Perfection in Liquid Handling

HIGHEST RELIABILITY IN DISPENSING

VITLAB®
Competence in Labware

atlantic labo
Perform your lab
Réactifs - Matériels - Consommables pour laboratoires

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VITLAB® Dispenser line: genius², simplex², and TA²

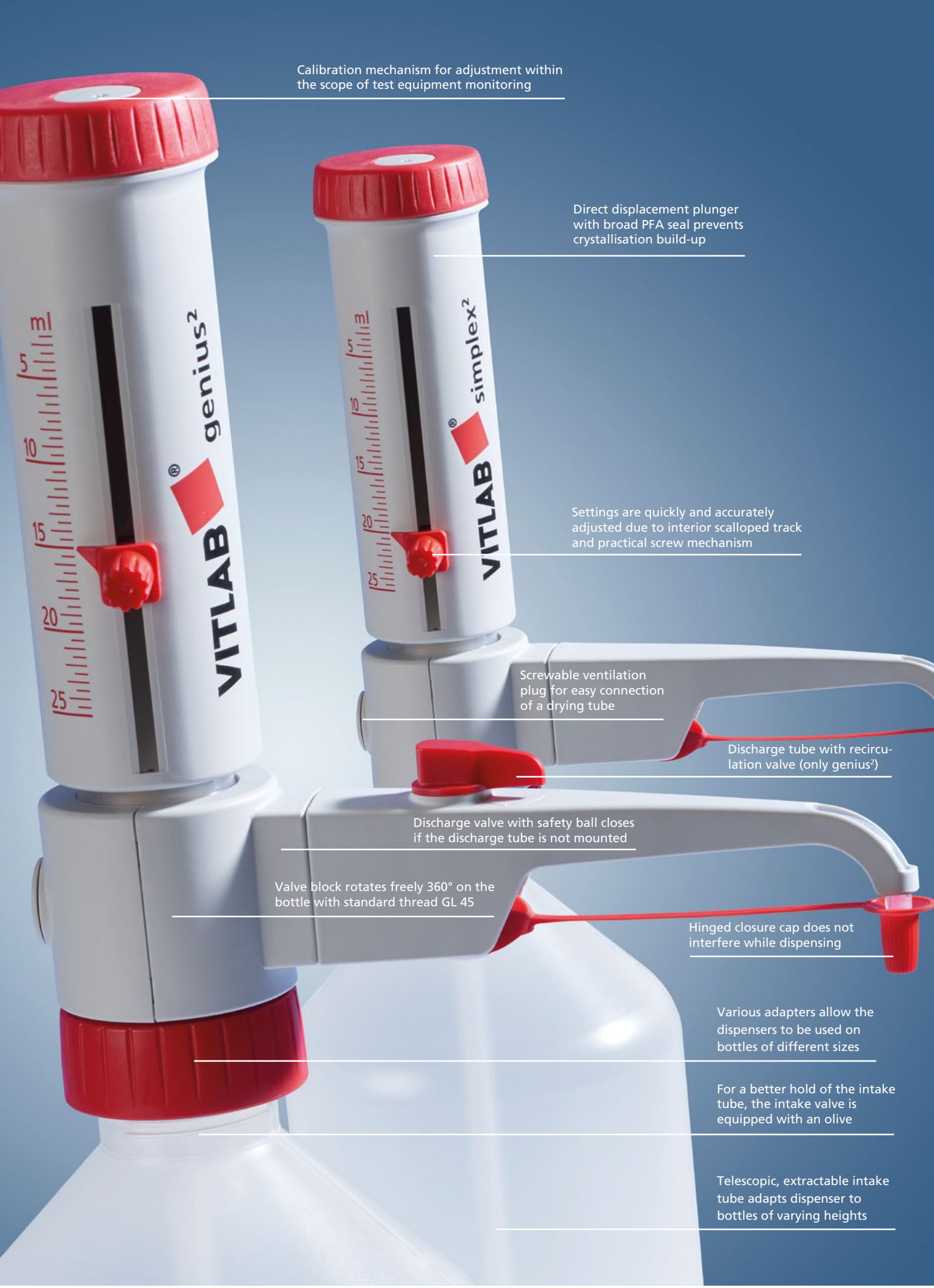
VITLAB® genius² and simplex² bottle-top dispensers are a family of instruments with proven precision that offer many advantages in routine liquid-handling operations. VITLAB® genius² and simplex² instruments can be used for practically any task and are suitable for organic and inorganic solutions, while VITLAB® TA² dispensers have been specially developed for use in trace analysis and with highly concentrated media. As they are produced from materials with extremely high chemical resistance (e.g. PTFE, PFA, FEP, borosilicate glass and platinum-iridium), VITLAB® bottle-top dispensers are very robust and reliable and resistant against most acids, bases and organic solvents.

