greiner bio-one

Sapphire
pipettes

Your Power for Liquid Handling

Sapphire from Greiner Bio-One

Your Power for Liquid Handling

Have a closer look at our
***Sapphire* Pipettes**

Sapphire Pipettes

Sapphire Pipettes by Greiner Bio-One combine state-of-the-art engineering and design in the ultimate instrument for modern liquid handling.

Sapphire Pipettes are a variable volume range of air-displacement pipettes designed and built to deliver optimal performance, ergonomics, and robustness in day-to-day use. The lightweight design coupled with an optimised mechanism reduces pipetting forces and makes our pipettes both comfortable and easy to use.
The contoured body shape allows for a relaxed grip whatever size your hand, and the 3-position tip ejector button makes pipetting comfortable for both left and right-handed users.

Precision and accuracy is taken as read, with the *Sapphire* Pipettes performing well within the requirements specified in ISO 8655 forming the optimum solution for liquid handling when used in combination with pipette tips from Greiner Bio-One.

Each pipette:

/ **Has a unique serial number**

/ **Is fully autoclavable**

/ **Comes with a 3 year warranty**

The *Sapphire* Portfolio

/ **8 x single-channel models with a volume range from 0.2 μl up to 10 ml**

/ **4 x 8-channel models with a volume range from 0.5 μl – 300 μl**

/ **4 x 12-channel models with a volume range from 0.5 μl – 300 μl**

An additional feature of the multi-channel pipette is the 360° rotational head giving the freedom to work in the most ergonomic position.

Key Facts

↶ **Ergonomic design for optimum comfort**

↶ **Lightweight**

↶ **Minimal pipetting forces**

↶ **Outstanding accuracy and precision**

↶ **Fully autoclavable**

↶ **Robust**

↶ **Dedicated range of *Sapphire* tips**

Sapphire Features

Ergonomic & Convenient

⁄ **Lightweight, comfortable design**

⁄ **Soft-spring technology for low pipetting forces**

⁄ **Perfect shape for small and large hands alike**

⁄ **3-position tip ejector for both left-hand and right-hand users**

⁄ **Comfort design for a relaxed grip in all hand sizes**

⁄ **360° adjustable head for multi-channel pipettes to allow work in every position**

Accurate & Precise

⁄ **Large display for easy volume identification**

⁄ **Freely rotating push button to adjust the volume and to avoid accidental volume changes**

⁄ **High precision and accuracy**

⁄ **Optimal performance with Greiner Bio-One Pipette Tips**

⁄ **Universal Tip Holder**

universal tip holder

Resistant & Reliable

⁄ **Durable materials and design**

⁄ **UV-resistance over extended periods**

⁄ **Fully autoclavable**

⁄ **Unique serial number for easy tracking**

ISO8655 COMPLIANT
ISO50001 COMPLIANT
ISO9001 COMPLIANT
ISO13485 COMPLIANT

UV RESISTANT

AUTO CLAVABLE

universal tip holders

robust tip ejector

colour-coded push button

soft-spring technology

ergonomic finger hook

large volume display

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0.2-2µl

easy volume adjustment

3-position tip ejector

stainless steel ejector

large volume display

greiner bio-one

20-200µl

Ordering Information

Sapphire Single Channel Pipettes

Cat. No.	89000002				89000010				89000020				89000100			
Volume range [µl]	0.2–2				1–10				2–20				10–100			
Colour coded button	● orange				● red				● light yellow				● light orange			
Specifications																
Volume [µl]	**0.2**		**2**		**1**		**10**		**2**		**20**		**10**		**100**	
	µl	%	µl	%	µl	%	µl	%	µl	%	µl	%	µl	%	µl	%
Sapphire Systematic error	±0.026	±13.2	±0.033	±1.7	±0.028	±2.8	±0.110	±1.1	±0.11	±5.5	±0.20	±1.0	±0.39	±3.9	±0.80	±0.8
Sapphire Random error	≤0.013	≤6.6	≤0.015	≤0.8	≤0.013	≤1.3	≤0.044	≤0.4	≤0.033	≤1.7	≤0.066	≤0.3	≤0.11	≤1.1	≤0.17	≤0.2
ISO 8655 Systematic error	±0.080	±40.0	±0.080	±4.0	±0.120	±12.0	±0.120	±1.2	±0.20	±10.0	±0.20	±1.0	±0.80	±8.0	±0.80	±0.8
ISO 8655 Random error	≤0.040	≤20.0	≤0.040	≤2.0	≤0.080	≤8.0	≤0.080	≤0.8	≤0.100	≤5.0	≤0.100	≤0.5	≤0.30	≤3.0	≤0.30	≤0.3

