

For any application – the right Dispensette®.

Dispensette®

- Dispensette® III
- Dispensette® Organic
- Dispensette® HF

The Dispensette® bottle-top dispenser has proven itself the world over with its wide range of practical applications. It has been continuously improved over decades to meet the increasing demands of the laboratory.



Models

The wide range of Dispensette® dispensers provides premium dispensing options for the complete spectrum of liquid reagents:

Dispensette® III (red color-code):

- EASY CALIBRATION model
- Analog-adjustable model
- Fixed-volume model

Dispensette® Organic (yellow color-code):

- EASY CALIBRATION model
- Analog-adjustable model
- Fixed-volume model

Dispensette® HF (green color-code):

Analog-adjustable model



For dispensing aggressive reagents, including concentrated acids such as H₃PO₄, H₂SO₄, bases like NaOH, KOH, saline solutions, as well as many organic solvents.

For dispensing organic solvents, including chlorinated and fluorinated hydrocarbons (e.g., trichlorotrifluoroethane and dichloromethane), concentrated acids (e.g., HCl and HNO₃), trifluoroacetic acid (TFA), tetrahydofuran (THF) and peroxides.



For dispensing hydrofluoric acid (HF). Maximum permitted concentration 52%. A closure set is recommended because of the fumes, see page 17.



- Easy to dismantle for cleaning
- Replaceable filling valves
- Autoclavable at 121 °C
- Conformity certified
- Easy to calibrate and adjust in order to comply with ISO 9001 and GLP guidelines. A positive indicator automatically indicates adjustment from factory settings.

Dispenser selection chart:

Please see page 18 of the user's guide or contact BRAND for information on compatibility with your specific media.



Use and Handling



One-handed operation

Each piston is matched individually with its cylinder to close tolerances. A thin liquid film acts as a non-wearing seal that reduces friction, so dispensing is easy and convenient.



Dispensing sterile fluids

The Dispensette® can be autoclaved at 121 °C and may be fitted with an optional microfilter to prevent contamination of the bottle contents. Sterile technique must be followed.



Serial dispensing

To facilitate serial dispensing, the optional flexible discharge tube with safety handle permits fast and precise dispensing even into narrow test tubes. The functions of the safety discharge system and SafetyPrime™ recirculation valve are fully maintained with the flexible discharge tube.



Dispensing sensitive reagents

The optional drying tube screws into the ventilation aperture at the rear of the Dispensette®. Filled with a suitable absorbing agent, it can protect sensitive reagents against humidity or CO₂.



Areas of application

Bases	Saline solutions	Acids	Organic solve polar		Hydrofluoric acid (HF)	
Dispensette® III						
		Dispensette® Organic				
					Dispensette® HF	

For assistance in selecting a system, please see the guide on page 18.

Parts in contact with medium

Dispensette® III:

iridium, ETFE, FEP, PFA and PP

■ Dispensette® HF:

borosilicate glass, ceramic, platinum-(discharge tube safety screw cap)

Dispensette® Organic: borosilicate glass, ceramic, tantalum, ETFE, FEP, PFA and PP (discharge tube safety screw cap)

> ceramic, platinum-iridium, ETFE, FEP, PFA and PP (discharge tube safety screw cap)

Operating limits

Dispensette® III:

vapor pressure max. 500 mbar viscosity max. 500 mm²/s temperature max. 40 °C density max. 2.2 g/cm³

Dispensette® Organic: vapor pressure max. 500 mbar

viscosity max. 500 mm²/s temperature max. 40 °C density max. 2.2 g/cm³

Dispensette® HF:

vapor pressure max. 500 mbar viscosity max. 500 mm²/s temperature max. 40 °C density max. 3.8 g/cm³

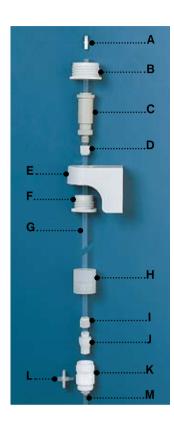
A Closer Look...

The EASY CALIBRATION model has a digital display and all the features that make dispensing safe and convenient.



Remote Dispensing System for Drum Dispensing

for Dispensette® III and Dispensette® Organic



Standard supply:

without Dispensette®, for drums with 3/4" inner thread, consisting of:

- A) Plug-in adapter, PTFE (only for Dispensettes ≤ 10 ml)
- B) Thread adapter, PP (GL 45/32)
- C) Strain-free grip, PP
- D) Locking screw, PP
- E) Wall mounting unit, PP
- F) Thread adapter, PP (GL 32/28)
- **G)** Filling tube, FEP, 3 m, outer Ø 7.6 mm
- H) Mounting screw, PP
- I) Locking screw, PP
- J) Coupling, ETFE, with ball valve
- K) Drum adapter, PTFE, for drums with inner-thread of 3/4", with ball valve (incl. closure cap)
- L) Membrane filter, 3 µm, non-sterile
- M) Filling tube, 0.47 m, outer Ø 6.9 mm

Cat. No.	7042 61

- Dispense accurate volumes directly from drums and bulk refills
- The Dispensette® can be mounted on a wall, a ring stand or on lab furniture
- A filter in the drum adapter minimizes risk of contaminating highpurity reagents
- A quick-release connector with integrated valves allows quick changing of the bulk container
- The remote dispensing system allows storage of the drum up to 10 meters (30 feet) away from the Dispensette®. The max. delivery height is approximately 1.2 m.

Note:

Observe all Safety Instructions, Operating Exclusions and Limitations of the Dispensette® III and the Dispensette® Organic.

Accessories

Description	Dimensions	Cat. No.
Filling tube, FEP	10 m, outer Ø 7.6 mm	7042 67
Filling tube, FEP	1 m, outer Ø 6.9 mm	7042 69
Filling tube, FEP	1.4 m, outer Ø 6.0 mm	7042 09
Filling tube, FEP	1.5 m, outer Ø 7.6 mm	7042 10
Thread adapter, steel	outer thread 2", inner thread 3/4"	7042 70
Thread adapter, PTFE, for direct mounting of Dispensette® on drum	outer thread 3/4", outer thread GL 32	7042 81
Thread adapter, PTFE, to connect remote dispensing system with drums with GL outer thread	inner thread 3/4", inner thread GL 32	7042 82
Support rod connector for wall mounting unit		7042 68
Shelf clamp for wall mounting unit	·	7042 72



Support rod connector



Shelf clamp

Operating Exclusions

Never use the remote dispensing system:

- with SafetyPrime[™] recirculation valve. It has to be removed before use!
- 2. for pressurized vessels
- for liquids attacking borosilicate glass, Al₂O₃-ceramic, PFA, ETFE, FEP or PTFE
- 4. for Peroxide (due to catalytic reaction)
- 5. for carbon disulfide (CS₂), due to risk of explosion!

Ordering Data

Items supplied:

Each Dispensette® is conformity certified and supplied with performance certificate, discharge tube, telescoping filling tube, SafetyPrime™ recirculation valve (optional), mounting tool and adapters of polypropylene:

Dispensette® nominal volume, ml	Adapter for bottle thread	Filling tube length, mm
0.5	GL 22, GL 25, GL 28, GL 32	125-240
1, 2, 5, 10	GL 22, GL 28, GL 32, GL 38, S40	125-240
25, 50, 100	GL 32, GL 38, S40	170-330



Dispensette® III, EASY CALIBRATION

Capac	ity		Subdivision ml	A* ≤ %	± μΙ	CV* <u>s</u> %	μl	without SafetyPrime recirculation valve Cat. No.	e™ with SafetyPrime™ recirculation valve Cat. No.
0.2 -	_	2	0.01	0.5	10	0.1	2	4700 320	4700 321
0.5 -		5	0.02	0.5	25	0.1	5	4700 330	4700 331
1 -		10	0.05	0.5	50	0.1	10	4700 340	4700 341
2.5 -	_	25	0.1	0.5	125	0.1	25	4700 350	4700 351
5 -	_	50	0.2	0.5	250	0.1	50	4700 360	4700 361



Dispensette® III, Analog-adjustable

Capacity ml	Subdivision ml	A* ≤ %	± µl	CV* %	≤ µl	without SafetyPrime ^r recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
0.05 - 0.5	0.01	1.0	5	0.2	1	4700 100	4700 101
0.2 - 2	0.05	0.5	10	0.1	2	4700 120	4700 121
0.5 - 5	0.1	0.5	25	0.1	5	4700 130	4700 131
1 - 10	0.2	0.5	50	0.1	10	4700 140	4700 141
2.5 - 25	0.5	0.5	125	0.1	25	4700 150	4700 151
5 - 50	1.0	0.5	250	0.1	50	4700 160	4700 161
10 - 100	1.0	0.5	500	0.1	100	4700 170	4700 171



Dispensette® III, Fixed-volume

Capacity ml	A * ≤ %	± µl	CV* ≤ %	≦ µl	without SafetyPrime™ recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
1	0.5	5	0.1	1	4700 210	4700 211
2	0.5	10	0.1	2	4700 220	4700 221
5	0.5	25	0.1	5	4700 230	4700 231
10	0.5	50	0.1	10	4700 240	4700 241
Special fixed volumes: 0.25-100 ml (please	state w	hen ord	lering)	4700 290	4700 291

Dispensette® Organic, EASY CALIBRATION

Capacity ml	Subdivision ml	A * ≤ : %	± µl	CV* ≤ %	μl	without SafetyPrime™ recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
0.5 - 5	0.02	0.5	25	0.1	5	4730 330	4730 331
1 - 10	0.05	0.5	50	0.1	10	4730 340	4730 341
2.5 - 25	0.1	0.5	125	0.1	25	4730 350	4730 351
5 - 50	0.2	0.5	250	0.1	50	4730 360	4730 361



Dispensette® Organic, Analog-adjustable

Capa ml	cit	у	Subdivision ml	A* ≤ %	± µl	CV* %	≤ µl	without SafetyPrime recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
0.5	-	5	0.1	0.5	25	0.1	5	4730 130	4730 131
1	-	10	0.2	0.5	50	0.1	10	4730 140	4730 141
2.5	-	25	0.5	0.5	125	0.1	25	4730 150	4730 151
5	-	50	1.0	0.5	250	0.1	50	4730 160	4730 161
10	-	100	1.0	0.5	500	0.1	100	4730 170	4730 171



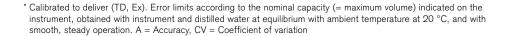
Dispensette® Organic, Fixed-volume

Capacity ml	A* ≤ : %	± µl	CV* ≤ %	μl	without SafetyPrime™ recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
5	0.5	25	0.1	5	4730 230	4730 231
10	0.5	50	0.1	10	4730 240	4730 241
Special fixed volumes: 2-100 ml (plea	ase sta	te when	orderir	ng)	4730 290	4730 291



Dispensette® HF

Capacity ml	Subdivision ml	A* ≤ ± % µl	CV* ≤ % µl	without SafetyPrime™ recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
1 - 10	0.2	0.5 50	0.1 10	4700 040	4700 041





Accessories



Discharge tubes with integrated valve

Pack of 1.

Description	Nominal volume ml	Shape	Length mm	Cat. No.
for Dispensette® III	0.5, 1, 2, 5, 10	fine tip	90	7079 15
	5, 10	standard	90	7079 16
	25, 50, 100	standard	120	7079 17
	25, 50, 100	fine tip	120	7079 18
for Dispensette® Organic	0.5, 1, 2, 5, 10	fine tip	90	7079 35
	5, 10	standard	90	7079 36
	25, 50, 100	standard	120	7079 37
	25, 50, 100	fine tip	120	7079 38
■ for Dispensette® HF	10	standard	90	7079 19

SafetyPrime™ recirculation valves

Pack of 1.