	VITLAB® genius² / simplex² / simplex²$_{fix}$	VITLAB® TA²
Applications	Salt solutions, acids, bases, and many organic solvents	Specially for use in trace analysis for dispensing high-purity and highly concentrated acids and alkalis, as well as hydrogen peroxide, bromine and HF
Components in contact with media	Borosilicate glass, Al_2O_3-ceramic, FEP, ETFE, PFA, PTFE, platinum-iridium, PP (screw cap)	Various fluoroplastics (e.g., ETFE, FEP, PFA, PCTFE, PTFE), Al_2O_3-sapphire, platinum-iridium or tantalum (depending on the model)
Operating limits	Temperature: +15 °C to +40 °C Steam pressure: max. 600 mbar Viscosity: max. 500 mm²/s Density: max. 2.2 g/cm³	Temperature: +15 °C to +40 °C Steam pressure: max. 600 mbar Viscosity: max. 500 mm²/s Density: max. 3.8 g/cm³

* Dynamic viscosity [mPas] = kinematic viscosity [mm²/s] x density [g/cm³]

General guide for dispenser selection (for the classification of dispenser media, see page 18).

Salt solutions	Acids and bases	Solvents	High-purity and highly concentrated acids and bases	Hydrofluoric acid (HF), bromine, hydrogen peroxide
VITLAB® genius²/simplex² →		VITLAB® genius²/simplex² →		
			VITLAB® TA² →	


Calibration mechanism for adjustment within the scope of test equipment monitoring
Direct displacement plunger with broad PFA seal prevents crystallisation build-up
Settings are quickly and accurately adjusted due to interior scalloped track and practical screw mechanism
Screwable ventilation plug for easy connection of a drying tube
Discharge tube with recirculation valve (only genius²)
Discharge valve with safety ball closes if the discharge tube is not mounted
Valve block rotates freely 360° on the bottle with standard thread GL 45
Hinged closure cap does not interfere while dispensing
Various adapters allow the dispensers to be used on bottles of different sizes
For a better hold of the intake tube, the intake valve is equipped with an olive
Telescopic, extractable intake tube adapts dispenser to bottles of varying heights
VITLAB® genius²
VITLAB® simplex²
ml
5
10
15
20
25

Dosing with precision and comfort

Drawing quantities of liquids from large supply bottles is a daily routine in the lab. This manual task must be carried out quickly, accurately, reproducibly, simply and safely.

The bottle-top dispensers VITLAB® genius² and simplex² are equipped with a positive displacement piston and a fluoroplastic (PFA) sealing lip on the cylinder wall. The latter acts as a "windscreen wiper" to prevent crystal build-up on the cylinder wall from readily crystallisable media. The telescopic filling tube can be adjusted smoothly to different bottle heights.

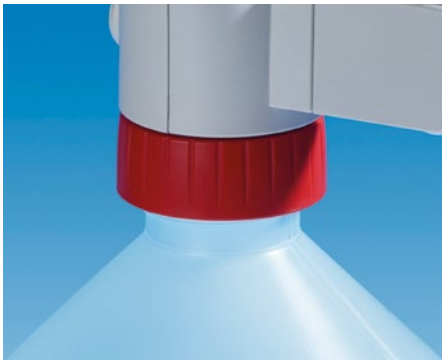
VITLAB® genius² and simplex² can both be calibrated within the scope of test equipment monitoring according ISO 9001 and GLP guidelines (a change to the factory settings is indicated), and are autoclavable according to DIN EN 285 at 121 °C (2 bar) and DE-M marked.

NEW!

Improved volume adjustment for variable Dispensers VITLAB® genius² and simplex². Due to an interior scalloped track, changing the volume setting is now even faster. The volume selector locks in place and the volume is securely fixed.

NEW!

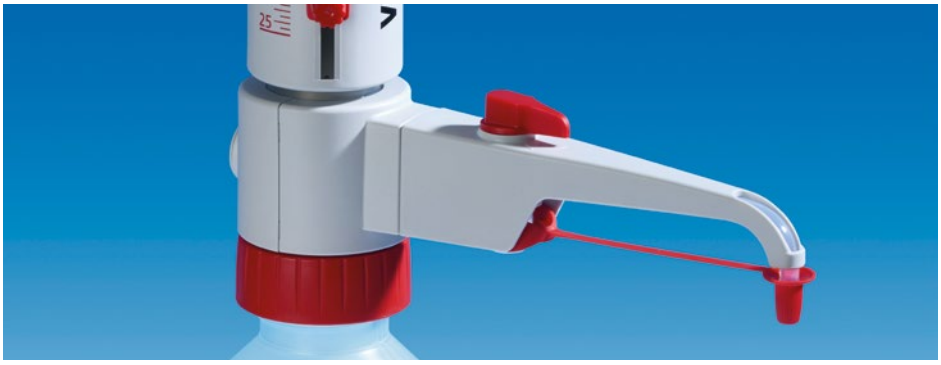
Also new is the screwable discharge valve that is equipped with an additional safety ball. If the discharge tube is not mounted, the safety ball closes the dispensing channel.



