







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

# SAPPHIRE PIPETTES OPTIMUM ERGONOMICS AND PERFORMANCE

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 a special 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-handed 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.

# THE SAPPHIRE PORTFOLIO

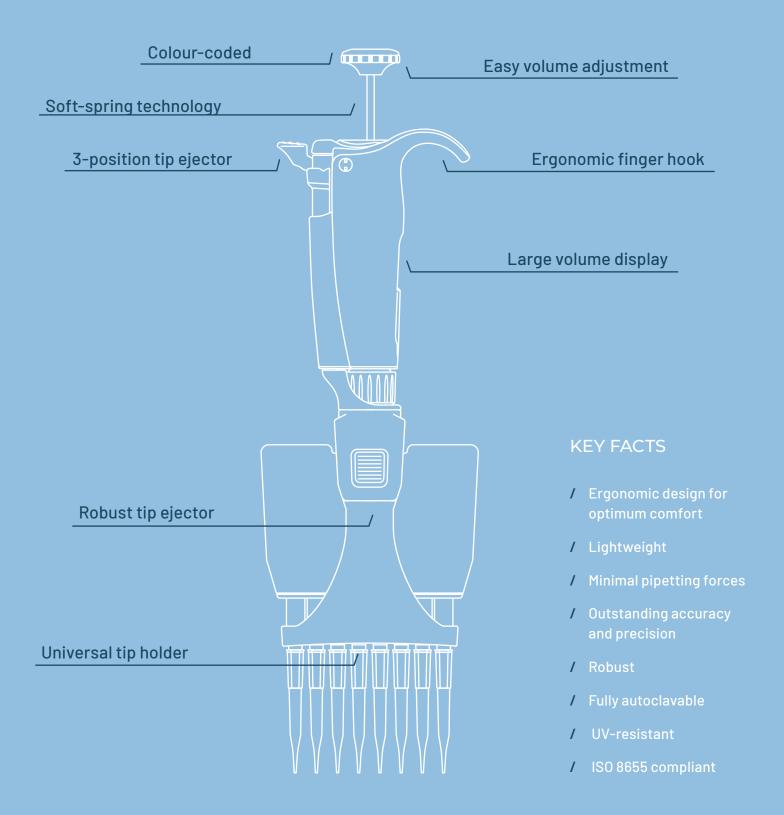
- / 8 single-channel models with a volume range from 0.2 µl up to 10 ml
- / 8 multi-channel pipettes (8-channel and 12-channel) with a volume range from 0.5 µl up to 300 µl



#### **EACH PIPETTE**

- Has a unique serial number
- Is fully autoclavable
- Comes with a 3-year warranty

# PRODUCT 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
- / Long finger hook for a relaxed grip
- / 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
- / Compatible with other manufacturers' tips

#### **RESISTANT & RELIABLE**

- / Durable materials and design
- / UV-resistance over extended periods
- / Fully autoclavable
- / Unique serial number for easy tracking



# **SAPPHIRE PIPETTES**

#### PERFORMANCE DATA

The Sapphire Pipettes perform within ISO 8655 which is considered the basis for determining the accuracy and precision of air-displacement pipettes.

The Sapphire Pipettes have one of the lowest error tolerances on the market. Test results are generated using Greiner Bio-One Pipette Tips.