Description	Cat. No.
■ for Dispensette [®] III 1-100 ml	7060 80
■ for Dispensette® III 0.5 ml	7060 81
for Dispensette® Organic	7060 90
■ for Dispensette® HF	7060 85

Adapters

For Dispensette®, seripettor®, Digital Burette III and QuikSip™.

PP or ETFE. Adapters of ETFE offer higher chemical resistance. Pack of 1.



Outer thread	for bottle thread/ ground joint	Material	Cat. No.
GL 32	GL 22	PP	7043 22
GL 32	GL 25	PP	7043 25
GL 32	GL 28	PP	7043 28
GL 32	GL 30	PP	7043 30
GL 32	GL 45	PP	7043 45
GL 45	GL 32	PP	7043 96
GL 45	GL 38	PP	7043 97
GL 45	S* 40	PP	7043 43
S* 40	S* 60	PE	7043 48
GL 32	GL 25	ETFE	7043 75
GL 32	GL 28	ETFE	7043 78
GL 32	GL 30	ETFE	7043 80
GL 32	GL 45	ETFE	7043 95
GL 45	GL 32	ETFE	7043 98
GL 45	GL 38	ETFE	7043 99
GL 45	S* 40	PTFE	7043 91
GL 32	NS 19/26	PP	7044 19
GL 32	NS 24/29	PP	7044 24
GL 32	NS 29/32	PP	7044 29

^{*} buttress thread

Discharge tube with Luer-Lock attachment for micro filter

FEP/PP. Pack of 1.

Cat. No.	7079 28*
out. No.	1013 20





Threaded bottles, coated and uncoated, you can find on page 237.

Telescoping filling tubes

FEP. Adjusts to various bottle heights. Pack of 1.



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-	_	-			
		-	-	-	

Flexible discharge tubing

PTFE, coiled, length 800 mm, with handle. Pack of 1.



Nominal volume ml	Cat. No.
1, 2, 5, 10	7079 25*
25, 50, 100	7079 26*

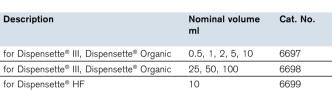
^{*} not suitable for HF and Peroxide

Nominal volume Outer Ø ml mm mm 0.5, 1, 2, 5, 10 6 70-140 7042 02 125-240 7042 03 195-350 7042 08 250-480 7042 01 25, 50, 100 7.6 170-330 7042 04

250-480

Filling valve with sealing washer

Pack of 1.





7042 05

Filling valve with olive-shaped nozzle

For frequent autoclaving with the filling tube mounted, this filling valve with tube nozzle (PEEK) is recommended. PEEK has limited chemical resistance! Pack of 1.



Description	Nominal volume ml	Cat. No.
for Dispensette® III, Dispensette® Organic	0.5, 1, 2, 5, 10	6637
for Dispensette® III, Dispensette® Organic	25, 50, 100	6638

Seals

PTFE. Spare seals for discharge tube, SafetyPrime™ and filling valve. Pack of 5 each type.





Closure Set

For sensitive reagents (PP air vent cap and stopper with Luer-cone, PTFE-sealing ring). Pack of 1.

Cat. No.	7044 8	16



Micro filter connector with Luer-cone

PP. Air vent cap and seal. Pack of 1 each.

Cat. No.	7044 95
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Drying tube

Drying tube and seal, without drying agent. Pack of 1.

Cat Na	7079.30
Cat. No.	7079.30



Dispenser Selection Chart

Reagent	Disp. III	Disp. Organic	seri- pettor®
Acetaldehyde	+	+	
Acetic acid (glacial), 100%	+	+	
Acetic acid, 96%	+	+	
Acetic anhydride		+	
Acetone	+	+	
Acetonitrile	+	+	
Acetophenone		+	+
Acetylacetone	+	+	+
Acetylchloride		+	
Acrylic acid	+	+	
Acrylonitrile	+	+	
Adipic acid	+		+
Allyl alcohol	+	+	+
Aluminium chloride	+		+
Amino acids Ammonium chloride	+		+
Ammonium fluoride			+
Ammonium hydroxide,	+		Т
30% (Ammonia)	+	+	+
Ammonium sulfate	+		+
n-Amyl acetate	+	+	·
Amyl alcohol (Pentanol)	+	+	+
Amyl chloride			
(Chloropentane)		+	
Aniline	+	+	
Barium chloride	+		+
Benzaldehyde	+	+	
Benzene (Benzol)	+	+	
Benzine (Gasoline)		+	
Benzoyl chloride	+	+	
Benzyl alcohol	+	+	
Benzylamine	+	+	
Benzylchloride	+	+	
Boric acid, 10%	+	+	+
Bromobenzene	+	+	
Bromonaphthalene	+	+	
Butanediol	+	+	+
1-Butanol	+	+	
n-Butyl acetate	+	+	
Butyl methyl ether	+	+	
Butylamine	+	+	
Butyric acid	+	+	
Calcium carbonate	+		+
Calcium chloride	+		+
Calcium hydroxide	+		+
Calcium hypochlorite Carbon tetrachloride	+	+	+
Chloro naphthalene	+	+	
Chloroacetalaldehyde,	+	+	
45%	+	+	
Chloroacetic acid	+	+	
Chloroacetone	+	+	
Chlorobenzene	+	+	
Chlorobutane	+	+	
Chloroform		+	
Chlorosulfonic acid		+	
Chromic acid, 10%	+	+	
Chromic acid, 50%	+	+	
Chromosulfuric acid	+		
Copper sulfate	+		+
Cresol		+	
Cumene			

Reagent	Disp. III	Disp.	seri-
Reagent	Disp. III	Organic	pettor®
Cyclohexane		+	
Cyclohexanone	+	+	
Cyclopentane		+	
Decane	+	+	
1-Decanol	+	+	
Dibenzylether	+	+	
Dichloroacetic acid		+	
Dichlorobenzene	+	+	
Dichloroethane		+	
Dichloroethylene		+	
Dichloromethane		+	
Diesel oil (Heating oil)		+	
Diethanolamine Diethyl ether	+	+	
Diethyl ether	+	+	
Diethylamine 1.2 Diethylbenzene	+	+	
Diethylene glycol	+	+	+
Dimethyl sulfoxide			
(DMSO)	+	+	
Dimethylaniline	+		
Dimethylformamide (DMF)	+	+	
1.4 Dioxane		+	
Diphenyl ether	+	+	
Ethanol	+	+	+
Ethanolamine	+	+	
Ethyl acetate	+	+	
Ethyl methyl ketone	+	+	+
Ethylbenzene		+	
Ethylene chloride		+	
Fluoroacetic acid		+	
Formaldehyde, 40%	+		+
Formamide	+	+	+
Formic acid, 100%		+	
Glycerol Chapt (Ethylana alyan)	+	+	+
Glycol (Ethylene glycol) Glycolic acid, 50%	+	+	+
Heating oil (Diesel oil)		+	
Heptane		+	
Hexane		+	
Hexanoic acid	+	+	+
Hexanol	+	+	
Hydriodic acid	+	+	+
Hydrobromic acid		+	
Hydrochloric acid, 20%	+	+	
Hydrochloric acid, 20-37 %		+	
Hydrogen peroxide, 35%		+	+
Isoamyl alcohol	+	+	
Isobutanol	+	+	+
Isooctane		+	
Isopropanol (2-Propanol)	+	+	+
Isopropyl ether	+	+	
Lactic acid	+		+
Methanol	+	+	+
Methoxybenzene	+	+	
Methyl benzoate	+	+	
Methyl butyl ether	+	+	
Methyl formate	+	+	
Methyl propyl ketone	+	+	
Methylene chloride		+	
Mineral oil (Engine oil)	+	+	
Monochloroacetic acid	+	+	
Nitric acid, 30%	+	+	

Reagent	Disp. III	Disp. Organic	seri- pettor®
Nitric acid, 30-70%		+	
Nitrobenzene	+	+	
Oleic acid	+	+	
Oxalic acid	+		+
n-Pentane		+	
Peracetic acid		+	
Perchloric acid	+	+	
Perchloroethylene		+	
Petroleum Datroleum athar	+	+	
Petroleum ether Phenol	+	+	
Phenylethanol	+	+	
Phenylhydrazine	+	+	
Phosphoric acid, 85%	+	+	
Phosphoric acid, 85% +	-		
Sulphuric acid, 98%, 1:1	+	+	
Piperidine	+	+	
Potassium chloride	+		+
Potassium dichromate	+		+
Potassium hydroxide	+		+
Potassium permanganate Propionic acid	+		+
Propylene glycol	+	+	+
(Propanediol)	+	+	+
Pyridine	+	+	
Pyruvic acid	+	+	+
Salicylaldehyde	+	+	
Scintilation fluid		+	
Silver acetate	+		+
Silver nitrate	+		+
Sodium acetate	+		+
Sodium chloride Sodium dichromate	+		+
Sodium fluoride	+		+
Sodium hydroxide, 30%	+		+
Sodium hypochlorite	+		+
Sulfuric acid, 10%	+	+	+
Sulfuric acid, 98%	+	+	
Tartaric acid	+		
Tetrachloroethylene		+	
Tetrahydrofuran (THF)		+	
Tetramethylammonium hydroxide	+		
Toluene		+	
Trichloroacetic acid		+	
Trichlorobenzene		+	
Trichloroethane		+	
Trichloroethylene		+	
Trichlorotrifluoro ethane		+	
Triethanolamine	+	+	
Triethylene glycol	+	+	
Trifluoro ethane		+	
Trifluoroacetic acid (TFA)		+	
Turpentine		+	
Urea	+		+
Xylene		+	
Zinc chloride, 10%	+		+
Zinc sulfate, 10%	+		+

Hydrofluoric acid (HF): Only the Dispensette® HF is specifically designed to dispense hydrofluoric acid (maximum permitted concentration 52%). The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. In addition to these chemicals, a variety of organic and inorganic saline solutions (e.g., biological buffers), biological detergents and media for cell culture can be dispensed. Should you require information on chemicals not listed, please feel free to contact BRAND. Status as of: 0506



seripettor®

The bottle-top dispenser with its technically innovative design provides a cost-effective alternative to high-end dispensers. Materials of construction allow for dispensing of many common laboratory liquids: dilute acids, buffers, polar solvents – even strong alkaline solutions!



Use and Handling



Aqueous solutions

Dispense biological buffers, biological detergents, antifoaming agents, culture media, vitamin solutions, etc. The seripettor® is also suitable for sensitive solutions such as hydrogen peroxide solution.

Agar culture media can be dispensed at up to a max. of 60 °C.



Acids

Weak, dilute or non-oxydizing acids, such as 10 % HCl can be dispensed.



Alkaline solutions

The components of seripettor® are compatible with alkaline solutions, such as NaOH, KOH and ammonia.



Polar solvents

seripettor® is suitable for acetone, ethanol, methanol, acetylacetone, etc.



Dispensing sterile liquids

 Mount the valve block with filling tube onto the bottle and cover the valve block with cap. Fix the autoclavable sterile membrane filter (0.2 μm) laterally and autoclave at 121 °C.



2. In a Clean-bench (sterile hood), remove cap from the valve block, screw in a new sterile dispensing cartridge and mount the pump assembly. You're ready to dispense!



Serial dispensing

The flexible discharge tubing greatly facilitates serial dispensing.

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Areas of application

Bases	Saline solutions	Acids		Organic solve	ents	Hydrofluoric
		non-oxidizing	oxidizing	polar	non-polar	acid (HF)
seripettor®						

For assistance in selecting a system, please see the guide on page 18.

Parts in contact with medium

Parts of seripettor® which come in contact with dispensed liquids are made of PP, PE and EPDM (Ethylene-Propylene-Diene-Rubber).