Cat. No.	89000200				89001000				89000500				89010000			
Volume range [µl]	20–200				100–1000				500–5000				1000–10000			
Colour coded button	● yellow				● blue				● violet				● light blue			
Specifications																
Volume [µl]	**20**		**200**		**100**		**1000**		**500**		**5000**		**1000**		**10000**	
	µl	%	µl	%	µl	%	µl	%	µl	%	µl	%	µl	%	µl	%
Sapphire Systematic error	±0.55	±2.8	±1.60	±0.8	±3.3	±3.3	±8.0	±0.8	±13	±2.6	±33	±0.7	±33	±3.3	±60	±0.6
Sapphire Random error	≤0.22	≤1.1	≤0.33	≤0.2	≤0.7	≤0.7	≤1.7	≤0.2	≤3.3	≤0.7	≤8.8	≤0.2	≤6.6	≤0.7	≤17.6	≤0.2
ISO 8655 Systematic error	±1.60	±8.0	±1.60	±0.8	±8.0	±8.0	±8.0	±0.8	±40	±8.0	±40	±0.8	±60	±6.0	±60	±0.6
ISO 8655 Random error	≤0.60	≤3.0	≤0.60	≤0.3	≤3.0	≤3.0	≤3.0	≤0.3	≤15	≤3.0	≤15	≤0.3	≤30	≤3.0	≤30	≤0.3

Sapphire 8- Channel Pipettes

Cat. No.	89000810		89000820		89008200		89008300	
Volume range [µl]	0.5 – 10		2 – 20		20 – 200		20 – 300	
Colour coded button	● red		● light yellow		● yellow		● green	
Specifications								
Volume [µl]	**0.5**	**10**	**2**	**20**	**20**	**200**	**30**	**300**
	µl / %	µl / %	µl / %	µl / %	µl / %	µl / %	µl / %	µl / %
Sapphire Systematic error	±0.09 / ±17.6	±0.22 / ±2.2	±0.11 / ±5.5	±0.40 / ±2.0	±0.6 / ±2.8	±2.2 / ±1.1	±1.1 / ±3.7	±3.3 / ±1.1
Sapphire Random error	≤0.04 / ≤8.8	≤0.11 / ≤1.1	≤0.09 / ≤4.4	≤0.17 / ≤0.8	≤0.28 / ≤1.4	≤0.55 / ≤0.3	≤0.39 / ≤1.3	≤1.10 / ≤0.4
ISO 8655 Systematic error	±0.24 / ±48.0	±0.24 / ±2.4	±0.40 / ±20.0	±0.40 / ±2.0	±3.2 / ±16.0	±3.2 / ±1.6	±8.0 / ±26.7	±8.0 / ±2.7
ISO 8655 Random error	≤0.16 / ≤32.0	≤0.16 / ≤1.6	≤0.20 / ≤10.0	≤0.20 / ≤1.0	≤1.20 / ≤6.0	≤1.20 / ≤0.6	≤3.00 / ≤10.0	≤3.00 / ≤1.0

Sapphire 12- Channel Pipettes

Cat. No.	89001210		89001220		89012200		89012300	
Volume range [µl]	0.5 – 10		2 – 20		20 – 200		20 – 300	
Colour coded button	● red		● light yellow		● yellow		● green	
Specifications								
Volume [µl]	**0.5**	**10**	**2**	**20**	**20**	**200**	**30**	**300**
	µl / %	µl / %	µl / %	µl / %	µl / %	µl / %	µl / %	µl / %
Sapphire Systematic error	±0.09 / ±17.6	±0.22 / ±2.2	±0.11 / ±5.5	±0.40 / ±2.0	±0.6 / ±2.8	±2.2 / ±1.1	±1.1 / ±3.7	±3.3 / ±1.1
Sapphire Random error	≤0.04 / ≤8.8	≤0.11 / ≤1.1	≤0.09 / ≤4.4	≤0.17 / ≤0.8	≤0.28 / ≤1.4	≤0.55 / ≤0.3	≤0.39 / ≤1.3	≤1.10 / ≤0.4
ISO 8655 Systematic error	±0.24 / ±48.0	±0.24 / ±2.4	±0.40 / ±20.0	±0.40 / ±2.0	±3.2 / ±16.0	±3.2 / ±1.6	±8.0 / ±26.7	±8.0 / ±2.7
ISO 8655 Random error	≤0.16 / ≤32.0	≤0.16 / ≤1.6	≤0.20 / ≤10.0	≤0.20 / ≤1.0	≤1.20 / ≤6.0	≤1.20 / ≤0.6	≤3.00 / ≤10.0	≤3.00 / ≤1.0

