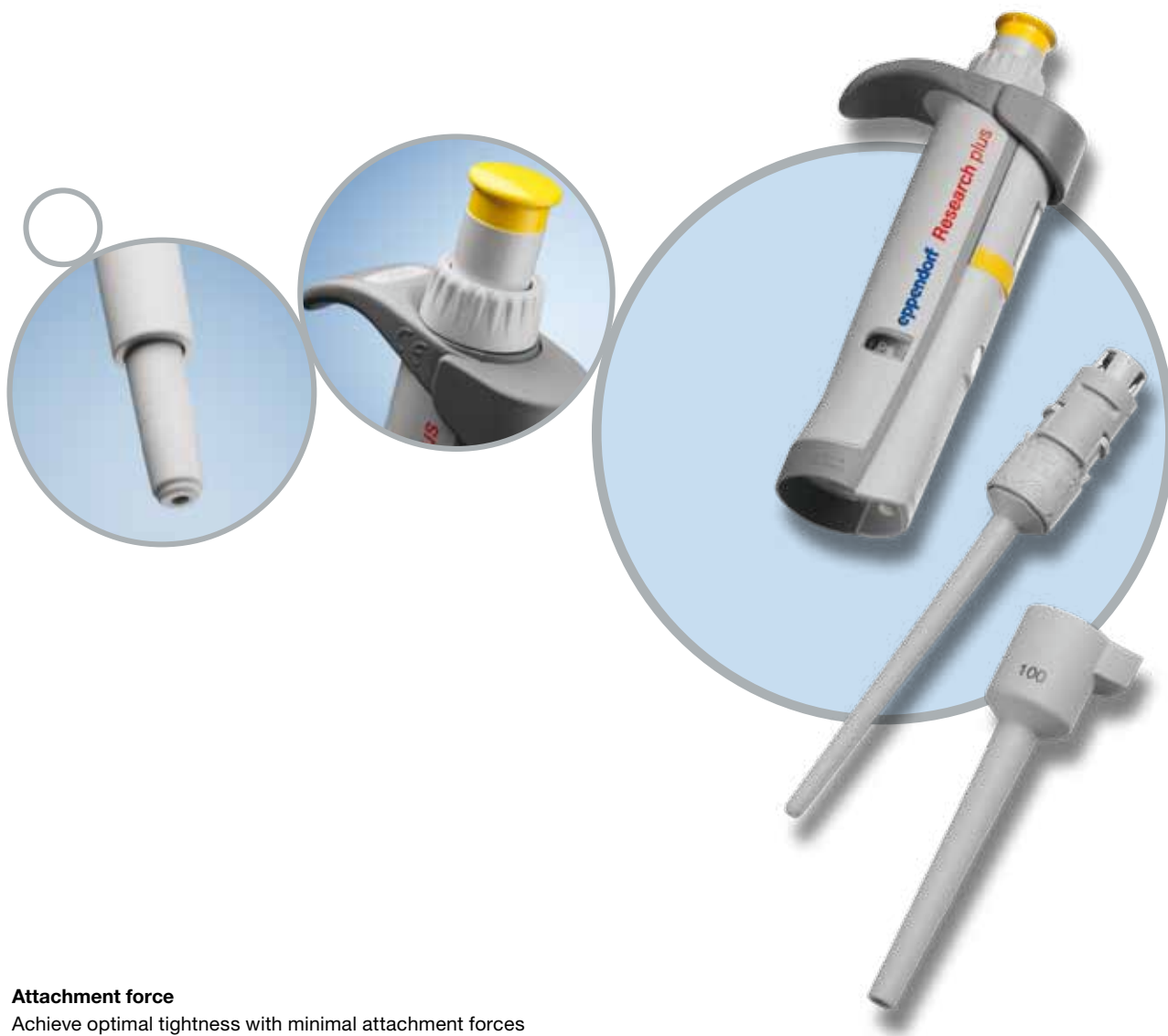
An Eppendorf Research plus pipette is of extremely low weight!

This can only be achieved by using the most advanced materials and production processes, including the new Eppendorf PerfectPiston™ system, made of Fortron®. Fortron is an organic polymer with impressive characteristics. It is highly resistant to heat, acids and alkalies, mildew, bleaches, aging, sunlight and abrasion. It absorbs only small amounts of solvents and resists dyeing. This means your pipette is safe, robust and ultra light.



● See the low weight of the Research plus—no matter which size.

NEW! Eppendorf Research® plus

**Attachment force**

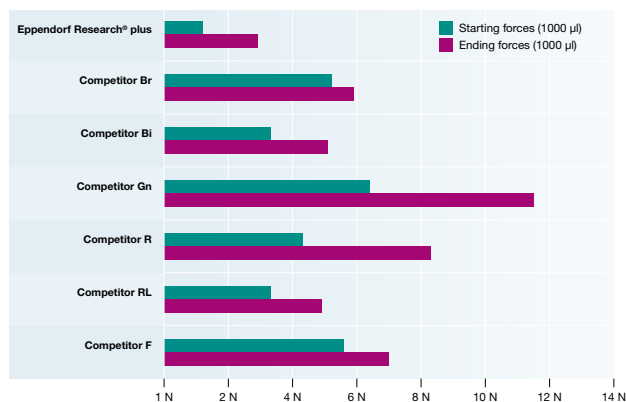
Achieve optimal tightness with minimal attachment forces with the Eppendorf Research plus. The spring loaded tip cone helps to reduce stress without sacrificing tightness. Just give it a try—you will love it!

Tip ejection forces

How many tips do you use per day? Even small differences in the tip ejection forces make a big change if you do it day by day. The tip ejection forces of the Eppendorf Research plus can be as low as only 3.6 N, depending on the size and the force you use to fix the tip.

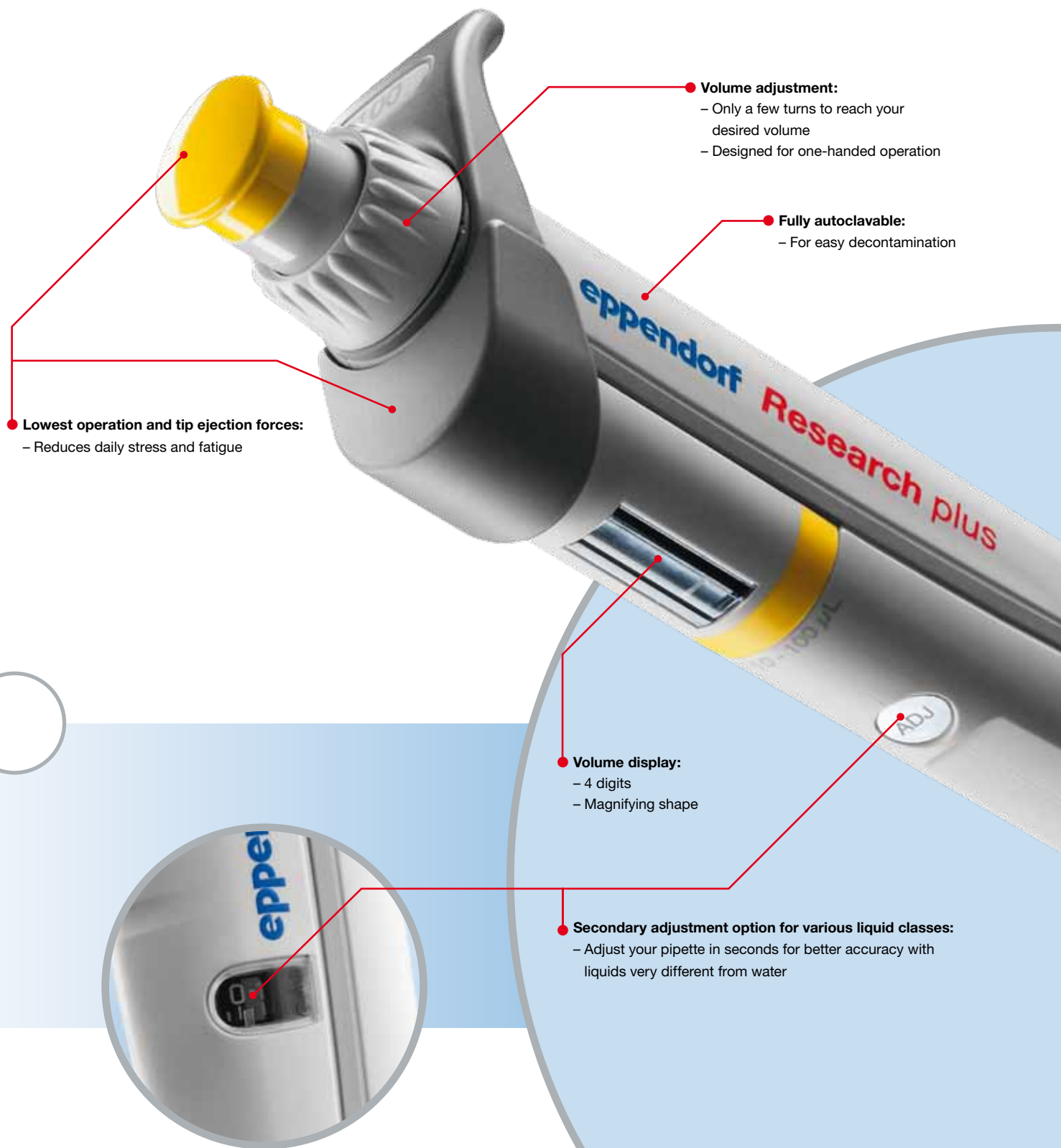
Positioning of control elements

The positions and shapes of all control buttons and displays have been optimized again to ensure stress-free workflow and intuitive usage. The volume adjustment wheel needs only a few turnarounds from maximum volume to minimum volume.



● Pipetting forces are optimized to reduce stress.

NEW! Eppendorf Research® plus



- **Lowest operation and tip ejection forces:**
 - Reduces daily stress and fatigue

- **Volume adjustment:**
 - Only a few turns to reach your desired volume
 - Designed for one-handed operation

- **Fully autoclavable:**
 - For easy decontamination

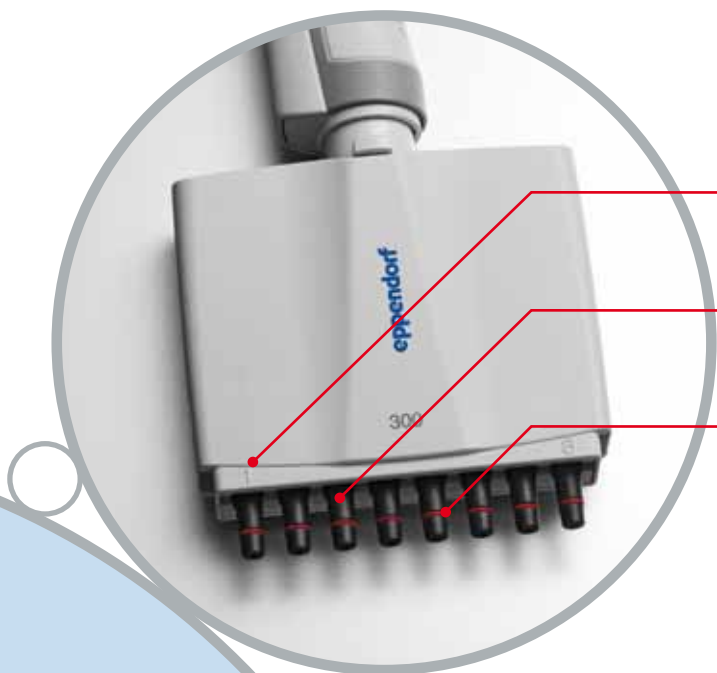
- **Volume display:**
 - 4 digits
 - Magnifying shape

- **Secondary adjustment option for various liquid classes:**
 - Adjust your pipette in seconds for better accuracy with liquids very different from water

EP1759768, US 7, 434 484 and foreign counterparts and patents pending.

Order from your laboratory supply dealer.
Product appearance, specifications, and/or prices are subject to change without notice.

NEW! Eppendorf Research® plus



● **Channel indicator:**

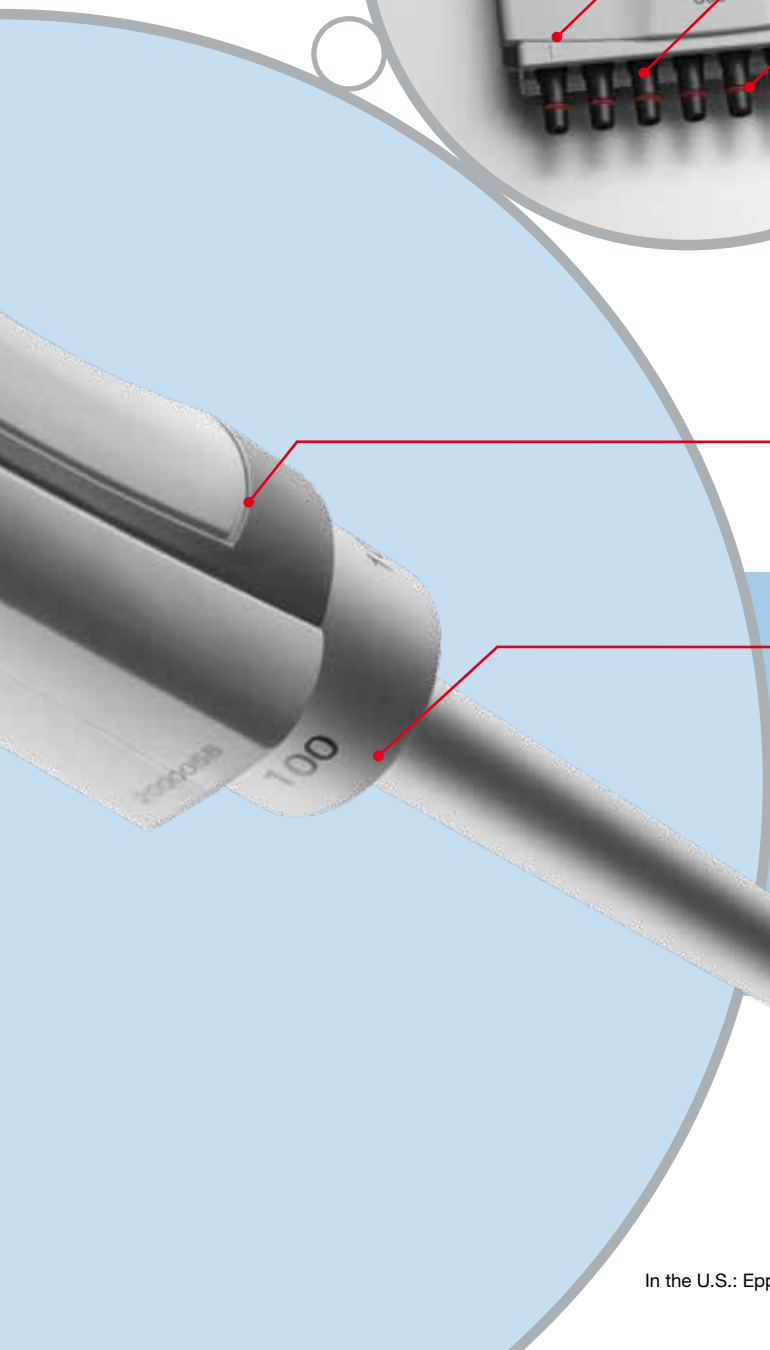
- Use the pipette the same way round—all the time

● **Remove any of the independent channels:**

- Gain flexibility for individual needs

● **Spring loaded tip cone:**

- Improved ergonomics
- Tight fit to the tip
- Independent suspension in each channel



● **Ultra lightweight with space-age materials:**

- Eppendorf PerfectPiston™ system made of Fortron®, chemically resistant for everyday use with aggressive solvents

● **Quick connection clip:**

- Remove lower part in just 2 steps!

● **Spring loaded tip cone:**

- Improved ergonomics for consistent tip attachment and ejection
- Guarantees tight fit to the tip

NEW! Eppendorf Research® plus



Eppendorf Research plus (adjustable)

Volume range	Volume	Inaccuracy ¹	Imprecision ¹	Catalog No.	List USD
Dark grey operating button, for use with 10 µl pipette tips					
0.1–2.5 µl	0.1 µl	±48.0%	≤12.0%	3120000011	\$329.00
	0.25 µl	±12.0%	≤6.0%		
	1.25 µl	±2.5%	≤1.5%		
	2.5 µl	±1.4%	≤0.7%		
Grey operating button, for use with 20 µl pipette tips					
0.5–10 µl	0.5 µl	±8.0%	≤5.0%	3120000020	329.00
	1 µl	±2.5%	≤1.8%		
	5 µl	±1.5%	≤0.8%		
	10 µl	±1.0%	≤0.4%		
Light grey operating button, for use with 20 µl L pipette tips					
2–20 µl	2 µl	±5.0%	≤1.5%	3120000097	329.00
	10 µl	±1.2%	≤0.6%		
	20 µl	±1.0%	≤0.3%		
Yellow operating button, for use with 200 µl pipette tips					
2–20 µl	2 µl	±5.0%	≤1.5%	3120000038	329.00
	10 µl	±1.2%	≤0.6%		
	20 µl	±1.0%	≤0.3%		
10–100 µl	10 µl	±3.0%	≤1.0%	3120000046	329.00
	50 µl	±1.0%	≤0.3%		
	100 µl	±0.8%	≤0.2%		
20–200 µl	20 µl	±2.5%	≤0.7%	3120000054	329.00
	100 µl	±1.0%	≤0.3%		
	200 µl	±0.6%	≤0.2%		
Orange operating button, for use with 300 µl pipette tips					
30–300 µl	30 µl	±2.5%	≤0.7%	3120000100	329.00
	150 µl	±1.0%	≤0.3%		
	300 µl	±0.6%	≤0.2%		
Blue operating button, for use with 1,000 µl pipette tips					
100–1,000 µl	100 µl	±3.0%	≤0.6%	3120000062	329.00
	500 µl	±1.0%	≤0.2%		
	1,000 µl	±0.6%	≤0.2%		
Violet operating button, for use with 5 ml pipette tips					
0.5–5 ml	0.5 ml	±2.4%	≤0.6%	3120000070	329.00
	2.5 ml	±1.2%	≤0.25%		
	5 ml	±0.6%	≤0.15%		
Turquoise operating button, for use with 10 ml pipette tips					
1–10 ml	1 ml	±3.0%	≤0.6%	3120000089	329.00
	5 ml	±0.8%	≤0.2%		
	10 ml	±0.6%	≤0.15%		

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

NEW! Eppendorf Research® plus



Eppendorf Research plus (adjustable, multichannel)

Volume range	Volume	Inaccuracy ¹	Imprecision ¹	Catalog No. 8-channel	List USD	Catalog No. 12-channel	List USD
Grey operating button, for use with 20 µl pipette tips							
0.5–10 µl	0.5 µl	±12.0%	≤8.0%	3122000019	\$787.00	3122000027	\$912.00
	1 µl	±8.0%	≤5.0%				
	5 µl	±4.0%	≤2.0%				
	10 µl	±2.0%	≤1.0%				
Yellow operating button, for use with 200 µl pipette tips							
10–100 µl	10 µl	±3.0%	≤2.0%	3122000035	787.00	3122000043	912.00
	50 µl	±1.0%	≤0.8%				
	100 µl	±0.8%	≤0.3%				
Orange operating button, for use with 300 µl pipette tips							
30–300 µl	30 µl	±3.0%	≤1.0%	3122000051	787.00	3122000060	912.00
	150 µl	±1.0%	≤0.5%				
	300 µl	±0.6%	≤0.3%				

Eppendorf Research plus (fixed volume)

Volume	Inaccuracy ¹	Imprecision ¹	Catalog No.	List USD
Grey operating button, for use with 20 µl pipette tips				
10 µl	±1.2%	≤0.6%	3121000015	\$223.00
Light grey operating button, for use with 20 µl L pipette tips				
20 µl	±0.8%	≤0.3%	3121000031	223.00
	±1.0%	≤0.8%		
	±0.8%	≤0.3%		
Yellow operating button, for use with 200 µl pipette tips				
10 µl	±1.2%	≤0.6%	3121000023	223.00
20 µl	±1.0%	≤0.3%	3121000040	223.00
25 µl	±1.0%	≤0.3%	3121000058	223.00
50 µl	±0.7%	≤0.3%	3121000066	223.00
100 µl	±0.6%	≤0.2%	3121000074	223.00
200 µl	±0.6%	≤0.2%	3121000082	223.00
Blue operating button, for use with 1,000 µl pipette tips				
200 µl	±0.6%	≤0.2%	3121000090	223.00
250 µl	±0.6%	≤0.2%	3121000104	223.00
500 µl	±0.6%	≤0.2%	3121000112	223.00
1,000 µl	±0.6%	≤0.2%	3121000120	223.00

¹ The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.

