

Transferpette® S

Gebrauchsanleitung · Operating Manual · Mode d'emploi
Instrucciones de manejo · 操作手册



EG-Konformitätserklärung EC-Conformity Declaration

Die bezeichneten Produkte sind entwickelt, konstruiert und gefertigt in Übereinstimmung mit den einschlägigen Anforderungen der EG-Richtlinie 98/79/EG (IVD). Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller. / The devices named below are developed, constructed and manufactured in accordance to the fundamental requirements of the EC directive 98/79/EC (IVD). This declaration of conformity is issued under the sole responsibility of the manufacturer.

Gerätebezeichnung / Device name: Transferpette *S, einschließlich Pipettenspitzen von BRAND
Transferpette**S*, including pipette tips from BRAND
Gerätetyp / Device type: Transferpette**S*, Typ Variabel, Typ Fix, -8, -12
Transferpette**S*, Adjustable Volume, Fixed Volume, -8, -12
Art. No. : 703700, 703706, 703708, 703710, 703712, 703720, 703726, 703728, 703730, 703732, 704708, 704716, 704720, 704728, 704738, 704744, 704754, 704762, 704764, 704768, 704769, 704770, 704772, 704773, 704774, 704778, 704780, 704782, 704784, 705808, 705816, 705820, 705828, 705838, 705844, 705854, 705862, 705864, 705868, 705869, 705870, 705872, 705873, 705874, 705878, 705880, 705882, 705884, 705900, 705905, 705908, 705910, 705912, 705920, 705926, 705928, 705930, 705932
Pipettenspitzen: alle Größen/ Pipette Tips: all sizes
Art. No. : 702595, 702600, 702603, 702604, 702605, 702608, 732002, 732004, 732006, 732008, 732010, 732012, 732022, 732024, 732026, 732028, 732030, 732032, 732102, 732104, 732106, 732108, 732110, 732112, 732122, 732124, 732126, 732128, 732130, 732132, 732202, 732204, 732206, 732208, 732210, 732212, 732222, 732224, 732226, 732228, 732230, 732232, 732244, 732248, 732252, 732264, 732268, 732272, 732302, 732304, 732306, 732308, 732310, 732312, 732322, 732324, 732326, 732328, 732330, 732332, 732344, 732348, 732352, 732364, 732368, 732372, 732502, 732504, 732506, 732508, 732510, 732512, 732514, 732602, 732604, 732606, 732608, 732610, 732612, 732614, 732622, 732624, 732626, 732628, 732630, 732632, 732634, 732702, 732704, 732706, 732708, 732710, 732712, 732714, 732722, 732724, 732726, 732728, 732730, 732732, 732734, 732802, 732804, 732805, 732808, 732810, 732812, 732814, 732822, 732824, 732826, 732828, 732830, 732832, 732834

Registrier-Nr./ Registration No.: DE/ CA37/IVD/3/13 (Volumenmessgerät mit Hubkolben – Kolbenhubpipette nach DIN EN ISO 8655 Teil 2 einschl. Pipettenspitzen) zur In-Vitro-Anwendung/
(Piston-operated volumetric apparatus -Piston pipettes according DIN EN ISO 8655 Part 2 incl. Pipette tips for In-Vitro application)

Hersteller / Manufacturer: BRAND GMBH + CO KG

Adresse / Address: Otto-Schott-Str. 25, 97877 Wertheim · Germany

Die Produkte sind keine Produkte des Anhang II. Die Konformitätsbewertung erfolgte gemäß Anhang III. Eine vollständige technische Dokumentation ist vorhanden. / The products are not products of annex II. The conformity assessment procedures follow annex III. A complete technical documentation is available.

Wertheim, 02. Oktober 2019 / October 2, 2019

08.01.03.04



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1 *Scope of supply*

Transferpette® S, adjustable / fixed-volume, DE-M marking, supplied with quality certificate, shelf mount and silicone grease.

2 *Terms of use*



- Please carefully read the operating manual before using the instrument for the first time.
- The operating manual is part of the instrument and must be kept in an easily accessible place.
- Be sure to include the operating manual if possession of this instrument IS transferred to a third party.
- Up-to-date versions of the operating manual are available at: www.brand.de.

2.1 Hazard levels

The following signal words identify possible hazards:

Signal word	Meaning
DANGER	Will lead to serious injury or death.
WARNING	May lead to serious injury or death.
CAUTION	May lead to minor or moderate injuries.
NOTICE	May lead to property damage.

