

*Your specialist for chromatography and
pharmaceutical packaging*

Product Catalogue



... competent and reliable!



New Products



9mm and 11mm Total Phthalat Free Closure System

Screw Thread 9-425

- SV 09 1005 (page 16)

Crimp Neck ND11

- BV 11 0979 (page 23)



New variations of 1.1mm Microliter Vials with standard design 32 x 11.6mm, available as clear and amber glass versions

Screw Thread 8-425

- GW 08 1317, GW 08 1318 (page 10)

Screw Thread 9-425

- KG 09 1201, KG 09 1321 (page 13)

Screw Thread 10-425

- GW 10 1319, GW 10 1320 (page 18)

Crimp Neck ND11

- RR 11 1200, RR 11 1316 (page 20)

Snap Ring ND 11

- SR 11 1312, SR 11 1322 (page 25)



Vials with integrated Micro-Insert as modern sample container for Micro Sampling

Screw Thread 9-425

- KG 09 0682, KG 09 0683 (page 13)

Crimp Neck ND11

- RR 11 0680, RR 11 0681 (page 20)

Snap Ring ND 11

- SR 11 0684, SR 11 0685 (page 25)



Plastic insert with injection moulded polymer spring

Application:

Ion Chromatography, Atomic absorption and Capillary electrophoresis (CE ü+ CE/MS)

adaptable to any standard vial with dimensions 32 x 11.6mm, with wide opening

- ME 06 1174 (page 10, 13, 18)



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Company Profile



CHROMA GLOBE GbR was founded on November 15th, 2007.

The company's headquarters have been in Kreuzau since 2011, approx. 55 km west of Cologne.

The objective of the company is the production and distribution of high-quality **laboratory** and **pharmaceutical packaging** materials.

We aim to manufacture, sell high-quality laboratory and pharmaceutical products. As an independent, flexible, privately owned company managed by the owners, the company's goal is to quickly and reliably supply a worldwide customer base with innovative and high quality products at competitive prices.

Our customers are laboratory wholesalers, specialist dealers, manufacturers of analysis equipment, customers in the pharmaceutical industry, as well as laboratories and institutes.

Our range of products includes ...

- ***a wide scope of laboratory glass for laboratories in the chromatography and analysis technology:***

- Crimp and screw vials, micro inserts
- septa of different materials, Silicone / PTFE, butyl / PTFE, Viton, PTFE, silicone / aluminum
- crimp closures
- plastic closures
- flaring tools (manual, pneumatic and electric)
- plastic bottles
- Syringe filters for HPLC

- ***for use mainly by pharmaceutical users:***

- Injection vials and infusion bottles
- Injection stoppers, infusion stoppers and septa
- crimp closures, plastic closures
- flaring tools (manual, pneumatic and electric)
- Syringe filters
- Septa for laboratory closures (Schott screw caps GL16 – GL45)

In order to optimize customer service and to increase the flexibility required by the market, the key products – sealing washers (septas), closures and flanging tools – are produced exclusively in-house.

Handling of the catalogue

- I. The product groups are sorted in ascending order of their nominal diameter
- II. Within a chapter you will find all articles that belong together. Starting with sample bottles, followed by matching micro inserts, as well as closures and, if available, caps and septas.

Services

- **Technical Support**
 - Autosampler Compatibility
 - Cross-References
 - Application-Specific Questions
- **Sample Service**
 - Cost-free
 - Upon request dispatch directly to the end user
- **Distribution Service**
 - Shipping of standard items within 24 hours
 - Upon request dispatch directly to the end user (neutral delivery)
 - Customer-Specific Labelling
 - Stocking of annual call-off contracts
- **Product Trainings**
 - Product training either at the customer's site or in our company
 - Introduction to the production processes of vials and seals
- **Product Catalogue Support**
 - Texts, tables, drawings and photos as electronic data files

Explanations

- **Cleanroom class 100.000**

There are different standards of cleanroom classes globally established. When stated, our products are packed in clean rooms of the class ISO 7 or ISO 8 (acc. to ISO 14644-1) which is identical to the class 10.000 or 100K (acc. to US FED STD 209E) for particles $\geq 0.5 \mu\text{m}$. Cleanroom classes represent a hygienic standard often found in the pharmaceutical industry. These special rooms have certified conditions for maximum particles per ft³ or m³ air. To have a comparison: The environment in a normal room contains billions of particles. The Cleanrooms are regularly measured by external authorities to guarantee the specifications. Such rooms have no windows (air-conditioned) and only material with low particle abrasion is allowed there (Plastic instead of wood or cardboard, etc.). The people have to wear special clothing.
- **Durometer**

