



Eppendorf Research[®] plus

The ultra light pipette that delights your hand

The Eppendorf Research plus mechanical pipette combines over 50 years of innovation in liquid handling and is one of the most commonly used pipettes in the world. It provides you with one of the safest and most ergonomic pipettes available today. The Research plus microliter pipette protects the health of our customers during their daily work in the laboratory. It has pioneered the renowned Eppendorf PhysioCare Concept[®] and thus reduced the strain on hand and arm during pipetting essentially. The Research plus is the pipette family with the lowest weight and lowest operation forces in the Eppendorf product families. Lower operation forces can only be reached with our Eppendorf electronic pipettes. Enjoy excellent flexibility and choose among single-channel pipettes in fixed or variable volume as well as multi-channel pipette options with 8, 12, 16 and 24 channels.



PhysioCare
VIA concept

Product features

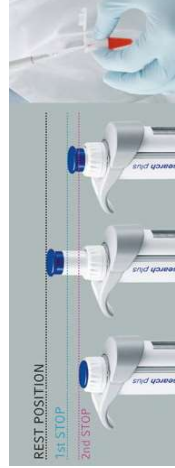
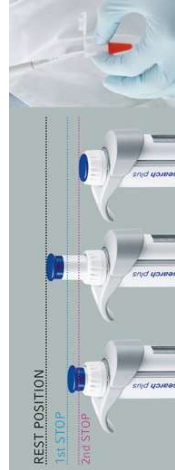
- > Air-cushion pipette for accurate pipetting of aqueous solutions
- > Feel the difference in weight and pipetting forces: the ultra light mechanical pipette is designed according to the strict criteria of the Eppendorf PhysioCare Concept and limits the strain on your hand and arm
- > Spring loaded tip cone (available for all pipettes up to 1 mL) for minimal tip attachment forces helps to reduce stress
- > Low tip ejection force of Eppendorf Research plus (3.6 N)
- > Adjust your pipette in seconds for better accuracy when pipetting various difficult liquids like ethanol or even when pipetting at high altitudes. Return to factory adjustment without calibration
- > Autodrive the entire pipette or only the lower part according to your needs to ensure decontamination
- > Enjoy excellent flexibility and choose among single-channel pipettes in fixed or variable volume as well as 8, 12, 16 and 24 channel pipettes

Applications

- > Forward pipetting
- > Reverse pipetting
- > Removal of supernatants
- > Sample mixing
- > Phase extraction
- > Filling of plates, gels, and reaction vessels

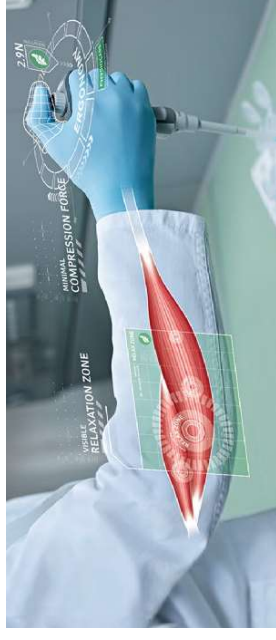
Forward and reverse pipetting

Transfer	Forward pipetting	Reverse pipetting
Liquid uptake	1. Press operating button down to 1st stop 2. Let operating button move up completely	1. Press operating button down to 2nd stop 2. Let operating button move up completely
Liquid discharge	3. Press operating button via 1st stop down to 2nd stop 4. No liquid is left in tip after action	3. Press operating button down to 1st stop 4. Liquid is left in tip after action (volume of blow-out)
Observation		



➤ For more information go to: <https://handling-solutions.eppendorf.com/liquid-handling/pipetting-facts/pipetting-of-challenging-liquids/>

Technical specifications subject to change.



Fatigue-free pipetting

Strain on your hand and arm is limited by reduced tip attachment and ejection force. For more information go to <https://handling-solutions.eppendorf.com/liquid-handling/pipetting-facts/ergonomics/>



A joy for your eyes - The display

4-digit volume display with magnifying window. Easy to read. Allows for more accurate volume setting.

Secondary adjustment option for various liquid classes

Adjust your pipetting volume in seconds by up to ±2 % for better accuracy when pipetting various difficult liquids like warm, cold, volatile or high density liquids or even when external conditions change (e.g., altitude or use of elongated tips). Change back to factory adjustment easily without calibration.