2.2 Icon

Format	Meaning	Format	Meaning
1. Task	Indicates a task.		Indicates a condition.
a., b., c.	Indicates the individual steps of a task.		Indicates a result.

3 Safety regulations

3.1 General safety regulations

Please read carefully!

This instrument can be used in combination with hazardous materials, work processes and equipment. However, the operating manual cannot cover all of the safety issues that may occur in doing so. It is the user's responsibility to ensure compliance with the safety and health regulations and to specify the corresponding restrictions before use.

1. Every user must read and observe this operating manual before using the instrument.
2. Follow the general hazard instructions and safety regulations, e.g. wear protective clothing, eye protection and protective gloves. When working with infectious or hazardous samples, the standard laboratory rules and precautions must be adhered to.
3. Follow the instructions given by the reagent manufacturer.
4. Use the instrument only for pipetting liquids within the defined limitations and restrictions of use. Comply with the operating exclusions; see p. 40. In case of doubt, contact the manufacturer or dealer.
5. Always perform work in a manner that does not endanger users or other people. Avoid splattering. Use only suitable vessels.

6. Avoid touching the tip opening when working with aggressive media.
7. Never use force.
8. Use only original spare parts. Do not make any technical modifications. Do not disassemble the instrument further than described in the user manual!
9. Always check that the instrument is in proper working condition before use. If instrument malfunctions are indicated (e.g. sluggish pistons, leaks), stop pipetting immediately and refer to the section "Troubleshooting"; see p. 57. Contact the manufacturer, if necessary.

3.2 Purpose

This is an air displacement pipette for pipetting aqueous solutions of medium density and low to medium viscosity.

3.3 Limitations of use

This instrument is intended for pipetting samples, within the following limitations:

- Operating temperature of instrument and reagent should be between +15 °C and +40 °C (59 °F to 104 °F) (other temperatures upon request)
- Vapor pressure up to 500 mbar
- Viscosity: 260 mPa s

3.4 Operating limitations

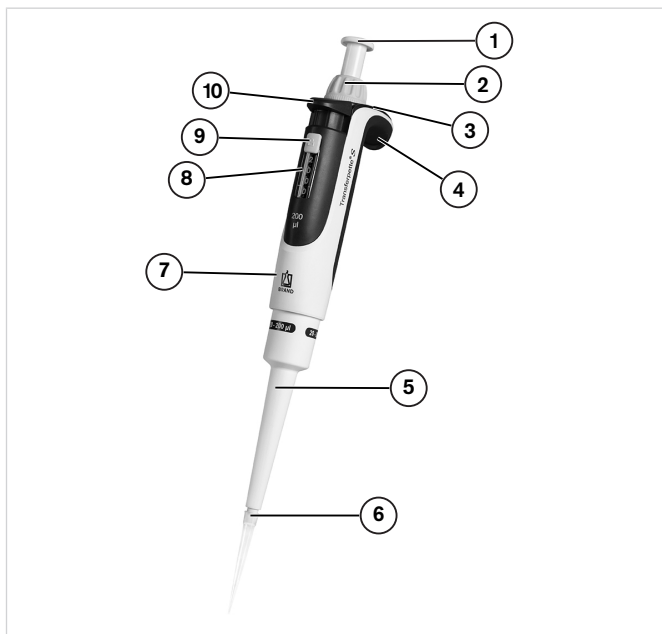
Viscous and wetting liquids may compromise volumetric accuracy. Volumetric accuracy may also be affected when pipetting liquids whose temperature deviates from the ambient temperature by more than ± 1 °C/ ± 1.8 °F.

3.5 Operating exclusions

The user is responsible for checking the compatibility of the instrument with the intended application. The instrument cannot be used:

- for liquids that corrode polypropylene
- for liquids that corrode polycarbonate (viewing window)
- for liquids that corrode FKM and polyether ether ketone (PEEK)
- for liquids that corrode polyvinylidene fluoride
- for liquids that corrode polyphenylsulphide (PPS) (on adjustable 50 µl instrument)
- for liquids with very high steam pressure

4 Functions and controls



- | | |
|-----------------------------|------------------------|
| 1 Pipetting key | 2 Volume-setting wheel |
| 3 Easy Calibration function | 4 Finger rest |
| 5 Pipetting shaft | 6 Tip cone |
| 7 Hand grip | 8 Volume display |
| 9 Volume-change protection | 10 Tip ejection key |

Label window



The pipette can be individually labeled on the finger rest:

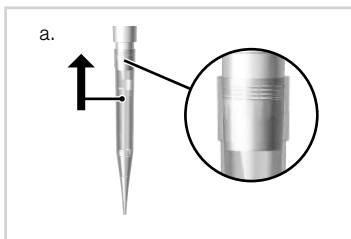
- Remove the label window on the finger rest.
- Mark the labeling film.
- Reinsert the labeling film with window.