Durometer is the hardness of a liner and is expressed in ° shore. The higher the grade the harder the liner; the lower the grade, the softer the liner. The softest liner is 35° shore A and the hardest 70° shore A. Besides the thickness of a liner the hardness is an essential indication when deciding which liner is suitable for the penetration of a certain type of needle (fragile needles, thin or thick needles, sharp or dull needles, etc.)
- **Headspace Neck (bevelled top)**

A Headspace Neck or Headspace Vial with bevelled top has a crimp neck whose outer edges are bevelled. In contrast to a flat DIN crimp neck the liner only has a very small surface to sit on which is a disadvantage regarding tightness (except for Pharma-Fix septa). Headspace Necks or bevelled crimp necks are only necessary when using the patented PerkinElmer Pressure Release Seal consisting of an Aluminum Cap with a slit, a metal star washer plate and a star-shaped liner. This system only releases excess pressure reliably when using a vial with such a top.

Explanations (Cont.)

- **Micro-Insert**

A Micro-Insert in contrast to a Micro-Vial cannot be sealed on its own. It is neckless and always has to be used within a vial. The diameter of the MicroInsert is depending on the size of the vial opening. A Micro-Insert reduces the volume, so that a needle is capable of picking up even smallest sample quantities. The longer the top of an Insert the more the volume can be reduced.

- **Micro-Vial**

Micro-Vials can be sealed, but often need an adapter to run in the autosampler. In case they have a conical bottom, they cannot stand by themselves.

- **Microliters Vial (optimised residual emptying)**

Microliter-Vials can be closed independently and do not require an adapter for a safe stand due to their solid flat bottom with inner cone. The inner cone reduces the sample volume in such a way that a needle is still able to hold even small sample quantities. Functionally comparable to a sample vials with integrated or inserted micro insert, but the Micro-Liter vials holds about 5 times the sample volume of a micro insert.

- **Seal**

A Seal is an already assembled closure consisting of a cap and a liner.

- **Silanized**

Silanized vials are used to reduce the adsorption of polar compounds onto the normally polar surface of the glass container. Some compounds like aminoacids, predeins or phenols tend to react with the OH-groups of the glass, even if – as is common for chromatography – 1st hydrolytic class glass is used. Through the silanization process the glass surface is deactivated and so possible reactions between the polar compounds and the glass are eliminated.

1. Crimp Neck ND8

The vials are preferentially used on instruments of the following manufacturers: Agilent, Beckman, Carlo Erba, CTC, Fisons, PerkinElmer, Shimadzu, Thermo Scientific, VWR (Merck®)/Hitachi, etc. (Please have a look at the autosampler compatibility chart on pages 62 – 73 to see on which models they can be used).

Broad selection of Crimp Neck Vials ND8 available:

Crimp Neck Vials and Micro Vials ND8 can be closed with 8mm Aluminum Caps, 9mm PE-Caps or with 8mm Push-On Caps. However, Micro-Vials often need an adapter to run in the autosampler. They often have a conical bottom shape, so that they cannot stand by themselves, but need an adapter.

- with different volumes
- with flat, round or conical bottom
- in clear or amber glass
- for almost all autosamplers



1.1 Crimp Neck Vials and Micro-Vials ND8



RR 08 0326	RR 08 0327	RR 08 0328	RR 08 0329	RR 08 0330
0.7ml Crimp Neck Vial, 40 x 7mm, clear glass, 1st hydrol. class	0.7ml Crimp Neck Vial, 40 x 7mm, amber glass, 1st hydrol. class	0.8ml Crimp Neck Vial, 30 x 8.2mm, clear glass, 1st hydrol. class	1.2ml Crimp Neck Vial, 40 x 8.2mm, clear glass, 1st hydrol. class	1.2ml Crimp Neck Vial, 40 x 8.2mm, amber glass, 1st hydrol. class
R. vol. < 11 µl	R. vol. < 11 µl	R. vol. < 11 µl	R. vol. < 20 µl	R. vol. < 20 µl
10 x 100 pcs. per PP-Box			100 pcs. per PP-Box	