Operating limits

Liquids which do not attack the materials of the fluid path can be used whithin the following limits:

Vapor pressure: max. 500 mbar

Viscosity: 10 ml instrument: 150 mm²/s

25 ml instrument: 75 mm²/s

Density: max. 13.6 g/cm³

Temperature: max. 40 °C (Agar culture media

up to max. 60 °C)

Liquids that should not be dispensed include, but are not limited to:

- concentrated or oxidizing acids
- non-polar solvents like hydrocarbons and halogenated hydrocarbons

Dispenser selection chart:

Please see page 18 of the guide or contact BRAND for information on applications with your specific media.

A Closer Look...

Disassembles without tools!

The innovative design of seripettor® makes cleaning and maintenance easy. All parts can be replaced guickly without tools. Eliminate expensive repairs!



Volume setting

Scalloped track allows for quick and exact setting of desired volume.



Semi-automatic dispensing

The spring-loaded piston refills the cylinder after dispensing.



Replaceable dispensing cartridge

In the event of contamination with crystallizing or sticky deposits, the pull-off metering cartridge is easy and inexpensive to replace. One spare cartridge included free!



Fits most bottles

Valve block (45 mm) and included adapters match the threads of the most common reagent bottles.



See page 16 for an overview of available adapters.

Ordering Data



seripettor®

Items supplied:

Each seripettor $^{\tiny{(8)}}$ is supplied with discharge tube, filling tube, spare dispensing cartridge and PP adapters (GL 45/32 and GL 45/S40).

Volume ml	Subdivision ml	A * ≤ ± %	μl	CV* ≤ %	μl	Cat. No.
1 - 10	0.2	1.2	120	0.2	20	4720 140
2.5 - 25	0.5	1.2	300	0.2	50	4720 150

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth, steady operation. A = Accuracy, CV = Coefficient of variation

Accessories

Dispensing cartridges

Non-sterile and sterile. Piston (PE), cylinder (PP).

Description	Pack of	Cat. No.
10 ml, non-sterile	3	7045 02
25 ml, non-sterile	3	7045 04
10 ml, sterile (single packed)	7	7045 06
25 ml, sterile (single packed)	5	7045 08



Filling tubes

PP. Autoclavable design for sterile applications with additional O-rings.

Length	Pack of	Cat. No.
250 mm	2	7045 32
500 mm	2	7045 34
250 mm, with O-ring	1	7045 36
500 mm, with O-ring	1	7045 38



Valve set

1 filling valve (filling valve body, O-ring) 1 discharge valve, 2 seals.

Cat. No. 6790



Flexible discharge tubing

PTFE, coiled, length 600 mm, with handle. Pack of 1.

Cat. No.	7045 22



Discharge tube

PP, incl. closure cap and EPDM discharge valve Pack of 1.

Cat. No.	7045 20



Caps

PP-cap for closing the valve block. Autoclavable. Pack of 1.

Description	Cat. No.
10 ml	7045 52
25 ml	7045 54



Digital Burette III

The Digital Burette III bridges the gap between cumbersome glass burettes and costly titrating units. Its small size and long-life battery allow it to be used in cramped quarters and in locations far from electrical outlets. Straightforward and intuitive operation together with high reliability simplifies your daily routine, whether in the lab or in the field.



Applications

The Digital Burette III is ideal for working in remote areas. The combination of small size, light weight and battery power make it a must for outdoor titrations. The Digital Burette III facilitates daily routine work in many areas:



In the food laboratory, e.g., for the determination of caffeine and proteine in beverages, sulfurous acid in wine and juices, etc.



In the chemical laboratory, e.g., for the determination of esterification values, iodine and bromine numbers, neutralization values in mineral oils, etc.



In field or laboratory environmental work, e.g., for the determination of COD, water hardness, acid or alkaline values, etc.



Titrating tube

With conventional discharge tubes, the achievable precision depends on the drop size, e.g., 30 μ l. The optional micro-valve discharge tube allows titrating directly into the sample, without drop formation. This results in titration with microliter precision.



Drying tube

To protect sensitive titrants from humidity or CO_2 , the Digital Burette III can be fitted with an optional drying tube.





Parts in contact with medium

The flowpath of the Digital Burette III is made of highly resistant materials:

- Borosilicate glass
- PTFE
- FEP
- PFA
- ETFE
- Platinum-iridium
- Al₂O₃-ceramic
- PP (screw cap)

Operating limits

The Digital Burette III performs within the following limits:

- Temperatures of instrument and reagent must be between 15 °C to 40 °C.
- The Digital Burette III can be used for aqueous and non-aqueous solutions (e.g., KOH in alcohol) up to 2 mol/l.
- The Digital Burette III is not autoclavable.
- The Digital Burette III is not designed for strongly crystallizing solutions, or acids and bases at higher concentrations. For these applications, use one of our bottletop dispensers, see page 10.

Simple cleaning



The filling valve is easily removed for cleaning. No need to worry about solutions which tend to crystallize.

Don't worry about power outages

The environmentally-friendly lithium battery provides power for more than 60,000 titrations without recharging! That is enough power for more than 5 years operation with 50 titrations per day. Battery will then be replaced during routine performance check in the factory. There is no need to worry about a dead battery, and no cumbersome battery change. The Digital Burette III is always ready to use.













A Closer Look...

The Digital Burette III Easy Calibration has all the features that make titrating safe and convenient.



The large LCD screen clearly shows titrated volume. With no meniscus and no graduation lines, there are no reading errors.

Simple operation.

Two keys control all microprocessor functions.

SafetyPrime™

The SafetyPrime[™] recirculation valve (optional) avoids reagent waste by permitting recirculation during priming. Valve control clearly indicates valve position.

Safety discharge system.

The integrated safety discharge system reduces the risk of inadvertent dispensing and splashes if discharge tube is improperly installed or missing.

Discharge tube safety screw cap.

Screw cap reduces reagent contact and is easy to attach and remove, even while wearing gloves.

Easy Calibration Technique

Calibration and adjustments according to ISO 9001 and GLP guidelines are done within seconds. Alteration of factory setting is automatically indicated by <CAL> in the display. For more information, please see page 276.

Easy-grip hand wheel

Easy-grip hand wheel action simplifies the continuous regulation of titration rate, from fast to dropwise.

Rotating valve block

To allow the bottle label to face the user, the valve block can be rotated 360°. The Digital Burette III comes with a 45 mm standard thread plus three adapters to fit most common reagent bottles. Additional adapters are available for most applications.

Telescoping filling tube

Adjusts easily to different size bottles – without measuring or cutting.



Recommended Application Range

The Digital Burette III can be used for the following titrants up to a concentration of 2 mol/l:



Reagent	Reagent
Acetic acid	Potassium dichromate solution
Alcoholic potassium hydroxide solution	Potassium hydroxide solution
Ammonium iron (II) sulfate solution	Potassium iodate solution
Ammonium thiocyanate solution	Potassium permanganate solution
Barium chloride solution	Potassium thiocyanate solution
Bromide bromate solution	Silver nitrate solution
Cerium (IV) sulfate solution	Sodium arsenite solution
EDTA solution	Sodium carbonate solution
Hydrochloric acid	Sodium chloride solution
Hydrochloric acid in acetone	Sodium hydroxide solution
lodine solution	Sodium nitrite solution
Iron (II) sulfate solution	Sodium thiosulfate solution
Nitric acid	Sulfuric acid
Oxalic acid solution	Tetra-n-butylammonium hydroxide
Perchloric acid	solution
Potassium bromate solution	Triethylamine in acetone
Potassium bromate bromide solution	Zinc sulfate solution

The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. Should you require information on chemicals not listed, please feel free to contact BRAND. Status as of: 0506

Ordering Data

Digital Burette III, Easy Calibration

Items supplied:

Each Digital Burette III is conformity certified and supplied with performance certificate, fine tip titrating tube, telescoping filling tube, SafetyPrime™ recirculation valve (optional), valve mounting tool and polypropylene adapters (GL 45/32, GL 45/S40 and GL 32/NS 29/32).

Capacity ml	Subdivision ml	A* ≤ %	± µl	CV* %	≤ µl	without SafetyPrime™ recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
25	0.01	0.2	50	0.1	25	4750 150	4750 151
50	0.01	0.2	100	0.1	50	4750 160	4750 161

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth, steady operation. A = Accuracy, CV = Coefficient of variation



Accessories



SafetyPrime™ recirculation valve

To retrofit the Digital Burette III. Pack of 1.



Titrating tubes

Pack of 1.

Description	Length mm	Height mm	Cat. No.
with micro valve	125	50-250	7075 22
with fine tip	165	75	7075 24



Drying tube

Drying tube (without drying agent) and seal. Pack of 1.

Cat Na	7070 20
Cat. No.	7079 30



Telescoping filling tubes

FEP/PTFE. Pack of 1.

Length mm	Outer Ø mm	Cat. No.
125-240	6	7042 03
195-350	6	7042 08
250-480	6	7042 01



Filling valve

With sealing washer. Pack of 1.

Cat. No.	6697



Seals

PTFE. For titrating tube, SafetyPrime™ recirculation valve and filling valve. Pack of 5.

6696



See page 16 for an overview of the available **adapters**.



Threaded bottles, coated and uncoated, you can find on page 237.



Transferpette®

Pipetting System

BRAND offers the ideal pipette for every hand:

- Transferpette® with the pipetting key on the side
- Transferpette® *S* with the central pipetting button and one-handed volume setting
- Transferpette® electronic with motor drive

BRAND has been developing and manufacturing single-channel and multichannel piston-operated pipettes for more than 25 years. Special attention is always paid to optimum ergonomics and reduction of injuries caused by prolonged strain (such as Repetitive Strain Injury Syndrome, RSI).





Pipetting - A Routine **Laboratory Procedure**

Pipetting is one of the most frequent tasks in the laboratory. The right choice of pipette is critical to performing this repetitive task accurately and strain-free.

What are the special features to look for?

■ Pipetting kev

To fit your preferred working style, choose either the Transferpette® with the pipetting key on the side or the Transferpette® S with the central pipetting button.

The Transferpette® electronic only needs a brief tap on the pipetting button to activate the piston.

■ Tip ejector

All Transferpette® models have separate tip ejection. This reduces the risk of accidental tip ejection.

■ Adjustability

Piston-operated pipettes are calibrated in compliance with the monitoring of measuring instruments according to EN ISO 8655. All Transferpette® models feature the unique Easy Calibration Technique that allows adjustment without tools (please see page 276).

■ Autoclavability

No compromises! Depending on the model, either the complete pipette shaft (Transferpette®, Transferpette® electronic) or the entire pipette (Transferpette® S) can be autoclaved at 121 °C (20 min).

■ Tip cone

Pipette and pipette tip form a single system. Both components have been developed by BRAND and are perfectly matched. This ensures an optimum fit between the Transferpette® and the PLASTIBRAND® pipette and filter tips.

For your convenience, tip cone is also designed to accept tips made by other leading manufacturers.

Which Transferpette® is right for you?

Selection criteria	Transferpette® S	Transferpette® electronic	
Side pipetting key		V	
Central pipetting button	V		V
Separate tip ejection	V	V	V
Easy Calibration Technique	V	V	V
Entire shaft is autoclavable	✓	V	V
Entire pipette is autoclavable	✓		
Corrosion-resistant piston	✓	V	✓
Universal tip cone	V	V	V
Volume display	4-position	3/4-position*	4-position
Volume range	0.1 μl - 10 ml	0.1 μl - 5 ml	0.5 μl - 5 ml
Motor driven			✓

depending on volume range

Transferpette[®] Single channel

A new performance standard among pipettes with a central pipetting button! BRAND's new Transferpette® S.