5 Pipetting

1. Inserting tips

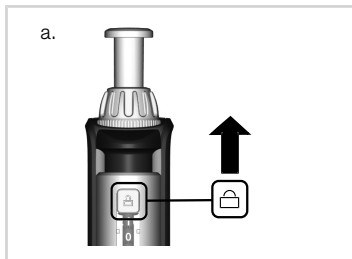
NOTICE

- 2 ml, 5 ml and 10 ml instruments should only be used with a built-in PE filter; see p. 53.
- Perfect analysis results can only be achieved by using quality tips. We recommend BRAND pipette tips. For additional information, refer to the accuracy table p. 48.
- Pipette tips are disposable products!



- Use the correct tips, in accordance with the volume range or color code! Make sure that the tips are firmly in place and leak tight.

2. Setting the volume

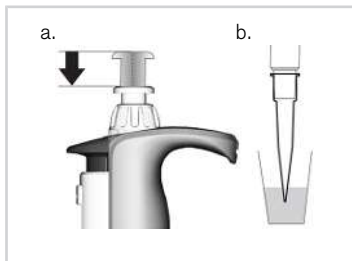


- Slide the volume-change protection upward (UNLOCK).
- Turn the volume-setting wheel to select the desired volume. In doing so, turn the adjustment wheel steadily, avoiding abrupt turning motions.
- Slide the volume-change protection downward (LOCK). The volume-setting wheel becomes noticeably more difficult to turn, but movement is not completely blocked.

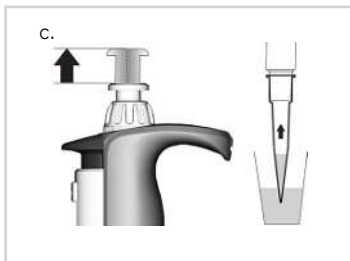
3. Aspirating a sample

NOTICE

The ISO 8655 standard requires that pipette tips are pre-wetted once before the actual pipetting procedure.



- Press the pipetting key until first resistance is felt.
- Hold the instrument vertically and immerse the tip in the liquid.



- c. Allow the pipetting button to steadily move back to its original position.

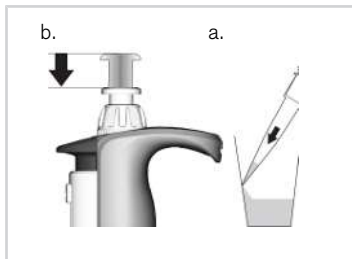
Leave the tip immersed in the liquid for a few seconds, so that the set volume is aspirated completely. This is especially important when pipetting viscous media and when using pipettes with large volumes.

Volume range	Immersion depth [mm]	Wait time [s]
0.1 μl - 1 μl	1 - 2	1
> 1 μl - 100 μl	2 - 3	1
> 100 μl - 1,000 μl	2 - 4	1
> 1,000 μl	3 - 6	3

NOTICE

Do not lay the instrument down when the tip is filled; this can cause the medium to flow into the instrument and contaminate it! The instrument should always be stored in the provided shelf mount or table stand and kept in an upright position, without any tip inserted.

4. Dispensing a sample



- Place the pipette tip against the vessel wall. Hold the pipette at an angle of 30-45° to the vessel wall.
- Press the pipetting button at a uniform speed until the first resistance is felt and hold it. To improve accuracy, comply with the corresponding wait time for serums, highly-viscous or low-density media.



- Completely empty the tip by over-stroking: press the pipetting button until the second resistance is felt.
- While doing this, wipe the pipette tip against the vessel wall.
- Remove the pipette tip from the vessel wall and allow the pipetting button to move back to its original position.

5. Ejecting a tip

NOTICE

The instrument should always be stored in the provided shelf mount or table stand and kept in an upright position, without any tip inserted.



- a. Hold the pipette shaft over a suitable disposal bin and press the tip ejection button all the way down.

