VITLAB® Dispenser line: genius, simplex, and TA

VITLAB bottle-top dispensers are available for a broad spectrum of applications in the dispensing of exact volumes. VITLAB® genius and simplex can be used for practically any task, while VITLAB® TA 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, VITLAB bottle-top dispensers are very robust and reliable.

	VITLAB® genius/simplex	VITLAB® TA
Applications	Salt solutions, acids, alkalis, 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, FEP, ETFE, PFA, PTFE, platinum-iridium, PVDF (screw cap).	Various fluoroplastics (e.g., ETFE, FEP, PFA, PTFE), Al_2O_3-sapphire, platinum-iridium or tantalum (depending on the model)
Operating limits	Temperature: +15 °C to +40 °C Steam pressure: max. 500 mbar Viscosity: max. 500 mm^2/s Density: max. 2.2 g/cm^3	Temperature: +15 °C to +40 °C Steam pressure: max. 600 mbar Viscosity: max. 500 mm^2/s Density: max. 3.8 g/cm^3

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

Salt solutions	Acids and alkalis	Solvents	High-purity and highly concentrated acids and alkalis	Hydrofluoric acid (HF), bromine, hydrogen peroxide
VITLAB® genius/simplex		VITLAB® genius/simplex		
			VITLAB® TA	

Recommended usage ranges for VITLAB® genius and VITLAB® simplex:

	Medium		Medium		Medium
O	Acetaldehyde	O	Acetic acid	O	Urea
O	Acetone	O	Chloronaphthalene	I	Hydrochloric acid, 37%
O	Acetonitrile	I	Chromic acid	O	Lactic acid
O	Acetylacetone	I	Chromic-sulphuric acid	I	Magnesium chloride
O	Acrylic acid	I	Copper sulphate	I	Mercury chloride
O	Acrylonitrile	O	Cresol	O	Methanol
O	Adipic acid	O	Cumene (isopropylbenzene)	O	Methoxybenzene
O	Allyl alcohol	O	Cyclohexanone	O	Methyl butyl ether
I	Aluminium chloride	O	Decane	O	Methyl formate
O	Amino acids	O	1-Decanol	O	Methyl propyl ketone
I	Ammonia solution	O	Di(ethylene glycol)	O	Mineral oil (motor oil)
I	Ammonium chloride	O	Dibenzyl ether	O	Monochloroacetic acid, 50%
I	Ammonium fluoride	O	Dichlorobenzene	I	Nitric acid, 60%
I	Ammonium hydroxide	O	Dichloroethane	O	Nitrobenzene
I	Ammonium sulphate	O	Dichloromethane	O	Octane
O	Amyl acetate	O	Diethanolamine	O	Oleic acid
O	Amyl alcohol (pentanol)	O	Diethyl ether	O	Oxalic acid
O	Amyl chloride (chloropentane)	O	Diethylamine	I	Perchloric acid
O	Aniline	O	1,2 Diethylbenzene	O	Petroleum
I	Barium chloride	O	Dimethyl sulphoxide (DMSO)	O	Phenol
O	Benzaldehyde	O	Dimethylaniline	O	Phenylethanol
O	Benzene	O	Dimethylformamide (DMF)	O	Phenylhydrazine
O	Benzoyl chloride	O	1,4 Dioxane	I	Phosphoric acid, 85%
O	Benzyl alcohol	O	Diphenyl ether	I	Phosphoric acid, 85% + sulphuric acid, 98%,1:1
O	Benzyl chloride	O	Ethanol	O	Piperidine
O	Benzylamine	O	Ethanolamine	O	Propanol
I	Boric acid	O	Ethyl acetate	O	Propionic acid
O	Bromobenzene	O	Formaldehyde	O	Propylene glycol (propanediol)
O	Bromonaphthalene	O	Formamide	O	Propylene oxide
O	Butanediol	O	Glacial acetic acid	O	Pyridine
O	1-Butanol	O	Glycerine	O	Salicylaldehyde
O	n-Butyl acetate	O	Glycol (ethylene glycol)	O	Salicylic acid
O	Butyl methyl ether	O	Glycolic acid, 50%	O	Silver acetate
O	Butylamine	O	Heating oil (Diesel oil)	I	Silver nitrate
O	Butyric acid	O	Hexane	O	Sodium acetate
I	Calcium carbonate	O	Hexanoic acid	I	Sodium chloride
I	Calcium chloride	O	Hexanol	I	Sodium dichromate
I	Calcium hydroxide	I	Hydroiodic acid	I	Sodium fluoride
I	Calcium hypochlorite	I	Iodine / potassium iodide solution	I	Sodium hydroxide, 30%
O	Chloroacetaldehyde	O	Isoamyl alcohol	I	Sodium hypochlorite
O	Chloroacetic acid	O	Isobutanol	I	Sulphuric acid, 98%
O	Chloroacetone	O	Isopropanol (2-propanol)	O	Tartaric acid
O	Chlorobenzene	O	Isopropyl ether	O	Tetramethylammonium hydroxide
O	Chlorobutane	O	Methyl ethyl ketone	O	Toluene
O	Formic acid	I	Potassium chloride	O	Turpentine
O	Gasoline	I	Potassium dichromate	O	Xylene
O	Methyl benzoate	I	Potassium hydroxide	I	Zinc chloride
O	Pyruvic acid	I	Potassium permanganate	I	Zinc 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: 03/12.