Eppendorf Research® fixed/adjustable/multichannel pipettes



- User-friendly
- User-tested
- Ergonomic

**Product features**

- Two-button operation
- Autoclavable lower part
- TÜV award: ergonomic, user-friendly and user-tested
- Viable calibration seal indicates factory calibration has not been changed
- Chemically resistant
- Reduced operating forces
- Single-handed operation
- Four-digit display
- Maintenance-free nose cones
- 3-year warranty

Description

The separate tip ejection (two-button operation) and TÜV Rheinland-certified ergonomics make our Eppendorf Research* pipettes a lab favorite all over the world. They are available in fixed-volume, adjustable-volume and multichannel versions to satisfy all requirements.

Display

The four-digit volume display is magnified for improved visibility; adjustable-volume models feature easy, single-handed volume setting.



* U.S. Pats. 5,531,131/6,199,435



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Eppendorf Research® fixed-volume pipettes



The lower part can be easily removed for cleaning, autoclaving and decontamination.

Ordering information: Eppendorf Research fixed-volume pipettes¹

Volume	Inaccuracy ²	Imprecision ²	Catalog No.	List USD
Yellow operating button, for use with 200 µl pipette tips				
10 µl	±1.2%	≤0.6%	022443054	\$215.00
20 µl	±1.0%	≤0.3%	022443101	215.00
25 µl	±1.0%	≤0.3%	022443151	215.00
50 µl	±0.7%	≤0.3%	022443208	215.00
100 µl	±0.6%	≤0.2%	022443259	215.00
Blue operating button, for use with 1,000 µl pipette tips				
200 µl	±0.6%	≤0.2%	022443305	215.00
250 µl	±0.6%	≤0.2%	022443356	215.00
500 µl	±0.6%	≤0.2%	022443402	215.00
1,000 µl	±0.6%	≤0.2%	022443453	215.00

¹ U.S. Pat. 6,119,435

² The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.

➔ For pipette service and maintenance information, see page 30; pipette tips information begins on page 53.

Eppendorf Research® adjustable-volume pipettes



This space-saving pipette holder can be attached to a shelf or wall, ensuring that your pipette is always within easy reach.
(022444913)

❶ Each Eppendorf Research adjustable-volume pipette (except for Research 10 ml) contains a service kit and an epT.I.P.S. Box with the appropriate volume tip.

➡ For pipette service and maintenance information, see page 30; pipette tips information begins on page 53.

Ordering information: Eppendorf Research adjustable-volume pipettes¹

Volume range	Volume increment	Volume	Inaccuracy ²	Imprecision ²	Catalog No.	List USD
Dark grey operating button, for use with 10 µl pipette tips						
0.1–2.5 µl	0.002 µl	0.25 µl 1.25 µl 2.5 µl	±12.0% ±2.5% ±1.4%	≤6.0% ≤1.5% ≤0.7%	022471856	\$318.00
Grey operating button, for use with 20 µl pipette tips						
0.5–10 µl	0.01 µl	1 µl 5 µl 10 µl	±2.5% ±1.5% ±1.0%	≤1.8% ≤0.8% ≤0.4%	022471902	318.00
Yellow operating button, for use with 200 µl pipette tips						
2.0–20 µl	0.02 µl	2 µl 10 µl 20 µl	±5.0% ±1.2% ±1.0%	≤1.5% ≤0.6% ≤0.3%	022471953	318.00
10–100 µl	0.1 µl	10 µl 50 µl 100 µl	±3.0% ±1.0% ±0.8%	≤1.0% ≤0.3% ≤0.2%	022472003	318.00
20–200 µl	0.2 µl	20 µl 100 µl 200 µl	±2.5% ±1.0% ±0.6%	≤0.7% ≤0.3% ≤0.2%	022472054	318.00
Blue operating button, for use with 1,000 µl pipette tips						
100–1,000 µl	0.1 µl	100 µl 500 µl 1,000 µl	±3.0% ±1.0% ±0.6%	≤0.6% ≤0.2% ≤0.2%	022472101	318.00
Violet operating button, for use with 5 ml pipette tips						
500–5,000 µl	5 µl	500 µl 2,500 µl 5,000 µl	±2.4% ±1.2% ±0.6%	≤0.6% ≤0.25% ≤0.15%	022472151	318.00
Turquoise operating button, for use with 10 ml pipette tips						
1–10 ml	10 µl	1 ml 5 ml 10 ml	±3.0% ±0.8% ±0.6%	≤0.6% ≤0.2% ≤0.15%	022472208	318.00

¹ U.S. Pat. 5,531,131

² The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

epResearch³ Pack



epResearch³ Pack includes:

- **Option 1:**
3 Eppendorf Research® PhysioCare Concept® pipettes (0.5–10 µl, 10–100 µl, 100–1,000 µl);
3 refillable epT.I.P.S. boxes with 96 tips each;
3 Pipette Holders; SOP and Eppendorf pipette pen!
- **Option 2:**
3 Eppendorf Research PhysioCare Concept pipettes (2–20 µl, 20–200 µl, 100–1,000 µl);
3 refillable epT.I.P.S. boxes with 96 tips each;
3 Pipette Holders; SOP and Eppendorf pipette pen!

Description

Comfortable, high precision pipetting is the result of perfect teamwork between the pipette and tip. Why not place your trust in the unbeatable team of Eppendorf Research pipettes and the epT.I.P.S. pipette tips? Now conveniently available as epResearch³ Pack at a special price that's too good to miss!



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.



Ordering information

Description	Catalog No.	List USD
epResearch ³ Pack 1, (10, 100 and 1,000 µl pipettes)	022474359	\$804.00
epResearch ³ Pack 2, (20, 200 and 1,000 µl pipettes)	022474367	804.00

Eppendorf Research® multichannel pipettes



Reagent reservoir supplied with multichannel pipettes.

**Description**

Long series in columns, rows and plates—that is the area in which the multichannel pipette is becoming increasingly popular. And it is especially for this environment that we developed the Research multichannel pipette, which can be operated easily with one hand. This high-performance 8- or 12-channel pipette offers an effective, precise and rapid way to process long series for an entire spectrum of applications.

❶ Each Eppendorf Research multichannel pipette contains a service kit and an eT.I.P.S. Box with the appropriate volume tip.

Ordering information: Eppendorf Research multichannel pipettes¹

Volume range	Description	Volume increment	Volume	Inaccuracy ²	Imprecision ²	Catalog No.	List USD
Grey operating button, for use with 20 µl pipette tips							
0.5–10 µl	8-channel	0.01 µl	1 µl	±8.0%	≤5.0%	022452002	\$754.00
	12-channel		5 µl	±4.0%	≤2.0%	022452061	874.00
			10 µl	±2.0%	≤1.0%		
Yellow operating button, for use with 200 µl pipette tips							
10–100 µl	8-channel	0.1 µl	10 µl	±3.0%	≤2.0%	022452029	754.00
	12-channel		50 µl	±1.0%	≤0.8%	022452088	874.00
			100 µl	±0.8%	≤0.3%		
Orange operating button, for use with 300 µl pipette tips							
30–300 µl	8-channel	0.2 µl	30 µl	±3.0%	≤1.0%	022452045	754.00
	12-channel		150 µl	±1.0%	≤0.5%	022452100	874.00
			300 µl	±0.6%	≤0.3%		

¹ U.S. Pat. 5,531,131

² The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.

Ordering information: Accessories

Description	Catalog No.	List USD
Reagent Reservoir , autoclavable reservoir for reagent take-up with multichannel pipette, filling volume 50–60 ml, 1 set = 10 pcs.	022265806	\$ 39.00
Pipette Carousel Stand , for 6 pipettes	022444905	127.00
Replacement manifolds		
For 0.5–10 µl 8-channel pipette	022453882	596.00
For 0.5–10 µl 12-channel pipette	022453947	792.00
For 10–100 µl 8-channel pipette	022453904	596.00
For 10–100 µl 12-channel pipette	022453963	792.00
For 30–300 µl 8-channel pipette	022453921	596.00
For 30–300 µl 12-channel pipette	022453980	792.00

➔ Pipette tips information begins on page 53.

Reference fixed-volume and adjustable-volume pipettes



Description

The patented¹ Reference pipette is synonymous with pipetting accuracy, a smooth stroke, a compact and robust design and superior operating comfort. One multifunctional button operates measuring stroke and blow-out as well as ejects the tip. There are 8 adjustable-volume models to cover the range from 0.1 µl to 2,500 µl.



- User-friendly
- User-tested
- Ergonomic



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Ordering information: Reference fixed-volume pipettes

Volume	Inaccuracy ²	Imprecision ²	Catalog No.	List USD
Grey operating button, for use with 20 µl pipette tips or GELoader tip				
1 µl	±2.5%	≤1.8%	022470400	\$290.00
2 µl	±2.0%	≤1.2%	022470451	290.00
5 µl	±1.5%	≤0.8%	022470507	290.00
10 µl	±1.0%	≤0.5%	022470558	290.00
Yellow operating button, for use with 200 µl pipette tips				
10 µl	±1.0%	≤0.5%	022470604	290.00
15 µl	±1.0%	≤0.5%	022470655	312.00
20 µl	±0.8%	≤0.3%	022470752	290.00
25 µl	±0.8%	≤0.3%	022470809	290.00
30 µl	±0.8%	≤0.3%	022470850	312.00
40 µl	±0.8%	≤0.3%	022470906	312.00
50 µl	±0.7%	≤0.3%	022470957	290.00
75 µl	±0.7%	≤0.3%	022471007	312.00
80 µl	±0.7%	≤0.3%	022471058	312.00
90 µl	±0.7%	≤0.3%	022471104	312.00
100 µl	±0.6%	≤0.2%	022471155	290.00
125 µl	±0.7%	≤0.2%	022471171	290.00
150 µl	±0.7%	≤0.2%	022471201	312.00
Blue operating button, for use with 1,000 µl pipette tips				
200 µl	±0.6%	≤0.2%	022471252	290.00
250 µl	±0.6%	≤0.2%	022471309	290.00
300 µl	±0.6%	≤0.2%	022471350	290.00
400 µl	±0.6%	≤0.2%	022471406	312.00
450 µl	±0.6%	≤0.2%	022471431	312.00
500 µl	±0.6%	≤0.2%	022471457	290.00
750 µl	±0.6%	≤0.2%	022471503	312.00
800 µl	±0.6%	≤0.2%	022471554	312.00
900 µl	±0.6%	≤0.2%	022471601	312.00
1,000 µl	±0.6%	≤0.2%	022471651	290.00
Red operating button, for use with 2,500 µl pipette tips				
1,500 µl	±0.6%	≤0.2%	022471708	290.00
2,000 µl	±0.6%	≤0.2%	022471759	290.00
2,500 µl	±0.6%	≤0.2%	022471805	290.00

¹ U.S. Pat. 5,511,433

² The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.

Liquid: Bidistilled water, degassed

Temperature: 20 °C–25 °C, constant to ±0.5 °C

No. of measurements: 10, in accordance with EN ISO 8655 using original Eppendorf pipette tips

Reference adjustable-volume pipettes

Product features

- Fully autoclavable
- One-button operation for aspiration, dispensing and tip ejection
- Volume setting automatically locks
- Chemically resistant
- TÜV award: user friendly and user-tested
- Single-handed operation
- Four-digit display
- 3-year warranty
- 100% recyclable packaging materials



All Reference¹ pipettes can be readjusted and calibrated for use with liquids that have a different density than water.

i Each pipette contains a service kit and an epT.I.P.S. Box with the appropriate tips.

Ordering information: Reference adjustable-volume pipettes

Volume range	Volume increment	Volume	Inaccuracy ²	Imprecision ²	Catalog No.	List USD
Dark grey operating button, for use with 10 µl pipette tips						
0.1–2.5 µl	0.002 µl	0.25 µl 1.25 µl 2.5 µl	±12.0% ±2.5% ±1.4%	≤6.0% ≤1.5% ≤0.7%	022470001	\$382.00
Grey operating button, for use with 20 µl pipette tips						
0.5–10 µl	0.01 µl	1 µl 5 µl 10 µl	±2.5% ±1.5% ±1.0%	≤1.8% ≤0.8% ≤0.4%	022470051	382.00
2–20 µl	0.02 µl	2 µl 10 µl 20 µl	±3.0% ±1.0% ±0.8%	≤2.0% ≤0.5% ≤0.3%	022470108	382.00
Yellow operating button, for use with 200 µl and 300 µl pipette tips						
2–20 µl	0.02 µl	2 µl 10 µl 20 µl	±5.0% ±1.2% ±1.0%	≤1.5% ≤0.6% ≤0.3%	022470159	382.00
10–100 µl	0.1 µl	10 µl 50 µl 100 µl	±3.0% ±1.0% ±0.8%	≤0.7% ≤0.3% ≤0.15%	022470205	382.00
50–200 µl	0.2 µl	50 µl 100 µl 200 µl	±1.0% ±0.9% ±0.6%	≤0.3% ≤0.3% ≤0.2%	022470256	382.00
Blue operating button, for use with 1,000 µl pipette tips						
100–1,000 µl	1 µl	100 µl 500 µl 1,000 µl	±3.0% ±1.0% ±0.6%	≤0.3% ≤0.2% ≤0.2%	022470302	382.00
Red operating button, for use with 2,500 µl pipette tips						
500–2,500 µl	2 µl	500 µl 1,000 µl 2,500 µl	±1.5% ±0.8% ±0.6%	≤0.3% ≤0.2% ≤0.2%	022470353	382.00

Liquid: Bidistilled water, degassed

Temperature: 20°C–25°C, constant to ±0.5 °C

No. of measurements: 10, in accordance with EN ISO 8655 using original Eppendorf® pipette tips¹ U.S. Pat. 5,511,433

²The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf pipette tips are used.

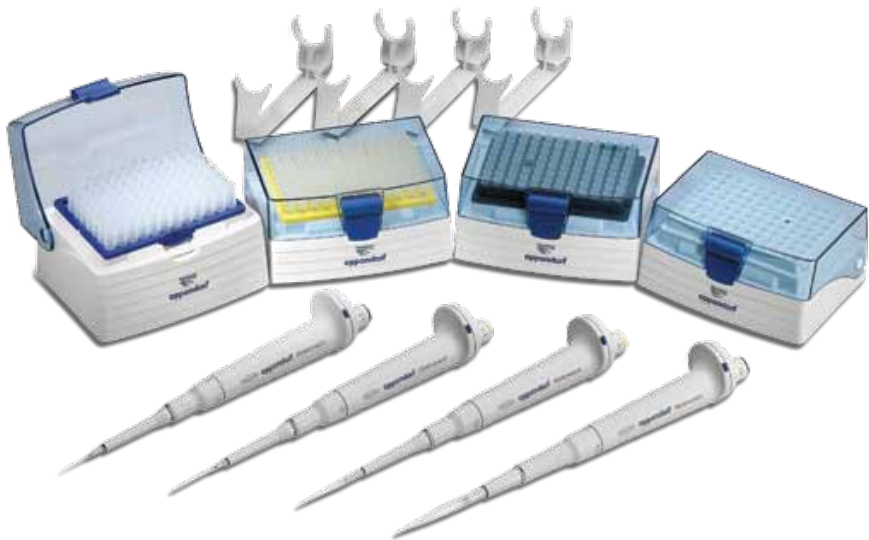
Ordering information: Accessories

Description	Catalog No.	List USD
Pipette Carousel Stand , for six pipettes	022444905	\$127.00
Pipette Holder , for wall mounting	022444913	29.00

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

epReference³ Pack



epReference³ Packs include:

- **Option 1:**
3 Eppendorf Reference PhysioCare Concept® pipettes (0.5–10 µl, 10–100 µl, 100–1,000 µl); 3 refillable epT.I.P.S. boxes with 96 tips each; 3 Pipette Holders; SOP and Eppendorf pipette pen!
- **Option 2:**
3 Eppendorf Reference PhysioCare Concept pipettes (2–20 µl, 50–200 µl, 100–1,000 µl); 3 refillable epT.I.P.S. boxes with 96 tips each; 3 Pipette Holders; SOP and Eppendorf pipette pen!

Description

Comfortable, high precision pipetting is the result of perfect teamwork between the pipette and tip. Why not rely upon the unbeatable team of Eppendorf Reference pipettes and epT.I.P.S. pipette tips? Now conveniently available as epReference³ Pack at a special price that's too good to miss!



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.



Ordering information

Description	Catalog No.	List USD
epReference ³ Pack 1, (10, 100 and 1,000 µl pipettes)	022470388	\$863.00
epReference ³ Pack 2, (20, 200 and 1,000 µl pipettes)	022470396	863.00

Eppendorf Research® pro electronic pipettes



**20–300 µl single-channel
Research pro**



**20–300 µl multichannel
Research pro**

Product features

- Five single-channel models available from 0.5 µl to 5 ml
- 8- and 12-channel models available from 0.5 µl to 1,200 µl
- Volumes can be easily changed in pipetting and dispensing modes
- Intuitive, easy-to-learn operation
- Rapid volume selection via predefinable “FIX” volumes
- Low-force, patented tip ejection for flexible handling
- Removable, autoclavable and maintenance-friendly lower part
- Independent adjustment of aspiration and dispensing speeds
- User-adjustable tip-ejector button
- Motorized piston control increases reproducibility and decreases repetitive stress
- High-capacity NiMH battery (at least 3,700 full strokes at high speed with single-channel pipettes) reduces downtime
- High precision with no reduction in speed
- Capable of storing up to five commonly used pipetting programs
- All functions are intuitively executed in a similar manner as per mechanical pipettes
- 2-year warranty

Application

- Electronic pipetting and dispensing (single-channel and multichannel)

Description

The Research pro* electronic pipette is ideal for all liquid handling applications. Its easy-to-follow display, ergonomically placed operating buttons and various dispensing techniques, such as pipetting, dispensing, reverse pipetting and diluting, make this a laboratory favorite.