RR 08 0331	RR 08 0332	RR 08 0317	RR 08 0333	RR 08 0334
0.3ml Micro-Vial, 31.5 x 5.5mm, clear glass, 1st hydrol. class, round bottom	0.2ml Micro-Vial, 31.5 x 5.5mm, clear glass, 1st hydrol. class, conical	0.7ml Micro-Vial, 40 x 7mm, clear glass, 1st hydrol. class, conical	0.7ml Micro-Vial, 40 x 7mm, amber glass, 1st hydrol. class, conical	0.4ml Micro-Vial, 30 x 7mm, amber glass, 1st hydrol. class, conical
R. vol. < 6 µl	R. vol. < 3 µl	R. vol. < 3 µl	R. vol. < 3 µl	R. vol. < 3 µl
10 x 100 pcs. per PP-Box				



Suitable flanging tool
you will find in the
Chapter 17
on pages 47ff.

1.2 Aluminum Crimp Seals ND8

1.2.1 Natural Rubber/TEF and RedRubber/PTFE Seals

- Temperature resistant from -40°C up to 120°C for Natural Rubber resp. up to 160°C for RedRubber.
- Natural Rubber harder to penetrate with more fragmentation during penetration than RedRubber.
- Natural Rubber ideal for multiple injections due to high resealability, but not as clean as the synthetic RedRubber.



Art. No.	BV 08 0335	BV 08 0438	BV 08 0727
Cap	Aluminum Cap clear lacquered, 4mm centre hole		
Septa	Nat. Rubber red-orange/TEF transparent	RedRubber/PTFE transparent	RedRubber/PTFE beige
Durometer	60° shore A	45° shore A	45° shore A
Thickness	1,0mm	1,0mm	1,0mm
100 pcs. per PE-Bag			

1.2.2 Silicone/PTFE Seals

- Temperature resistant from -60° C to 200° C
- Preferably only for single injections
- Different hardnesses to meet the respective needle types
- Silicone septa coated on both sides for low particle formation during penetration
- Cleaner than Natural Rubber or as RedRubber



Art. No.	BV 08 0324	BV 08 0753	BV 08 0522	BV 08 0523
Cap	Aluminum Cap clear lacquered, 4mm centre hole			
Septa	Silicone white/PTFE red	Silicone cream/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE red, with slit
Durometer	45° shore A	55° shore A	45° shore A	45° shore A
Thickness	1,0mm	1,5mm	1,0mm	1,3mm
100 pcs. per PE-Bag				

1.2.3 Other Crimp Seals

- PTFE is very inert and temperature resistant, however, problems with leakage due to the inflexibility and thinness of the material
- Only for single injections for non-critical HPLC analysis
- Viton is resistant to a variety of corrosive organic substances; temperature resistant from -40°C to 240°C, main application in the petrochemical industry



Art. No.	SC 08 1245	BV 08 0754	BV 08 0546	BV 08 0547
Cap	PE Push-On Cap, blue	Aluminum Cap clear lacquered, 4mm centre hole		
Septa	with thinned penetration point	PTFE virginal	Viton black	Viton black
Durometer		53° shore A	70° shore A	70° shore A
Thickness		0,25mm	1,0mm	1,5mm
100 pcs. per PE-Bag				

Further Crimp Seals ND8 or Combination Seals for Crimp Neck ND8 are available upon request!

2. Screw Neck Vials ND8

The vials are preferentially used on instruments of the following manufactures: Beckman, CTC, Gilson, Knauer, Shimadzu, Spark, Varian, VWR (Merck®)/Hitachi, etc.
(Please have a look at the autosampler compatibility chart on pages 62 - 73 to see on which models they can be used)

Standard vials for GC and HPLC.

- Specially suitable for VWR (Merck®)/Hitachi instruments (Article GW 08 0193, GW 08 0799, ME 05 0289, SV 08 0657, SK 08 0287, SE 08 0018, SE 08 0076)
- Broad range of Micro-Inserts.
- Screw Neck Vials (thread 8/425) with small opening requires Micro-Inserts with a diameter of 5mm.
- Vials and seals also available as 2in1 KIT.