Sapphire Accessories

Pipette Carrousel

/ **Holds up to 7 pipettes**
/ **Robust and space-saving**
/ **Heavy base for stability**
/ **Hold single and multi-channel pipettes**

Cat. No.	Product Description	Pack
89000099	Carrousel Pipette Stand	1

Pipette Holder

/ **Wall mounted single pipette holder**
/ **Keeps pipette within reach**
/ **Robust and space-saving**
/ **Self adhesive or screw fix**

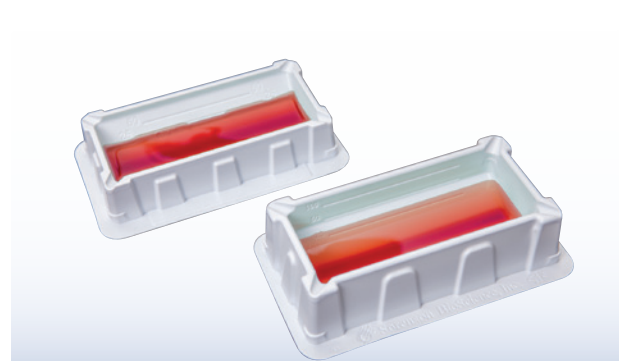| Cat. No.	Product Description	Pack
89000098	Wall mounted pipette holder	1

Personal ID Clips

/ **For identification/personalisation of your pipette**
/ **Clips into place to help avoid mix-ups**
/ **Writeable with permanent ink**
/ **5 colours available**

Cat. No.	Product Description	Pack
89019801	○ white	10
89019803	● red	10
89019804	● blue	10
89019805	● green	10
89019806	● yellow	10
89019809	assorted	10

Reagent Reservoirs

/ **For use with single/multi-channel procedures**
/ **Sterile**
/ **Individually wrapped or in bags of 5**
/ **50 ml and 100 ml capacity**

Cat. No.	Product Description	Pack	Case
960305	50 ml	5	200
960306	50 ml, individually wrapped	1	100
960308	100 ml,	5	200
960307	100 ml, individually wrapped	1	100

Sapphire Starter Kits

Get off to a great start with a *Sapphire* Starter Pack, the complete solution to Liquid Handling. In addition to the pipettes listed and a case of each relevant tip, each pack contains a wall mounted pipette holder and a GBO Pipetting Guide.

	Standard	Micro 2	Micro 10
Cat. No.	8900000A	8900000B	8900000C
Single channel Pipettes	2–20 µl 20–200 µl 100–1000 µl	0.2–2 µl, 2–20 µl, 20–200 µl, 100–1000 µl	1–10 µl, 2–20 µl, 20–200 µl, 100–1000 µl
Tips ▼			
10 µl	-	10 racks of 96	10 racks of 96
20 – 200 µl	10 racks of 96	10 racks of 96	10 racks of 96
1250 µl	8 racks of 96	8 racks of 96	8 racks of 96
Accessories ▼			
Pipette Holder	✓	✓	✓
Pipetting Guide	✓	✓	✓

Sapphire Pipette Servicing & Calibration

As a precision instrument it is essential to keep your *Sapphire* pipette in good working order. Regular maintenance and calibration should be undertaken to ensure this. Our highly experienced and knowledgeable technicians provide a full maintenance and calibration service to ensure your *Sapphire* pipette always performs to specification. We offer 3 service levels which are detailed below.

	Service Level		
	Bronze	**Gold**	**Platinum**
Default Service			
Dismantle, check and replace worn parts	✓	✓	✓
Internal clean	✓	✓	✓
External clean	✓	✓	✓
Issue a calibration certificate for each pipette	✓	✓	✓
Calibration Options			
Single Channel Cat.No. 89001999	4 measurements at mid volume	4 measurements at min and max volume	5 measurements at min, mid and max volume
8 - Channel Cat. No. 89008999	4 measurements at mid volume	4 measurements at min and max volume	5 measurements at min, mid and max volume
12 - Channel Cat. No. 89012999	4 measurements at mid volume	4 measurements at min and max volume	5 measurements at min, mid and max volume

Multi-channel pipettes:
All channels are checked and each pipette is calibrated in accordance with the manufacturers specification.

The above are our standard service packages. For other service options please contact your Greiner Bio-One representative.

ISO8655
COMPLIANT

ISO50001
COMPLIANT

ISO9001
COMPLIANT

ISO13485
COMPLIANT

UV
RESISTANT

AUTO
CLAVABLE

Your Power for Health

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Sapphire Pipettes

Your Power for Liquid Handling

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