Simple functions of the Research pro (pipetting and dispensing, etc.) are intuitively executed in the same manner as a manual pipette. All of the single-channel pipette functions are performed identically in the multichannel version, which means that both models can be used without any additional training.

* US Patents 6,499,365/6,778,917



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Eppendorf Research® pro electronic pipettes



Research pro display



Single-channel Research pro



Research pro with charging adapter

Sliding tip-ejector button is ideal for left- and right-handed users

The following functions of the Eppendorf Research pro are available by simply pressing the Select rocker switch:

Pipetting (PIP)

Standard aspiration and dispensing step with the following optional functions:

- **Blow** (separation of stroke and blow-out)
- **Rinse** (rinsing and mixing)
- **Reverse pipetting** (aspiration with blow-out volume)
- **Manual pipetting** (aspiration and dispensing for as long as the key is held down)

Dispensing (DIS)

Single aspiration, dispensing a maximum of 20 equal partial volumes.

Fixed-volume pipetting (FIX)

Rapid volume setting from five programmable presets.

In addition, the pipette can store up to five programs containing specified pipetting and dispensing sequences, which makes it adaptable to a variety of requirements and also makes everyday repetitive pipetting much easier.

i More information at www.research-pro.info

➔ For pipette service and maintenance information, see page 30; pipette tips information begins on page 53.

Eppendorf Research® pro electronic pipettes

Ordering information: Eppendorf Research pro electronic pipettes¹

Model	Volume range	Volume increment	Volume	Inaccuracy ²	Imprecision ²	Catalog No.	List USD	
Single-channel pipette								
Grey operating button, for use with 20 µl pipette tips								
with charging adapter	0.5–10 µl	0.01 µl	1 µl	±2.5%	≤1.8%	022461303	\$ 659.00	
without charging adapter ³			5 µl	±1.5%	≤0.8%	022461354	633.00	
			10 µl	±1.0%	≤0.4%			
Yellow operating button, for use with 200 µl pipette tips								
with charging adapter	5–100 µl	0.1 µl	10 µl	±2.0%	≤1.0%	022461311	659.00	
without charging adapter ³			50 µl	±1.0%	≤0.3%	022461362	633.00	
			100 µl	±0.8%	≤0.2%			
Yellow operating button, for use with 300 µl pipette tips								
with charging adapter	20–300 µl	0.5 µl	30 µl	±2.5%	≤0.7%	022461320	659.00	
without charging adapter ³			150 µl	±1.0%	≤0.3%	022461371	633.00	
			300 µl	±0.6%	≤0.2%			
Blue operating button, for use with 1,000 µl pipette tips								
with charging adapter	50–1,000 µl	1 µl	100 µl	±3.0%	≤0.6%	022461338	659.00	
without charging adapter ³			500 µl	±1.0%	≤0.2%	022461389	633.00	
			1,000 µl	±0.6%	≤0.2%			
Violet operating button, for use with 5,000 µl pipette tips								
with charging adapter	100–5,000 µl	10 µl	500 µl	±3.0%	≤0.6%	022461346	659.00	
without charging adapter ³			2,500 µl	±1.2%	≤0.25%	022461397	633.00	
			5,000 µl	±0.6%	≤0.15%			
Multichannel pipette								
Grey operating button, for use with 20 µl pipette tips								
with charging adapter	8-channel	0.5–10 µl	0.01 µl	1 µl	±5.0%	≤3.0%	022461401	1,172.00
w/o charging adapter	8-channel ³			5 µl	±3.0%	≤1.5%	022461443	1,121.00
with charging adapter	12-channel			10 µl	±2.0%	≤0.8%	022461486	1,419.00
w/o charging adapter	12-channel ³						022461516	1,386.00
Yellow operating button, for use with 200 µl pipette tips								
with charging adapter	8-channel	5–100 µl	0.1 µl	10 µl	±2.0%	≤2.0%	022461419	1,172.00
w/o charging adapter	8-channel ³			50 µl	±1.0%	≤0.8%	022461451	1,121.00
with charging adapter	12-channel			100 µl	±0.8%	≤0.25%	022461494	1,419.00
w/o charging adapter	12-channel ³						022461524	1,386.00
Orange operating button, for use with 300 µl pipette tips								
with charging adapter	8-channel	20–300 µl	0.5 µl	30 µl	±2.5%	≤1.0%	022461427	1,172.00
w/o charging adapter	8-channel ³			150 µl	±1.0%	≤0.5%	022461460	1,121.00
with charging adapter	12-channel			300 µl	±0.6%	≤0.25%	022461508	1,419.00
w/o charging adapter	12-channel ³						022461532	1,386.00
Green operating button, for use with 1,250 µl pipette tips								
with charging adapter	8-channel	50–1,200 µl	5 µl	120 µl	±6.0%	≤0.9%	022461435	1,172.00
w/o charging adapter	8-channel ³			600 µl	±2.7%	≤0.4%	022461478	1,121.00
				1,200 µl	±1.2%	≤0.3%		

¹ U.S. Pats. 6,499,365/6,778,917² The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.³ A single- or four-place charging stand must be purchased with the pipette to recharge the unit.



Charging stand for single-channel and multichannel pipettes



Application of Research pro

Ordering information

Description	Catalog No.	List USD
Charging stand (including charging adapter) For one pipette	022461541	\$217.00
Charging stand (including charging adapter) For four pipettes	022461559	639.00

➞ Pipette tips information begins on page 53.



Carousel Stand

Product features

- Carousel stand for six pipettes—stores all Research and Research plus single-channel and multichannel pipettes¹ in a minimal space
- Suitable for use with all Reference² pipettes without an adapter
- With an adapter, also suitable for use with Repeater®, Repeater Plus³ and Maxipettor® pipettes

Description

Enjoy an organized workplace with our rotating pipette stand. Pipettes attach to the stand by the handle, not the nose cone, which eliminates potential cross-contamination from the stand to the pipettes. In addition to the Eppendorf Research® and Reference pipettes, the stand can also hold all older models of Eppendorf pipettes.

Also available: a pipette holder that attaches to the wall, which keeps the pipette within reach, even when you have limited bench space.



Pipette holders for wall mounting

Ordering information

Description	Catalog No.	List USD
Pipette Carousel Stand, for six pipettes	022444905	\$127.00
Pipette holder, for wall mounting	022444913	29.00
Repeater Plus/Maxipettor adapter, for pipette carousel stand	022260588	18.00
Repeater Plus/Maxipettor adapter, for wall mounting	022260596	29.00

¹ U.S. Pats. 5,531,131/6,119,435

² U.S. Pat. 5,511,433

³ U.S. Pats. 5,620,660/5,620,661/5,591,408/5,573,729

➔ For pipette service and maintenance information, see page 30; pipette tips information begins on page 53.



A pipette is only as good as its tip

Only a perfectly manufactured pipette tip can ensure that the precision of a modern pipette is maximized. Our epT.I.P.S. — Eppendorf *Totally Integrated Pipetting System*—work in perfect combination with our pipettes, resulting in reduced-force tip attachment and ejection with complete sealing. Additionally, the universal nose cone design allows the tips to be used with pipettes from other manufacturers.

Production without compromise

Having our own production facility means that each one of our epT.I.P.S. is manufactured to the highest quality standards. Through our selection of the best plastic materials and ISO 9001-certified production processes, our tips maintain ideal wetting properties and boast high transparency and certified purity levels. Every tip is manufactured to match specifically to its respective Eppendorf® pipette(s), thus ensuring the maximum precision and reliability you have come to expect and rely on.

The Eppendorf pipette and tip system satisfies all of the requirements of EN ISO 8655 standards.

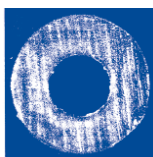
Product features of epT.I.P.S.

- Drop-contour design gives all Eppendorf tips a uniform look
- Soft, flexible tip cone ensures better pipette tip sealing
- Ergonomically optimized cone geometry ensures perfect fit on Eppendorf pipettes
- Universal fit—can be used with pipettes from other manufacturers
- Fine graduations make it easy to visually check the volume pipetted
- Available in five purity levels: Eppendorf Quality, Sterile, PCR clean, PCR clean sterile and free of pyrogens, and Eppendorf Biopur®

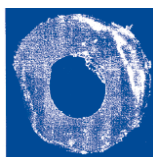


- New tip design for better access to a wider variety of tubes and wells
- Finely tapered and extended for working with small volumes

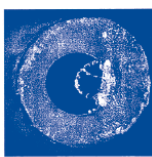
Can you see the quality of your tips?



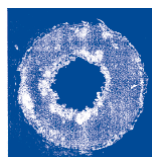
Eppendorf tip



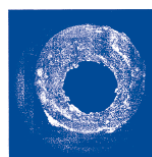
Brand A



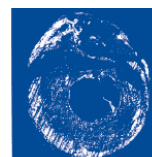
Brand B



Brand C



Brand D



Brand E

Handling the reload system—Contamination Free!



The transparent blue protective lid for epT.I.P.S. Reloads allows individual trays to be lifted off of the respective stack (left) or dual tray (right) without contamination.



An audible “click” indicates that the tray is fully engaged. The blue lid can be used to reseal the epT.I.P.S. Reloads to protect the tips from contamination.

Eppendorf purity levels for tips, Combitips®, tubes and plates

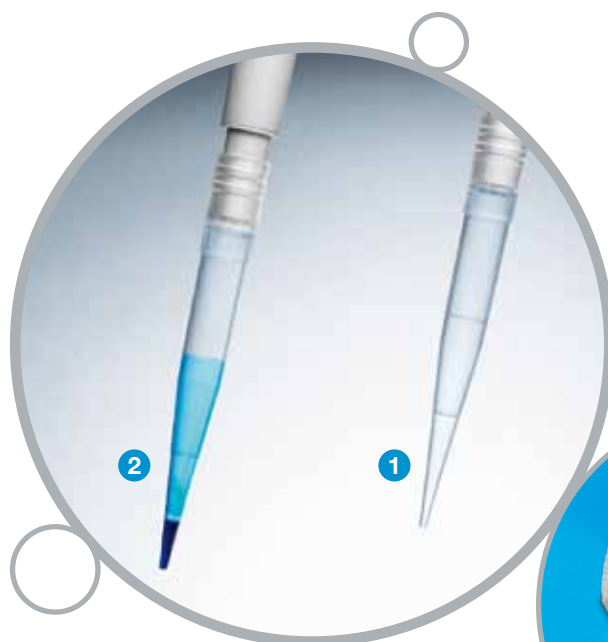


	Eppendorf Quality	Eppendorf Sterile	Eppendorf PCR clean	Eppendorf PCR clean, sterile and free of pyrogens	Eppendorf Biopur®
Continuous quality control for the following quality criteria:					
Function, tightness, precision	•	•	•	•	•
Defined flow dynamics	•	•	•	•	•
Minimal water retention	•	•	•	•	•
High chemical resistance	•	•	•	•	•
High thermal stability	•	•	•	•	•
Precisely molded	•	•	•	•	•
Batch testing¹ (certified) for the following purity criteria:					
Free of human DNA			•	•	•
Free of bacteria DNA (<i>E. coli</i>)					•
DNase-free			•	•	
RNase-free			•	•	•
Free of PCR inhibitors			•	•	
ATP-free					•
Pyrogen-free (endotoxin-free)				•	•
Sterile (Ph.Eur./USP)		•		•	•
Eppendorf products					
Tips					
epT.I.P.S. Standard (Bulk)	•				
epT.I.P.S. Box	•				
epT.I.P.S. Reloads	•		•		
epT.I.P.S. Starter Set	•				
epT.I.P.S. Racks	•	•	•		•
epT.I.P.S. Singles (individually packaged)		•			•
ep Dualfilter T.I.P.S.				•	
Combitips Plus tips	•	•			• ²
epT.I.P.S. LoRetention	•		•	•	
epT.I.P.S. Motion	•	•			
epT.I.P.S. Motion filtertips		•	•		
Tubes					
Safe-Lock tubes	•		•		• ²
Flex-Tube®	•		•		
Protein LoBind tubes			•		
DNA LoBind tubes			•		
PCR Tubes (PCR and qPCR)			•		
Cap Strips (PCR and qPCR)			•		
Plates and accessories					
Deepwell Plates	•	•			
Protein LoBind Deepwell Plates			•		
DNA LoBind Deepwell Plates			•		
twin.tec PCR Plates (PCR and qPCR)			•		
Self-adhesive sealing materials			•		
Heat sealing materials			•		
Capping Aid			•		
<i>in situ</i> Frame			•		

¹ Batch-specific certificates can be downloaded from www.eppendorf.com.² Individually packaged.

➔ For more information on Eppendorf purity levels, see pages 301 to 305, or visit www.eppendorf.com/purity.

epT.I.P.S. LoRetention



Simple differentiation of racks and reloads through a new, clear lid with a white seal. When open, the writing “LoRetention” can be seen from the inside. The reusable seal also makes it possible to label existing epT.I.P.S. boxes.



The “Pearl Effect”—a comparison of the amount of residual liquid when pipetting solutions that contain detergents: ① Maximum recovery with epT.I.P.S. LoRetention ② Significant loss of sample using standard tips

Product features

- Ultrahomogeneous surface for maximum reproducibility
- Ultrahydrophobic surface for minimum loss of sample
- Air bubbles and foaming are significantly reduced during pipetting
- Autoclavable, high chemical resistance
- 5-year shelf life
- Available as ep Dualfilter T.I.P.S., as well as in PCR clean and Eppendorf Quality

Maximum results

The ultrahydrophobic, extremely homogenous surface of the epT.I.P.S. LoRetention is achieved through an innovative treatment at the molecular level—the Pearl Effect Technology. The tips are uncoated and free from additives, thus nothing can bleed into the sample. Liquids roll off completely, so that almost no sample remains in the tip. In comparison, the adhesive layer of liquid in standard tips retains considerably more sample material.

This unique material property guarantees maximum sample recovery, improved reproducibility and higher sensitivity.

Reduce costs, increase reproducibility

Particularly with sensitive PCR and real-time PCR applications, low-retention surfaces can increase reproducibility and notably reduce the loss of expensive reagents—depending on the reagent solution by up to 5%!

Various applications

epT.I.P.S. LoRetention are ideally suited for all applications with samples that contain detergents:

- PCR and real-time PCR preparation of enzyme solutions and master mixes
- Isolation, purification and denaturation of proteins
- Restriction digestions and ligations
- Pipetting DNA ladders during gel electrophoresis

epT.I.P.S. LoRetention perform considerably better in terms of precision and sample recovery than low-retention tips from other manufacturers.

epT.I.P.S. LoRetention

**Quality and purity Eppendorf style**

It goes without saying that the new epT.I.P.S. LoRetention have all the valued properties of the proven Eppendorf epT.I.P.S. They are produced in high-precision manufacturing processes, can be autoclaved, are extremely resistant to chemicals, and are

available in the PCR clean (free of human DNA, DNase, RNase, and PCR inhibitors) purity grade, as well as in Eppendorf Quality. For maximum contamination protection, epT.I.P.S. LoRetention are also available as ep Dualfilter T.I.P.S.

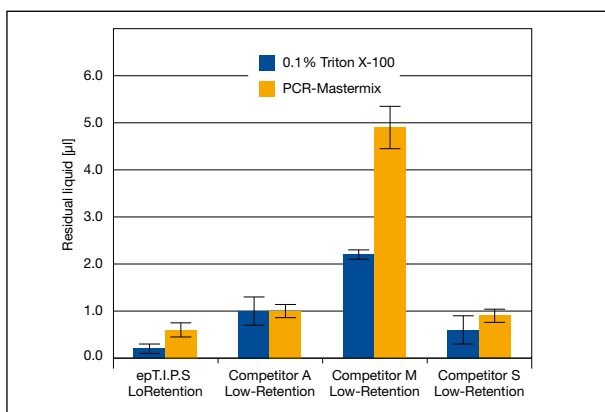


Fig. 1. Comparison of residual liquid from epT.I.P.S. LoRetention and low-retention tips of other manufacturers.

200 µl tips were used to pipette a commercial PCR master mix and the detergent 0.1% Triton X-100. Once the liquid had been dispensed, the residual liquid in the tips was determined. The measurements were repeated several times and the standard deviation determined. epT.I.P.S. LoRetention resulted in the lowest residual liquid, as well as the smallest standard deviation.

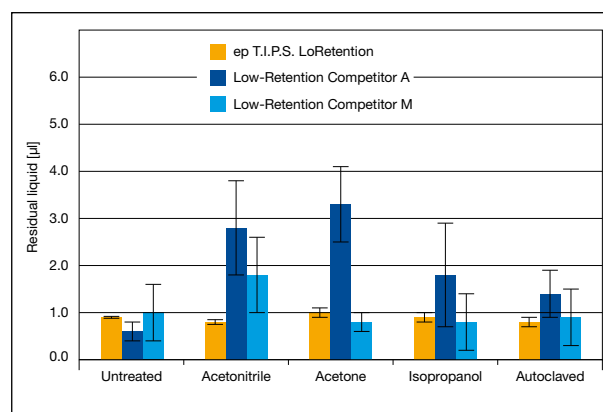


Fig. 2. Comparison of resistance of the low-retention property when subjected to solvents or autoclaving.

200 µl epT.I.P.S. LoRetention and low-retention tips of other manufacturers were autoclaved or treated with the solvent specified. An enzymatic buffer containing detergents was then pipetted and the residual moisture was determined. epT.I.P.S. LoRetention resulted in reproducible low levels of residual liquid with minimum standard deviation. Low-retention tips from other manufacturers are less resistant to chemicals or autoclaving: this resulted in an increase in residual liquid and standard deviation.