NEW!

The standard threading for every dispenser is GL 45. The dispensers can be screwed directly or with the help of the supplied adapters on all common lab bottles.

Bottle-top dispensers



NEW!

New is the discharge tube, which is available with (genius²) or without (simplex²) recirculation valve and can be easily exchanged, if required.

NEW!

The hinged closure cap is positioned in a way that it can swing completely out of the work area.

NEW!

Starting immediately, the ventilation plug is screwable. Therefore, a drying tube can be even more easily connected.

An extensive range of accessories allows the operator to use the dispensers for a variety of special applications.

- Serial Dispensing:

  The flexible discharge tube facilitates the dosing of longer series. It can be used to fill narrow reaction vessels quickly and precisely.

- Dispensing sterile media:

  The dispensers VITLAB® simplex² and genius² are completely autoclavable at 121 °C. A microfilter can be connected in order to filter the indrawn air flow.

- Dispensing of sensitive media:

  The drying tube can protect sensitive media against humidity and CO_2.

Recommended usage ranges for VITLAB® genius² and VITLAB® simplex²:

	Medium		Medium		Medium
O	Acetaldehyde	O	Cresol	O	Methyl ethyl ketone
O	Acetic acid, ≤ 96%	O	Cumene (Isopropylbenzene)	O	Methyl formate
O	Acetone	O	Cyclohexanone	O	Methyl propyl ketone
O	Acetonitrile	O	Decane	O	Mineral oil (Motor oil)
O	Acetylacetone	O	1-Decanol	O	Monochloroacetic acid, ≤ 50%
O	Acrylic acid	O	Diethylene glycol	I	Nitric acid, ≤ 60%*/**
O	Acrylonitrile	O	Dibenzyl ether	O	Nitrobenzene
O	Adipic acid	O	Dichlorobenzene	O	Octane
O	Allyl alcohol	O	Dichloroethane	O	Oleic acid
I	Aluminium chloride	O	Diethanolamine	O	Oxalic acid
O	Amino acid	O	Diethyl ether	I	Perchloric acid
I	Ammonium chloride	O	Diethylamine	O	Petroleum
I	Ammonium fluoride	O	1,2 Diethylbenzene	O	Phenol
I	Ammonium hydroxide, ≤ 20%	O	Dimethyl sulphoxide (DMSO)	O	Phenylethanol
I	Ammonium sulphate	O	Dimethylaniline	O	Phenylhydrazine
O	Amyl acetate	O	Dimethylformamide (DMF)	I	Phosphoric acid, ≤ 85%
O	Amyl alcohol (Pentanol)	O	1,4 Dioxane	I	Phosphoric acid, 85% + sulphuric acid, 98%,1:1
O	Amyl chloride (Chloropentane)	O	Diphenyl ether	O	Piperidine
O	Aniline	O	Ethanol	I	Potassium chloride
I	Barium chloride	O	Ethanolamine	I	Potassium dichromate
O	Benzaldehyde	O	Ethyl acetate	I	Potassium hydroxide
O	Benzene	O	Formaldehyde, ≤ 40%	I	Potassium permanganate
O	Benzoyl chloride	O	Formamide	O	Propanol
O	Benzyl alcohol	O	Formic acid	O	Propionic acid
O	Benzyl chloride	O	Gasoline	O	Propylene glycol (Propanediol)
O	Benzylamine	O	Glacial acetic acid	O	Propylene oxide
I	Boric acid, ≤ 10%	O	Glycerine	O	Pyridine
O	Bromobenzene	O	Glycol (Ethylene glycol)	O	Pyruvic acid
O	Bromonaphthalene	O	Glycolic acid, 50%	O	Salicylaldehyde
O	Butanediol	O	Heating oil (Diesel oil)	O	Salicylic acid
O	1-Butanol	O	Hexane	O	Silver acetate
O	n-Butyl acetate	O	Hexanoic acid	I	Silver nitrate
O	Butyl methyl ether	O	Hexanol	O	Sodium acetate
O	Butylamine	I	Hydrochloric acid, ≤ 37%**	I	Sodium chloride
O	Butyric acid	I	Hydroiodic acid, ≤ 57%**	I	Sodium dichromate
I	Calcium carbonate	I	Iodine / potassium iodide solution	I	Sodium fluoride
I	Calcium chloride	O	Isoamyl alcohol	I	Sodium hydroxide, ≤ 30%
I	Calcium hydroxide	O	Isobutanol	I	Sodium hypochlorite
I	Calcium hypochlorite	O	Isopropanol (2-propanol)	I	Sulphuric acid, ≤ 98%
O	Chloroacetaldehyde, ≤ 45%	O	Isopropyl ether	O	Tartaric acid
O	Chloroacetic acid	O	Lactic acid	O	Tetramethylammonium hydroxide
O	Chloroacetone	I	Magnesium chloride	O	Toluene
O	Chlorobenzene	I	Mercury chloride	O	Turpentine
O	Chlorobutane	O	Methanol	O	Urea
O	Chloronaphthalene	O	Methoxybenzene	O	Xylene
I	Chromic acid, ≤ 50%	O	Methyl benzoate	I	Zinc chloride, ≤ 10%
I	Chromic-sulphuric acid	O	Methyl butyl ether	I	Zinc sulphate, ≤ 10%
I	Copper sulphate				

