# Perfection in Liquid Handling

RAPID AND ACCURATE TITRATION











### VITLAB® continuous E/RS



The VITLAB® continuous bottle-top burette (Figure 1) enables continuous titration, which leads to rapid, convenient, and accurate results. The angled display shows 4-position titration volume in large, easily read numbers (Figure 2), which simplifies operation. Turning the two hand wheels supplies the titration medium in a **continuous and pulse-free** manner via the specially developed double-piston pump (Figure 3). Filling procedures are not necessary. This innovative technology increases safety; its compact design and low centre of gravity reduce risk of overturning, especially with smaller bottles. The height and length of the discharge tube can be adjusted, making it possible to work safely with both short and tall bottles. The innovative recirculation system (Figure 4) **prevents the loss of valuable reagent** and reduces the risk of splashes. With its simple-to-use calibration function, VITLAB® continuous fulfils the corresponding requirements for test equipment monitoring without instrument downtime. Margins of error are under those specified in the DIN EN ISO 8655-3 standard, even for partial volumes. VITLAB® continuous is DE-M marked. Also available with DAkkS calibration certificate.

#### Included in delivery:

VITLAB® continuous E/RS, with GL 45 connecting threads and GL 32, GL 38 and S 40 (buttress thread) size PP thread adapters, telescopic filling tube (200 - 350 mm), telescopic discharge tube (140 - 220 mm), two 1.5 V microbatteries (LR 03/AAA), instruction manual, and quality certificate.

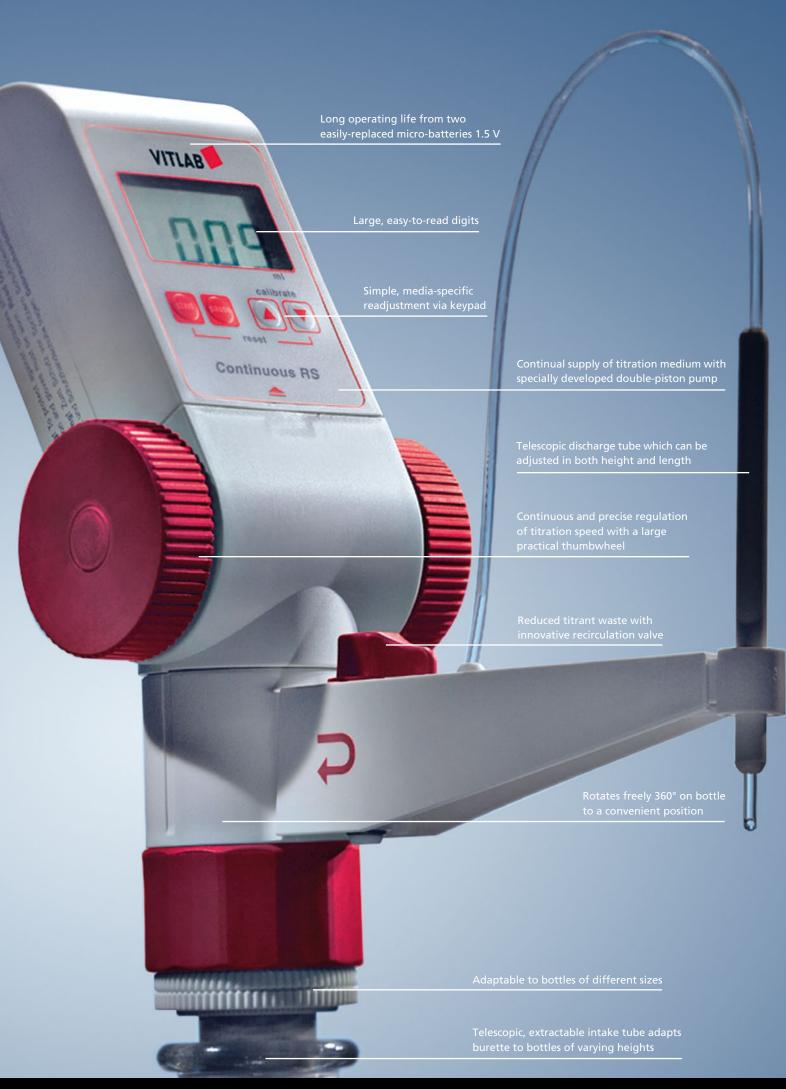
Type	Volume/rot.**	A*	CV*	PU	Cat. No.
	ml	≤ <b>±</b> %	≤ %		
E	2.5	0.2 at 25 ml	0.1 at 25 ml	1	1620506
RS	5.0	0.2 at 50 ml	0.1 at 50 ml	1	1620507
*Accuracy and coefficient of variation according to DIN EN ISO 8655-3					
**Volume dispensed per rotation of the hand wheel					