Ordering information

Description	Catalog No.	List USD
epT.I.P.S. LoRetention Dualfilter, Racks, PCR clean/sterile/pyrogen-free, 10 × 96 tips		
0.1–10 µl Short	022493000	\$142.00
0.5–20 µl Long	022493002	142.00
2–100 µl	022493006	132.00
20–300 µl	022493004	142.00
50–1,000 µl	022493008	142.00
epT.I.P.S. LoRetention, Reloads, PCR clean, 10 × 96 tips		
0.1–10 µl Short	022493010	98.00
0.5–20 µl Long	022493012	98.00
2–200 µl	022493014	80.00
50–1,000 µl	022493016	86.00

Description	Catalog No.	List USD
epT.I.P.S. LoRetention, Reloads, Eppendorf Quality, 10 × 96 tips		
0.1–10 µl Short	022493018	\$86.00
0.5–20 µl Long	022493020	86.00
2–200 µl	022493022	68.00
50–1,000 µl	022493024	75.00
epT.I.P.S. LoRetention, Racks, PCR clean, 10 × 96 tips		
0.1–10 µl Short	022493026	116.00
0.5–20 µl Long	022493028	116.00
2–200 µl	022493030	92.00
50–1,000 µl	022493032	99.00

➔ For more information on Eppendorf purity levels, see pages 301 to 305, or visit www.eppendorf.com/purity.

epT.I.P.S. Bulk



- Original, high-quality Eppendorf pipette tips at an attractive price
- Packaged in resealable bags
- Available in sizes from 10 µl to 10 ml

Ordering information

Description	Catalog No.	List USD
epT.I.P.S. Bulk , 2 bags of 500 tips = 1,000 tips Eppendorf Quality		
0.1–10 µl, 34 mm	022492004	\$62.00
0.1–20 µl, 40 mm	022492012	62.00
0.5–20 µl L, 46 mm	022492021	62.00
2–200 µl, 53 mm	022492039	50.00
20–300 µl, 53 mm	022492047	50.00
50–1,000 µl, 71 mm	022492055	53.00
50–1,250 µl, 76 mm	022492063	53.00
500–2,500 µl, 115 mm, 5 bags of 100 tips = 500 tips	022492071	62.00
100–5,000 µl, 120 mm, 5 bags of 100 tips = 500 tips	022492080	86.00
1–10 ml, 165 mm, 5 bags of 100 tips = 500 tips	022492098	48.00
1–10 ml L, 243 mm, 5 bags of 100 tips = 500 tips	022492101	54.00

ep Dualfilter T.I.P.S.



- All filter tips are Sterile (to USP, DAB, Ph.Eur. standards) and PCR clean (free of human DNA, DNase, RNase, PCR inhibitors and pyrogens)
- Continuous control of each batch by an independent lab – Batch-related certificates available on request
- Pipette tips have an integrated dual pore filter made of hydrophobic polyethylene and do not contain “self-sealing” additives
- Sample can be easily recovered, even if the filter becomes wet as a result of incorrect pipetting
- Packaged in racks of 96 tips

Ordering information

Description	Catalog No.	List USD
epT.I.P.S. Dualfilter , 10 racks of 96 tips = 960 tips, PCR clean and sterile		
0.1–10 µl S, 34 mm	022491202	\$134.00
0.1–10 µl M, 40 mm	022491211	134.00
0.5–20 µl L, 46 mm	022491229	134.00
2–20 µl, 55 mm	022491270	134.00
2–100 µl, 55 mm	022491237	124.00
2–200 µl, 55 mm	022491296	124.00
20–300 µl, 55 mm	022491245	124.00
50–1,000 µl, 71 mm	022491253	134.00
100–5,000 µl, 120 mm, 5 racks of 24 tips = 120 tips	022491261	74.00
1–10 ml L, 243 mm, 5 racks of 24 tips = 120 tips	022491288	62.00

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

epT.I.P.S. Box

**User friendly:**

- Contamination-free transfer of trays to the working box
- System optimized for use with multichannel pipettes
- Color-coded trays for simple identification of tips and matching Eppendorf® pipette
- Tips can be attached to the pipette from the refill trays
- Refill trays are entirely autoclavable for future use
- Space-saving packaging

Ordering information

Description	Catalog No.	List USD
epT.I.P.S. Box , 1 reusable box includes 96 tips, Eppendorf Quality		
0.1–10 µl, 34 mm	022491300	\$32.00
0.1–20 µl, 40 mm	022491318	32.00
0.5–20 µl L, 46 mm	022491326	32.00
2–200 µl, 53 mm	022491334	32.00
20–300 µl, 53 mm	022491342	32.00
50–1,000 µl, 71 mm	022491351	32.00
50–1,250 µl, 76 mm	022491369	32.00
500–2,500 µl, 115 mm, includes 48 tips	022491377	32.00
100–5,000 µl, 120 mm, includes 24 tips	022491385	32.00

epT.I.P.S. Set



Starter kits consist of the epT.I.P.S. Box and 5 refill trays

Ordering information

Description	Catalog No.	List USD
epT.I.P.S. Starter Set , 1 reusable box includes 5 trays of 96 tips = 480 tips		
0.1–10 µl, 34 mm	022491407	\$62.00
0.1–20 µl, 40 mm	022491415	62.00
0.5–20 µl L, 46 mm	022491423	62.00
2–200 µl, 53 mm	022491431	50.00
20–300 µl, 53 mm	022491440	50.00
50–1,000 µl, 71 mm	022491458	53.00
50–1,250 µl, 76 mm	022491466	53.00
500–2,500 µl, 115 mm, 5 trays of 48 tips = 240 tips	022491474	63.00

epT.I.P.S. Reloads

**Environmentally friendly:**

- All components are 100% recyclable
- Reduced waste as compared with disposable racks
- The refill system, depending on tip size, is packaged as either dual-sided or in stack form
- Reloads are available in two purity levels: Eppendorf Quality and PCR clean

Ordering information

Description	Catalog No.	List USD	Catalog No.	List USD
epT.I.P.S. Reloads, 10 trays of 96 tips = 960 tips	Eppendorf Quality		PCR Clean	
0.1–10 µl, 34 mm	022491504	\$78.00	022491709	\$90.00
0.1–20 µl, 40 mm	022491512	78.00	022491717	90.00
0.5–20 µl L, 46 mm	022491521	78.00	022491725	90.00
2–200 µl, 53 mm	022491539	60.00	022491733	72.00
20–300 µl, 53 mm	022491547	60.00	022491741	72.00
50–1,000 µl, 71 mm	022491555	67.00	022491750	78.00
50–1,250 µl, 76 mm	022491563	67.00	022491768	78.00
500–2,500 µl, 115 mm, 10 trays of 48 tips = 480 tips	022491571	67.00	022491776	78.00

epT.I.P.S. Racks



Sterile



- Convenient, ready-to-use pipette tip racks are available in four purity levels: Eppendorf Quality, Sterile, PCR clean and Eppendorf Biopur®
- Packaged in racks of 96, 48 or 24 tips, depending on tip volume

Ordering information

Description	Cat. No.	List USD	Cat. No.	List USD	Cat. No.	List USD	Cat. No.	List USD
epT.I.P.S. Racks, 10 racks of 96 tips = 960 tips	Eppendorf Quality		Sterile		PCR Clean		Biopur	
0.1–10 µl, 34 mm	022491903	\$86.00			022491806	\$108.00		
0.1–20 µl, 40 mm	022491911	86.00	022492250	\$108.00	022491814	108.00	022491067	\$86.00
0.5–20 µl L, 46 mm	022491920	86.00			022491822	108.00		
2–200 µl, 53 mm	022491938	67.00	022492276	84.00	022491831	84.00	022491083	80.00
20–300 µl, 53 mm	022491946	67.00	022492284	84.00	022491849	84.00	022491091	80.00
50–1,000 µl, 71 mm	022491954	73.00	022492292	91.00	022491857	91.00	022491105	85.00
50–1,250 µl, 76 mm	022491962	73.00	022492306	91.00	022491865	91.00	022491113	85.00
500–2,500 µl, 115 mm, 5 racks of 48 tips = 240 tips	022491971	37.00			022491873	47.00	022491121	85.00
100–5,000 µl, 120 mm, 5 racks of 24 tips = 120 tips	022491989	43.00	022492314	54.00	022491881	54.00		
1–10 ml, 165 mm, 5 racks of 24 tips = 120 tips	022491997	61.00					022491164	74.00

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

epT.I.P.S. Singles

Sterile



- Individually wrapped pipette tips available in two purity levels
- Batch number and expiration date printed on each tip package
- Continuous quality control of each batch by an independent laboratory
 - Batch-specific purity certificates available upon request, or visit www.eppendorf.com

Ordering information

Description	Catalog No.	List USD	Catalog No.	List USD
epT.I.P.S. Singles, individually wrapped	Sterile (1,000 tips)		Biopur (100 tips)	
0.1–10 µl, 34 mm				
0.1–20 µl, 40 mm			022491130	\$29.00
0.5–20 µl L, 46 mm				
2–200 µl, 53 mm	022492209	\$129.00	022491148	24.00
20–300 µl, 53 mm				
50–1,000 µl, 71 mm	022492225	129.00	022491156	25.00
50–1,250 µl, 76 mm				
500–2,500 µl, 115 mm				
100–5,000 µl, 120 mm				
1–10 ml, 165 mm				
1–10 ml L, 243 mm				

Special tips



Volume range/pipette tip	GEloader	Catalog No.	List USD
0.5 µl–20 µl, 62 mm	2 racks of 96 tips = 192 tips	022351656	\$121.00
	Microloader		
0.5 µl–20 µl, 100 mm	2 racks of 96 tips = 192 tips	930001007	148.00

Note: All pipette tips meet the Eppendorf Quality purity standard; where applicable, higher purity levels are noted.



How can you recognize original Eppendorf® pipette tips?



A unique feature of our tips is the “ring” of drop-shaped relief elements circling the crown. Additionally, each tip (and tube) is embossed with “Eppendorf” on its rim.

epT.I.P.S.[®] Elongated

Product features

- Highest protection for pipette and sample with ep Dualfilter T.I.P.S. L (103 mm in volume variant of 1,250 µl)
- Available in four purity standards: Eppendorf Quality, PCR clean, PCR clean/sterile/pyrogen-free and Eppendorf Biopur[®]
- Safe access to Eppendorf Deepwell Plates or other deep and narrow vessels
- Highest precision and accuracy when using epT.I.P.S. 50 µl–1,250 µl L pipette tips in system with the Eppendorf Research[®] pro 8-channel pipette
- Easy recognition through new “dark green” tray color

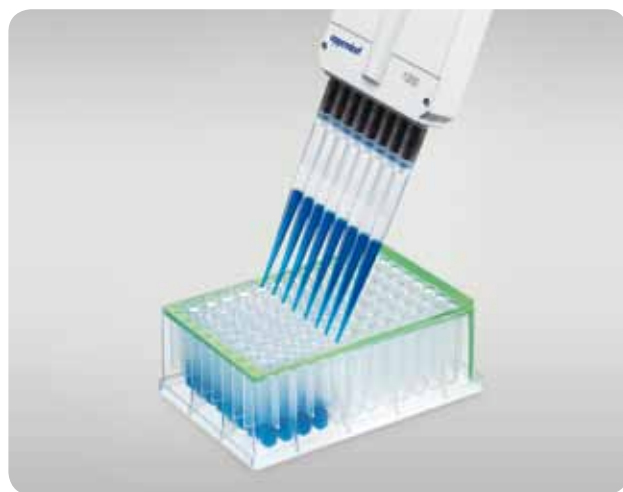
Description

With the new epT.I.P.S. 50 µl–1,250 µl L pipette tip you will always receive best results while pipetting from and into 15 ml conical tubes, high reagent bottles, narrow deep vessels and especially Eppendorf Deepwell Plates. The long and slim design of this new elongated pipette tip gives you free access to your sample with reduced risk of touching the sides of tubes or wells. Cross-contamination during pipetting can be avoided to a minimum. Even smallest volumes in deepwell plates of 96 and 384 wells can be almost completely recovered from the bottom.

Compatibility of epT.I.P.S. 1,250 µl L and Eppendorf pipettes

Description	Model	50–1,000 µl	100–1,000 µl	200–1,000 µl	50–1,200 µl*
Eppendorf Reference	fixed-volume			X	
	adjustable		X		
Eppendorf Research [®]	fixed-volume			X	
	adjustable		X		
Eppendorf Research pro	single-channel	X			
	multichannel*				X*
Eppendorf Research plus	single-channel			X	

* Special standard of precision and accuracy in accordance with EN ISO 8655 is given in combination with the Eppendorf Research pro multichannel pipette 50–1,200 µl. Universal fit is given in combination with pipettes of the above mentioned volumes from other manufacturers.



Ordering information

Description	Purity	Catalog No.	List USD
ep Dualfilter T.I.P.S.[®], Racks, 5 × 96 = 480 tips			
50 µl–1,250 µl L	PCR clean, sterile and pyrogen-free	022494002	\$70.00
epT.I.P.S., Reloads, 10 × 96 = 960 tips			
50 µl–1,250 µl L	Eppendorf Quality	022494004	70.00
50 µl–1,250 µl L	PCR Clean	022494006	80.00
epT.I.P.S., Racks, 5 × 96 = 480 tips			
50 µl–1,250 µl L	Eppendorf Quality	022494010	38.00
50 µl–1,250 µl L	PCR Clean	022494012	47.00
50 µl–1,250 µl L	Eppendorf Biopur [®]	022494014	47.00
epT.I.P.S., Reusable Box, 1 × 96 tips			
50 µl–1,250 µl L	Eppendorf Quality	022494016	33.00
epT.I.P.S., Standard, 2 bags of 500 = 1,000 tips			
50 µl–1,250 µl L	Eppendorf Quality	022494018	54.00

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

BioMaster–Positive Displacement Pipette



Product features

- Single-handed tip attachment and ejection
- Lateral volume locking
- Ergonomic design
- UV-resistant and fully autoclavable
- Maintenance-free
- 3-year warranty

Technical specifications

Volume	Volume increment	Inaccuracy*	Imprecision*
2 µl	0.02 µl	±6.0%	≤4.0%
3 µl		±5.0%	≤3.0%
5 µl		±4.0%	≤2.0%
10 µl		±3.0%	≤1.5%
20 µl		±2.5%	≤0.8%
Liquid:	Bidistilled water		
Temperature:	20°C–25°C, constant to ±0.5°C		
No. of measurements:	10, in accordance with EN ISO 8655 using original Eppendorf® pipette tips		

* The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf pipette tips are used.

Application

- Contamination-free pipetting in positive-displacement mode
- Ideal for liquids that are viscous (e.g., glycerol) or have high vapor pressure (e.g., ethanol, acetone)

Description

Enjoy contamination-free pipetting with the Positive Displacement Pipette, an adjustable pipette for the volume range from 1 µl to 20 µl. With the Positive Displacement Tip, the pipette functions according to the positive-displacement principle; thus, the formation of aerosols—a common cause of contamination—is eliminated.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Ordering information

Description	Catalog No.	List USD
BioMaster Positive Displacement Pipette kit , includes 1 Positive Displacement Pipette with 1–20 µl continuous volume selection and 1 box of 96 Positive Displacement Tips	022440501	\$433.00

Positive Displacement Tips



Product features

- Ready-for-use piston integrated in tip
- 96 positive displacement tips per rack

Ordering information

Description	Catalog No.	List USD
Positive Displacement Tips , includes ready-for-use piston, 5 racks of 96 tips	022354159	\$248.00

Maxipettor® with Maxitip P and Maxitip S



- 1–Maxitip P
2–Maxitip S Kit
3–Maxitip S
4–Maxitip G



Product features of Maxipettor

- Adjustable pipette for 1 ml to 10 ml
- Control button for volume selection
- Digital volume display
- Maintenance-free
- Exchangeable Maxitips

Description

The Maxipettor is an incrementally adjustable pipette for precise pipetting of volumes up to 10 ml (in 10 µl increments). Even liquids with a high vapor pressure or viscosity can be easily pipetted.

Ordering information

Description	Catalog No.	List USD
Maxipettor , with 1 ml–10 ml continuous volume adjustment	022290002	\$688.00
Maxitip P (positive displacement), nonsterile, pkg. of 100	022291050	186.00
Maxitip P , Eppendorf Biopur, (positive displacement), sterile, individually wrapped, pkg. of 100	022292056	259.00
Maxitip S Kit (air displacement), includes 10 barrels with pistons, 100 Maxitip S, 2 Maxitip G, 10 Valves	022291301	175.00
Barrels with Pistons , for Maxitip S, pkg. of 30	022291408	134.00
Maxitip S (air displacement), pkg. of 200	022291351	149.00
Valves , for Maxitip S and G, pkg. of 100	022291459	66.00
Maxitip G , pkg. of 5	022291505	78.00
Stand for Maxipettor , holds two units	022260651	67.00

Product features of Maxitips

- Maxitip P for aspirating 1 ml to 10 ml from beakers using a positive displacement technique
- Maxitip S for aspirating 2.5 ml to 10 ml from tall, narrow-neck vessels using an air-displacement technique
- No carryover as Maxitips are exchanged
- Valve for Maxitip ensures drip-free dispensing of liquids with a high vapor pressure
- Maxitip G is graduated for dispensing accurate volumes of nonaqueous liquids

Description

The pipette tips for the Maxipettor are tailored to different vessels. For example, the Maxitip P is designed for aspirating 1 ml to 10 ml from beakers, and it pipettes according to the positive displacement principle. The Maxitip S for 2.5 ml to 10 ml forms a system with the Maxipettor, and it is used for aspirating liquids from tall, narrow-neck vessels.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Technical specifications




Nominal volume	Inaccuracy*	Imprecision*
Maxipettor and Maxitip S		
2.5 ml	±1.0%	≤0.2%
5 ml	±0.4%	≤0.2%
10 ml	±0.3%	≤0.2%
Maxipettor and Maxitip P		
1.0 ml	±0.6%	≤0.2%
5 ml	±0.5%	≤0.1%
10 ml	±0.3%	≤0.1%

Measuring conditions in accordance with EN ISO 8655: Bidistilled water, 20 °C, n = 10
* The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® pipette tips are used.

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

Electronic and manual Repeater® Plus and stream/Xstream

Selection Guide for Eppendorf® Repeater pipettes			
			
	Repeater Plus manual dispenser	Repeater stream electronic dispenser	Repeater Xstream electronic dispenser
Catalog No.	022260201	022460803 (incl. charging adapter)	022460811 (incl. charging adapter)
List USD	\$485.00	\$884.00	\$1,061.00
Volume settings	20 steps	Unlimited	Unlimited
Display LCD	LCD	Illuminated	Illuminated
Positive displacement principle	●	●	●
Automatic Combitips® Plus tip recognition	●	●	●
Volume range from 1 µl to 50 ml	●	●	●
PhysioCare Concept® design	●	●	●
Pipetting	●	●	●
Dispensing	●	●	●
2-year warranty	●	●	●
Automatic dispensing with programmable time interval		●	●
Rapid, ergonomic dispensing with motorized piston		●	●
One button tip ejector		●	●
Long life Li-ion battery		●	●
Real-time countdown of dispensings displayed		●	●
Real-time troubleshooting prompts		●	●
Aspiration (pipetting of supernatants)			●
Titration			●
Sequential dispensing			●

The instruments

The manual Repeater Plus¹ and the electronic Repeater stream/Xstream hand dispensers are ideal for process acceleration and saving time on long-series pipetting: their increased volume selection provides outstanding flexibility and exceptional support for research as well as routine tasks; and their smooth handling reduces the fatigue associated with repetitive work.

The consumables

Combitips Plus tips² easily attach to the Repeaters; their built-in sensor recognizes the size of the tip, and the volume appears automatically in the display—eliminating time-consuming volume calculations and incorrect dispensing volumes. The nine sizes of Combitips Plus allow a wider dispensing range of up to 112 different volumes and longer series dispensing (e.g., 100 x 250 µl) without stopping for a refill. Always contamination-free!

A wide variety of solutions

Combitips Plus tips function according to the positive displacement principle, which ensures that the correct volume is dispensed regardless of the density or viscosity of the liquid. The positive displacement system provides safer dispensing of solutions that contain radioactive and/or toxic substances, as well as solutions that have a high vapor pressure, because no aerosols are formed. Combitips are easily replaced—eject with the push of a button—and dispose after use, always contamination-free.