It is Your Choice

Eppendorf Research plus adjustable and fixed volume pipettes

Dispensing adjustable volumes within a range of 0.1 µL and 10 mL is possible by using variable volume pipettes. Fixed volume pipettes are the perfect tool for beginners and labs on a budget. In addition, they allow working at a faster pace. Finally, it is less likely to commit an error and calibration is much more easier.

Eppendorf Research plus single- and multichannel pipettes

Depending on the vessel type you can choose between:

- > Single-channel pipettes for tubes
- > 8 and 12-channel pipettes for 96 and 24-well plates
- > 16 and 24-channel pipettes for 384-well plates

Eppendorf Research plus Move It pipettes with adjustable cone distance

When moving samples from one vessel format to another, instead of pipetting many times, up to twelve samples can now be moved simultaneously. Move It pipettes have adjustable cones for variable tip spacings according to your vessel format. See also page 41 for more information.



Eppendorf Research® plus

Single-channel pipettes, fixed volume

Ordering information		Color code	Rel. systematic error ¹⁾	Abs. systematic error ²⁾	Rel. random error ¹⁾	Abs. random error ²⁾	Order no.
Volume range	Color code						
Eppendorf Research® plus, single-channel, fixed							
10 µL	medium gray		±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	3121 000 015
10 µL	yellow		±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	3121 000 023
20 µL	light gray		±0.8 %	±0.16 µL	±0.3 %	±0.06 µL	3121 000 031
20 µL	yellow		±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	3121 000 040
25 µL	yellow		±1.0 %	±0.25 µL	±0.3 %	±0.08 µL	3121 000 058
50 µL	yellow		±0.7 %	±0.35 µL	±0.3 %	±0.15 µL	3121 000 066
100 µL	yellow		±0.6 %	±0.6 µL	±0.2 %	±0.2 µL	3121 000 074
200 µL	yellow		±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	3121 000 082
200 µL	blue		±0.6 %	±1.7 µL	±0.2 %	±0.4 µL	3121 000 090
250 µL	blue		±0.6 %	±1.5 µL	±0.2 %	±0.5 µL	3121 000 104
500 µL	blue		±0.6 %	±3.0 µL	±0.2 %	±1.0 µL	3121 000 112
1,000 µL	blue		±0.6 %	±6.0 µL	±0.2 %	±2.0 µL	3121 000 120

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

Single-channel pipettes, variable volume

Ordering information		Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ²⁾	Rel. random error ¹⁾	Abs. random error ²⁾	Order no.
Volume range	Color code							
Eppendorf Research® plus, single-channel, variable, incl. epi.I.P.S.® Box								
0.1 – 2.5 µL	dark gray		0.1 µL	±48.0 %	±0.048 µL	±12.0 %	±0.012 µL	3120 000 011
			0.25 µL	±12.0 %	±0.03 µL	±12.0 %	±0.015 µL	
			1.25 µL	±2.5 %	±0.031 µL	±1.5 %	±0.019 µL	
			2.5 µL	±1.4 %	±0.035 µL	±0.7 %	±0.018 µL	
0.5 – 10 µL	medium gray		0.5 µL	±8.0 %	±0.04 µL	±5.0 %	±0.025 µL	3120 000 020
			1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL	
			5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL	
			10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL	
2 – 20 µL	light gray		2 µL	±5.0 %	±0.1 µL	±1.5 %	±0.03 µL	3120 000 097
			10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	
			20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	
2 – 20 µL	yellow		2 µL	±5.0 %	±0.1 µL	±1.5 %	±0.03 µL	3120 000 038
			10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	
			20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	
10 – 100 µL	yellow		10 µL	±3.0 %	±0.3 µL	±1.0 %	±0.1 µL	3120 000 046
			50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL	
			100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL	
20 – 200 µL	yellow		20 µL	±2.5 %	±0.5 µL	±0.7 %	±0.14 µL	3120 000 054
			100 µL	±1.0 %	±1.0 µL	±0.3 %	±0.3 µL	
			200 µL	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	
30 – 300 µL	orange		30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL	3120 000 100
			150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL	
			300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL	
100 – 1,000 µL	blue		100 µL	±3.0 %	±3.0 µL	±0.6 %	±0.6 µL	3120 000 062
			500 µL	±1.0 %	±5.0 µL	±0.2 %	±1.0 µL	
			1,000 µL	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL	

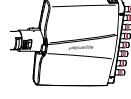
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Technical specifications subject to change.