6 Checking the volume

We recommend testing the instrument every 3 to 12 months, depending on the level of use. However, the testing cycle can be adapted to meet individual requirements. Gravimetric volume testing of the pipette is carried out according to the following steps and complies with DIN EN ISO 8655, Part 6.

1. Setting the nominal volume

Set the maximum specified instrument volume.

2. Conditioning the pipette

Condition the pipette before testing by aspirating and dispensing the test liquid (H_2O distilled) with a pipette tip five times.

3. Performing the test

NOTICE

In accordance with DIN EN ISO 8655-2, a tip change is recommended after each individual measurement. An exception to this rule can be made, according to DAkkS guideline DKD-R8-1.

- a. Aspirate the test liquid and pipette into the weighing vessel.

- Weigh the pipetted amount with an analysis scale. (Please refer to the user manual of the scale manufacturer.)
- Calculate the pipetted volume. In doing so, take into account the temperature of the test liquid.
- At least 10 pipetting series and weighings in 3 volume ranges (100%, 50%, 10%) are recommended.

Calculation (for nominal volume)

x_1 = Weighing results

n = Number of weighings

Z = Correction factor

(e.g. 1.0029 $\mu\text{l}/\text{mg}$ at 20 °C, 1013 hPa)

Mean $\bar{x} = \frac{\sum x_1}{n}$

Mean volume $\bar{V} = \bar{x} \cdot Z$

Accuracy* $A\% = \frac{\bar{V} - V_0}{V_0} \cdot 100$

V_0 = Nominal volume

Coefficient of variation* $CV\% = \frac{100 s}{\bar{V}}$

Standard deviation* $s = Z \cdot \sqrt{\frac{\sum (x_1 - \bar{x})^2}{n - 1}}$

*) = Calculation for accuracy (A%) coefficient of variation (CV%): A% and CV% are calculated using the formulas of statistical quality control.

NOTICE

Test instructions (SOPs) and a version of the calibration software EASYCAL™ 4.0 are available for download at www.brand.de.

7 Accuracy table

Transferpette® S, adjustable

Volume range [μl]	Partial volume [μl]	A* ≤ ± %	CV* ≤ %	Sub steps [μl]	Recommended tip type [μl]
0.1 - 1	1	2	1.2	0.001	0.1 - 20
	0.5	4	2.4		
	0.1	20	12		
0.1 - 2.5	2.5	1.4	0.7	0.002	0.5 - 20
	1.25	2.5	1.5		
	0.25	12	6		
0.5 - 10	10	1	0.5	0.01	0.5 - 20
	5	1.6	1		
	1	7	4		
2 - 20	20	0.8	0.4	0.02	2 - 200
	10	1.2	0.7		
	2	5	2		
5 - 50	50	0.8	0.3	0.05	2 - 200
	25	1.2	0.5		
	5	4	2		
10 - 100	100	0.6	0.2	0.1	2 - 200
	50	0.8	0.4		
	10	3	1		
20 - 200	200	0.6	0.2	0.2	2 - 200
	100	0.8	0.3		
	20	3	0.6		
100 - 1,000	1,000	0.6	0.2	1	50 - 1,000
	500	0.8	0.3		
	100	3	0.6		
500 - 5,000	5,000	0.6	0.2	5	500 - 5,000
	2,500	0.8	0.3		
	500	3	0.6		
1000 - 10,000	10,000	0.6	0.2	10	1,000 - 10,000
	5,000	0.8	0.3		
	1,000	3	0.6		

*A = Accuracy, CV = Coefficient of Variation

Transferpette® S, fixed-volume

Volume range [µl]	A* ≤ ± %	CV* ≤ %	Recommended tip type [µl]
10	1	0.5	0.5 - 20
20	0.8	0.4	2 - 200
25	0.8	0.4	2 - 200
50	0.8	0.4	2 - 200
100	0.6	0.2	2 - 200
200	0.6	0.2	2 - 200
500	0.6	0.2	50 - 1,000
1,000	0.6	0.2	50 - 1,000
2,000	0.8	0.3	500 - 5,000

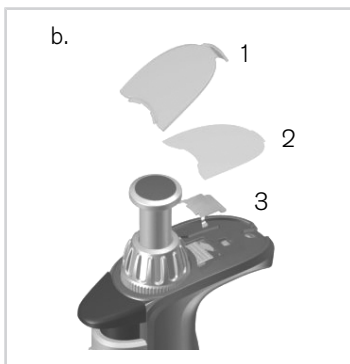
*A = Accuracy, CV = Coefficient of Variation