¹ U.S. Patents 5,620,660/5,620,661/5,591,405/5,573,729

² U.S. Patents 5,620,660/5,620,661

Electronic Repeater® stream and Repeater Xstream handheld dispensers



Illuminated display for easy viewing.

Product features

- Electronic dispensing with programmable memory functions
- Contamination-free dispensing using the positive displacement principle
- Dispensing from 1 µl to 50 ml
- Dispensing volumes in long series
- See page 65 for additional features

Description

Electronic Repeater stream and Xstream combine easy handling with a broad range of features. When used with Combitips Plus®* tips (pages 68 to 71), the dispenser/tip forms an unbeatable system that is the quintessential lab tool for all applications: Repeater stream is suitable for all standard pipetting and dispensing applications; for added versatility, the Repeater Xstream can also perform titrations, sequential dispensing and aspiration of supernatants.

* U.S. Patents 5,620,660/5,620,661

➔ For technical specifications, see page 69.



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.



red dot design award
winner

Ordering information

Description	Catalog No.	List USD
Repeater stream electronic dispenser	022460803	\$ 884.00
Repeater Xstream electronic dispenser	022460811	1,061.00

Manual Repeater® Plus handheld dispenser



The rounded, grooved grip of the Repeater Plus means easier dispensing with less stress on the hand and thumb muscles.

Product features

- Dispensing volumes in long series
- Contamination-free dispensing using the positive displacement principle
- Ideal for viscous solutions (e.g., glycerol, oil) or liquids with high vapor pressure (e.g., acetone, ethanol)
- Easy to read: automatic Combitips Plus® recognition with electronic volume display
- Easy volume setting
- More flexible with 112 different volumes from 1 µl to 10 ml
- Up to 100 dispensings per filling for easy processing of long series
- Versatile, even for “uneven” volumes, e.g., 1 µl, 3 µl or 17 µl
- Safe, due to easy, contact-free Combitips Plus attachment and ejection
- 2-year warranty
- See page 65 for additional features

Description

Repeater Plus¹ is the ideal precision instrument for reducing the time associated with manual, long-series pipetting. Its increased volume selection provides outstanding flexibility and all-around support for research and routine tasks. The electronic display ensures error-free dispensing, and the rounded, grooved grip makes dispensing easier and ergonomic—with less stress on the hand and thumb muscles.

¹ U.S. Pats. 5,620,660/5,620,661/5,591,405/5,573,729



Ordering information

Description	Catalog No.	List USD
Repeater Plus manual dispenser	022260201	\$485.00



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Combitips Plus® tips and Repeater® Plus, stream and Xstream accessories



Product features of Combitips Plus

- Ideal system component for all Repeater, Repeater Plus and Repeater stream/Xstream (electronic)
- 20 different dispensing volumes for each Combitip size (Repeater Plus)
- Several hundred different volumes for each Combitip size (Repeater stream/Xstream)
- Higher throughput with up to 100 dispensings per filling
- Reliable results ensured by positive displacement system
- Available in Eppendorf Quality, Sterile and Eppendorf Biopur purity levels
- Available in nine different sizes from 0.1 ml to 50 ml
- Certified trace metal release

Tip purity is ensured

In addition to standard purity, Combitips Plus tips are available in Sterile and Eppendorf Biopur®. Eppendorf Biopur (page 305), signifying outstanding biological purity, guarantees that these tips are sterile as well as pyrogen-, RNase-, DNase and ATP-free. They meet the most stringent demands of the medical, pharmaceutical and food industries, PCR applications and molecular biology/cell technology labs. This purity is ensured through an automated manufacturing process, which safeguards the product against contamination with biological substances. Individual lot certificates are available at www.eppendorf.com.



Wall mount



Pipette stand



Charging stand

Accessories

As a safeguard against potential contamination, our carousel stand does not hold the pipette at the bottom—like most other stands do. Eppendorf Repeater, Repeater Plus and Maxipettor® pipettes easily fit on the carousel with an adapter. To store the electronic Repeater stream/Xstream, a charging stand is available (sold separately). Is your bench space at a premium? We also offer the practical wall-mounted pipette bracket—it keeps your Repeater Plus off the bench but still within reach.

Ordering information

Description	Catalog No.	List USD
Charging stand , for Repeater stream/Xstream, holds one unit	022460897	\$194.00
Stand for Repeater pipettes , holds two units	022260651	67.00
Repeater Plus adapter , for new pipette carousel stand	022260588	18.00
Repeater Plus Wall Mount	022260596	29.00

Combitips Plus® for Repeater® Plus and Repeater stream/Xstream

Technical specifications

Combitips Plus	Volume min./max.	Increment/ step size	Max. dispensing volume	Volume	Inaccuracy ¹	Imprecision ¹
For Repeater Plus² and Combitips Plus³ system						
0.1 ml	1 µl 20 µl	1 µl	20 µl	2 µl 20 µl	±1.6% ±1.0%	≤3.0% ≤2.0%
0.2 ml	2 µl 40 µl	2 µl	40 µl	4 µl 40 µl	±1.3% ±0.8%	≤2.0% ≤1.5%
0.5 ml	5 µl 100 µl	5 µl	100 µl	10 µl 100 µl	±0.9% ±0.8%	≤1.5% ≤0.6%
1 ml	10 µl 200 µl	10 µl	200 µl	20 µl 200 µl	±0.9% ±0.6%	≤0.9% ≤0.4%
2.5 ml	25 µl 500 µl	25 µl	500 µl	50 µl 500 µl	±0.8% ±0.5%	≤0.8% ≤0.3%
5 ml	50 µl 1,000 µl	50 µl	1,000 µl	100 µl 1,000 µl	±0.6% ±0.5%	≤0.6% ≤0.25%
10 ml	100 µl 2,000 µl	100 µl	2,000 µl	200 µl 2,000 µl	±0.5% ±0.5%	≤0.6% ≤0.25%
25 ml	250 µl 5,000 µl	250 µl	5,000 µl	500 µl 5,000 µl	±0.4% ±0.3%	≤0.6% ≤0.25%
50 ml	500 µl 10,000 µl	500 µl	10,000 µl	1,000 µl 10,000 µl	±0.3% ±0.3%	≤0.5% ≤0.25%
For Repeater stream/Xstream and Combitips Plus system						
0.1 ml	1 µl 100 µl	0.1 µl	0.1 ml	10 µl 100 µl	±1.6% ±1.0%	≤2.5% ≤0.5%
0.2 ml	2 µl 200 µl	0.2 µl	0.2 ml	20 µl 200 µl	±1.3% ±1.0%	≤1.5% ≤0.5%
0.5 ml	5 µl 500 µl	0.5 µl	0.5 ml	50 µl 500 µl	±0.9% ±0.9%	≤0.8% ≤0.3%
1 ml	10 µl 1 ml	1 µl	1 ml	100 µl 1,000 µl	±0.9% ±0.6%	≤0.55% ≤0.2%
2.5 ml	25 µl 2.5 ml	2.5 µl	2.5 ml	250 µl 2,500 µl	±0.8% ±0.5%	≤0.45% ≤0.15%
5 ml	50 µl 5 ml	5 µl	5 ml	500 µl 5,000 µl	±0.8% ±0.5%	≤0.35% ≤0.15%
10 ml	100 µl 10 ml	10 µl	10 ml	1,000 µl 10,000 µl	±0.5% ±0.4%	≤0.25% ≤0.15%
25 ml	250 µl 25 ml	25 µl	25 ml	2,500 µl 25,000 µl	±0.3% ±0.3%	≤0.25% ≤0.15%
50 ml	500 µl 50 ml	50 µl	50 ml	5,000 µl 50,000 µl	±0.3% ±0.3%	≤0.25% ≤0.15%

¹ The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) according to EN ISO 8655 is valid only when original Eppendorf® Combitips Plus are used.

² U.S. Pats. 5,620,660/5,620,661/5,591,408/5,573,729

³ U.S. Pats. 5,620,660/5,620,661

➔ For ordering information, see next page.

Combitips Plus®

Volume table for using Combitips Plus¹ with the Repeater® Plus²:

The positions and dispensing steps that are marked in **bold** are based on Combitips Plus used with the original Repeater pipette

Position of the volume selection dial:

	0.5	1/1	1.5	2/2	2.5	3/3	3.5	4/4	4.5	5/5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
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Maximum number of dispensing volumes:

	100	50/48	33	25/23	20	16/15	14	12/11	11	10/8	9	8	7	7	6	6	5	5	5	5
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Combitips Plus with the following volumes:

0.1 ml	1 µl	2 µl	3 µl	4 µl	5 µl	6 µl	7 µl	8 µl	9 µl	10 µl	11 µl	12 µl	13 µl	14 µl	15 µl	16 µl	17 µl	18 µl	19 µl	20 µl
0.2 ml	2 µl	4 µl	6 µl	8 µl	10 µl	12 µl	14 µl	16 µl	18 µl	20 µl	22 µl	24 µl	26 µl	28 µl	30 µl	32 µl	34 µl	36 µl	38 µl	40 µl
0.5 ml	5 µl	10 µl	15 µl	20 µl	25 µl	30 µl	35 µl	40 µl	45 µl	50 µl	55 µl	60 µl	65 µl	70 µl	75 µl	80 µl	85 µl	90 µl	95 µl	100 µl
1.0 ml	10 µl	20 µl	30 µl	40 µl	50 µl	60 µl	70 µl	80 µl	90 µl	100 µl	110 µl	120 µl	130 µl	140 µl	150 µl	160 µl	170 µl	180 µl	190 µl	200 µl
2.5 ml	25 µl	50 µl	75 µl	100 µl	125 µl	150 µl	175 µl	200 µl	225 µl	250 µl	275 µl	300 µl	325 µl	350 µl	375 µl	400 µl	425 µl	450 µl	475 µl	500 µl
5 ml	50 µl	100 µl	150 µl	200 µl	250 µl	300 µl	350 µl	400 µl	450 µl	500 µl	550 µl	600 µl	650 µl	700 µl	750 µl	800 µl	850 µl	900 µl	950 µl	1.0 ml
10 ml	100 µl	200 µl	300 µl	400 µl	500 µl	600 µl	700 µl	800 µl	900 µl	1.0 ml	1.1 ml	1.2 ml	1.3 ml	1.4 ml	1.5 ml	1.6 ml	1.7 ml	1.8 ml	1.9 ml	2.0 ml
25 ml³	250 µl	500 µl	750 µl	1.0 ml	1.25 ml	1.5 ml	1.75 ml	2.0 ml	2.25 ml	2.5 ml	2.75 ml	3.0 ml	3.25 ml	3.5 ml	3.75 ml	4.0 ml	4.25 ml	4.5 ml	4.75 ml	5 ml
50 ml³	500 µl	1.0 ml	1.5 ml	2.0 ml	2.5 ml	3.0 ml	3.5 ml	4.0 ml	4.5 ml	5 ml	5.5 ml	6.0 ml	6.5 ml	7.0 ml	7.5 ml	8.0 ml	8.5 ml	9.0 ml	9.5 ml	10 ml

¹ U.S. Pats. 5,620,660/5,620,661

² U.S. Pats. 5,620,660/5,620,661/5,591/408/5,573,729

³ 25 ml and 50 ml Combitips Plus must be used with the supplied adapter.

Ordering information

Description	Catalog No.	List USD	Catalog No.	List USD	Catalog No.	List USD
Combitips Plus tips	Standard (set of 100)		Sterile (10 bags of 10 tips = 100 tips)		Eppendorf Biopur^{®1} (individually wrapped, set of 100)	
0.1 ml	022265954	\$105.00	022267001	\$132.00	022496000	\$150.00
0.2 ml	022266004	105.00	022267108	132.00	022496026	150.00
0.5 ml	022266101	105.00	022267205	132.00	022496042	150.00
1 ml	022266209	105.00	022267302	132.00	022496069	150.00
2.5 ml	022266306	105.00	022267400	132.00	022496085	150.00
5 ml	022266403	105.00	022267507	132.00	022496107	150.00
10 ml	022266501	105.00	022267604	132.00	022496123	150.00
25 ml	022266551	130.00	022267655	155.00	022496131	171.00
50 ml	022266608	130.00	022267701	155.00	022496140	171.00
25 ml adapter (1 piece), blue	022266993	19.00				
50 ml adapter (1 piece), dark grey	022266705	19.00				
25 ml adapter (set of 7)					022496158	117.00
50 ml adapter (set of 7)					022496166	117.00
Combitips Plus tips assortment pack , includes five of each size plus one 50 ml and one 25 ml adapter	022266624	85.00				
Combitube (set of two) , aspirating aid for removing liquids from volumetric flasks and tall bottles; Combitips Plus tips sizes 5 ml, 25 ml and 50 ml	022261550	53.00				

¹ Eppendorf Biopur Combitips (individually wrapped) are guaranteed to be sterile, RNase-, DNA-, ATP- and pyrogen-free.

➔ For pipette service and maintenance information, see pages 30 and 31.

Mounting rack for Combitips Plus®



Product features

- Autoclavable box with tray for storing up to 10 Combitips Plus² tips from 0.1 ml to 10 ml sizes
- Particularly suitable for storing sterile products
- Can also be used as a stand for Repeater® Plus³ pipette
- Allows tips to be attached single-handedly
- Detachable sliding lid
- Nonslip stand
- Durable construction
- Labeling surface

Ordering information

Description	Catalog No.	List USD
Combitips Rack , for mounting Combitips Plus tips	022268007	\$35.00

Description

To save time and fully enjoy the improved convenience of the Repeater Plus and Repeater stream/Xstream, we have developed the Combitips Rack—a box for 10 Combitips Plus tips that helps you to easily and single-handedly attach the tips.

² U.S. Pats. 5,620,660/5,620,661

³ U.S. Pats. 5,620,660/5,620,661/5,591,408/5,573,729

Combitips®



For use only with original Repeater and Repeater Plus/8 accessories. Combitips form a reliable and precise system for positive displacement dispensing in combination with the original Repeater.

Ordering information

Description	Catalog No.	List USD
Combitips , 0.05 ml set of 50, plus 96 x 10 µl pipette tips, autoclavable	022260952	\$149.00
Combitips, Standard , set of 100		
1.25 ml	022261100	125.00
12.5 ml	022261401	125.00
Combitips, Eppendorf Biopur® , individually wrapped, set of 100		
1.25 ml	022495101	161.00
12.5 ml	022495208	161.00

Dispensing acids, alkalis and organic solvents with the Repeater® Plus pipette

We have checked a number of acids, alkalis and organic solvents with a variety of viscosities and densities in our laboratories to provide you with practical data in this regard.

Liquid	Conc.	100 µl [d]	100 µl [cv]	1,000 µl [d]	1,000 µl [cv]	Vapor pressure at 20°C [hPa]	Density at 20°C [g/cm³]	Viscosity at 20°C [mPa s]
Double-distilled water	100%	±0.6	≤0.6	±0.5	≤0.25	23	1	1
Acetone	100%	0.4	0.5	-0.2	0.3	240	0.79	0.32
Acetonitrile	100%	-0.4	1.1	-0.6	0.2	97	0.79	0.31 [25°C]
Formic acid	98%	-1.7	0.3	-1.9	0.2	42	1.22	1.8
Ammonium hydroxide	32%	1.7	0.5	2.4	0.8	837	0.89	1.3 [26%]
Aniline	100%	-1.8	0.8	-1.3	0.3	0.5	1.03	4.4
Dimethyl formamide (DMF)	100%	0.4	0.6	0.3	0.1	3.77	0.94	0.82
Dimethyl sulfoxide (DMSO)	100%	0.1	0.7	0.1	0.2	0.56	1.1	2.14
Ethyl acetate	100%	-0.4	1.0	-0.4	0.2	97	0.9	0.44
Ethanol	98%	-0.1	0.6	0.1	0.1	58	0.78	1.20
Formaldehyde	37%	0.8	0.3	0.8	0.1	1.3	1.08	2.5 [25°C]
Isopropanol	99%	-0.8	1.4	-0.3	0.2	43	0.78	2.2
Perchloric acid	60%	-2.0	0.5	-1.9	0.1	9	1.53	-
Phosphoric acid	85%	-1.7	0.9	-1.9	0.3	2	1.71	47
Nitric acid	65%	-1.3	0.3	1.9	0.1	9.4/9	1.41	1.49 [40%]
Hydrochloric acid	37%	-2.1	0.5	-1.7	0.3	213	1.19	2.0
Sulfuric acid	95-97%	-2.6	0.6	-4.4	0.3	0.0016	1.84	26.9
Tetrachloromethane	100%	-0.5	1.0	-0.2	0.2	122	1.59	0.96
Tetrahydrofuran (THF)	100%	-2.7	0.7	-0.3	0.2	173	0.88	0.48
Toluene (methyl benzene)	100%	-0.7	0.9	-1.1	0.1	29	0.87	0.6
Trichloroethylene	100%	-0.4	1.9	-0.1	0.3	77	1.46	0.55
Trichloromethane (chloroform)	100%	-0.1	0.4	0.3	0.2	213	1.47	0.56
Triethylamine	100%	-0.4	0.4	0.1	0.1	69	0.72	0.36
Mean value		1.1	0.7	1.0	0.2			

Table 1: Random [d] and systematic [cv] measurement deviations in percent when dispensing selected liquids

The experiments were performed using a Repeater Plus¹ with liquids at room temperature; the results of 10 dispensing operations with a 5 ml Combitips Plus^{®2} tip are shown.

¹ U.S. Pats. 5,620,660/5,620,661/5,591,408/5,573,729

² U.S. Pats. 5,620,660/5,620,661

Easypet® electronic pipet filler



Product features

- Accurate, safe and fatigue-free series pipetting using graduated pipets from 0.1 ml to 100 ml
- Lightweight, balanced design provides comfortable, fatigue-free operation
- Touch-control adjustable speed for rapid or slow pipetting needs
- Fine control of the meniscus movement
- High aspirating speed: 25 ml in 5 seconds
- One-finger control for the dispensing and blow-out functions
- Cordless, works for up to seven hours after recharging
- Autoclavable pipet adapters and filter holders
- Space-saving wall holder
- 1-year warranty

Ordering information

Description	Catalog No.	List USD
Easypet , with transformer, wall holder and 2 membrane filters/0.45 µm	022230204	\$385.00
Membrane filter , for Easypet, 0.45 µm with black lettering, set of 5	022232002	23.00
Membrane filter , for Easypet, 0.45 µm with blue lettering, set of 10	022231006	55.00
NiCd batteries KR 15/30 (qty. 3)	022236016	33.00
Wall-mountable holder	022230905	27.00

Pipet Helper® manual pipet filler



Packaged in 100% recyclable material; for more information on epGreen products, see pages 312 and 313.