Ordering information		Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ²⁾	Rel. random error ¹⁾	Abs. random error ²⁾	Order no.
Volume range	Color code							
Eppendorf Research® plus, single-channel, variable, incl. epi.I.P.S.® Sample bag								
0.25 – 2.5 mL	red		0.25 mL	±4.8 %	±0.012 mL	±1.2 %	±0.003 mL	3120 000 143
			1.25 mL	±0.8 %	±0.01 mL	±0.2 %	±0.0025 mL	
			2.5 mL	±0.6 %	±0.015 mL	±0.2 %	±0.005 mL	
0.5 – 5 mL	violet		0.5 mL	±2.4 %	±0.012 mL	±0.6 %	±0.003 mL	3120 000 070
			2.5 mL	±1.2 %	±0.03 mL	±0.25 %	±0.006 mL	
			5 mL	±0.6 %	±0.03 mL	±0.15 %	±0.008 mL	
1 – 10 mL	turquoise		1 mL	±3.0 %	±0.03 mL	±0.6 %	±0.006 mL	3120 000 089
			5 mL	±0.8 %	±0.04 mL	±0.2 %	±0.01 mL	
			10 mL	±0.6 %	±0.06 mL	±0.15 %	±0.015 mL	

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



8-channel pipettes, variable volumes

Ordering information		Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ²⁾	Rel. random error ¹⁾	Abs. random error ²⁾	Order no.
Volume range	Color code							
Eppendorf Research® plus, 8-channel, variable, incl. epi.I.P.S.® Box								
0.5 – 10 µL	medium gray		0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	3122 000 019
			1 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL	
			5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL	
10 – 100 µL	yellow		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL	3122 000 035
			10 µL	±3.0 %	±0.3 µL	±2.0 %	±0.3 µL	
			50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL	
			100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL	
30 – 300 µL	orange		30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	3122 000 051
			150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL	
			300 µL	±0.6 %	±1.8 µL	±0.3 %	±0.9 µL	
120 – 1,200 µL	green		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL	3122 000 213
			600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL	
			1,200 µL	±1.2 %	±14.4 µL	±0.3 %	±3.6 µL	

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

For 8-channel pipettes please choose standard epi.I.P.S., see pages 58 - 65

Order info of new Pipette „Move II“ see page 41

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Liquid Handling

PIPETTING

Eppendorf Research® plus

12-channel pipettes, variable volumes

Ordering information

Volume range	Color code	Volume	Rel. systematic error ^{a)}	Abs. systematic error ^{b)}	Rel. random error ^{b)}	Abs. random error ^{b)}	Order no.
Eppendorf Research® plus, 12-channel, variable, incl. ep1.L.P.S.® Box							
0.5 – 10 µL	medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	31722 000 027
		1 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL	
		5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL	
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL	
10 – 100 µL	yellow	10 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	31722 000 043
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL	
30 – 300 µL	orange	100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL	31722 000 060
		150 µL	±1.0 %	±0.9 µL	±1.0 %	±0.3 µL	
		300 µL	±0.6 %	±1.5 µL	±0.5 %	±0.75 µL	
New 1.200 µL	green	120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL	31722 000 221
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL	
		1,200 µL	±1.2 %	±14.4 µL	±0.3 %	±3.6 µL	

^{a)} The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

For 12-channel pipettes please choose standard ep1.L.P.S., see pages 58 - 65

Order info of new Pipette „Move II“ see page 41

16-channel pipettes, variable volume, for 384-well plates

Ordering information

Volume range	Color code	Volume	Rel. systematic error ^{a)}	Abs. systematic error ^{b)}	Rel. random error ^{b)}	Abs. random error ^{b)}	Order no.
Eppendorf Research® plus, 16-channel, variable							
1 – 20 µL	light pink	1 µL	±12 %	±0.12 µL	±8 %	±0.08 µL	31725 000 079
		2 µL	±8 %	±0.16 µL	±5 %	±0.1 µL	
		10 µL	±4 %	±0.4 µL	±2 %	±0.2 µL	
		20 µL	±2 %	±0.4 µL	±1 %	±0.2 µL	
5 – 100 µL	light yellow	5 µL	±6 %	±0.3 µL	±4 %	±0.2 µL	31725 000 095
		10 µL	±3 %	±0.3 µL	±2 %	±0.2 µL	
		50 µL	±1.2 %	±0.6 µL	±0.8 %	±0.4 µL	
		100 µL	±1 %	±1 µL	±0.6 %	±0.6 µL	