Transferpette® S models are the product of intensive ergonomic and operational studies and the application of modern innovative materials. The new Transferpette® S models are the perfect manual pipettes for demanding laboratory applications for scientists who prefer the central pipetting button.

The Transferpette® S pipettes provide all of the features required by users working in the life sciences field. Robust, one-handed operation, completely autoclavable, high precision and Easy Calibration technique for lasting reliability. Available as fixed-volume and digital models in volume ranges from 0.1 μ l to 10 ml.





Transferpette® S

Solutions for Science





Models

Lightweight – robust – low force: Transferpette® *S* provides maximum versatility and optimum quality over the entire 0.1 µl to 10 ml volume range. Eight models are available in the respective digital adjustable and fixed volume types.

- Central pipetting button and separate ejection function
- One-handed operation for both rightand left-handers
- The Transferpette® *S* is completely autoclavable at 121 °C (20 min).
- 4-position volume display, always clearly visible
- Transferpette® S features Easy Calibration technique readjustment without special tools (please see page 276 for further details) Changes from factory settings are clearly visible externally.
- Corrosion-resistant piston and ejector
- Color-coded for easy selection of the right tip
- Transferpette® S 0.1-1 µl maximum precision for molecular biology work, especially when pipetting enzymes.
- CE-**IVD**-compliant



One-handed operation – easy volume changes with no fumbling.

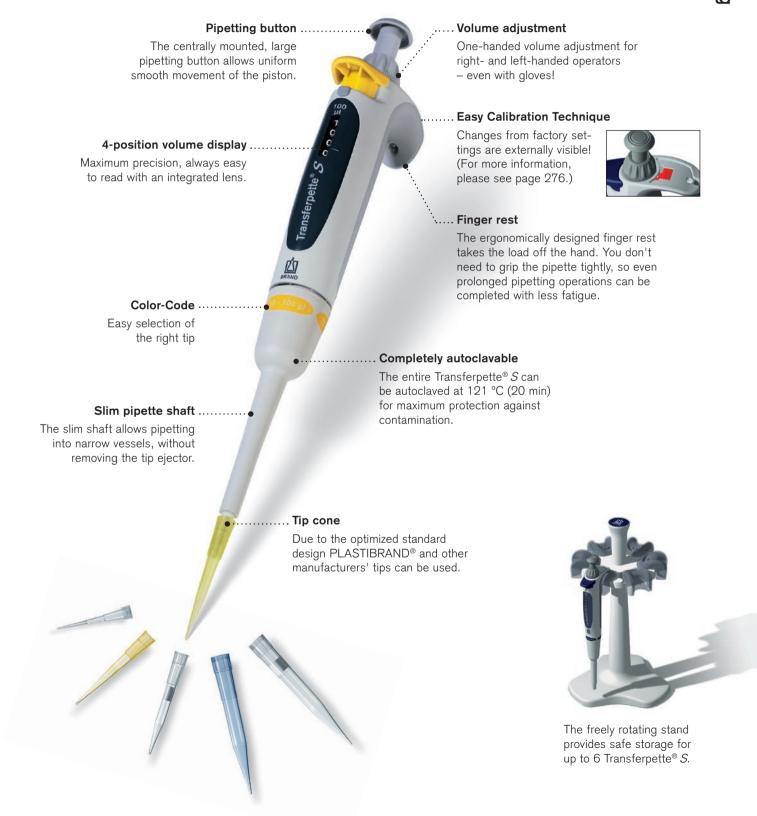




Optimal performance will be achieved with the use of genuine PLASTIBRAND® premium tips. **Pipette and filter tips**, see page 81-88.

A Closer Look...

Every detail is carefully considered. A central pipetting button, the one-handed operation, precise 4-position volume settings and a volume display that can be easily read by both right- and left-handed operators are only a few examples of the attention to detail in the design of the Transferpette® \mathcal{S} .



Ordering information



Transferpette® S, Digital adjustable

Items supplied:

Each Transferpette $^{\circ}$ S Digital adjustable pipette is conformity certified and supplied with performance certificate and rack mount.

Capacity μΙ		Description	A* ≤ ± %	μl	CV* ≤ %	μl	Subdivision µI	Cat. No.
0.1 -	1	D-1	2	0.02	1.2	0.012	0.001	7047 68
0.5 -	10	D-10	1	0.1	0.5	0.05	0.01	7047 70
2 -	20	D-20**	0.8	0.16	0.4	0.08	0.02	7047 72
10 -	100	D-100	0.6	0.6	0.2	0.2	0.1	7047 74
20 -	200	D-200**	0.6	1.2	0.2	0.4	0.2	7047 78
100 -	1000	D-1000	0.6	6	0.2	2	1	7047 80
500 -	5000	D-5000	0.6	30	0.2	10	5	7047 82
1000 - 1	0000	D-10000	0.6	60	0.2	20	10	7047 84

Transferpette $^{\otimes}$ S, Fixed volume

Items supplied:

Each Transferpette $^{\otimes}$ S Fixed volume pipette is conformity certified and supplied with performance certificate and rack mount.

Capacity μΙ	Description	A* ≤ ± %	μl	CV* ≤ %	μΙ	Cat. No.
10	F-10	1	0.1	0.5	0.05	7047 08
20	F-20**	0.8	0.16	0.4	0.08	7047 16
25	F-25	0.8	0.2	0.4	0.1	7047 20
50	F-50	0.8	0.4	0.4	0.2	7047 28
100	F-100	0.6	0.6	0.2	0.2	7047 38
200	F-200**	0.6	1.2	0.2	0.4	7047 44
500	F-500	0.6	3	0.2	1	7047 54
1000	F-1000	0.6	6	0.2	2	7047 62

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation

^{**} For use only with 2-200 µl pipette tips



Accessories

Starter Kit

Items supplied:

3 $Transferpette^{\otimes} S$ Digital adjustable pipettes,

3 x Tip-Box (filled), 3 rack mounts.

Туре	The kit includes the following Transferpette® <i>S</i> models	Cat. No.
Micro	D-1, D-10, D-100	7047 90
Midi	D-20, D-200, D-1000	7047 91
Macro	D-1000, D-5000, D-10000	7047 92



Bench-top rack

Suitable for up to 6 Transferpette® *S* pipettes. Pack of 1.

Cat. No. 7048 05



Shelf/rack mount

Shelf/rack mount for Transferpette® *S* single instrument. Pack of 1.

Cat. No.	7048 10
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Transferpette® Single-channel

The Transferpette® pipette from BRAND is designed for routine lab and research applications in a shape that is adapted to the anatomy of the human hand. The special handle shape with the side pipetting key allows the Transferpette® to lie loosely and lightly in your hand.

The Transferpette® is particularly well suited for prolonged pipetting, or for anyone who is susceptible to RSI syndrome due to repetitive laboratory procedures.



36

Models

Economical – accurate – versatile!

With only 5 instruments you can cover the entire volume range from 0.1 μ l to 5 ml. You can choose from 10 models of the digital-adjustable Transferpette® and from 12 models of the fixed-volume type.



- Side pipetting key relieves strain; separate ejector function limits errors.
- Pipette shafts are entirely autoclavable at 121 °C (20 min).
- Digital models feature Easy Calibration technique readjustment without special tools (please see page 276 for further details).
- Corrosion-resistant piston and ejector
- Colored tip ejector caps indicate appropriate tips to use.
- Transferpette® 0.1-1 µl maximum precision for molecular biology work, especially when pipetting enzymes.
- A variety of pipette stands for optimum storage of the Transferpette®
- CE-**IVD** compliant



Transferpette® 0.1-1 μ I with nano-capTM pipette tip



Optimal performance will be achieved with the use of genuine PLASTIBRAND® premium tips. **Pipette and filter tips**, see page 81-88.

A Closer Look...

The Transferpette® is designed to the shape of the human hand for maximum comfort.



Ordering Data

Transferpette®, Digital adjustable

Items supplied:

Each Transferpette® Digital adjustable is conformity certified and supplied with performance certificate.

Capacity μΙ	A* ≤ ± %	μl	CV* ≤ %	μl	Subdivision µl	Cat. No.
0.1 - 1	2	0.02	1.2	0.012	0.005	7041 01
0.5 - 10	1	0.1	0.8	0.08	0.05	7041 02
2 - 20	0.8	0.16	0.4	0.08	0.1	7041 03
2 - 20	0.8	0.16	0.4	0.08	0.1	7041 04
5 - 50	0.8	0.4	0.4	0.2	0.1	7041 72
10 - 100	0.6	0.6	0.2	0.2	0.1	7041 74
20 - 200	0.6	1.2	0.2	0.4	1	7041 78
25 - 250	0.6	1.5	0.2	0.5	1	7041 76
100 - 1000	0.6	6	0.2	2	1	7041 80
500 - 5000	0.6	30	0.2	10	10	7041 82

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation



Transferpette®, Fixed volume

Items supplied:

Each Transferpette® Fixed volume is conformity certified and supplied with performance certificate and calibration key.

Capacity μΙ	A* ≤ ± %	μl	CV* ≤ %	μl	Cat. No.
5	1	0.05	8.0	0.04	7041 06
10	1	0.1	0.8	0.08	7041 08
20	0.8	0.16	0.4	0.08	7041 16
25	0.8	0.2	0.4	0.1	7041 20
50	0.8	0.4	0.4	0.2	7041 28
100	0.6	0.6	0.2	0.2	7041 38
200	0.6	1.2	0.2	0.4	7041 44
200	0.6	1.2	0.2	0.4	7041 46
250	0.6	1.5	0.2	0.5	7041 48
500	0.6	3	0.2	1	7041 54
1000	0.6	6	0.2	2	7041 62
2000	0.6	12	0.2	4	7041 64

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation





BRAND also offers an on-site **calibration service** (for more information, please see page 273).

Accessories

PipSet Transferpette® Digital adjustable

The PipSet contains of three Transferpettes (0.5-10 μ l, 10-100 μ l, 100-1000 μ l), one bench-top rack and one filled Tip Box N for each Transferpette®. Pack of 1.



Pipetting keys, colored

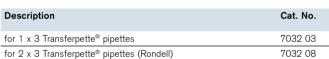
Incl. 2 stickers per key. Pack of 5.

Color	Cat. No.
light green	7040 70
pink	7040 71
blue	7040 72
beige	7040 73
dark gray	7040 74
assorted colors	7040 75



Bench-top rack

Incl. 1 or 2 adapters for Transferpette® 2 ml or 0.5-5 ml. Pack of 1.



Wall/rack mount

Pack of 1.

Description	Cat. No.
for 1 x 3 Transferpette® pipettes*	7032 10

^{*} Not suitable for the 0.5-5 ml or 2 ml Transferpette®



Individual stand

For Transferpette® 0.5-5 ml, 2 ml and Transferpette® electronic 0.5-5 ml.
Pack of 1.

Cat. No.	7053 86





Transferpette®-8/-12 Multichannel

Repetitive multichannel pipetting can be tedious. Why make it more difficult than it needs to be? The Transferpette®-8/-12 requires much less effort than many conventional multichannel pipettes. Its light weight and ergonomic design help to reduce hand stress.

The tips are of equal importance to the instrument for pipetting accuracy and precision. BRAND manufactures tips to the same high quality standards as the instruments for optimum results. (For more information about pipette tips, see pages 81-88.)





Models

To make your work as easy as possible, the Transferpette®-8/-12 is available in 7 different volume ranges, from 0.5 μ l to 300 μ l... a model for every application!