Product features

- Safe and convenient filling and dispensing of glass and plastic pipets
- Easy-pull slide lever applies vacuum to eliminate the hand stress caused by conventional "squeeze bulb" apparatus
- Single rocker-switch controls aspiration, dispensing and vacuum to save time
- Disposable, in-line filter prevents contamination
- Filters and pipet connectors can be autoclaved for decontamination
- Easily disassembled for maintenance and cleaning

Description	Catalog No.	List USD
Pipet Helper , with filter disk	022230000	\$75.00
Filter Disk , 3 µm, pkg. of 10	022231103	49.00

Varispenser® plus/Varispenser

**Ordering information**

Varispenser: Bottletop dispenser, for external bottle threads of 32 mm (sizes 1, 2 and 3) or 45 mm (sizes 4, 5 and 6), complete with telescopic tube, tool and 3 adapters (see below). Quality certificate. Varispenser plus: same as Varispenser, plus recirculation valve, valve toggle and media-specific fine adjustment.

Description

Our Varispenser and Varispenser plus are ideal for dispensing aliquots of liquid from large supply bottles. Their smart design make them capable of extracting reproducible dispensing volumes with no reagent waste. Their tight seal provides the best possible protection against contact with caustic media, such as solvents, and they are chemically resistant and fully autoclavable for the utmost in safety for you and your lab.

Product features

- Extensive volume range (6 sizes)
- PFA-sealing of the slide piston prevents jamming
- Wiping piston design prevents crystallization of liquid
- Highly resistant to chemicals
- Rapid volume setting using precise graduation scale
- Easy disassembling and cleaning
- Telescopic filling tube for use with most bottles
- 2-year warranty

Ordering information

Size	Volume range	With 3 adapters for outer diameters (mm)	Dispensing steps	Inaccuracy ¹	Imprecision ¹	Catalog No.	List USD
Varispenser (adjustable-volume)							
1	0.5–2.5 ml	28, 40, 45	0.05 ml	±0.6%	≤0.1%	4960000019	\$421.00
2	1–5 ml	28, 40, 45	0.1 ml	±0.5%	≤0.1%	4960000027	421.00
3	2–10 ml	28, 40, 45	0.2 ml	±0.5%	≤0.1%	4960000035	421.00
4	5–25 ml	32, 38, 40	0.5 ml	±0.5%	≤0.1%	4960000043	566.00
5	10–50 ml	32, 38, 40	1 ml	±0.5%	≤0.1%	4960000051	599.00
6	20–100 ml	32, 38, 40	2 ml	±0.5%	≤0.1%	4960000060	887.00
Varispenser (fixed-volume)							
Bottletop Dispenser, 1 ml				±0.6%	≤0.1%	4962000016	421.00
Bottletop Dispenser, 5 ml				±0.5%	≤0.1%	4962000024	421.00
Bottletop Dispenser, 10 ml				±0.5%	≤0.1%	4962000032	421.00
Varispenser plus (adjustable-volume)							
1	0.5–2.5 ml	28, 40, 45	0.05 ml	±0.6%	≤0.1%	4961000012	445.00
2	1–5 ml	28, 40, 45	0.1 ml	±0.5%	≤0.1%	4961000020	445.00
3	2–10 ml	28, 40, 45	0.2 ml	±0.5%	≤0.1%	4961000039	445.00
4	5–25 ml	32, 38, 40	0.5 ml	±0.5%	≤0.1%	4961000047	614.00
5	10–50 ml	32, 38, 40	1 ml	±0.5%	≤0.1%	4961000055	619.00
6	20–100 ml	32, 38, 40	2 ml	±0.5%	≤0.1%	4961000063	954.00
Discharge tube, spiral 80 cm for Varispenser/Varispenser plus, up to 10 ml						4960824003	Inquire
Discharge tube, spiral 80 cm for Varispenser/Varispenser plus, for 25–100 ml						4960825000	Inquire

¹ The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) are given according to EN ISO 8655.

Bottle-top dispenser is not a substitution for a bottle closure. Volatile liquids can disappear.

➔ For more information go to www.eppendorf.com/varispenser

Order from your laboratory supply dealer.

Product appearance, specifications, and/or prices are subject to change without notice.

Top Buret



Product features

- Patented recirculation valve for priming without loss of reagent
- Voltage supply with long-life primary cells and charging display
- Dispensing range from 0.01 ml to 999.9 ml
- Removable electronics unit
- Modular, service-friendly construction
- Simple calibration program
- Discharge tube can be rotated a full 360°
- Adjustable filling tube horizontal: 142–220 mm; vertical: 10–200 mm
- Telescopic filling tube for automatically setting the length from 210 mm to 370 mm
- 2-year warranty

Description

Our innovative Top Buret sets new standards for manual titration. Its pulse-free dispensing technique allows the desired volumes to be dispensed continuously, thus making titration simpler and safer, with precision values well within required limits. The volume is dispensed by simply rotating the wheels: Model M features a dispensing rate of 2,500 μ l per rotation; Model H features a rate of 5,000 μ l per rotation. The display readings on both models range from 0.01 ml to 999.9 ml. This bottle-top buret is extremely sturdy, and its user-friendly display and control features provide simple, fatigue-free operation.

Application

- Continuous, pulse-free dispensing technique for rapid titration

Ordering information

Description	Inaccuracy ¹	Imprecision ¹	Catalog No.	List USD
Bottle-top buret with recirculation valve, valve toggle, telescopic filling tube, adjustable discharge tube, three adapters for 40/38/32 mm bottle threads, 2 x 1.5 V microbatteries. Quality certificate.				
Top Buret M , 2.5 ml per rotation	±0.2%	≤0.1%	4965000017	\$1,004.00
Top Buret H , 5 ml per rotation	±0.2%	≤0.1%	4965000025	1,004.00
Dry tube			4960851000	Inquire

¹ The data for imprecision (random measurement error) and inaccuracy (systematic measurement error) are given according to EN ISO 8655.
Bottle-top dispenser is not a substitution for a bottle closure. Volatile liquids can disappear.

epMotion® automated pipetting system



Easy to use

- **No other automation compares to epMotion**
 - Software can be fully mastered in only a few hours
 - Optical sensor for safe operation examines the worktable for correct loading
 - No teaching required—labware data is available as free download at www.epMotion.com

Accurate

- **Superior automated liquid handling**
 - Pipetting tools with single- and eight-channel Eppendorf® air cushion technology
 - Pipetting range from 1 to 1,000 µl, always from air to minimize cross-contamination
 - Typical pipetting precision below 2% CV at 1 µl*

Flexible

- **Every application, every day**
 - Tubes range from 0.2 ml PCR to 50 ml blue-cap tubes
 - Plates range from 6 to 96 and 384 wells
 - Filter and non-filter tips, specially selected for straightness, non-carbonized to reduce costs
 - Sterile tips available



















Description

epMotion automates all your pipetting tasks, delivering the most accurate pipetting and relief from tedious bench work for everyone, everyday. Whether it's sample or reagent transfer, assay setup or nucleic acid extraction, even with the smallest sample numbers any application will benefit from automation. Pipetting is more accurate, reproducible and completely standardized.

Automated pipetting is totally hands-free, creating a more efficient and ergonomic workplace. With six models, two instrument sizes and multiple pipetting deck combinations to choose from, epMotion is the perfect companion for your workload. Transition from manual protocols is simple with predefined protocols, and the powerful labware database ensures that virtually any tube or plate can be used.

*Eppendorf application note 168: "Measuring the Accuracy and Precision of the epMotion® 5070 Workstation Using the Artel Multichannel Verification System (MVS®)."

epMotion® applications

epMotion	Capacity	Applications
5070   System description  page 78	4-position deck and 3 virtual positions	General pipetting tasks <ul style="list-style-type: none"> ● Serial dilutions ● Tube to plate transfer ● Reformatting of plates ● Concentration normalization ● Hit-picking ● Reagent transfer ● Pooling Examples: All routine pipetting, e.g. sample/reagent transfer, qPCR or immunoassays
5070 CB   System description  page 80	4-position deck and 3 virtual positions, specially designed to fit into a laminar flow hood or fume hood	Cell culture <ul style="list-style-type: none"> ● Cell separation ● Change of media ● Cytotoxicity assays ● Growth curves ● Soft agar assays ● Cell-based assays ● Apoptosis assays Examples: Cell culture maintenance and assays
5075 LH   System description  page 82	12-position deck <ul style="list-style-type: none"> ● Transporting ● Stacking ability ● 3 thermo modules (optional) 	Genomics applications <ul style="list-style-type: none"> ● Real-time PCR set-up ● PCR set-up with automated amplification ● Sequencing set-up ● SNP detection ● Forensics Examples: All routine pipetting, e.g. sample/reagent transfer, qPCR or immunoassays
5075 VAC   System description  page 84	11-position deck and 1 vacuum station	Nucleic acid purification <ul style="list-style-type: none"> ● gDNA from various matrixes ● Total and viral RNA ● Plasmid preparation ● BAC purification ● PCR and sequencing clean-up ● Bacterial DNA Examples: Nucleic acid extraction, Plug'n'Prep® protocols, filtration, and solid phase extraction
5075 MC   System description  page 88	9-position deck and 1 position for Mastercycler® ep	Complex assays <ul style="list-style-type: none"> ● Luminex® assay set-up ● HLA genotyping ● Advantix PCR slide pipetting Examples: Fully automated PCR: set-up and amplification
5075 TMX   System description  page 86	11-position deck and 1 TMX module	Typical applications <ul style="list-style-type: none"> ● Immunoassays ● Magnetic bead purification ● Hit picking ● Cell assays ● Nucleic acid preparation Examples: Compound screening, PCR set-up, concentration normalizations

epMotion® 5070



epMotion® 5070

Product features

- 4 labware positions, plus three virtual spaces
- Pipetting range from 1 µl to 1,000 µl
- Compatible with micro- and PCR plates
- Compatible with plates up to 384 wells
- Compatible with tubes from 0.2 ml to 50 ml
- Liquid level detection without conductive tips
- Optical sensor* checks the loaded deck
- Safety hood with monitored front door
- Easily exchangeable pipetting tool
- Innovative control panel
- PC editor software available
- Optional PC control version

*U.S. Pat. 6,819,437



30 ml and 100 ml reagent reservoirs

The reagent reservoirs are “PCR clean” as well as autoclavable, and they can be easily placed in the reagent rack; their special geometry minimizes residual volume and makes them ideal vessels for reagents.



Thermorack for Safe-Lock tubes

Rack for up to 24 micro test tubes in the formats 0.5/1.5/2.0 ml.

Applications

- Serial dilutions
- Reagent distribution
- Reformatting into plates
- Sample transfer from tubes to plates
- Sample normalization
- Media change for cell culture
- Real-time PCR set-up
- Cell-based assay set-up
- Immunoassay set-up

Description

epMotion 5070 is the most compact solution for accurate and reproducible automated pipetting. It is a perfect match for all routine applications, such as serial dilutions, reagent distribution, sample transfer from tubes to plates and sample normalization.

Due to its excellent pipetting accuracy, epMotion is the recommended solution for real-time PCR—enabling setups with less reagent volume and excellent reproducibility. Its pipetting technology is based on the classic Eppendorf® piston-stroke pipettes; thus, protocols previously carried out manually are easily transferred to epMotion 5070. Its compatibility to a wide range of predefined consumables also allows established procedures to be maintained. Before every run the optical sensor checks that the required labware is correctly positioned on the deck and it also checks tip type and quantity available.



epMotion control panel

Graphical color display intuitively guides the user through application set-up and execution.

➔ For epMotion ordering information, see page 96.

➔ For more epMotion accessories, see page 90.

epMotion® 5070 CB



epMotion® 5070 CB

Product features

- Compatible with almost all culture hoods
- Innovative light barrier safety lock technology
- Preprogrammed cell culture applications
- Sterile pipette tips
- Autoclavable pipetting tools

Applications

- Cell culture maintenance
- Cell aliquoting
- Media exchange
- Apoptosis testing
- Cyto-toxicity testing
- Cell viability testing
- Soft agar tests

Description

The epMotion 5070 CB is the first automated pipetting system for cell culture applications allowing all of the benefits of automated pipetting to be available for liquid handling tasks inside a laminar flow or fume hood. Cell maintenance is one of the most repetitive tasks in life science research. The epMotion 5070 CB allows you to automate key processes such as seeding cells, media changes, or performing cytotoxicity tests. It enables you to handle 6-, 24- or 48-well plates or even denser formats from 96 to 384 wells. Almost all single tube sizes such as cryotubes®, safe-lock and blue cap tubes up to 50 ml are supported.



epMotion 5070 CB

Used on a sterile workbench.



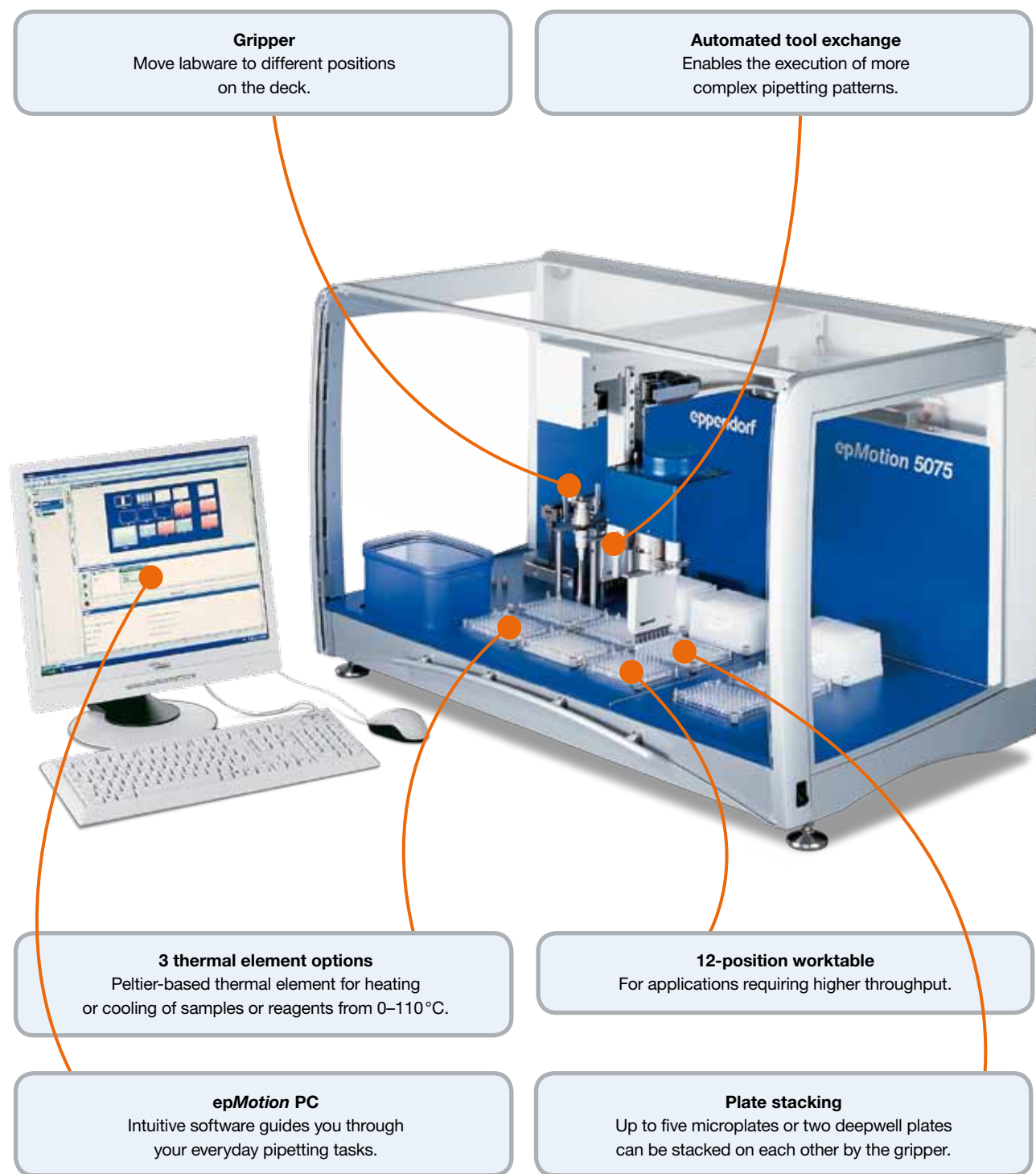
Thermorack for cryotubes

Pre-cooled rack for up to 24 cryotubes.

➔ For epMotion ordering information, see page 96.

➔ For more epMotion accessories, see page 90.

epMotion® 5075 LH



epMotion® 5075 LH

Product features

- 12 labware positions
- Automatic exchange of all tools
- Pipetting range from 1 µl to 1,000 µl
- Thermal module option
- Plate gripper option
- Compatible with tubes from 0.2 ml to 50 ml
- Compatible with plates up to 384 wells
- Plate stacking
- Optical sensor* checks the loaded deck
- Detection of tip size and tip quantity
- Safety hood with monitored front door
- Innovative control panel
- PC editor software available
- Optional PC control version
- Modular system: Upgrade to 5075 VAC, 5075 TMX and 5075 MC possible
- Liquid level detection with unique optical sensor

*U.S. Pat. 6,819,437



Reservoir rack with tube modules

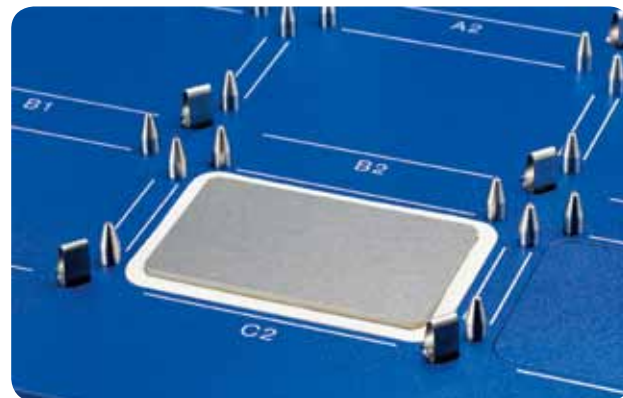
Individually configured and temperature controlled.

Applications

- Serial dilutions
- Reagent distribution
- Reformatting into plates
- Sample transfer from tubes to plates
- Sample normalization
- Pooling of samples
- Media change for cell culture
- Real-time PCR set-up
- Immuno- and cell-based assay set-up
- Compound testing
- Magnetic bead applications

Description

epMotion 5075 LH is the ideal solution for advanced liquid handling procedures. It offers the same outstanding accuracy and precision as the epMotion 5070, making it an ideal tool for demanding small-volume applications, such as real-time PCR setup, magnetic bead purification and all routine pipetting tasks. The 12-position deck and automatic tool exchange expand the application range to include complex pipetting patterns and higher sample numbers. With heating and cooling options as well as the availability of a gripper for labware transport on the deck, the epMotion 5075 LH is a versatile and flexible automated pipetting system that is able to meet the needs of the most demanding research.