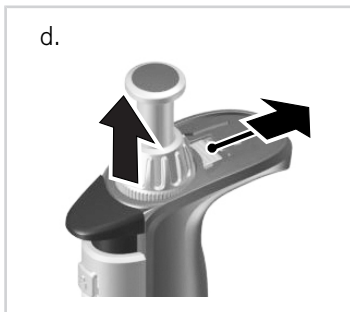
Final test values based on the nominal volume (= max. volume) printed on the instrument and the specified partial volumes at the same temperature (20 °C/68 °F) of the instrument, surroundings and distilled water, in accordance with DIN EN ISO 8655.

8 Adjustment – Easy Calibration

The instrument is permanently calibrated for aqueous solutions. If it is determined that the pipette is operating inaccurately or to adjust the instrument to work with solutions of varying density and viscosity or with specially-shaped pipette tips, it can be calibrated using the Easy Calibration Technique.



- a. Perform a volume check and determine the actual value; see p. 46.
- b. Remove label window (1) and labeling film (2): Gently move the clamp and lift it off.
- c. Using a paper clip or an unused pipette tip, remove the protective film (3) (the protective film can be discarded).



- d. Slide the red adjustment slider back completely, lift the volume-setting wheel (decoupling) and release the adjustment slider.



- e. Set the adjustment value:
Transferpette® S, adjustable: with the volume-setting wheel in the UNLOCK position, set to the previously determined actual value.

Transferpette® S, fixed-volume: set the volume by rotating in the +/- direction. A volume check is recommended after every adjustment.



- f. Slide the adjustment slider completely back again, push the volume-setting wheel downward and release the adjustment slider. Re-attach the labeling film and re-assemble the label window.

NOTICE

The change to factory settings is indicated by the red adjustment slider now visible in the label window.

9 *Cleaning and disinfection*

9.1 Autoclaving

The Transferpette® S and S -8/-12 are completely autoclavable at 121 °C (250 °F), 2 bar and a holding time of at least 15 minutes, in accordance with DIN EN 285.

NOTICE

The effectiveness of autoclaving must be verified by the user. Maximum safety is achieved through vacuum sterilization. We recommend the use of sterilization bags.

NOTICE

Prior to autoclaving, the volume-setting wheel must be set on an available numbered value (e.g., 11.25 or 11.26, but not between), with the volume-change protection set to fully unlocked (UNLOCK).

If the pipette is autoclaved frequently, the piston and seal should be greased with the supplied silicone grease in order to ensure proper movement. After autoclaving, tighten the connection between the hand grip and the pipette shaft if necessary.

- a. Eject the pipette tip.
- b. Autoclave the complete pipette without any further disassembling.
- c. Allow the Transferpette® S or S -8/-12 to completely cool and dry.

9.2 UV sterilization

The instrument is resistant to normal exposure to a UV sterilization lamp. The effects of the UV exposure may cause some color change.

Filter Transferpette® S 2 ml, 5 ml + 10 ml

A hydrophobic PE filter is used to prevent liquid from entering the pipette.

Change the filter if it becomes wet or contaminated.

- Use a flat object, such as a screwdriver.
- Remove the filter carefully, without damaging the tip cone.

Remove the filter before autoclaving!

The instrument can also be operated without a filter.

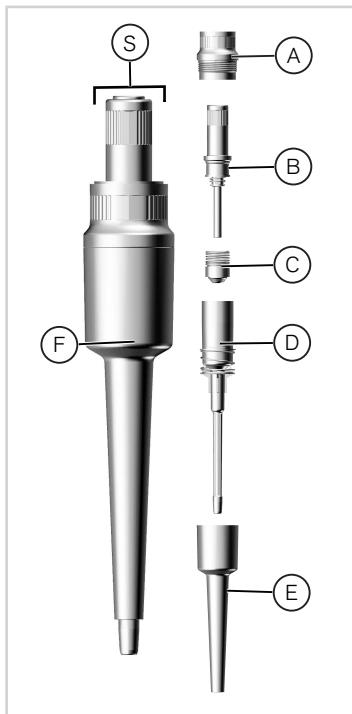
10 Maintenance

10.1 Disassembling/cleaning (Transferpette® S up to 1,000 µl)

- Check the pipette tip cone for damage.
- Inspect the piston and seal for contamination.
- Check the pipette for leaks.