2.1 Screw Neck Vials ND8, small opening, 8-425 thread and Micro-Vials ND8



GW 08 0193	GW 08 0799	GW 08 0194	GW 08 0195	GW 08 0356	GW 08 0859 GW 08 0860	GW 08 1317 GW 08 1318
1.5ml Screw Neck Vial, 8-425 thread, 32 x 11.6mm, clear glass, 1st hydrol. class, small opening	1.5ml Screw Neck Vial, 8-425 thread, 32 x 11.6mm, amber glass, 1st hydrol. class, small opening	1.5ml Screw Neck Vial, 8-425 thread, 32 x 11.6mm, clear glass, 1st hydrol. class, small opening, label + filling lines	1.5ml Screw Neck Vial, 8-425 thread, 32 x 11.6mm, amber glass, 1st hydrol. class, small opening, label + filling lines	1.1ml Micro-Vial, 8-425 thread, 32 x 11.6mm, clear glass, 1st hydrol. class, conical, small opening	1.1ml Microliter Screw Neck Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, with solid glass base, 1. hydrol. class (amber glass)	1.1ml Microliter Screw Neck Vial, 32 x 11.6mm, clear glass, 1st hydrol. class (amber glass)
R. vol. < 110 µl	R. vol. < 110 µl	R. vol. < 110 µl	R. vol. < 110 µl	R. vol. < 3 µl	R. vol. < 15 µl	R. vol. < 15 µl
100 pcs. per PP-Box						

2.2 Micro-Inserts for Vials with small opening



ME 05 0289	ME 05 0357	ME 05 0358	ME 05 0290	ME 05 0359	ME 05 0360
0.15ml Micro-Insert, 31 x 5mm, clear glass, 1st hydrol. class, 15mm top	0.2ml Micro-Insert, 31 x 5mm, clear glass, 1st hydrol. class, 9mm top	0.2ml Micro-Insert, 31 x 5mm, clear glass, 1st hydrol. class, flat bottom	0.15ml Micro-Insert, 29 x 5mm, clear glass, 1st hydrol. class, with assembled plastic spring	0.05ml Micro-Insert, 27.5 x 4mm, clear glass, 1st hydrol. class (Metal Spring required)	Spring 36 x 5mm for Micro-Insert ME 05 0359
R. vol. < 1 µl	R. vol. < 2 µl	R. vol. < 8 µl	R. vol. < 1 µl	R. vol. < 1 µl	
10 x 100 pcs. per PP-Box					

2.3 PP Screw Seals ND8

- Ready to use combination seals; no time consuming and "tricky" assembly.
- Available with black or white screw caps with 8-425 thread.

- Available as closed top screw seals or with centre hole.
- Now available either with Natural Rubber or RedRubber as cost-effective seals.

2.3.1 Natural Rubber/TEF and RedRubber/PTFE Seals

- Natural rubber temperature resistant from -40°C to 120°C
- RedRubber/PTFE from -40°C bis 160°C
- Natural rubber is more difficult to penetrate than RedRubber and has a higher particle formation
- RedRubber and butyl show less fragmentation than natural rubber
- Natural rubber is ideal for multiple injections due to its good resealing properties, but not as clean as RedRubber or Butyl



Art. No.	SV 08 0657	SV 08 0766	SV 08 0763	SV 08 0916
Cap	Polypropylene Screw Cap black, 5.5mm centre hole, 8-425 thread			
Septa	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	Butyl cream/PTFE grey	Silicone white/Aluminum foil silver
Hardness	60° shore A	45° shore A	55° shore A	50° shore A
Thickness	1,3mm	1,0mm	1,3mm	1,3mm
100 pcs. per PE-Bag				

2.3.2 Silicone/PTFE Seals

- Temperature resistant from -60°C to 200°C
- Preferably for single injections only
- Different hardnesses to suit the respective needle types
- Cleaner than natural rubber, RedRubber or butyl
- Silicone septa coated on both sides for low particle formation during penetration



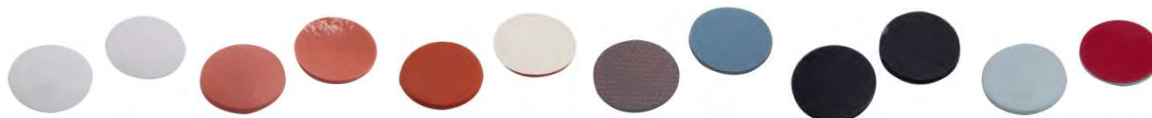
Art. No.	SV 08 0158	SV 08 0759	SV 08 0761	SV 08 0293	SV 08 0495	SV 08 0439
Cap	Polypropylene Screw Cap black, 5.5mm centre hole, 8-425 thread					
Septa	Silicone white/PTFE red	Silicone cream/PTFE red	Silicone blue transp./PTFE white	PTFE red/Silicone white/PTFE red	Silicone white/PTFE red, slit	Silicone white/PTFE blue, slit
Hardness	45° shore A	55° shore A	35° shore A	45° shore A	45° shore A	45° shore A
Thickness	1,3mm	1,5mm	1,3mm	1,0mm	1,3mm	1,5mm
100 pcs. per PE-Bag						