# Single-Channel Pipettes

			Sapphire Pipette Specifications			ISO 8655 Specifications				
Model	Volume range	Volume	Systema	tic error	Randor	m error	Systema	tic error	Randoi	m error
	[ µl ]	[ µl ]	[ µl ]	[%]	[ µl ]	[%]	[ µl ]	[%]	[ µl ]	[%]
1 x 2	0.2 - 2	0.2	± 0.026	± 13.2	≤ 0.013	≤6.6	± 0.080	± 40.0	≤ 0.040	≤20.0
		2	± 0.033	± 1.7	≤ 0.015	≤ 0.8	± 0.080	± 4.0	≤ 0.040	≤2.0
110		1	± 0.028	±2.8	≤ 0.013	≤ 1.3	± 0.120	± 12.0	≤ 0.080	≤8.0
1 x 10	1 - 10	10	± 0.110	± 1.1	≤0.044	≤0.4	± 0.120	± 1.2	≤ 0.080	≤ 0.8
4 00	0.40	2	± 0.11	± 5.5	≤ 0.033	≤ 1.7	± 0.20	± 10.0	≤ 0.100	≤5.0
1 x 20	2 - 10	20	± 0.20	± 1.0	≤ 0.066	≤ 0.3	± 0.20	± 1.0	≤ 0.100	≤ 0.5
4 400		10	± 0.39	± 3.9	≤ 0.11	≤ 1.1	± 0.80	± 8.0	≤ 0.30	≤ 3.0
1 x 100	10 - 100	100	± 0.80	± 0.8	≤ 0.17	≤ 0.2	± 0.80	± 0.8	≤ 0.30	≤ 0.3
1000	00.000	20	± 0.55	±2.8	≤ 0.22	≤ 1.1	± 1.60	± 8.0	≤ 0.60	≤3.0
1 x 200	20 - 200	200	± 1.60	± 0.8	≤0.33	≤ 0.2	± 1.60	± 0.8	≤ 0.60	≤ 0.3
4 4000	400 4000	100	± 3.3	± 3.3	≤ 0.7	≤ 0.7	± 8.0	± 8.0	≤ 3.0	≤ 3.0
1 x 1000	100 - 1000	1000	± 8.0	± 0.8	≤ 1.7	≤ 0.2	± 8.0	± 0.8	≤ 3.0	≤ 0.3
4 5000		500	± 13	± 2.6	≤ 3.3	≤ 0.7	± 40	± 8.0	≤ 15	≤ 3.0
1 x 5000	500 - 5000	5000	± 33	± 0.7	≤8.8	≤0.2	± 40	± 0.8	≤ 15	≤ 0.3
1 x	1000 -	1000	± 33	± 3.3	≤ 6.6	≤ 0.7	± 60	± 6.0	≤30	≤ 3.0
10000	10000	10000	± 60	± 0.6	≤ 17.6	≤ 0.2	± 60	± 0.6	≤30	≤ 0.3

# **Multi-Channel Pipettes**

			Sapphire Pipette Specifications				ISO 8655 Specifications			
Model	Volume range	Volume	Systematic error		Random error		Systematic error		Random error	
	[ µl ]	[ µl ]	[ µl ]	[%]	[ µl ]	[%]	[ µl ]	[%]	[ µl ]	[%]
8 x 10	0.5 - 10	0.5	± 0.09	± 17.6	≤ 0.04	≤8.8	± 0.24	± 48.0	≤ 0.16	≤32.0
12 x 10	0.5 - 10	10	± 0.22	± 2.2	≤ 0.11	≤ 1.1	± 0.24	± 2.4	≤ 0.16	≤ 1.6
8 x 20	2 - 20	2	± 0.11	± 5.5	≤ 0.09	≤ 4.4	± 0.40	± 20.0	≤ 0.20	≤10.0
12 x 20	2-20	20	± 0.40	± 2.0	≤ 0.17	≤ 0.8	± 0.40	± 2.0	≤ 0.20	≤ 1.0
8 x 200	20 - 200	20	± 0.6	± 2.8	≤ 0.28	≤ 1.4	± 3.2	± 16.0	≤ 1.20	≤ 6.0
12 x 200	20-200	200	± 2.2	± 1.1	≤ 0.55	≤ 0.3	± 3.2	± 1.6	≤ 1.20	≤ 0.6
8 x 300	20 - 300	20	± 1.10	± 5.5	≤0.39	≤ 1.9	± 3.2	± 16.0	≤ 1.20	≤ 6.0
12 x 300		300	± 3.30	± 1.1	≤ 1.10	≤0.4	± 3.2	± 1.6	≤ 1.20	≤ 0.6