We recommend using BRAND's leak detector, the BRAND PLT unit. As an alternative to this, aspirate a sample and hold the pipette vertically for approx. 10 s. If a drop forms on the pipette tip, refer to p. 57.

Cleaning



- Detach the pipette shaft (S) from the hand grip by unscrewing it.
- Unscrew the upper part of the ejector unit (A) from the pipette shaft.
- Pull out the shaft (B, C and D) from the lower part of the ejector unit (E).
- Unscrew the piston unit (B).

NOTICE

Do not disassemble the piston unit (B) any further!

- Remove the spring (C) (not possible on Transferpette®S 1 µl, 2.5 µl and 10 µl!).
- Clean the parts shown with a soap solution or isopropanol, and then rinse with distilled water.
- Dry the parts (max. 120 °C/248 °F).
- Grease piston and seal with a very thin layer of supplied silicone grease.

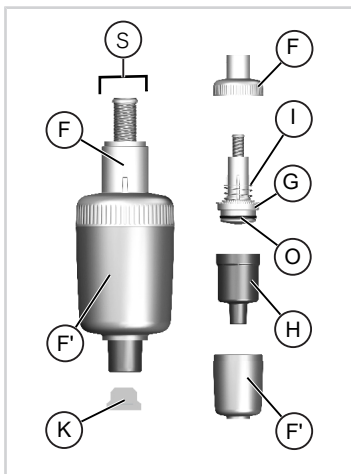
Reassemble the cooled parts in reverse order. Only hand-tighten the piston unit and the upper part of the ejector unit (A, B).

10.2 Disassembling/cleaning (Transferpette® S 2 ml – 10 ml)

- Check the pipette tip cone for damage.
- Inspect the piston and seal for contamination.
- Check the pipette for leaks.

We recommend using BRAND's leak detector, the BRAND PLT unit. As an alternative to this, aspirate a sample and hold the pipette vertically for approx. 10 s. If a drop forms on the pipette tip, refer to p. 57.

Cleaning



- Remove the entire shaft (S) from the hand grip by rotating at the upper end of the ejector (F) and remove the filter (K) from the bottom part of the shaft (H).
- Separate the bottom part of the ejector (F') by unscrewing it from the upper part of the ejector (F).
- Unscrew and dismantle the piston unit (G) with the ejector spring (I) and the bottom part of the shaft (H).
- Remove the O-ring-seal from the piston unit and clean it.

NOTICE

Do not disassemble the piston unit (G) any further!




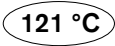
- e. Clean the piston unit (G) and the bottom part of the shaft (H) with a soap solution or isopropanol, and then rinse with distilled water.
- f. Dry the parts (max. 120 °C/248 °F) and allow them to cool.
- g. Carefully lubricate the inside and outside of the O-ring (O) and mount it on the piston.

Reassemble the individual components in reverse order.

11 *Troubleshooting*

Problem	Possible cause	Corrective action
Tip dripping (instrument leaking)	Unsuitable tip	Only use high-quality tips
	Tip not seated tightly	Firmly press tip on
The instrument does not aspirate or aspirates too little; the dispensed volume is too low	Seal contaminated	Clean seal
	Seal or cone is damaged	Replace seal or shaft
	Piston is contaminated or damaged	Clean or replace piston
Aspiration is very slow	Shaft is clogged	Clean shaft
	Filter contaminated on 2 ml, 5 ml or 10 ml instruments	Change filter
Dispensed volume too large	Pipetting button pressed too far (to the over-stroke point) before aspirating	Ensure proper handling.
Piston sluggish	Piston is contaminated or not greased	Clean piston and apply grease

12 Product markings

Symbol or number	Meaning
	Read the user manual.
XXZXXXXX	Serial number
	With this mark, we confirm that the product complies with the requirements set out in the EC Directives and has been subjected to the specified testing procedures.
 18	The instrument is marked in accordance with the German Weights and Measures Act and the Weights and Measures Ordinance. Character sequence DE-M (DE for Germany), framed by a rectangle, as well as the two last digits of the year the marking was added (here: 2018).
	Autoclavable up to the temperature shown

13 Ordering Information

13.1 Order info/accessories

Transferpette® S, fixed-volume

Volume	Description	Order No.
10 µl	F-10	7058 08
20 µl	F-20	7058 16
25 µl	F-25	7058 20
50 µl	F-50	7058 28
100 µl	F-100	7058 38
200 µl	F-200	7058 44
500 µl	F-500	7058 54
1,000 µl	F-1000	7058 62
2000 µl	F-2000	7058 64