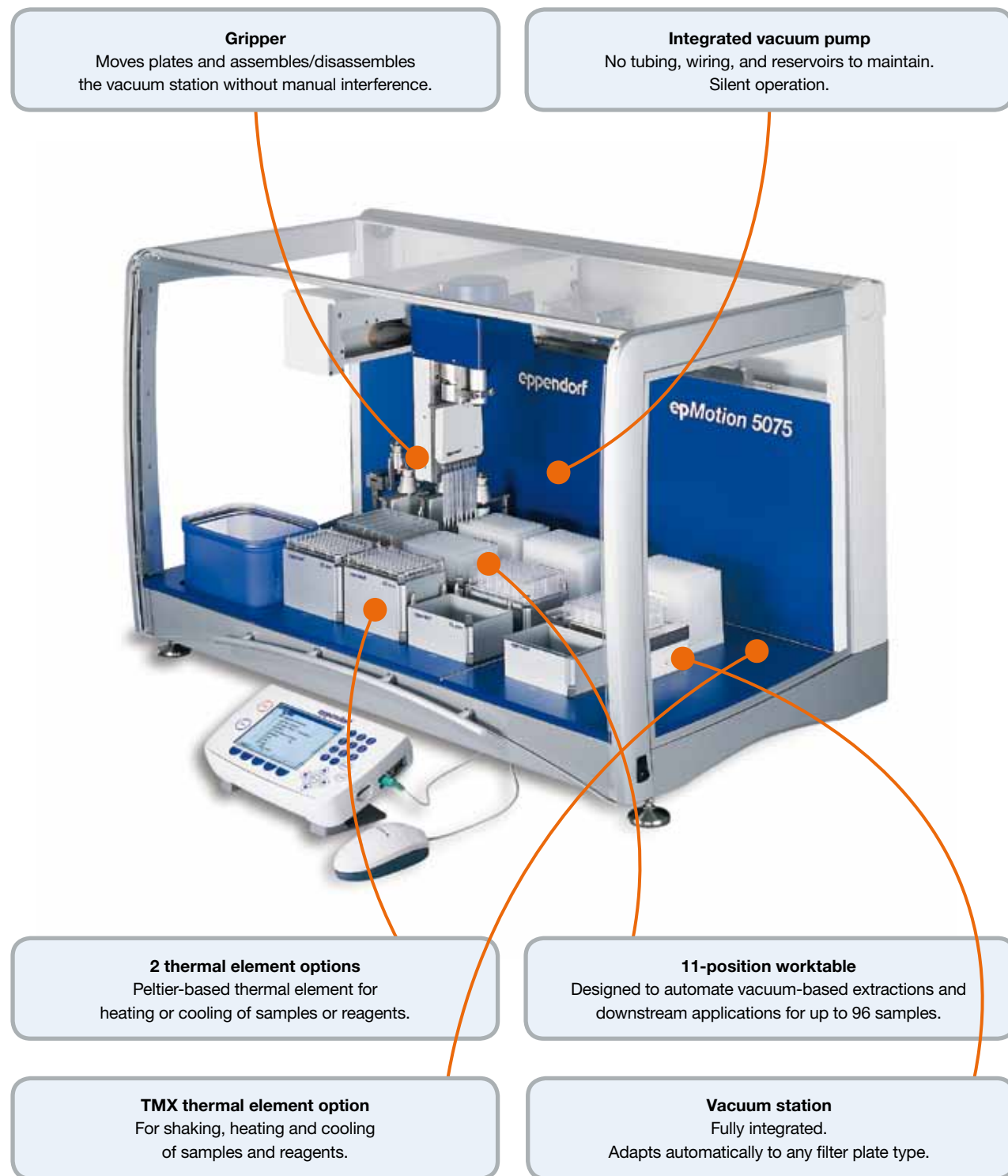
Thermal Modules

Up to three can be used for active heating and cooling of Thermal Racks, Thermal Blocks and Reagent Reservoir Modules.

➞ For epMotion ordering information, see page 96.

➞ For more epMotion accessories, see page 90.

epMotion® 5075 VAC



epMotion® 5075 VAC

Product features

Same as epMotion 5075 LH plus:

- 11 labware positions
- One vacuum position
- Integrated vacuum pump
- Vacuum is fully software controlled
- Universal spring loaded vacuum frame
- Plug'n'Prep® validated protocols

Applications

Same as epMotion 5075 LH plus:

- Vacuum based purification applications
- Solid phase extraction
- Filtration
- Predefined and tested methods for:
 - Plasmid and BAC purification
 - gDNA from blood and tissue
 - gDNA from plants
 - Sequencing and PCR clean-up
 - Total RNA

Description

Complex applications, such as nucleic acid purification should not tie lab personnel to the workbench. The epMotion 5075 VAC allows true walk-away automation of purification protocols that rely on vacuum filtration.

Pre-validated protocols are available for most standard applications, such as plasmid DNA, genomic DNA and RNA purification. The protocols are predefined on the system and setup takes only a few minutes. Additional customized applications can be developed easily using the control panel or the optional epMotion PC software.

The unique Eppendorf silicon mat helps to save time and money by allowing you to use only portions of a 96-well plate when working with smaller sample numbers. The VAC thermo lid also reduces the extraction time substantially by accelerating the ethanol evaporation step.



Labware handling

Reconfiguration of the vacuum chamber and the transport of labware takes place automatically with the gripper.



Integrated vacuum station

Completely integrated vacuum chamber and pump that adapts automatically to any filter plate.

➔ For epMotion ordering information, see page 96.

➔ For more epMotion accessories, see page 90.

epMotion® 5075 TMX



epMotion® 5075 TMX

Product features

Same as epMotion 5075 LH plus:

- 11 labware positions
- TMX module—active mixing/vortexing and temperature control
- Temperature range: 4 °C to 95 °C
- Automatic lock-in of the labware on the TMX position
- Pipetting in other deck positions is possible during the mixing steps

Applications

- Like epMotion 5075 LH plus an integrated shaker/vortexer with heating and cooling
- MagBead based extraction
- Pre-programmed methods for gDNA and RNA
- gDNA from blood and fabric
- Sequencing PCR Clean Up from plants
- Total RNA
- Unique ^{2D}Mix-Control for optimal resuspension

Description

The epMotion 5075 TMX is the most flexible member of the epMotion family of automated pipetting systems. It includes an integrated TMX module to shake, heat or cool samples and reagents. The TMX module can be loaded and unloaded with the gripper and pipetting to the mixer is possible before and after mixing steps. The TMX module is fully software controlled enabling pipetting onto other worktable positions while the mixer is in operation.

TMX mixing is based on Eppendorf's ^{2D}Mix-Control technology. Orbital shaking combined with the perfect balance of speed and mixing radius assures the best stirring results, for example in resuspending bacteria pellets or magnetic beads. The ^{2D}Mix-Control eliminates the need for additional centrifugation steps as the orbital shaking prevents droplets from collecting on the sides of the tube or plate wells.



Plate handling capabilities

A plate gripper allows for the transport of labware to and from the TMX module.



Integrated TMX module

Enables the mixing, heating and cooling of samples and reagents.

➞ For epMotion ordering information, see page 96.

➞ For more epMotion accessories, see page 90.

epMotion® 5075 MC

Automated sealing

Sealing of plates with reusable silicon-based cycle lock system.

Gripper

Moves the plate to the Mastercycler® ep.

Integrated Mastercycler ep

Automated loading of the cyclor.



epMotion® 5075 MC

Product features

Same as epMotion 5075 LH plus:

- 9 labware positions
- Integrated Mastercycler® ep gradient* with motorized lid
- 96-or 384-well PCR block options
- Robust, high-quality aluminum or silver block
- Integrated Mastercycler ep software
- Unique cycle-lock silicon sealing system
- Simultaneous PCR reaction and liquid handling possible

* Mastercycler ep gradient sold separately

Practice of the patented polymerase chain reaction (PCR) process requires a license. The Mastercycler is an Authorized Thermal Cycler and may be used with PCR licenses available from Applied Biosystems. Its use with Authorized Reagents also provides a limited PCR license in accordance with the label rights accompanying such reagents.

Applications

Same as epMotion 5075 LH plus:

- Fully automated sample preparation and subsequent amplification in the Mastercycler ep
- Automated PCR and in 96-/384-well plate formats
- Automated sequencing reactions in 96-/384-well plate formats
- *In vitro* plasmid amplification
- Automated DNA extraction and profiling of forensic FTA® samples

Description

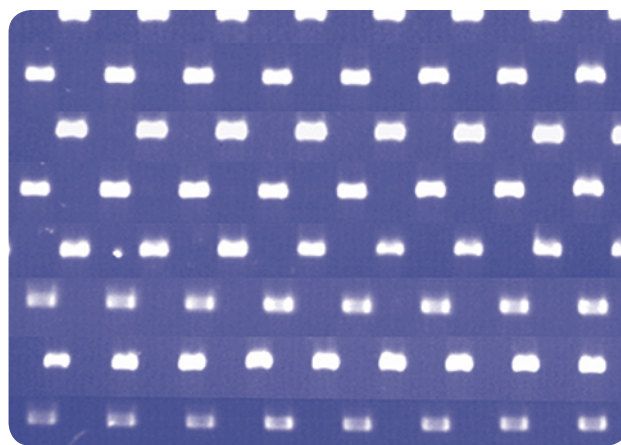
epMotion 5075 MC combines sample preparation and PCR in an enclosed system for automated “walk-away” amplification reactions. This version can be equipped with all motorized lid models of the Eppendorf Mastercycler ep line of thermal cyclers.

The cycler software is integrated in the epMotion software, so both system components can easily be programmed with the same innovative control panel. Deck positions can be used for liquid handling protocols while the cycler is running.



Ready to go

The epMotion 5075 MC and Mastercycler ep provide a great combination for the automation and execution of PCR reactions.



Dispensing without cross-contamination

Amplification of the 535 bp fragment of the human β -globin gene in a 384-well format, where every other well contains a negative control in a checkerboard pattern.

➔ For epMotion ordering information, see page 96.

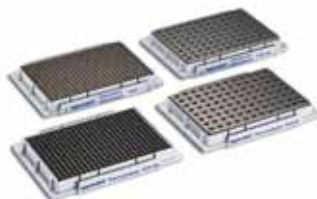
➔ For more epMotion accessories, see page 90.

epMotion® automated pipetting system accessories



Reservoir rack

Enables the use of up to 7 reagent rack modules or reservoirs.



Thermoracks and adapters

For use with 96- and 384-well PCR plates on thermal elements.



Reservoir rack modules TC

Modules for the reservoir rack. Seven module sizes are available to use tubes from 0.2 ml to 50 ml. Temperature-controlled when used with a thermal module.



Height adapter

Various height adapters enable exact height level adjustment and accelerated processing of microplates.



30 ml and 100 ml reagent reservoir

The reagent reservoirs are both "PCR clean," autoclavable, and can be placed in the reservoir rack. Their special geometry minimizes residual volume.



Thermoblock for PCR plates

Thermal block holds 96- or 384-well PCR plates. Allows for temperature control when used with a thermal module.



Racks for single test tubes

For micro test tubes, glass, or plastic tubes or various sizes.



Gripper for epMotion 5075

For the transport of labware on the worktable and for automatic operation of the vacuum manifold.



Thermoadapter DWP 96

For heating or cooling of deepwell plates. Plates can be exchanged by the gripper.



Thermal module (only epMotion 5075)

For thermoracks and 96- and 384-well PCR plates. Cool or heat up to 3 positions on the deck.



Thermoracks for 24 x Safe-Lock 0.5/1.5/2 ml tubes

For 24 micro test tubes.



Dispensing tools

3 different dispensing tools are available from either 1–50 µl, 20–300 µl or 40–1,000 µl in either single- or 8-channel formats.

➔ For ordering information, see pages 96 to 99.

epMotion® tools and tips

Accuracy and reproducibility delivered

Based on Eppendorf® classic air cushion pipetting technology

- No tubes, no wires, no air bubbles
- As simple to operate and maintain as a manual pipette
- Excellent pipetting precision, typically below 2% CV at 1 µl*
- Automatic alert when pipetting tools need calibration
- Ultra-low dead volume pipetting
- Every tool tested and certified to ISO 85540

*Eppendorf application note 168: "Measuring the Accuracy and Precision of the epMotion® 5070 Workstation using the Artel Multichannel Verification System (MVS®)."



epT.I.P.S. Motion

Specially selected tips for use in automated systems. Each tip is inspected for straightness prior to packaging. This ensures a perfect handling of 96- and 384-well micro and PCR plates.

- Box packaging ensures contamination-free tip loading
- Non-carbonized, pure virgin polypropylene, both tip and box are recyclable
- Standard, filter, and sterile tips available
- PCR-clean quality grade for filter tips



- 50 µl filter tip



- 50 µl tip without filter



- 300 µl filter tip



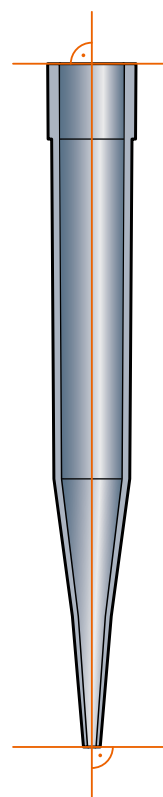
- 300 µl tip without filter



- 1,000 µl filter tip



- 1,000 µl tip without filter



epMotion® Control: two smart options

Product features

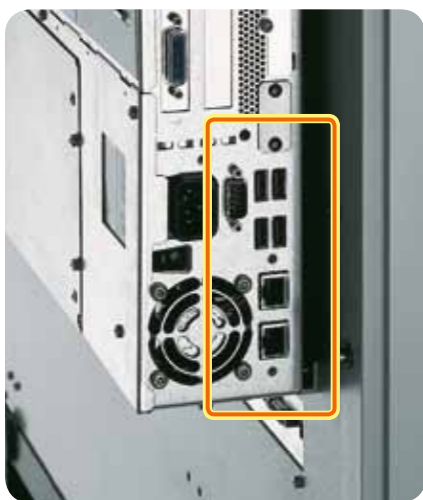
- The epMotion PC version with epBlue™ software offers the most convenient way ever to use an automated liquid handling system
- The epMotion control panel provides all functions and Windows® style programming in an ultra-compact design

Description

epMotion offers you two options to control automated pipetting: the epMotion PC version or the epMotion control panel.

Whatever you choose, the innovative epMotion functions make programming easy; pipetting pattern recognition, labware database, and liquid classes are always included.

epMotion PC version



Product feature

- The network interface of the integrated PC allows the remote control of the epMotion via direct ethernet connection. Method files can be shared using the computer network or USB port.

epMotion control panel



Product features

- Graphical user interface
- Drag and drop programming
- Windows explorer style organization
- User management
- Run reports
- Software preinstalled on the control panel

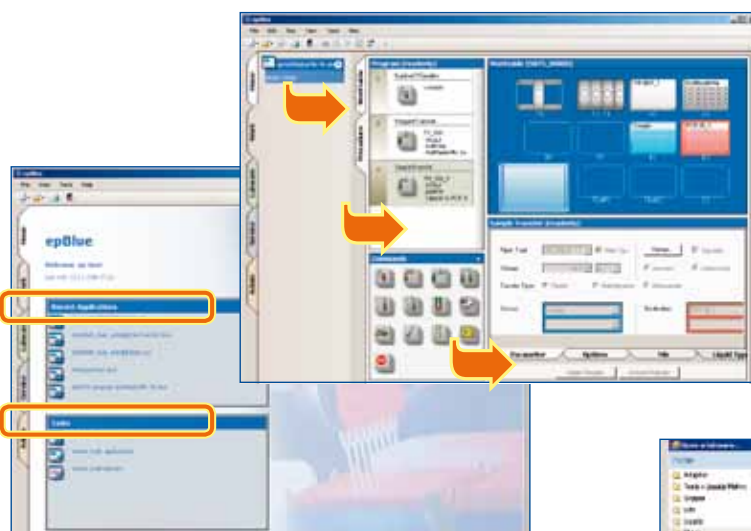
epMotion® PC software: epBlue™—intuitive operation and programming

Description

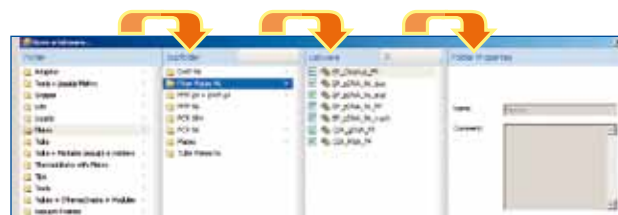
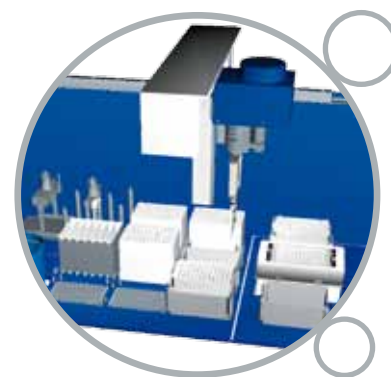
Simple and clear, epBlue guides you through your everyday pipetting tasks: Choose your objective in the home section and follow the epBlue commands from left to right with unique guiding menus and the consistent, tab-based structure. With the unmatched ease-of-use of epBlue, even complex methods can be generated in minutes.

Pipetting pattern recognition, labware database, and liquid classes are built-in and organized for intuitive use. Simply set up your worktable, select the pipetting commands, simulate, and launch. Operating and programming epBlue is fast and easy.

- Safe operation through 3D run-simulation



- The home screen provides fast access to the main functions and personal list of the recently used methods, while the intuitive graphical user interface provides a consistent, tab-based workflow from left to right



- Menus guide you step by step through the software functions

epMotion editor—easy off-line program management

epMotion editor

A separate, off-line software package for generating and editing methods as well as printing and archiving program processes on your PC.