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# **ORDERING INFORMATION**

# Sapphire Pipettes

Item no.	Description	Colour code	Volume range	Qty. inner / outer
89000002	single-channel pipette	<ul><li>orange</li></ul>	0.2 - 2 µl	1/1
89000010	single-channel pipette	• red	1 - 10 μΙ	1/1
89000020	single-channel pipette	<ul><li>light yellow</li></ul>	2 - 20 µl	1/1
89000100	single-channel pipette	light orange	10 - 100 μΙ	1/1
89000200	single-channel pipette	yellow	20 - 200 μΙ	1/1
89001000	single-channel pipette	<ul><li>blue</li></ul>	100 - 1000 μΙ	1/1
89000500	single-channel pipette	<ul><li>violet</li></ul>	500 - 5000 μI	1/1
89010000	single-channel pipette	<ul><li>light blue</li></ul>	1000 - 10000 µl	1/1
89000810	8-channel pipette	• red	0.5 - 10 μΙ	1/1
89000820	8-channel pipette	light yellow	2 - 20 µl	1/1
89008200	8-channel pipette	yellow	20 - 200 µI	1/1
89008300	8-channel pipette	<ul><li>green</li></ul>	20 - 300 μl	1/1
89001210	12-channel pipette	• red	0.5 - 10 μl	1/1
89001220	12-channel pipette	light yellow	2 - 20 μΙ	1/1
89012200	12-channel pipette	yellow	20 - 200 µl	1/1
89012300	12-channel pipette	<ul><li>green</li></ul>	20 - 300 µl	1/1

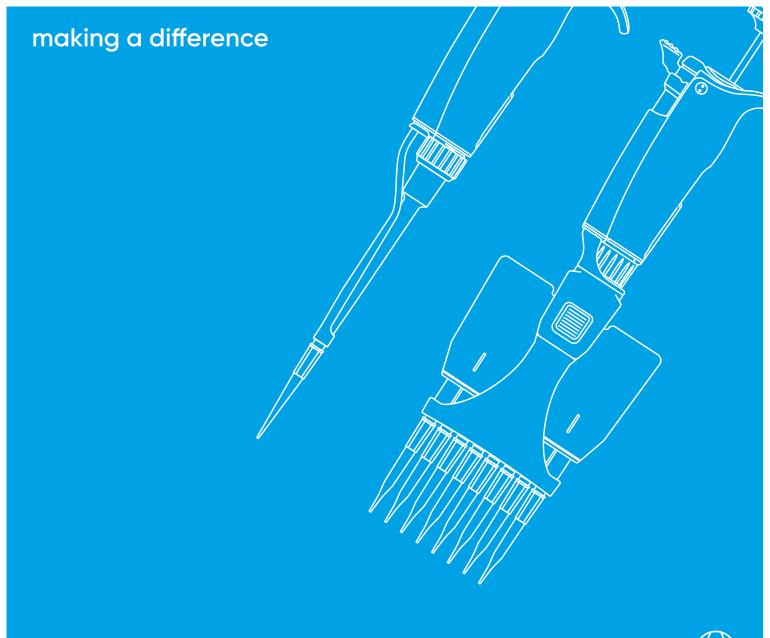
## Accessories

Item no.	Description	Colour code	Oty. inner / outer		
89000099	carrousel pipette holder	-	1/1		
89019801	ID Clip	O white	10		
89019803	ID Clip	• red	10		
89019804	ID Clip	<ul><li>blue</li></ul>	10		
89019805	ID Clip	<ul><li>green</li></ul>	10		
89019806	ID Clip	yellow	10		
89019809	ID Clip	assorted	10		

### **SERVICE & MAINTENANCE**

We recommend that pipettes are serviced and calibrated annually by an authorised service provider. Please contact your local Greiner Bio-One representative for servicing options.





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FIND THE CONTACT DETAILS OF YOUR LOCAL PARTNER ON OUR WEBSITE.



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