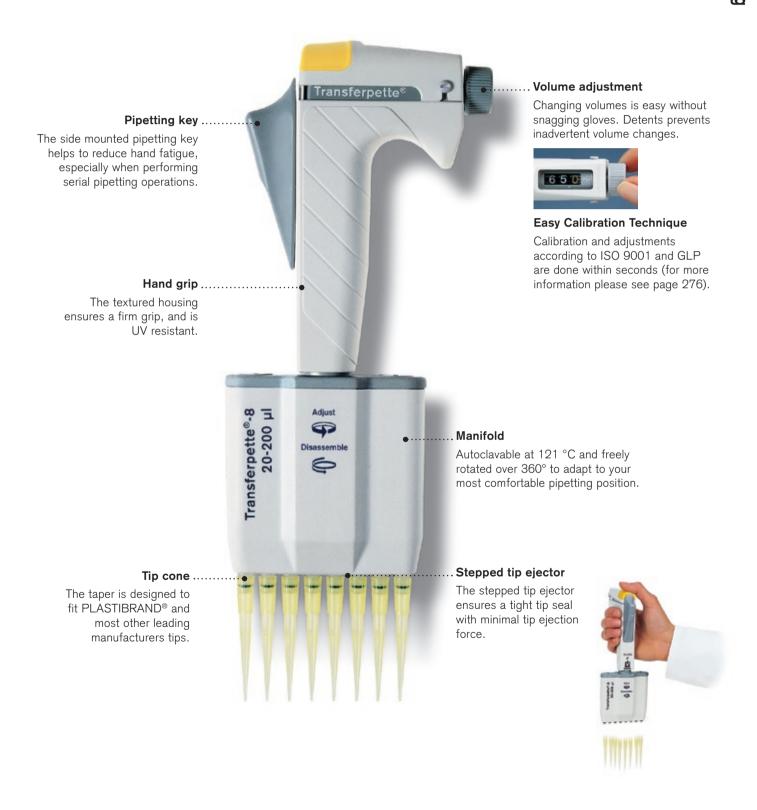
- Resilient FKM V-rings and a stepped tip ejector significantly reduce tip-ejection force.
- Easy to maintain, with individual shafts and seals that can be removed and replaced for cleaning or repair in the lab, without special tools and without affecting calibration!
- Universal tip cone fits all conventional pipette tips.
- Corrosion-resistant pistons
- Easy Calibration Technique: Make calibration adjustments yourself in half the time or less, without tools and without trial-and-error (for further information, please see page 276).
- The freely rotatable manifold can be entirely autoclaved at 121 °C.
- Separate ejector function reduces inadvertent ejector risk.
- CE-**IVD** -compliant





A Closer Look...

The Transferpette®-8/-12 is designed with ease of use in mind. The contoured handle and accessible controls work naturally in your hand. The light-weight yet durable construction and low operating force minimize strain and fatigue.



Ordering Data



Transferpette®-8

Items supplied:

Each Transferpette®-8 is conformity certified and supplied with performance certificate, 1 Tip-Box, filled with PLASTIBRAND® pipette tips, 1 Tip-Rack for refilling, 1 stand, 1 reagent-reservoir, 1 set of sealing rings made of FKM.

Capacity μI	A* ≤ ± %	μl	CV* ≤ %	μl	Subdivision µl	Cat. No.
0.5 - 10	1.6	0.16	1.0	0.1	0.05	7036 00
2 - 20	1.0	0.2	0.6	0.12	0.1	7036 02
2.5 - 25	1.0	0.25	0.6	0.15	0.1	7036 04
5 - 50	0.8	0.4	0.4	0.2	0.1	7036 06
10 - 100	0.8	0.8	0.3	0.3	0.1	7036 08
20 - 200	0.8	1.6	0.3	0.6	1	7036 10
30 - 300	0.6	1.8	0.3	0.9	1	7036 12

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation



Transferpette®-12

Items supplied:

Each Transferpette®-12 is conformity certified and supplied with performance certificate, 1 Tip-Box, filled with PLASTIBRAND® pipette tips, 1 Tip-Rack for refilling, 1 stand, 1 reagent-reservoir, 1 spare set of sealing rings made of FKM.

Capacity μI	A* ≤ ± %	μl	CV* ≤ %	μl	Subdivision µI	Cat. No.
0.5 - 10	1.6	0.16	1.0	0.1	0.05	7036 20
2 - 20	1.0	0.2	0.6	0.12	0.1	7036 22
2.5 - 25	1.0	0.25	0.6	0.15	0.1	7036 24
5 - 50	0.8	0.4	0.4	0.2	0.1	7036 26
10 - 100	0.8	8.0	0.3	0.3	0.1	7036 28
20 - 200	0.8	1.6	0.3	0.6	1	7036 30
30 - 300	0.6	1.8	0.3	0.9	1	7036 32

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation



Reagent reservoir, PP, non-sterile or sterile, please see page 55.



Transferpette® electronic

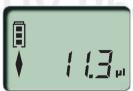
Single-channel

The Transferpette® electronic combines the widely recognized features of BRAND mechanical pipettes with the advantages of electronic apparatus. Comfortable design, balanced weight distribution, intuitive software and user-friendly technical documentation were the key objectives in developing the Transferpette® electronic.

TUV Rhineland/Berlin-Brandenburg has confirmed the design as ergonomically sound and easy to use after rigorous field testing. It was the first pipette ever granted such recognition as a comprehensive, ergonomic concept.









Models

Transferpette® electronic is available in 5 different models: 0.5-10 $\mu l,~2\text{--}20~\mu l,~20\text{--}200~\mu l,~100\text{--}1000~\mu l$ and 0.5-5 ml.



■ Ergonomic

- functional, ergonomic housing design
- individually adjustable finger rest

■ Easy operation

- intuitive menu structure
- comprehensively illustrated user manual

■ Innovative

 significantly reduced tip attachment and ejection forces using universal tips

■ Five convenient programs (Please see page 48 for details)

- Pipetting
- Reverse pipetting
- Mixing
- GEL-Electrophoresis
- Dispensing

■ Ready for use

- 4000 pipetting cycles with each battery charge
- battery refresh function
- CE- IVD compliant





Optimal performance will be achieved with the use of genuine PLASTIBRAND® premium tips. **Pipette and filter tips**, see pages 81-88.

A Closer Look...

The Transferpette® electronic was **the first microliter pipette worldwide** to be recognized with the "Ergonomics Approved" certificate from the Technical Control Board Rhineland/Berlin-Brandenburg!

Independent user tests confirm the ergonomics and the operating ease of the product and system!

A user acceptance rating of **1.54** is an outstanding result.

You can obtain information about the Transferpette® electronic at www.tuv.com, ID No. 0011105500.





Large, clear display, with
easily understandable numbers,
words and symbols

...... Charging connector jack

.Big pipetting button

. Ergonomically arranged ejection button with color code for pipette volume and tip size

individually adjustable finger rest

... Slim ergonomic grip

The pipette shaft can be unscrewed and is entirely autoclavable (121 °C).

Tip cone with soft EPDM components that adapt to variations among tips from various manufacturers. With the ejector clip, which prevents over-tight tip loading, the ejection force is significantly reduced with standard tips.



Ejector clips accomodate tips from virtually all manufacturers while limiting attachment and ejection forces.

(not available for sizes 0.5-10 $\mu l,$ 2-20 $\mu l,$ 0.5-5 ml)



A resilient sealing ring not only adapts the pipette to small tip variations, but also provides a very distinct visual check for the correct seating and sealing of the tip.

Functions

The **Programs**

Pipetting (PIP Mode)

The "standard" program.

The set volume is aspirated by the pipette, and then discharged.



Mixing of Samples (PIPmix Mode) —

Program for mixing of liquids. The sample is repeatedly aspirated and discharged, and the number of mixing cycles is displayed.



Reverse Pipetting (revPIP Mode) ____

Program specially designed for the pipetting of liquids with a high viscosity, high vapor pressure or foamy media.



Pipetting with Electrophoresis (GEL Mode)*

Program for the loading of electrophoresis gels**. The required sample volume is aspirated at the desired, adjustable speed, and is then discharged very slowly. The exact volume of liquid discharged is shown in the display as it is discharged.



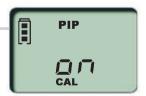
Dispensing (DISP Mode)

A program for the dispensing of liquids in a series of equal aliquots. A volume that has been aspirated is dispensed in steps.



Easy Calibration Technique (CAL Mode)

Program for making quick adjustments to the Transferpette® electronic, without tools. By changing the factory setting, <CAL> appears automatically in the display (please see page 276 for more information).



Battery-Refresh (batt Mode)

Regeneration function for increased performance and extending the service life of the batteries. The world's first microliter pipette with this function.



- * The GEL mode is not included in the Transferpette® electronic 1000 µl and 5000 µl because these volumes are rarely used in electrophoresis.
- ** Patent pending



Ordering Data

Transferpette® electronic

Items supplied:

Each Transferpette® electronic is conformity certified and supplied with performance certificate, battery, battery charger, 2 extra ejector clips to adapt to non-standard tips (for Transferpette® electronic 20-200 μ l, 100-1000 μ l), silicon oil.

Capacity μΙ	Subdiv. µl	A * ≤ %	± µl	CV* %	≤ µl	Tip type µl	With battery charger for	Cat. No.
0.5 - 10	0.01	1.0	0.1	0.4	0.04	20	Europe (continental) (230V/50Hz)	7052 99
							UK/Ireland (230V/50Hz)	7053 09
							USA/Japan (110V/50-60Hz)	7053 19
							Australia (240V/50Hz)	7053 29
							without battery charger	7053 39
2 - 20	0.02	1.0	0.2	0.4	0.08	20	Europe (continent) (230V/50Hz)	7053 00
							UK/Ireland (230V/50Hz)	7053 10
							USA/Japan (110V/50-60Hz)	7053 20
							Australia (240V/50Hz)	7053 30
							without battery charger	7053 40
20 - 200	0.2	0.8	1.6	0.2	0.4	200/300	Europe (continent) (230V/50Hz)	7053 03
							UK/Ireland (230V/50Hz)	7053 13
							USA/Japan (110V/50-60Hz)	7053 23
							Australia (240V/50Hz)	7053 33
							without battery charger	7053 43
100 - 1000	1.0	0.6	6	0.2	2	1000	Europe (continent) (230V/50Hz)	7053 06
							UK/Ireland (230V/50Hz)	7053 16
							USA/Japan (110V/50-60Hz)	7053 26
							Australia (240V/50Hz)	7053 36
							without battery charger	7053 46
500 - 5000	5.0	0.6	30	0.2	10	5000	Europe (continent) (230V/50Hz)	7053 07
							UK/Ireland (230V/50Hz)	7053 17
							USA/Japan (110V/50-60Hz)	7053 27
							Australia (240V/50Hz)	7053 37
							without battery charger	7053 47

Accessories

3-device charging stand for Transferpette® electronic

Pack of 1.

for Transferpette® electronic with battery charger for	Cat. No.
Europe (continental)	7053 90
UK/Ireland	7053 91
USA/Japan	7053 92
Australia	7053 93



Individual stand for Transferpette® electronic

Pack of 1.

for Transferpette® electronic	Cat. No.
up to 1000 μl	7053 85
500-5000 μl	7053 86



^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation





Transferpette®-8/-12 electronic

Multichannel

The operation of 8- or 12-channels simultaneously multiplies the risk of RSI if the forces are not properly managed.

Simply tap the pipette key: uniform, negligible operating force during pipetting, together with drastically reduced ejection force, makes all the difference in the Transferpette®-8/-12 electronic.

UV Rheinland

Models

Transferpette®-8/-12 electronic is available in 5 different models: 0.5-10 μ l, 1-20 μ l, 5-100 μ l, 10-200 μ l and 15-300 μ l.