The VITLAB® continuous E/RS bottle-top burette can be used for the following titrants up to a concentration of 1 mol/L:

Acetic acid	Potassium dichromate solution	
Ammonium iron (II) sulphate solution	Potassium hydroxide	
Ammonium thiocyanate solution	Potassium iodate solution	
Barium chloride solution	Potassium permanganate solution	
Bromide bromate solution	Potassium thiocyanate solution	
Cerium (IV) sulphate solution	Silver nitrate solution	
EDTA solution	Sodium arsenite solution	
Hydrochloric acid	Sodium carbonate solution	
	Sodium chloride solution	
Iron (II) sulphate solution	Sodium hydroxide	
Nitric acid	Sodium nitrite solution	
Oxalic acid solution	Sodium thiosulphate solution	
Perchloric acid	Sulphuric acid	
Potassium bromate solution	Tetra-n-butylammonium hydroxide solution	
Potassium bromide / bromate solution	Zinc sulphate solution	

The recommendations in this table have been carefully tested and reflect the most current information available. Always follow the instruction manual for the instrument as well as the reagent manufacturer's specifications. Should you require information on chemicals not listed, please do not hesitate to contact us. As at 03/12.

10 www.vitlab.com





# Adapter for VITLAB® continuous E/RS

For secure screwing of the burettes onto reagent bottles with an NS neck, GL screw threading or an S buttress thread.

Description	External thread	Bottle neck threads	PU	Cat. No.
NS-adapter, PP	GL 32	NS 19/26	1	1670066
NS-adapter, PP	GL 32	NS 24/29	1	1670067
NS-adapter, PP	GL 32	NS 29/32	1	1670068
Thread adapter, PP	GL 32	GL 28	1	1670155
Thread adapter, PP	GL 38	GL 32	1	1670085
Thread adapter, PP	GL 45	GL 32	1	1670180
Thread adapter, PP	GL 45	GL 38	1	1670110
Thread adapter, PP	GL 45	S 40	1	1670120
Thread adapter, ETFE	GL 32	GL 28	1	1670080
Thread adapter, PTFE	GL 38	GL 32	1	1670095
Thread adapter, ETFE	GL 45	GL 32	1	1670100
Thread adapter, ETFE	GL 45	GL 38	1	1670115
Thread adapter, PTFE	GL 45	S 40	1	1670125



# Drying tube for VITLAB® continuous E/RS

PP, transparent, unfilled. Can be connected directly to the burette.

Description	PU	Cat. No.
Drying tube, PP, unfilled	1	1671095



## Telescopic filling tube for VITLAB® continuous E/RS

For the filling of titration medium from bottles of different heights.

Description	Length	PU	Cat. No.
	mm		
Telescopic filling tube, FEP, ETFE, PTFE	200 - 350	1	1671085



# Threaded bottles for VITLAB® continuous E/RS

Threaded brown glass (soda lime glass) bottles with an ethylene acrylate coating.

Volume ml	Thread GL	Shape	PU	Cat. No.
1000	45	square	1	1671500
2500	45	round	1	1671510

12 www.vitlab.com