I Inorganic media

O Organic media

VITLAB® genius

VITLAB® genius bottle-top dispensers are a family of instruments with proven precision that offer many advantages in routine liquid-handling operations. VITLAB® genius instruments are suitable for a wide variety of applications, and can be used in practically any operation, since the materials that come into in contact with media (PTFE, PFA, FEP, borosilicate glass and platinum-iridium) are resistant to most acids, bases, and solvents. Reagent loss while ventilating is avoided with the patented (EP 542 241) recirculation valve. The simple-to-use calibration function helps meet all the requirements for test equipment monitoring without downtime.

VITLAB® genius is equipped with a positive displacement piston and a fluoroplastic (PFA) sealing lip on the cylinder wall. The latter acts like a windscreen wiper to prevent crystal build-up on the cylinder wall from readily crystallisable media. The glass cylinder is also coated with a plastic material that reduces the risk of splashes should breakage occur. The telescopic filling tube can be adjusted smoothly to different bottle heights.

The VITLAB® genius is completely autoclavable at 121 °C (2 bar) according to DIN EN 285, and is certified compliant with DIN 12600.

Included in delivery:
VITLAB® genius with 3 threaded adapters made from PP.
Nominal volumes of 2.5 - 10 ml (screw coupling GL 32) with adapters GL 28, S 40 and GL 45.
Nominal volumes of 25 - 100 ml (screw coupling GL 45) with adapters GL 32, GL 38 and S 40.
Telescopic filling tube (200 - 350 mm), mounting tool, instruction manual, and quality certificate stating all test values.

Volume ml	Graduation ml	A* ≤ ± %	CV* ≤ %	PU	Cat. No.
0.25 - 2.5	0.05	0.6	0.1	1	1605503
0.5 - 5.0	0.10	0.5	0.1	1	1605504
1.0 - 10.0	0.20	0.5	0.1	1	1605505
2.5 - 25.0	0.50	0.5	0.1	1	1605506
5.0 - 50.0	1.00	0.5	0.1	1	1605507
10.0 - 100.0	2.00	0.5	0.1	1	1605508

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

Accessories
can be found on page 14.

VITLAB® simplex

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.

VITLAB® simplex bottle-top dispensers are a family of instruments with proven precision that offer many advantages in routine liquid-handling operations. The positive displacement piston in this instrument is equipped with a fluoroplastic (PFA) sealing lip on the cylinder wall. This acts like a windscreen wiper to prevent crystal build-up on the cylinder wall from readily crystallisable media.
The glass cylinder is also coated with a plastic material that reduces the risk of splashes should breakage occur. The telescopic filling tube can be adjusted smoothly to the height of the bottle.

Since the materials in contact with the media (PTFE, PFA, FEP, borosilicate glass and platinum-iridium) are resistant to most acids, bases, and solvents, VITLAB® simplex bottle-top dispensers can be used in practically any operation.

The VITLAB® simplex is completely autoclavable at 121 °C (2 bar) according to DIN EN 285, and is certified compliant with DIN 12600.

Included in delivery:
VITLAB® simplex with 3 threaded adapters made from PP.
Nominal volumes of 2.5 - 10 ml (screw coupling GL 32) with adapters GL 28, S 40 and GL 45.
Nominal volumes of 25 - 100 ml (screw coupling GL 45) with adapters GL 32, GL 38 and S 40.
Telescopic filling tube (200 - 350 mm), mounting tool, instruction manual, and quality certificate stating all test values.

Volume ml	Graduation ml	A* ≤ ± %	CV* ≤ %	PU	Cat. No.
VITLAB® simplex					
0.25 - 2.5	0.05	0.6	0.1	1	1601503
0.5 - 5.0	0.10	0.5	0.1	1	1601504
1.0 - 10.0	0.20	0.5	0.1	1	1601505
2.5 - 25.0	0.50	0.5	0.1	1	1601506
5.0 - 50.0	1.00	0.5	0.1	1	1601507
10.0 - 100.0	2.00	0.5	0.1	1	1601508
VITLAB® simplex fix					
1.0	-	0.6	0.1	1	1602502
5.0	-	0.5	0.1	1	1602504
10.0	-	0.5	0.1	1	1602505

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

Accessories
can be found on page 14.