■ Ergonomic

- functional, ergonomic housing design
- individually adjustable finger rest

■ Easy Operation

- intuitive menu structure
- comprehensively illustrated user manual

■ Innovative

significantly reduced tip attachment and ejection forces

■ Five convenient programs (Please see page 48 for details.)

- Pipetting
- Reverse pipetting
- Mixing
- GEL-Electrophoresis
- Dispensing

■ Ready for Use

- 4000 pipetting cycles with each battery charge
- battery refresh function

■ CE- IVD - compliant





Optimal performance will be achieved with the use of genuine PLASTIBRAND® premium tips. **Pipette and filter tips**, see pages 81-88.

A Closer Look...

The optimal position of the thumb relative to the functional elements of the pipette is the starting point for a relaxed grip. RSI is the keyword.

The optimum design, the layout of the controls, and the adjustable finger rest provide a Transferpette®-8/-12 that fits the hand like a glove. Perfect for right-handers and left-handers alike!

The Transferpette®-8/-12 electronic received the Ergonomics Certificate as the world's first electronic multichannel pipette with a User Acceptance Rating of 1.55 – unrivaled anywhere!





.....Large, clear display, with easily understandable numbers, words and symbols.

......Charging connector jack

Intuitive operation of all functions using menu keys.

Ergonomically arranged ejection button with color code for pipette volume and tip size.

..... Individually adjustable finger rest

.. Complete manifold can be autoclaved at 121 °C and rotates freely 360°.

Stepped tip ejector reduces .. ejection forces significantly.

. V-rings made of FKM allow effortless mounting and easy ejection of the tips, and readily adapt to tips from various manufacturers.

Easy to Service



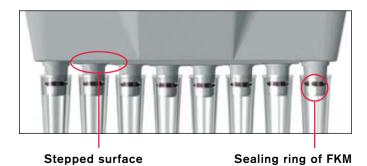
The manifold for the Transferpette®-8/-12 electronic has been completely newly developed.

Individual shafts and seals can now be easily removed and replaced in the lab for cleaning or repair without tools or calibration adjustments! Tip cones and seals can now be easily cleaned or replaced. This patented procedure eliminates the expense and long outages providing long service life and low operating costs.

No readjustment necessary.



Shafts and sealing rings are made of resilient FKM material, and are designed so that only minimal attachment force is needed for solid and parallel tip seating. The stepped design allows the ejection force to be sequentially distributed to the tips within fractions of a second and thus drastically reduces the force required.



Ordering Data

Transferpette®-8 electronic

Items supplied:

Each Transferpette®-8 electronic is conformity certified and supplied with performance certificate, battery, battery charger, device stand, Tip-Box SL, refill units, reagent reservoir and silicone oil.



Capacity µI	Subdiv. µl	A* ≤ %	± µl	CV* ±	≦ µl	Tip type µl	With battery charger for	Cat. No.
0.5 - 10	0.01	1.2	0.12	8.0	0.08	20	Europe (continental) (230V/50Hz)	7053 99
							UK/Ireland (230V/50Hz)	7054 09
							USA/Japan (110V/50-60Hz)	7054 19
							Australia (240V/50Hz)	7054 29
1 - 20	0.02	1.0	0.2	0.5	0.1	20	Europe (continental) (230V/50Hz)	7054 00
							UK/Ireland (230V/50Hz)	7054 10
							USA/Japan (110V/50-60Hz)	7054 20
							Australia (240V/50Hz)	7054 30
5 - 100	0.1	0.8	8.0	0.25	0.25	200/300	Europe (continental) (230V/50Hz)	7054 03
							UK/Ireland (230V/50Hz)	7054 13
							USA/Japan (110V/50-60Hz)	7054 23
							Australia (240V/50Hz)	7054 33
10 - 200	0.2	0.8	1.6	0.25	0.5	200/300	Europe (continental) (230V/50Hz)	7054 04
							UK/Ireland (230V/50Hz)	7054 14
							USA/Japan (110V/50-60Hz)	7054 24
							Australia (240V/50Hz)	7054 34
15 - 300	0.5	0.6	1.8	0.25	0.75	300	Europe (continental) (230V/50Hz)	7054 06
							UK/Ireland (230V/50Hz)	7054 16
							USA/Japan (110V/50-60Hz)	7054 26
							Australia (240V/50Hz)	7054 36

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation

Transferpette®-12 electronic

Items supplied:

Each Transferpette®-12 electronic is conformity certified and supplied with performance certificate, battery, battery charger, device stand, Tip-Box SL, refill units, reagent reservoir and silicone oil.

Capacity µI	Subdiv. µl	A* ≤ %	± µl	CV* ≤ %	≦ µl	Tip type μΙ	With battery charger for	Cat. No.
0.5 - 10	0.01	1.2	0.12	8.0	0.08	20	Europe (continental) (230V/50Hz)	7054 49
	,						UK/Ireland (230V/50Hz)	7054 59
							USA/Japan (110V/50-60Hz)	7054 69
							Australia (240V/50Hz)	7054 79
1 - 20	0.02	1.0	0.2	0.5	0.1	20	Europe (continental) (230V/50Hz)	7054 50
	,						UK/Ireland (230V/50Hz)	7054 60
							USA/Japan (110V/50-60Hz)	7054 70
							Australia (240V/50Hz)	7054 80
5 - 100	0.1	0.8	8.0	0.25	0.25	200/300	Europe (continental) (230V/50Hz)	7054 53
							UK/Ireland (230V/50Hz)	7054 63
							USA/Japan (110V/50-60Hz)	7054 73
							Australia (240V/50Hz)	7054 83
10 - 200	0.2	0.8	1.6	0.25	0.5	200/300	Europe (continental) (230V/50Hz)	7054 54
							UK/Ireland (230V/50Hz)	7054 64
							USA/Japan (110V/50-60Hz)	7054 74
							Australia (240V/50Hz)	7054 84
15 - 300	0.5	0.6	1.8	0.25	0.75	300	Europe (continental) (230V/50Hz)	7054 56
							UK/Ireland (230V/50Hz)	7054 66
							USA/Japan (110V/50-60Hz)	7054 76
							Australia (240V/50Hz)	7054 86

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. A = Accuracy, CV = Coefficient of variation



Accessories



Reagent reservoir

PP, high clarity. Capacity 60 ml. Autoclavable (121 °C).

Non-sterile, with lid. Pack of 10.

Cat. No. 7034 59

Sterile, without lid. Packed individually. Pack of 100.

Cat. No. 7034 11

Sterile, without lid. 5 per bag, pack of 200.

Cat. No. 7034 09

The right pipette tip for your Transferpette®

PLASTIBRAND® pipette tips are tested for BRAND and most of the pipette types of Gilson®, Thermo Electron (Finnpipette®), Eppendorf® and Biohit. The 5 ml tip is exclusively tested for BRAND and Thermo Electron (Finnpipette®). The 10 ml tip is suitable for BRAND, Eppendorf® and Gilson®.



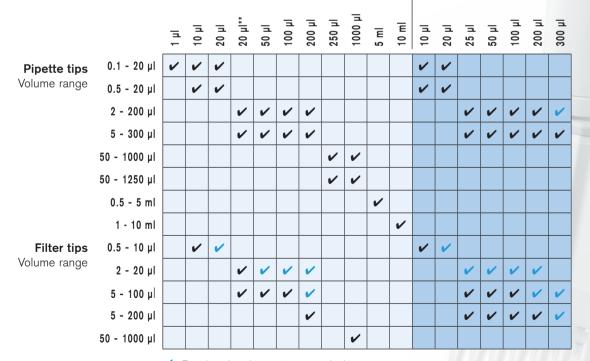


Transferpette® electronic*
Transferpette® S
Transferpette®

Nominal volume

Transferpette®-8/-12 electronic* Transferpette®-8/-12

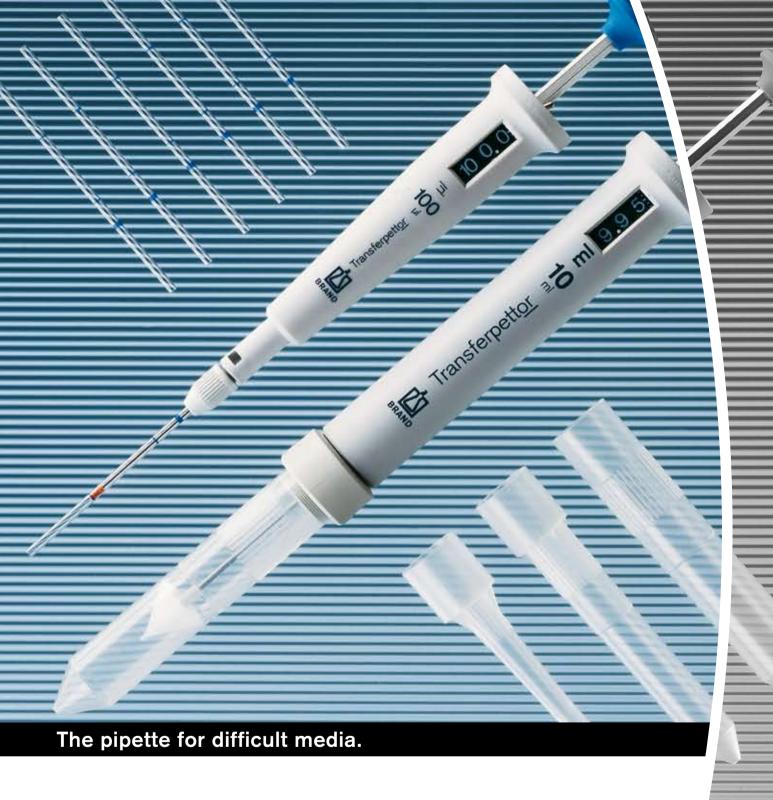
Nominal volume



✓ = Tip volume less than pipettes nominal volume

^{*} Transferpette® electronic is not available in all specified volumes

^{**} Transferpette® with yellow color code



Transferpettor

The Transferpettor is ideal for liquids when air displacement pipettes just won't work. Viscous, foaming, high vapor pressure: the Transferpettor can handle them all, with the precision and accuracy you expect from a BRAND pipette. This is the pipette for your most demanding pipetting operations.



Application



Highly viscous media and media with high density

- highly concentrated protein solutions, oils, resins, fats
- glycerin, mercury, sulfuric acid



Media with high vapor pressure

 alcohols, ether, hydrocarbons



Media which tend to foam

- tenside solutions



The Transferpettor is suitable for media with:

- Density up to 13.6 g/cm³
- Viscosity up to 50,000 mm²/s
- Vapor pressure up to 500 mbar

Working temperature range:

■ 15 °C to 40 °C

Volume range 1 µl to 10 ml:

■ Transferpettor fixed volume and digital adjustable up to 200 µl:

Caps: glass Seals: PTFE

■ Transferpettor digital adjustable above 100 µl:

Caps: PP Seals: PE



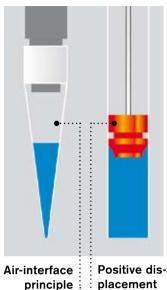
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A Closer Look...

The Transferpettor operates on the positive displacement principle.

In contrast with air displacement pipettes, the piston is in direct contact with the aspirated liquid. The movable, precision-fit piston always glides smoothly along the walls of the capillaries and tips, right on through to the last drop that can be clearly observed as it leaves the opening.

In this way, the results obtained are exactly reproducible regardless of the pipetting rate and environmental conditions.



principle: principle

There is no need to discard tips after each pipetting operation, since residual wetting is negligible.

However, in cases where no carry-over can be tolerated, for example with infectious or radioactive media, a different BRAND Transferpette® model is recommended, such as an air displacement pipette with a disposable tip for convenient operation (page 29).

