

# Eppendorf Reference® 2 – Technical Data

Description	Volume	Systematic error		Random error	
		± %	± µL	± %	± µL
<b>Eppendorf Reference® 2, single-channel variable*</b>					
0.1–2.5 µL ■ dark gray	0.1 µL	±48.0	±0.048	±12.0	± 0.012
	0.25 µL	±12.0	±0.03	±6.0	±0.015
	1.25 µL	±2.5	±0.031	±1.5	±0.019
	2.5 µL	±1.4	±0.035	±0.7	±0.018
0.5–10 µL ■ medium gray	0.5 µL	±8.0	±0.04	±5.0	±0.025
	1 µL	±2.5	±0.025	±1.8	±0.018
	5 µL	±1.5	±0.075	±0.8	±0.04
	10 µL	±1.0	±0.10	±0.4	±0.04
2–20 µL ■ light gray	2 µL	±3.0	±0.06	±1.5	±0.03
	10 µL	±1.0	±0.10	±0.6	±0.06
	20 µL	±0.8	±0.16	±0.3	±0.06
2–20 µL ■ yellow	2 µL	±5.0	±0.10	±1.5	±0.03
	10 µL	±1.2	±0.12	±0.6	±0.06
	20 µL	±1.0	±0.2	±0.3	±0.06
10–100 µL ■ yellow	10 µL	±3.0	±0.3	±0.7	±0.07
	50 µL	±1.0	±0.5	±0.3	±0.15
	100 µL	±0.8	±0.8	±0.2	±0.2
20–200 µL ■ yellow	20 µL	±2.5	±0.5	±0.7	±0.14
	100 µL	±1.0	±1.0	±0.3	±0.3
	200 µL	±0.6	±1.2	±0.2	±0.4
30–300 µL ■ orange	30 µL	±2.5	±0.75	±0.7	±0.21
	150 µL	±1.0	±1.5	±0.3	±0.45
	300 µL	±0.6	±1.8	±0.2	±0.6
100–1000 µL ■ blue	100 µL	±3.0	±3.0	±0.6	±0.6
	500 µL	±1.0	±5.0	±0.2	±1.0
	1000 µL	±0.6	±6.0	±0.2	±2.0
0.25–2.5 mL ■ red	0.25 mL	±4.8	±12	±1.2	±3
	1.25 mL	±0.8	±10	±0.2	±2.5
	2.5 mL	±0.6	±15	±0.2	±5
0.5–5 mL ■ violet	0.5 mL	±2.4	±12	±0.6	±3
	2.5 mL	±1.2	±30	±0.25	±6
	5.0 mL	±0.6	±30	±0.15	±7.5
1–10 mL ■ turquoise	1.0 mL	±3.0	±30	±0.6	±6
	5.0 mL	±0.8	±40	±0.2	±10
	10.0 mL	±0.6	±60	±0.15	±15
<b>Eppendorf Reference® 2, 8- and 12-channel variable</b>					
0.5–10 µL ■ medium gray	0.5 µL	±12.0	±0.06	±8.0	±0.04
	1 µL	±8.0	±0.08	±5.0	±0.05
	5 µL	±4.0	±0.2	±2.0	±0.1
	10 µL	±2.0	±0.2	±1.0	±0.1
10–100 µL ■ yellow	10 µL	±3.0	±0.3	±2.0	±0.2
	50 µL	±1.0	±0.5	±0.8	±0.4
	100 µL	±0.8	±0.8	±0.3	±0.3
30–300 µL ■ orange	30 µL	±3.0	±0.9	±1.0	±0.3
	150 µL	±1.0	±1.5	±0.5	±0.75
	300 µL	±0.6	±1.8	±0.3	±0.9

\* All Eppendorf Reference 2 single-channel adjustable-volume pipettes come with an epT.I.P.S. Box (except 2.5 mL, 5 mL and 10 mL)  
Technical specifications subject to change. Errors and omissions excepted.

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# Eppendorf Reference® 2 – Technical Data

Description	Color code	Systematic error		Random error	
		± %	± µL	± %	± µL
<b>Eppendorf Reference® 2, single-channel fixed</b>					
1 µL	■ dark gray	±2.5	±0.025	±1.8	±0.018
2 µL	■ dark gray	±2.0	±0.04	±1.2	±0.024
5 µL	■ medium gray	±1.2	±0.06	±0.6	±0.03
10 µL	■ medium gray	±1.0	±0.1	±0.5	±0.05
10 µL	■ yellow	±1.2	±0.12	±0.6	±0.06
20 µL	■ light gray	±0.8	±0.16	±0.3	±0.06
20 µL	■ yellow	±1.0	±0.2	±0.3	±0.06
25 µL	■ yellow	±1.0	±0.25	±0.3	±0.075
50 µL	■ yellow	±0.7	±0.35	±0.3	±0.15
100 µL	■ yellow	±0.6	±0.6	±0.2	±0.2
200 µL	■ yellow	±0.6	±1.2	±0.2	±0.4
200 µL	■ blue	±0.6	±1.2	±0.2	±0.4
250 µL	■ blue	±0.6	±1.5	±0.2	±0.5
500 µL	■ blue	±0.6	±3.0	±0.2	±1.0
1000 µL	■ blue	±0.6	±6.0	±0.2	±2.0
2 mL	■ red	±0.6	±12	±0.2	±4
2.5 mL	■ red	±0.6	±15	±0.2	±5

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