The above data have been carefully checked and reflect the current state of knowledge. Always follow the instructions for use that accompany the instrument as well as the reagent manufacturer's instruction manual. In addition to the chemicals listed above, solutions of a wide variety of organic or inorganic salts (e.g., biological buffers), biological detergents, and cell culture media can be dispensed. Should you require information on chemicals not listed, please do not hesitate to contact us. Last updated: 10/15.

* Use ETFE/PTFE bottle adapter

** Use drying tube

I Inorganic media

O Organic media

Bottle-top dispensers

VITLAB® genius²

DE-M 121°C

Bottle-top dispenser with variable volume and recirculation system. DE-M marked.

Included in delivery: VITLAB® genius², 3 respectively 5 threaded adapters* made of PP, telescopic filling tube, recirculation tube, mounting tool, instruction manual, quality certificate.

Volume ml	Graduation ml	A** ≤ ± %	A** ≤ ± µl	CV** ≤ %	CV** ≤ µl	PU	Cat. No.
0.2 - 2.0	0.05	0.5	10	0.1	2	1	1625503
0.5 - 5.0	0.10	0.5	25	0.1	5	1	1625504
1.0 - 10.0	0.20	0.5	50	0.1	10	1	1625505
2.5 - 25.0	0.50	0.5	125	0.1	25	1	1625506
5.0 - 50.0	1.00	0.5	250	0.1	50	1	1625507
10.0 - 100.0	1.00	0.5	500	0.1	100	1	1625508

VITLAB® simplex²

DE-M 121°C

Bottle-top dispenser with variable volume. DE-M marked.

Included in delivery: VITLAB® simplex², 3 respectively 5 threaded adapters* made of PP, telescopic filling tube, mounting tool, instruction manual, quality certificate.

Volume ml	Graduation ml	A** ≤ ± %	A** ≤ ± µl	CV** ≤ %	CV** ≤ µl	PU	Cat. No.
0.2 - 2.0	0.05	0.5	10	0.1	2	1	1621503
0.5 - 5.0	0.10	0.5	25	0.1	5	1	1621504
1.0 - 10.0	0.20	0.5	50	0.1	10	1	1621505
2.5 - 25.0	0.50	0.5	125	0.1	25	1	1621506
5.0 - 50.0	1.00	0.5	250	0.1	50	1	1621507
10.0 - 100.0	1.00	0.5	500	0.1	100	1	1621508

VITLAB® simplex²$_{fix}$

DE-M 121°C

Bottle-top dispenser with fixed volume. DE-M marked.

Included in delivery: VITLAB® simplex²$_{fix}$, 5 threaded adapters* made of PP, telescopic filling tube, mounting tool, instruction manual, quality certificate.

Volume ml	Graduation ml	A** ≤ ± %	A** ≤ ± µl	CV** ≤ %	CV** ≤ µl	PU	Cat. No.
1.0	-	1.0	10	0.2	2	1	1622502
5.0	-	0.5	25	0.1	5	1	1622504
10.0	-	0.5	50	0.1	10	1	1622505

* Nominal volume 1 - 10 ml: with adapters GL 25, GL 28, GL 32, GL 38, S 40 and telescopic intake tube (length 125 - 240 mm).
Nominal vollume 25 - 100 ml: with adapters GL 32, GL 38, S 40 and telescopic intake tube (length 170 - 330 mm).

** Accuracy and Coefficient of variation according to DIN EN ISO 8655-5