Ordering Data

Transferpettor, Digital-adjustable

Capacity μΙ		A * ≤ ± %	μl	CV* ≤ %	μΙ	Subdivision µI	Color code	Cat. No.
2.5 -	10	1.0	0.1	8.0	0.08	0.01	orange	7018 07
5 -	25	0.8	0.2	0.5	0.125	0.1	2 x white	7018 12
10 -	50	0.6	0.3	0.4	0.2	0.1	green	7018 17
20 -	100	0.6	0.6	0.4	0.4	0.1	blue	7018 22
100 -	500	0.5	2.5	0.2	1.0	1.0	green	7028 04
200 - 1	000	0.5	5.0	0.2	2.0	1.0	yellow	7028 06
1000 - 5	000	0.5	25.0	0.2	10.0	10.0	red	7028 10
2000 - 10	0000	0.5	50.0	0.2	20.0	10.0	orange	7028 12

Transferpettor, Fixed-volume

Capacity μΙ	A * ≤ %	± µl	CV* ≤ %	≦ µI	Color code	Cat. No.
1	4.0	0.04	4.0	0.04	white	7018 42
2	2.5	0.05	2.0	0.04	white	7018 44
3	1.7	0.051	1.5	0.045	white	7018 46
4	1.3	0.052	1.0	0.04	white	7018 48
5	1.0	0.05	0.8	0.04	white	7018 53
10	1.0	0.1	0.8	0.08	orange	7018 58
20	8.0	0.16	0.5	0.1	black	7018 63
25	8.0	0.2	0.4	0.1	2 x white	7018 64
50	0.6	0.3	0.4	0.2	green	7018 68
100	0.6	0.6	0.4	0.4	blue	7018 73
200	0.5	1.0	0.2	0.4	red	7018 78

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth, steady operation. A = Accuracy, CV = Coefficient of variation



Items supplied:

Each Transferpettor is conformity certified and supplied with performance certificate.

Accessories

Caps, glass

Conformity certified.
Pack of 100
(except 100/200 µl: pack of 50).

For nominal volume, µl	Color code	Cat. No.
1, 2, 3, 4, 5	white	7019 00
10	orange	7019 02
20	black	7019 04
25	2 x white	7019 06
50	green	7019 08
100 / 200	blue / red	7019 10



Seals, PTFE

Conformity certified. Pack of 3.

For capacity µI	Cat. No.
20, 25	7019 20
50	7019 22
100, 200	7019 24



Transferpettor-Station

Accommodates 4 instruments up to 200 μI with accessories. Pack of 1.

Cat. No.	7019 60
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Piston rod

For capacities $\geq 20~\mu\text{I},$ provided with seal. Pack of 3.

Cat. No.
7019 28
7019 30
7019 32
7019 34
7019 36
7019 38

Caps, PP

Conformity certified. Pack of 10.

For capacity µI	Color code	Cat. No.
100 - 500	green	7028 52
200 - 1000	yellow	7028 54
1000 - 5000	red	7028 58
2000 - 10000	orange	7028 60



Seals, PE

Conformity certified. Pack of 10.

Cat. No.
7028 64
7028 66
7028 70
7028 72



Transferpettor-Station

Accommodates 2 instruments 0.5 to 10 ml with accessories. Pack of 1.

Cat. No.	7028 90



Repair set

1 allen key, 1 piston rod with fitted PTFE Transferpettor-Seal (for capacities $\geq 20~\mu$ l), 1 calibrating gauge, 1 screwdriver, 3 clamping discs, 1 fixing-screw, 3 Transferpettor-Seals, PTFE, 1 mounting block (for capacities $\geq 20~\mu$ l).

For capacity µI	Cat. No.
1, 2, 3, 4, 5	7019 64
10	7019 65
20, 25	7019 66
50	7019 67
100, 200	7019 68



Use and Handling

A close-tolerance stepping mechanism allows the HandyStep® to offer precise repetition of the selected volume. With up to 49 dispensing steps from each aspiration, it is ideal for making aliquots of stock liquids.

The HandyStep® works on the positive displacement principle, making it suitable for routine dispensing, as well as for difficult liquids. Viscous, high density or high vapor pressure liquids can be dispensed while maintaining accuracy and precision.

- Ergonomic
- One-hand operation
- Superior handling
- Maintenance-free
- Factory adjusted
- CE-**IVD**-compliant





Accuracy table HandyStep® with PLASTIBRAND® PD-Tips, conformity certified

HandyStep® with PD-Tips	Volume range μΙ	Nomina 10 %	ll volume (A* ≤ ± %) 2%	Nominal 10 %	volume (CV* ≤ %) 2%
0.1 ml	2 - 10	1.6	8.0	2.0	5.0
0.5 ml	10 - 50	0.8	4.0	0.6	1.4
1.25 ml	25 - 125	0.8	4.0	0.3	0.8
2.5 ml	50 - 250	0.7	3.5	0.2	0.8
5.0 ml	100 - 500	0.5	2.5	0.2	0.6
12.5 ml	250 - 1250	0.3	1.5	0.2	0.4
25.0 ml	500 - 2500	0.3	1.5	0.2	0.4
50.0 ml	1000 - 5000	0.3	1.5	0.15	0.4

^{*} Calibrated to deliver (TD, Ex). Error limits refer to a volume that is adjustable using the respective PD-Tip obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth, steady operation. The tolerances definded in ISO 8655 are not exceeded.

A = Accuracy, CV = Coefficient of variation



Information for **PLASTIBRAND® PD-Tips** with size encoding on page 89.

A Closer Look...

The HandyStep® is contoured to fit your hand comfortably. All controls are designed for intuitive use with one hand.

The HandyStep® is suitable for PLASTIBRAND® PD-Tips, Combitips®, Combitips® plus and other compatible positive displacement tips.



Settings and volume ranges

100 µl x 2 ≙ 200 µl / step

Stroke setting 2:



Stroke settings	1	2	3	4	5
Number of steps	49	24	15	11	9
PD-Tip ml	Dispensing volume µl				I
0.1	2	4	6	8	10
0.5	10	20	30	40	50
1.25	25	50	75	100	125
2.5	50	100	150	200	250
5	100	200	300	400	500
12.5	250	500	750	1000	1250
25	500	1000	1500	2000	2500
50	1000	2000	3000	4000	5000

Ordering Data



HandyStep®

Items supplied:

Each HandyStep® is conformity certified and supplied with performance certificate and wall support.

Cat. No.

7051 00

Accessory

Wall support

Pack of 1.

Cat. No.

7051 20







electronic

menu and easy-to-read display further simplify repetitive pipetting.

Use and Handling

Dispensing (DISP) the standard mode

A predefined volume is dispensed repeatedly.





Automatic Dispensing (AUTO-DISP)

The instrument uses its patented learning function to calculate the average time interval between your first three dispensing steps, and automatically continues to work at this rhythm. No need to calculate and enter time intervals manually!



Pipetting (PIP)

Single aspiration/dispense positive displacement function. Ideal for pipetting viscous or volatile fluids.



Accuracy table HandyStep® electronic with PLASTIBRAND® PD-Tips, conformity certified

HandyStep® electronic with PD-Tip	Volume range	Subdivision		Nomina 100%	al volume 50%	e (A* ≤ ± 10%	%) 1%	Nomina 100%	al volume 50%	e (CV* ≤ 10%	%) 1%
0.1 ml	1 µl - 100 µl	1 µl - 100 µl	0.1 μΙ	1.0	1.2	1.6	16	0.5	1.0	2.0	12
0.5 ml	5 µl - 500 µl	5 µl - 100 µl 100 µl - 500 µl	0.1 μl 1 μl	0.9	0.9	0.9	9	0.25	0.5	1	6
1.25 ml	12.5 µl - 1250 µl	12.5 µl - 100 µl 100 µl - 1000 µl 1 ml - 1.25 ml	0.5 µl 1 µl 10 µl	0.6	0.9	0.9	8	0.15	0.3	0.6	3.5
2.5 ml	25 µl - 2500 µl	25 µl - 1000 µl 1 ml - 2.5 ml	1 μl 10 μl	0.5	0.8	0.8	8	0.1	0.2	0.4	2.5
5.0 ml	50 µl - 5000 µl	50 µl - 1000 µl 1 ml - 5 ml	1 μl 10 μl	0.5	0.8	0.8	8	0.08	0.15	0.3	1.5
12.5 ml	125 µl - 12.5 ml	125 µl - 1000 µl 1 ml - 10 ml 10 ml - 12.5 ml	5 µl 10 µl 100 µl	0.4	0.5	0.5	5	0.08	0.15	0.25	1.25
25.0 ml	250 µl - 25 ml	250 µl - 10 ml 10 ml - 25 ml	10 μl 100 μl	0.3	0.3	0.3	3	0.08	0.15	0.25	1.25
50.0 ml	500 μl - 50 ml	500 μl - 10 ml 10 ml - 50 ml	10 μl 100 μl	0.3	0.3	0.3	3	0.08	0.15	0.25	1.25

^{*} Calibrated to deliver (TD, Ex). Error limits refer to the nominal volumes and partial volumes relative to the PD-Tip, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth operation. The tolerances definded in ISO 8655 are not exceeded.

A = Accuracy, CV = Coefficient of variation

A Closer Look...



- 7.01 µl 70.1 µl 1.01 ml – 11.4 ml?
 - Any volume you require from 1.0 μl to 50 ml $\,$
- Patented automatic tip size recognition of the PLASTIBRAND® PD-Tips with size encoding
- Compatible system: will accept most third-party dispenser tips
- Versatile operation with 3 modes: Dispensing – Automatic Dispensing – Pipetting
- Patented learning function for individual adjustments of intervals in automatic dispensing
- Separate speed adjustment for filling and dispensing, independently adjustable
- NiMH battery pack easy to replace, charges in as little as 2.5 hours!
- Charge the storage battery either in the instrument or separately in the charger
- CE-IVD -compliant



The ideal combination: PLASTIBRAND® PD-Tips and HandyStep® electronic



The HandyStep® electronic saves time and prevents errors through automatic tip size recognition of the PLASTIBRAND® PD-Tips. The size of these tips is encoded in their piston (patented). After inserting the tip, the size is automatically recognized and displayed, making it easy to select the volume to be dispensed. When a new PD-Tip of the same size is inserted, all instrument settings are maintained.

Compatible with third-party dispenser tips!

The special tip connector of the HandyStep® electronic will accept most common dispenser tips such as Combitips®, Combitips® plus, and others. Simply enter the tip size manually.

Ordering Data



HandyStep® electronic

Items supplied:

Each HandyStep® electronic is conformity certified and supplied with performance certificate, NiMH battery pack and charging dock. One each PD-Tip size 0.5 ml, 1.25 ml, 2.5 ml, 5 ml and 12.5 ml.

AC adapter	Cat. No.
Europe (continental) 230V/50Hz	7050 00
UK/Ireland (230V/50Hz)	7050 01
USA/Japan (110V/50-60Hz)	7050 02
Australia (240V/50Hz)	7050 03
without AC adapter	7050 04

Accessories

Charging dock

Without AC adapter. Pack of 1.

Cat. No. 7050 20



NiMH Battery Pack

Pack of 1.





AC adapter for charging dock

Pack of 1.

Description	Cat. No.
Europe (continental) 230 V/50 Hz	7050 50
UK/Ireland 230 V/50 Hz	7050 51
USA/Japan 110 V/50-60 Hz	7050 52
Australia 240 V/50 Hz	7050 53



EASYCAL™ 4.0

Calibration software compatible with nearly all liquid handling instruments and glass or plastic volumetric instruments. Now you can calibrate and track measuring instruments to GLP and ISO 9001 standards without calculators or scratch paper. EASYCAL™ 4.0 software from BRAND performs all accuracy and precision calculations, matches them to standards and generates a report.