Transferpette® S, adjustable

Volume	Description	Order No.
0.1 - 1 µl	D-1	7058 68
0.1 - 2.5 µl	D-2.5	7058 69
0.5 - 10 µl	D-10	7058 70
2 - 20 µl	D-20	7058 72
5 - 50 µl	D-50	7058 73
10 - 100 µl	D-100	7058 74
20 - 200 µl	D-200	7058 78
100 - 1,000 µl	D-1000	7058 80

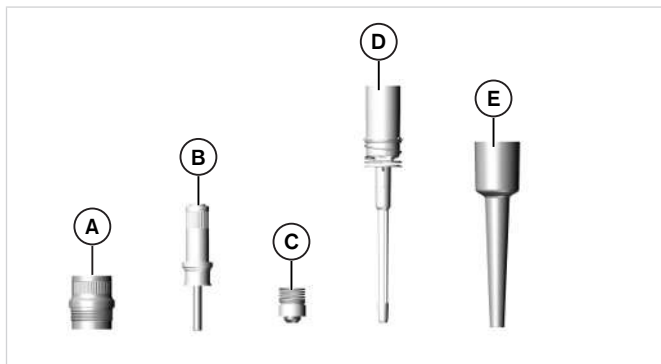
Volume	Description	Order No.
0.5 - 5 ml	D-5000	7058 82
1 - 10 ml	D-10000	7058 84

Benchtop rack for 6 Transferpette® S or 6 Transferpette® S -8/-12	Wall mount for 1 Transferpette® S or 1 Transferpette® S -8/-12	Shelf mount for 1 Transferpette S or 1 Transferpette® S -8/-12
		
Order No. 7048 07	Order No. 7048 12	Order No. 7048 11

13.2 Spare parts

13.2.1 Transferpette® S up to 1,000 µl

The appearance and dimensions of the spare parts correspond to the respective nominal volume. (Fig. spare parts for Transferpette® S 20-200 µl)



A Ejector (upper part)

B Piston unit

C Seal with spring

D Shaft with ejector spring

E Ejector (lower part)

Transferpette® S, fixed-volume

Volume	A	B	C	D	E
10 µl	7055 08	7046 01	–	7047 21*	7047 39
20 µl	7055 09	7046 02	7046 10	7047 23	7047 40
25 µl	7055 09	7046 08	7046 14	7047 23	7047 41
50 µl	7055 09	7046 54	7046 61	7047 24	7047 42
100 µl	7055 09	7046 54	7046 61	7047 24	7047 43

Volume	A	B	C	D	E
200 µl	7055 09	7046 55	7046 62	7047 25	7047 45
500 µl	7055 11	7046 56	7046 63	7047 26	7047 46
1,000 µl	7055 11	7046 56	7046 63	7047 26	7047 47

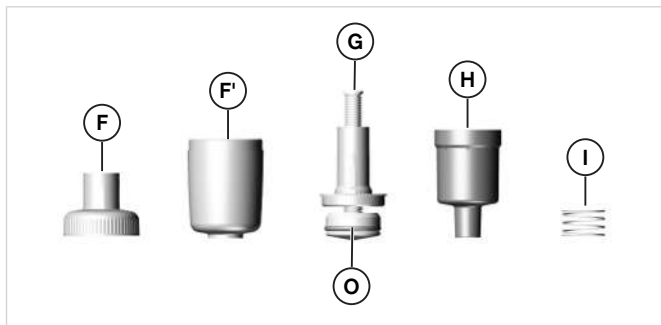
Transferpette® S, adjustable

Volume	A	B	C	D	E
0.1 - 1 µl	7055 08	7046 00	–	7047 18*	7047 30
0.1 - 2.5 µl	7055 08	7046 16	–	7047 19*	7047 31
0.5 - 10 µl	7055 08	7046 01	–	7047 21*	7047 32
2 - 20 µl	7055 09	7046 02	7046 10	7047 23	7047 33
5 - 50 µl	7055 09	7046 15	7046 17	7047 22	7047 34
10 - 100 µl	7055 09	7046 54	7046 61	7047 24	7047 35
20 - 200 µl	7055 09	7046 55	7046 62	7047 25	7047 36
100 - 1,000 µl	7055 11	7046 56	7046 63	7047 26	7047 37

* Seal permanently installed in shaft – not removable!