^{a)} The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

For 16-channel pipettes please choose ep1.L.P.S. 384, see pages 64 - 65

Order info of new Pipette „Move II“ see page 41

24-channel pipettes, variable volume, for 384-well plates

Ordering information

Volume range	Color code	Volume	Rel. systematic error ^{a)}	Abs. systematic error ^{b)}	Rel. random error ^{b)}	Abs. random error ^{b)}	Order no.
Eppendorf Research® plus, 24-channel, variable							
1 – 20 µL	light pink	1 µL	±12 %	±0.12 µL	±8 %	±0.08 µL	31725 000 087
		2 µL	±8 %	±0.16 µL	±5 %	±0.1 µL	
		10 µL	±4 %	±0.4 µL	±2 %	±0.2 µL	
5 – 100 µL	light yellow	20 µL	±2 %	±0.4 µL	±1 %	±0.2 µL	31725 000 109
		5 µL	±6 %	±0.3 µL	±4 %	±0.2 µL	
		10 µL	±3 %	±0.3 µL	±2 %	±0.2 µL	
50 µL	light yellow	50 µL	±1.2 %	±0.6 µL	±0.8 %	±0.4 µL	31725 000 109
		100 µL	±1 %	±1 µL	±0.6 %	±0.6 µL	

^{a)} The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

For 24-channel pipettes please choose ep1.L.P.S. 384 see pages 64 - 65

Order info of new Pipette „Move II“ see page 41

Technical specifications subject to change.

Liquid Handling

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PIPETTING

Eppendorf Research® plus 3-pack

Get your lab up and running fast with our 3-pack of Research plus pipettes

Get ready for a threefold enjoyable pipetting experience with one of the most advanced and ergonomic pipettes in the world. The economic Research plus triple-pack is available in three different versions. In addition to three Research plus pipettes, each pack contains one set of matching Eppendorf tips and one of the popular Eppendorf ballpoint pens.

Ordering information

Eppendorf Research® plus 3-pack	Order no.
Eppendorf Research® plus 3-pack, single-channel, variable, incl. ep1.L.P.S.® Box or sample bag and ballpoint pen	
Option 1: 0.5 – 10 µL, 10 – 100 µL, 100 – 1,000 µL	31720 000 909
Option 2: 2 – 20 µL yellow, 20 – 200 µL, 100 – 1,000 µL	31720 000 917
Option 3: 100 – 1,000 µL, 0.5 – 5 mL, 1 – 10 mL	31720 000 925

Eppendorf Tip-tub

Tip: the Eppendorf Tip-tub reagent reservoir is suitable for all 8, 12, 16 and 24-channel pipettes and all Eppendorf Move II™ pipettes. See below for ordering information.

Accessories

Accessories

Description	Order no.
Eppendorf Research® plus red adjustment seal ADJ , 1 set = 5 pieces	31720 636 005
Adjustment tool , for changing factory or secondary user adjustment	31720 633 006
Safety plug tools , for changing the factory adjustment, 5 pieces	31720 639 004
Protection filter 5 mL, 10 filters with 1 filter sleeve, for 0.5 – 5 mL, variable, color code: violet	4920 623 005
Protection filter 10 mL, 10 filters with 1 filter sleeve, for 1 – 10 mL, variable, color code: turquoise	4920 624 001
O-ring , red, for multi-channel lower parts, 5 – 100 µL, 15 – 300 µL (1 set = 24 pcs)	31722 611 000
Multi-channel tool , for cutting the O-rings on the tip cone of multi-channel lower parts, 5 – 100 µL or 15 – 300 µL	31722 610 003
Pipette wrench 2 mL – 10 mL	31720 634 002
Locking ring , to prevent spring action with single-channel pipettes, 2.5 µL – 1,000 µL	31720 635 009
Locking clip for 8 channel pipette , to prevent spring action of tip cones, 2 pieces	31722 612 006
Locking clip for 12 channel pipette , to prevent spring action of tip cones, 3 pieces	31722 613 002
Reagent reservoir Tip-Tub , autoclavable reservoir for the aspiration of liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	0030 058 607
Pipette grease with lime-free applicator	
Eppendorf TrackIT , RFID Reader and Software	00113 022 153
	3903 000 014

Your local distributor: www.eppendorf.com/contact
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