Application

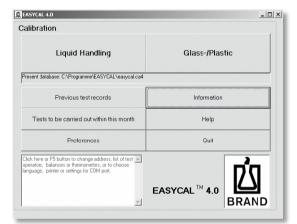
- Testing of liquid handling instruments and volumetric instruments of glass and plastic, according to ISO 8655, ISO 4787 etc.
- Open software, suitable for all volumetric instruments, irrespective of the manufacturer.
- Continual control of the actual results during testing by means of a traffic-light function.
- Reminder function for outstanding calibrations.
- Recording of primary data in accordance with GLP.
- Reliable transmission, calculation and saving of measurement data.



EASYCAL[™] 4.0 carries out all calculations automatically and compares them with the tolerances specified in current standards or your individual preset limit values. The tolerances of many instruments, and the settings of over 100 balances, are already preset in the software.

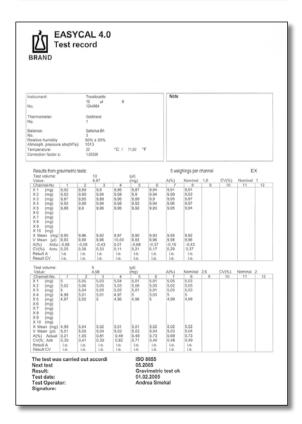
In the case of multichannel pipettes, the result of each individual channel is compared with the tolerances.

After entering the weighing values (primary data), all calculations are carried out automatically. Automatic import of the weighing values is only available in the professional version.



Start screen:

This determines whether a liquid handling or volumetric measuring device of glass/plastic is to be tested.

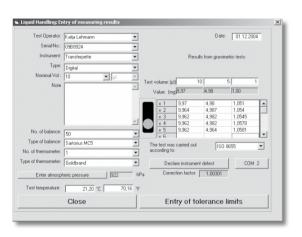


You can print out a clear and conclusive report to GLP. The test results are also stored in an easily sorted database. The test certificate can be saved in various formats (e.g., Microsoft® Word or Excel).

Quit calibration early?

After entering three weighing values (either manually or via data transmission from the balance), EASYCAL™ 4.0 executes a background comparison of the results with the tolerances. A traffic-light function (green/red) displays whether your results exceed the limit values.

EASYCAL[™] also helps you with testing times and intervals. You will be automatically reminded which tests are due.



In the event of unsuccessful testing, the test equipment can be designated as a "defective device". You can cancel this selection after successful cleaning or repair.

A Closer Look...

Items supplied:

CD-ROM with EASYCAL™ software in 5 languages (German/English/French/Spanish/Dutch), manual and testing instructions (SOPs) in four languages in PDF format for single- and multichannel pipettes, hand-held dispensers, bottletop burettes and dispensers and volumetric measuring instruments of glass/plastic.



System requirements:

PC with 32 MB RAM, Microsoft® Windows® 98/NT with SP6/ME/2000/XP, SVGA graphic card with 256 colors, mouse, CD-ROM drive, Microsoft® Paint.

For connection of the professional version of EASYCAL™ with the balance, please obtain the necessary interface cable from the balance manufacturer.



Demo version EASYCAL™ 4.0

A free demo version of our software is available for download from www.brand.de. With this, you can test EASYCAL $^{\text{TM}}$ for 4 weeks before deciding to purchase the full version.

Ordering Data



EASYCAL™ 4.0

Calibration software (CD-ROM) for liquid handling instruments and glass or plastic volumetric instruments.

Available as Basic Version (manual entry of measurement values) or Professional Version (automatic import of measurement values).

Description	Cat. No.
Professional Version	7084 40
Basic Version	7084 45
Upgrade	on request
Network license	on request

Accessories

Protection against evaporation

Avoid time-consuming evaporation traps or an expensive dual-pan balance! Pipettes $< 50 \ \mu l$ can be surprisingly easy to calibrate using EASYCALTM testing tubes (available as an accessory) or using the new micro-weighing container.



EL BEOD .

2. Place filled testing tube with clip on the balance; note mass. Done!



Micro-weighing container

The extremely small cap opening and internal filter provides simple protection against evaporation.

Micro-weighing container

incl. 10 filters and 3 cover caps.

Filter pack

20 replacement filters (capacity approx. 1000 μl).

Cat. No.	7084 71
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EASYCAL™ test tubes

For pipettes $< 50 \mu l$. Pack of 250.

testing tube.

Attach testing tube

1. Tare the testing tube and

clip. Remove the testing

tube from the balance after

from the pipette tip into the

taring. Pipette the sample

Cat. No. 7084 62

Pipette holder (clip)

For test tubes. Pack of 10.

Cat. No.	7086 05

Cover cap set

3 spare closures.



Exceptional control. Comfort grip. Easy to use.

Pipetting Aids

Pipetting aids from BRAND excel by their comfortable grips, superior control, light weight and rugged reliability:

- accu-jet® pro
- macro
- micro
- micro-classic



accu-jet® pro Pipette Controller

Comfortable

Ergonomic handgrip, weight only 190 g, perfectly balanced design – for fatigue-free pipetting even in prolonged operations.

Sensitive

With accu-jet® pro, you have continuously variable speed control using just two buttons. In addition, you can select your preferred motor speed to improve sensitivity and control with low-volume pipettes.

Powerful and quiet

At maximum motor speed, a 50 ml pipette is filled in less than 10 seconds. Now that's fast! Motor and pump operate quietly and with very low vibration. The longer you use it, the more you will appreciate it.

Power to spare

No need to worry about having enough battery power left to finish your series. A flashing LED light will alert you approx. two hours in advance.



■ Single-handed operation

All with one hand: select the delivery mode (gravity-delivery/blow-out) and adjust the motor speed range with your thumb; use variable button pressure for finest control of filling and delivery speed.

■ Advanced charging

The intelligent battery charger prevents overcharging of the NiMH battery. It effectively reduces the lazy-battery-effect (shortened operating time due to premature recharging). A flashing LED indicates when the storage battery needs charging. Charging time is 4 hours. After that, the charger automatically switches to a pulsed, long-term charging mode. The accu-jet® pro is always ready for action, even while being charged.

■ Tidy storage

Keep your accu-jet® *pro* within reach by placing it inverted on your lab bench. Or store it in the wall support, saving space.

■ Four colors

Select from four colors to individualize your accu-jet® *pro*.

A Closer Look...



Specifications

- Weight: 190 g
- Operating and charging temperature: +10 °C to + 35 °C
- Pipetting speed: 50 ml in less than 10 seconds
 - For glass and plastic pipettes from 0.1 to 100 ml
- Approx. eight hours of continuous pipetting (with a 10 ml pipette) without recharging
- Battery pack: NiMH battery 2.4 V / 700 mAh

Direct outlet of liquid vapors protects against corrosion to ensure long instrument life.

Pipette adapter firmly holds pipettes from 0.1 to 100 ml. The safety valve and 0.2 µm hydrophobic membrane filter provide double protection against fluid penetration.

Ordering Data

accu-jet® pro

Items supplied:

Each pipette controller is supplied with nickel-metal hydride battery, 2 battery compartment covers, wall support, battery charger and 2 spare membrane filters 0.2 µm.

Color accu-jet® <i>pro</i>		dark blue Cat. No.	magenta Cat. No.	green Cat. No.	royal blue Cat. No.
with battery charger for					
Europe (continental)	230 V/50 Hz	263 00	263 01	263 02	263 03
UK/Ireland	230 V/50 Hz	263 10	263 11	263 12	263 13
USA	120 V/60 Hz	263 30	263 31	263 32	263 33
Australia	230 V/50 Hz	263 20	263 21	263 22	263 23
Japan	100 V/50 Hz	263 40	263 41	263 42	263 43
without charger		263 04	-	_	-



Spare parts

Description	Cat. No.
Membrane filter 0,2 μm, sterile	265 30
Silicone adapter with non-return valve	265 08
Nickel-metal hydride battery pack	266 30

Other spare parts and accessories can be found in the operating manual.

macro Pipette Controller

Ideal handling

The unique valve system makes bellows compression easy. With one small sensitive lever, filling and delivery are easily controlled. Precise meniscus adjustment is effortless. A hydrophobic membrane filter protects the macro pipette controller from liquid penetration.



Economical

The silicone adapter on the macro pipette controller fits the entire range of volumetric and graduated pipettes, both glass and plastic, from 0.1 to 100 ml. There is no need for multiple instruments. The macro is fully autoclavable at 121 °C.

Award winning design

The combination of easy-to-use controls, light weight (106 g) and relaxed operation makes the macro pipette controller ideal for repetitive pipetting even for inexperienced user.



Volumetric and measuring pipettes can be found on pages 118-126.

Ordering Data



macro Pipette Controller

Items supplied:

Each pipette controller is supplied with spare membrane filter 3 µm.

Color	Cat. No.	
gray	261 00	
green	261 51	
blue	261 52	
magenta	261 54	

Spare parts for macro Pipette Controller

Description	Pack of	Cat. No.
Membrane filter 3 µm (PP, PTFE), non-sterile	1	260 52
Membrane filter 3 μm (PP, PTFE), non-sterile	10	260 56
Adapter (silicone), length 44 mm	1	261 46
Adapter support (PP), gray, length 49 mm	1	261 48
Valve system (PP, PTFE, silicone)	1	261 28
Suction bellows (silicone) with screw ring (PP)	1	260 37

micro Pipette Controller

The micro pipette controller is an indispensable accessory for sampling with disposable micropipettes with ring mark and many small volume pipettes up to 1 ml (e.g., blood diluting and blood sugar pipettes) with aspiration end-Ø max. 5 mm.

The micro reduces the hazards of infection and is autoclavable at 121 °C.

The integrated ejection device allows the disposal of contaminated pipettes up to 50 μ l without touching them, thus helping to prevent the transmission of dangerous viruses such as hepatitis B or HIV.

The micro is extremely light and very convenient.

micro Pipette Controller

Pack of 1.

Cat. No. 258 00

Spare suction system

Pack of 3.

Cat. No. 258 05





micro-classic Pipette Controller

Working under a microscope requires utmost concentration and therefore comfortable and reliable instruments.

The micro-classic pipette controller with its ergonomic shape and simple handling offers comfort and convenience for this strenuous job. It is a must in IVF and medical laboratories. Suitable for disposable micropipettes with ring mark and other small volume pipettes up to 1 ml (e.g., blood diluting pipettes) with aspiration end-Ø max. 5 mm. The micro-classic adapts to right- and left-handed operation. Adapter and suction tube are autoclavable at 121 °C.

The micro-classic minimizes the risk of contamination when working with infectious material.

micro-classic Pipette Controller

Each pipette controller is supplied with 2 spare suction tubes. Pack of 1.

Cat. No. 259 00

Spare adapter with suction tube

Pack of 3.

Cat. No. 259 31





Pipette fillers

Simple pipetting aids made of natural rubber for one-mark and graduated pipettes. Control of the functions by squeezing the appropriate valves between thumb and forefinger.



Pipette filler

Standard model, for pipettes up to 10 ml.

Pipette filler with 3 valves.

Valve A: Release air

Valve S: Filling

Valve E: Delivery

Pack of 1.

Cat. No.	253 00
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Pipette filler

Universal model, for pipettes up to 100 ml.

Pipette filler with 3 valves.

Valve A: Release air

Valve S: Filling

Valve E: Delivery

Pack of 1.



Pipette filler

Flip model, for pipettes up to 100 ml.

Pipette filler with 2 valves.

Release air through an automatic valve.

Valve ↑: Filling

Valve ↓: Delivery

Pack of 1.

Cat. No. 254 00