13.2.2 Transferpette® S, 2 ml, 5 ml and 10 ml

The appearance and dimensions of the spare parts correspond to the respective nominal volume. (Fig. replacement parts for Transferpette® S 5 ml).



F Ejector (upper part)

F' Ejector (lower part)

G Piston unit

H Shaft (lower part)

I Ejector spring

O O-ring

Transferpette® S, fixed-volume and adjustable

Volume	F + F'	G	H	I	O
2 ml	7047 65	7046 06	7032 47	7046 26	7288
0.5 - 5 ml	7047 66	7046 06	7032 47	7046 26	7288
1 - 10 ml	7047 67	7046 07	7046 28	7046 26	7298

13.3 Additional accessories

Description	Order No.
Filter for Transferpette® S 2 ml + 5 ml, PU 25 pcs.	7046 52
Filter for Transferpette® S 10 ml, PU 25 pcs.	7046 53
Silicone grease for Transferpette® S up to 1000 µl	7055 02
Silicone grease for Transferpette® S 2 ml/5 ml/10 ml	7036 77
Label window, PU 1 pc.	7047 50
Labeling film, PU 5 pcs.	7047 51
PLT unit (pipette leak testing unit)	7039 70

14 Repairs

14.1 Sending for repairs

NOTICE

Transporting hazardous materials without approval is prohibited by law.

Clean the instrument thoroughly and decontaminate!

- When returning products, please enclose a general description of the type of malfunction and the media used. The instrument cannot be repaired if information about the media used is not provided.
- Only send the instrument without a battery installed.
- The instrument is returned at the risk and expense of the sender.

Outside USA and Canada

Fill out the "Declaration on the Absence of Health Hazards" and send it together with the instrument to the manufacturer or dealer. Pre-printed forms can be requested at the dealer or manufacturer, or are available for download at www.brand.de.

Within USA and Canada

Please clarify the requirements for the return delivery with BrandTech Scientific, Inc **before** sending the instrument in for service.

Send only cleaned and decontaminated instruments to the address, which you received together with the return number. Attach the return number in a clearly visible place on the package.

Contact addresses

BRAND GMBH + CO. KG
Otto-Schott-Str. 25
97877 Wertheim (Germany)
T: +49 9342 808-0
F: +49 9342 808-98000
info@brand.de
www.brand.de

India:

BRAND Scientific Equipment Pvt.
Ltd.
303, 3rd Floor, 'C' Wing, Delphi
Hiranandani Business Park,
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Mumbai-400 076 (India)
T: +91 22 42957790
F: +91 22 42957791
info@brand.co.in
www.brand.co.in

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T: +1-860-767 2562
F: +1-860-767 2563
info@brandtech.com
www.brandtech.com

China:

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Ltd.
Guangqi Culture Plaza
Room 506, Building B
No. 2899, Xietu Road
Shanghai 200030 (P.R. China)
T: +86 21 6422 2318
F: +86 21 6422 2268
info@brand.cn.com
www.brand.cn.com

15 Calibration service

The ISO 9001 and GLP guidelines require regular inspection of your volume measuring instruments. We recommend performing a volume check every 3 to 12 months. The cycle is dependent on the individual requirements of the instrument. Checks should be performed more frequently, in case of high frequency of use or the use of aggressive media. The detailed testing instructions are available for download on www.brand.de or www.brandtech.com.

BRAND also offers the possibility to have your instruments calibrated by our factory calibration service or by the BRAND DAkkS laboratory. Simply send us the instrument to be calibrated, accompanied by details

about which type of calibration you would like. The instrument will be returned to you after a few days together with a test report (factory calibration) or a DAkkS calibration certificate. More information can be obtained from your dealer or directly from BRAND.

The order document is available for download on www.brand.de (see Technical Documents).

16 *Warranty*

We shall not be liable for the consequences of improper handling, use, servicing, operating or unauthorized repairs of the device or for the consequences of normal wear and tear, especially of wearing parts such as pistons, seals, valves and the breakage of glass. The same applies for failure to follow the instructions of the operating manual. We are not liable for damage resulting from disassembly beyond that described in the operating manual or if non-original spare parts or components have been installed.

USA and Canada:

Find more warranty information on www.brandtech.com.

17 *Disposal*

For the disposal of the instrument and pipette tips, please follow the respective national disposal regulations.

Subject to technical changes, errors, and misprints.