Product features

- Programming functions analogous to the control panel
- Graphical user interface identical to epBlue
- Print function
- Archiving function
- Transfer of methods using the MMC card

epMotion® automated pipetting system

Technical specifications		5070	5075 LH	5075 VAC
Surface				
System:	Width	39 in/98 cm	56 in/140 cm	56 in/140 cm
	Depth	30 in/75 cm	30 in/75 cm	30 in/75 cm
Dimensions (W x D x H)				
Device:	Width	26 in/65 cm	43 in/107 cm	43 in/107 cm
	Depth	19 in/48 cm	24 in/61 cm	24 in/61 cm
	Height	25 in/63 cm	27 in/67 cm	27 in/67 cm
Control panel:	Width	10 in/25 cm	10 in/25 cm	10 in/25 cm
	Depth	6 in/15 cm	6 in/15 cm	6 in/15 cm
	Height	4 in/11 cm	4 in/11 cm	4 in/11 cm
Weight				
Device:		99 lb/45 kg	187 lb/85 kg	198 lb/90 kg
Control panel:		3 lb/1.2 kg	3 lb/1.2 kg	3 lb/1.2 kg
Power supply				
Voltage:		110–130 V ±10%	110–130 V ±10%	110–130 V ±10%
Frequency:		50–60 Hz ±5 %	50–60 Hz ±5%	50–60 Hz ±5%
Max. output:		80 W	1,000 W	1,000 W
Dispensing tools				
Volume:	1 µl			
Systematic measurement error:		±15%	±15%	±15%
Random measurement error:		≤5%	≤5%	≤5%
Volume:	50 µl			
Systematic measurement error:		±1.2%	±1.2%	±1.2%
Random measurement error:		≤0.4%	≤0.4%	≤0.4%
Volume:	1,000 µl			
Systematic measurement error:		±0.7%	±0.7%	±0.7%
Random measurement error:		≤0.15%	≤0.15%	≤0.15%
in pipetting mode, free jet, without pre-wetting, with distilled water, at 20°C				
Conductor				
X, Y, Z Positioning:				
Systematic measurement error:		±0.3 mm	±0.3 mm	±0.3 mm
Random measurement error:		±0.1 mm	±0.1 mm	±0.1 mm
Positions in MTP-Format:		4	12	12
Detector				
Optical confocal infrared detector:		contact-free detection of liquid levels, tools used, labware worktables, tip types and quantities		
Optical sensor:*		liquid surface must be 90 ±3° to the vertical plane of the optical sensor		
Gripper				
Carrying capacity:		≤1,200 g	≤1,200 g	≤1,200 g
Vacuum unit				
Max. output:		-	-	35 L/min
Suction range:		-	-	0.1–0.85 ±0.05 Pa
Suction time:		-	-	1–99 min

* U.S. Pat. 6,819,437

epMotion® automated pipetting system

Technical specifications		5075 TMX	5075 MC	5070 CB
Surface				
System:	Width	56 in/140 cm	56 in/140 cm	39 in/98 cm
	Depth	30 in/75 cm	30 in/75 cm	24 in/62 cm
Dimensions (W x D x H)				
Device:	Width	43 in/107 cm	43 in/107 cm	26 in/65 cm
	Depth	24 in/61 cm	24 in/61 cm	19 in/48 cm
	Height	27 in/67 cm	27 in/67 cm	25 in/63 cm
Control panel:	Width	10 in/25 cm	10 in/25 cm	10 in/25 cm
	Depth	6 in/15 cm	6 in/15 cm	6 in/15 cm
	Height	4 in/11 cm	4 in/11 cm	4 in/11 cm
Weight				
Device:		209 lb/95 kg	224 lb/102 kg	99 lb/45 kg
Control panel:		3 lb/1.2 kg	3 lb/1.2 kg	3 lb/1.2 kg
Power supply				
Voltage:		110–130 V ±10%	110–130 V ±10%	110–130 V ±10%
Frequency:		50–60 Hz ±5%	50–60 Hz ±5 %	50–60 Hz ±5%
Max. output:		1,000 W	1,000 W	70W
Dispensing tools				
Volume:	1 µl			
Systematic measurement error:		±15%	±15%	±15%
Random measurement error:		≤5%	≤5%	≤5%
Volume:	50 µl			
Systematic measurement error:		±1.2%	±1.2%	±1.2%
Random measurement error:		≤0.4%	≤0.4%	≤0.4%
Volume:	1,000 µl			
Systematic measurement error:		±0.7%	±0.7%	±0.7%
Random measurement error:		≤0.15%	≤0.15%	≤0.15%
in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C				
Conductor				
X, Y, Z Positioning:				
Systematic measurement error:		±0.3 mm	±0.3 mm	±0.3 mm
Random measurement error:		±0.1 mm	±0.1 mm	±0.1 mm
Positions in MTP-Format:		10	10	4
Detector				
Optical confocal infrared detector:		contact-free detection of liquid levels, tools used, labware worktables, tip types and quantities		
Optical sensor:*		liquid surface must be 90° ±3° to the vertical plane of the optical sensor		
Gripper				
Carrying capacity:		≤1,200 g	≤1,200 g	≤1,200 g
Vacuum unit				
Max. output:		-	-	-
Suction range:		-	-	-
Suction range:		-	-	-

*U.S. Pat. 6,819,437

epMotion® automated pipetting system

Ordering information

Description	Catalog No.	List USD
epMotion automated pipetting systems		
epMotion 5070 with control panel , basic device incl. control panel, mouse, software, waste box, MMC, and reader, 50/60 Hz, 100–240 V	960000005	Inquire
epMotion 5070 CB with control panel , epMotion to be operated inside closed containers, basic device incl. control panel, mouse, software, waste box, MMC, and reader, 50/60 Hz, 100–240 V	960000021	Inquire
epMotion 5075 LH with control panel , basic device incl. control panel, software, waste box, MMC, and reader, 50/60 Hz, 100–240 V	960020006	Inquire
epMotion 5075 VAC with control panel , basic device incl. control panel, software, vacuum system, gripper, waste box, MMC, and reader, 50/60 Hz, 100–240 V	960020014	Inquire
epMotion 5075 MC with control panel , basic device incl. control panel, software, cycler bay, gripper, waste box, MMC, and reader, 50/60 Hz, 100–240 V. Mastercycler® not included.	960020022	Inquire
epMotion 5075 TMX with control panel , basic device incl. Thermomixer, control panel, mouse, software, waste box, MMC and reader, 50/60 Hz, 100–240 V	960020033	Inquire
epMotion with integrated PC		
epMotion 5070 PC version Same as 5070 catalog no. 960000005 but with integrated industrial PC, keyboard, and mouse instead of control panel. Includes monitor and epBlue™ software.	960000111	Inquire
epMotion 5070 CB PC version Same as 5070 catalog no. 960000021 but with integrated industrial PC, keyboard, and mouse instead of control panel. Software and monitor not included.	960000200	Inquire
epMotion 5075 LH PC version Same as 5075 catalog no. 960020006 but with integrated industrial PC, keyboard, and mouse instead of control panel. Includes monitor and epBlue software.	960020111	Inquire
epMotion 5075 VAC PC version Same as 5075 catalog no. 960020014 but with integrated industrial PC, keyboard, and mouse instead of control panel. Includes monitor and epBlue software.	960020222	Inquire
epMotion 5075 MC PC version Same as 5075 catalog no. 960020022 but with integrated industrial PC, keyboard, and mouse instead of control panel. Includes monitor and epBlue software.	960020333	Inquire
epMotion 5075 TMX PC version Same as 5075 catalog no. 960020033 but with integrated industrial PC, keyboard, and mouse instead of control panel. Includes monitor and epBlue software.	960020444	Inquire
Monitor , 19" TFT monitor to be used with epMotion versions with integrated PC	960021044	Inquire
epBlue—epMotion PC software , operating software for epMotion versions with integrated PC, preinstalled	960000309	Inquire
Upgrade and retrofit sets		
MC , for retrofitting an LH version into an MC version	960021002	Inquire
VAC , for retrofitting an LH version into a VAC version	960021011	Inquire
Software and hardware upgrade set 1 , upgrade kit for epMotion 5075 with serial numbers <1,000	960021022	Inquire
Hardware upgrade set 2 , includes integrated industrial PC, mouse, keyboard, monitor and epBlue software	960021033	Inquire

OEM components of the epMotion can be placed at the disposal of developers and manufacturers of similar devices as a basic module on request. Please contact our Customized Solutions department (see page 256).
* U.S. Pat. 6,819,437

epMotion® automated pipetting system

Ordering information

Description	Catalog No.	List USD
Dispensing tools		
Highly precise pipetting heads, for use in the tool holder of the epMotion workstation. Each dispensing tool is completely autoclavable at 121 °C, 1 bar for 20 min. A quality certificate for the measurement results accompanies each tool.		
TS 50 , single-channel dispensing tool for the volume range 1–50 µl	960001010	\$2,250.00
TS 300 , single-channel dispensing tool for the volume range 20–300 µl	960001028	2,250.00
TS 1000 , single-channel dispensing tool for the volume range 40–1,000 µl	960001036	2,250.00
TM 50-8 , 8-channel dispensing tool for the volume range 1–50 µl	960001044	3,970.00
TM 300-8 , 8-channel dispensing tool for the volume range 20–300 µl	960001052	3,970.00
TM 1000-8 , 8-channel dispensing tool for the volume range 40–1,000 µl	960001061	3,970.00
Holder , for 6 dispensing tools	960001109	284.00
epT.I.P.S. Motion pipette tips		
Pipette tips for automated systems in individual racks, for use with the epMotion. Tip type and size are automatically recognized on the device. 96 epT.I.P.S./rack, 15 racks per set.		
Without filter , sterile		
50 µl, sterile, volume range 1–50 µl, 15 x 96 tips in racks	960050200	139.00
300 µl, sterile, volume range 20–300 µl, 15 x 96 tips in racks	960050202	139.00
1,000 µl, sterile, volume range 40–1,000 µl, 15 x 96 tips in racks	960050204	139.00
Without filter , Eppendorf Quality		
50 µl, volume range 1–50 µl, 15 x 96 tips in racks	960050002	118.00
300 µl, volume range 20–300 µl, 15 x 96 tips in racks	960050045	118.00
1,000 µl, volume range 40–1,000 µl, 15 x 96 tips in racks	960050088	118.00
Filtertips , sterile and PCR clean		
50 µl, sterile, volume range 1–50 µl, 15 x 96 tips in racks	960050201	272.00
300 µl, sterile, volume range 20–300 µl, 15 x 96 tips in racks	960050203	272.00
1,000 µl, sterile, volume range 40–1,000 µl, 15 x 96 tips in racks	960050205	272.00
Filtertips , PCR clean		
50 µl, volume range 1–50 µl, 15 x 96 Filtertips in racks	960050029	230.00
300 µl, volume range 20–300 µl, 15 x 96 Filtertips in racks	960050061	230.00
1,000 µl, volume range 40–1,000 µl, 15 x 96 Filtertips in racks	960050100	230.00
Reservoir rack modules		
Reservoir rack modules are inserted in a reservoir rack. They can be temperature controlled with a thermal module for heating and cooling.		
PCR 0.2 ml , for 8 x 0.2 ml PCR tubes	960002601	370.00
PCR 0.5 ml , for 8 x 0.5 ml PCR tubes	960002611	370.00
Safe-Lock , for 4 x 0.5/1.5/2 ml tubes	960002620	385.00
Tubes Ø 12 mm , for 4 x Ø 12 mm tubes	960002630	390.00
Tubes Ø 16 mm , for 4 x Ø 16 mm tubes	960002640	390.00
15 ml Tubes "Blue Cap" , for 4 x Ø 17 mm tubes	960002650	385.00
50 ml Tubes "Blue Cap" , for 2 x Ø 29 mm tubes	960002660	390.00
Reservoir adapter 30 ml , for 1 x epMotion reservoir 30 ml	960002670	155.00
Reservoir adapter 100 ml , for 1 x epMotion reservoir 100 ml	960002680	155.00

i Please contact Eppendorf North America to receive a quotation for epMotion automated pipetting systems and accessories.

epMotion® automated pipetting system

Ordering information

Description	Catalog No.	List USD
Racks		
For 24 glass or plastic tubes, no temperature control		
Ø 17 mm x 100 mm max. length	960002024	\$ 355.00
Ø 17 mm x 60 mm max. length	960002156	355.00
Ø 16 mm x 100 mm max. length	960002032	355.00
Ø 16 mm x 60 mm max. length	960002164	355.00
Ø 15 mm x 100 mm max. length	960002377	355.00
Ø 15 mm x 60 mm max. length	960002326	355.00
Ø 14 mm x 100 mm max. length	960002369	355.00
Ø 14 mm x 60 mm max. length	960002334	355.00
Ø 13 mm x 100 mm max. length	960002041	355.00
Ø 13 mm x 60 mm max. length	960002342	355.00
Ø 12 mm x 100 mm max. length	960002059	355.00
Ø 12 mm x 60 mm max. length	960002351	355.00
Rack for 24 x HPLC tubes, Ø 12 mm x 40 mm max. length	960002380	345.00
Rack for 96 x 1.5/2.0 ml screw-cap tubes, requires 2 positions on the deck	960002318	905.00
Thermorack for 24 x cryotubes® or labelled Safe-Lock tubes	960002491	1,285.00
Height adapters		
For uniform levels of labware; enables faster processing of the plate		
85 mm	960002105	505.00
55 mm	960002113	505.00
40 mm (for epT.I.P.S. Motion pipette tips)	960002121	505.00
Accessories for epMotion 5070/5075		
epMotion editor , includes editor key, software package for creating and editing methods and for printing out and archiving program sequences on a PC	960000269	2,770.00
epMotion editor , additional license	960000300	1,080.00
MultiMediaCard , for archiving parameters and transporting data between control panel and PC	960002008	86.00
Waste container , receptacle for used pipette tips, with lid	960002016	113.00
Thermorack for 24 x 0.5 ml Safe-Lock tubes, for a supply of 24 test tubes, temperature control	960002067	1,030.00
Thermorack for 24 x 1.5/2 ml Safe-Lock tubes, for a supply of 24 test tubes, temperature control	960002075	1,030.00
Thermoadapter for Eppendorf Deepwell Plates 96	960002391	1,460.00
Adapter sleeves , 1 set = 25 pieces for reconfiguration of the thermo rack (1.5/2.0 ml) for use with 0.5 ml tubes	960002172	325.00
Assembly plate , to be used with epMotion 5070 CB, supports laminar flow worktable	960002570	480.00
Temperature controlled shaker , upgrade option for the 5075 LH and 5075 VAC	960021055	8,190.00

i Please contact Eppendorf North America to receive a quotation for epMotion automated pipetting systems and accessories.

epMotion® automated pipetting system

Ordering information

Description	Catalog No.	List USD
Accessories for PCR/real-time PCR		
Rack Smart , for holding one tube rack of SmartCycler® reaction tubes	960002520	\$ 330.00
Rack LC 20 µl/100 µl , for holding up to 96 x 20 µl or 100 µl LightCycler® capillaries, for use with, e.g., Centrifuge 5804/5804 R or 5810/5810 R, set of 2	960002511	2,510.00
Thermorack CB 100 µl , for holding up to 384 x 0.1 ml strip tubes in the Corbett Research Rotor-Gene 3000	960002500	1,345.00
Thermoadapter for PCR plates, 96-well, skirted , for heating or cooling of PCR plates; plates are exchangeable using the gripper	960002199	795.00
Thermoadapter for PCR plates, 384-well, skirted , for heating or cooling of PCR plates; plates are exchangeable using the gripper	960002202	885.00
Thermoadapter Frosty , combination of height adapter and PCR-Cooler for cooling of skirted PCR plates	960002300	780.00
Thermoblock for PCR plates, 96-well , for use with 96 x 0.2 ml tubes or a PCR plate 96	960002083	795.00
Thermoblock for PCR plates, 384-well , for use with a PCR plate 384	960002091	885.00
CycleLock starter set , 1 frame and 8 mats for automated sealing of Eppendorf® PCR plates, PCR clean; can only be used with Mastercycler® ep	960002288	330.00
CycleLock mats , 5 sealing mats, PCR clean, frame not included	960002296	89.00
Accessories		
Reservoir rack , for use with 30 ml and 100 ml reagent reservoirs, holds max. seven reservoirs of 30 ml or 100 ml filling volumes	960002148	170.00
epMotion Reservoir		
Large volume reservoir, must be used with a reservoir rack. Two sizes: 30 ml or 100 ml maximum volume. 5 reservoirs packed in separate bags, 10 bags per set. All reservoirs are PCR clean (free of human DNA, DNase, RNase and PCR inhibitors) and made of polypropylene. Production batch-tested, certified.		
30 ml, set of 50	960051009	205.00
100 ml, set of 50	960051017	300.00
Accessories for nucleic acid purification		
Vac frame holder	960002237	505.00
Vac lid	960002245	345.00
Mat , for vacuum lid	960002407	225.00
Vac frame 1	960002253	1,030.00
Vac frame 2	960002261	1,030.00
Collection Plate Adapter , for handling collection microtubes in microtube racks	960002531	125.00
Channeling Plate Adapter , for vacuum-processing foaming solutions through multiwell plates, set of 10	960002540	57.00
Vac Thermo Lid , for effective drying of filter plates in epMotion 5075 VAC vacuum chamber Note: additional thermal module required	960002551	1,870.00
Accessories for epMotion 5075 only		
Thermal module , for heating and cooling microplates and thermal racks	960002181	6,680.00
Gripper , for transporting plates on the deck and for automatic operation of the vacuum chamber	960002270	7,700.00
Gripper holder	960002211	570.00

epMotion® Performance Plans

Performance Plan Value

Choose a plan that’s right for you. Preventive Maintenance is at the heart of every epMotion Performance Plan. It’s a schedule of services designed to check your system and preserve its maximum performance quality. With Advantage Service a preventive maintenance is combined with a single service repair visit including any parts, labor and travel, for a value packaged offering. Our Premium Service Plan is a full service agreement to cover everything on unlimited visits and an annual Preventive Maintenance.

epMotion Tool Calibration

Dispensing tools are precision devices. For this reason they should be regularly maintained and calibrated, which will help to ensure that they continue to perform with high precision and accuracy.

Calibration of the dispensing tools can be performed according to ISO 8655 with NIST-traceable standards supporting GLP documentation.



Calibration of dispensing tool (gravimetric), thermal module and vacuum chamber S.

Performance plans (1-year contract)	Preventive Maintenance	Advantage Service	Premium
Cleaning and lubricating the device and components	●	●	●
Mechanical inspection and adjustment, if necessary	●	●	●
Software update (upon customer request)	●	●	●
Replacement of all dispensing tool seals	●	●	●
Function test and calibration of level sensor and carrier on all models; plus vacuum chamber of epMotion 5075 VAC	●	●	●
Function test according to service test methods	●	●	●
Full documentation	●	●	●
Number of emergency visits included	0	1	unlimited
Warranty extension (parts and labor)	–	12 Months	12 months
Preventive maintenance visits per plan year	1	1	1

Please contact Eppendorf Customer Support at 800-645-3050, menu option 1, for a quotation.

Long term benefits of Performance Plans

- Confidence in results
- Assurance of performance over an extended lifetime
- GLP compliance

Features of Eppendorf® Performance Plans

- Complete satisfaction and quality delivered by Eppendorf experts
- Complete programs—easy to understand, easy to budget, no surprises
- Complete documentation management—everything you need to be in compliance

i For more information go to www.eppendorfna.com/service

epMotion Tool Calibration Service Summary

Procedures	Advantage epMotion Tool Certification	epMotion Tool GLP/ GMP Custom
Internal/external inspection and cleaning of pipetting tool	Yes	Yes
Replacement of worn or broken parts, if needed*	Yes	Yes
Pipette calibration performed using NIST-traceable, semi-micro (0.00001g) balance	Yes	Yes
Number of measuring points:		As requested, based on customer requirements; may include “as found” data. Min 4/channel Max 10/channel
single-channel tool	4 low/mid/high	
multichannel tool	4 low/mid/high per channel	
Individual weighing results:		
measured	Yes	Yes
recorded	Yes	Yes
Mean volume, inaccuracy and imprecision values measured and recorded	Yes	Yes
Calibration label applied to pipetting tool	Yes	Yes
Calibration report supplied	Yes	Yes
Single-channel pipetting tool (spare parts additional if needed)		
Catalog No.	901510597	901510600
List USD (shipping not included)	\$85.00 (includes 4/4/4 as returned only)	\$85.00 plus \$0.50 per extra reading
Multichannel pipetting tool (spare parts additional if needed)		
Catalog No.	901510599	901510602
List USD (shipping not included)	\$150.00 (includes 4/4/4 as returned only)	\$150.00 plus \$0.50 per extra reading

* Spare parts additional if needed.