2.3.3 Natural Rubber/TEF, RedRubber/PTFE, Butyl/PTFE and Silicone/PTFE Seals, closed top



Art. No.	SV 08 0760	SV 08 0767	SV 08 1001	SV 08 0762
Cap	Polypropylene Screw Cap black, closed top, 8-425 thread			
Septa	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	Butyl cream/PTFE grey	Silicone white/PTFE red
Hardness	60° shore A	45° shore A	55° shore A	45° shore A
Thickness	1,3mm	1,0mm	1,3mm	1,3mm
100 pcs. per PE-Bag				

2.4 Septa ND8



Art. No.	SE 08 0018	SE 08 0072	SE 08 0765	SE 08 0073	SE 08 0089	SE 08 0074
Septa	PTFE, Virginal	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	Butyl cream/PTFE grey	Viton, Black	Silicone white/PTFE red
Hardness	53° shore A	60° shore A	45° shore A	55° shore A	70° shore A	45° shore A
Thicknes	0,25mm	1,0mm	1,0mm	1,3mm	1,0mm	1,3mm
1.000 pcs. per PE-Bag						



Art. No.	SE 08 0752	SE 08 0076	SE 08 0915	SE 08 0075	SE 08 0118	SE 08 1204
Septa	Silicone cream/PTFE red	Silicone white/PTFE blue, slit; reccmnd.by VWR (Merck®)Hitachi	Silicone white/Aluminum foil silver	Silicone blue transparent/PTFE white	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, slit
Hardness	55° shore A	55° shore A	50° shore A	35° shore A	45° shore A	55° shore A
Thicknes	1,5mm	0,9mm	1,3mm	1,3mm	Silicone cream/PTFE red 1,0mm	1,5mm
1.000 pcs. per PE-Bag						

2.5 PP Screw Caps ND8



Art. No.	SK 08 0287	SK 08 0756	SK 08 0757	SK 08 0758
Cap	Polypropylene Screw Cap, black, 5.5mm centre hole	Polypropylene Screw Cap, black, closed top	Polypropylene Screw Cap, white, 5.5mm centre hole	Polypropylene Screw Cap, white, closed top
100 pcs. per PE-Bag				

2.6 Special 2in1 Kits for Screw Neck ND8

➤ Each combination of a screw neck vial ND8 is now available with any 8mm screw seal listed in the catalogue as a practical 2in1 kit!

100 Vials and 100 Seals per Box



2.7 Screw Vials ND8, with pre-assembled Screw Cap ND8

➤ Pre-screwed vials reduce the risk of contamination of the vials in the laboratory. Furthermore, special applications (e.g. in the tobacco industry) may require a pre-sealed vial.



3. Short Thread ND9

The vials can be used on all common autosamplers due to their technical geometry, preferentially they are found on Agilent, HTA, Shimadzu, Thermo Scientific, Varian, Waters®, etc. (Please have a look at the autosampler compatibility chart on pages 62-73 to see on which models they can be used)



The Universal Autosampler Vial

Universally compatible on almost all autosamplers, thereby rationalization of other 1.5ml vials, as for instance 11mm Crimp Neck Vials, Screw Neck Vials 8-425 and 10-425, is possible.

3.1 Short Thread Vials ND9, wide opening and Micro-Vials with Short Thread ND9



KG 09 0196	KG 09 0197	KG 09 0188	KG 09 0363 KG 09 0364	KG 09 0682	KG 09 0683	KG 09 1122
1.5ml Short Thread Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, wide opening	1,5ml Short Thread Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, wide opening, label + filling lines	1,5ml Short Thread Vial, 32 x 11.6mm, amber glass, 1st hydrol. class, wide opening, label + filling lines	Short Thread Vial with integrated 0.2ml Micro-Insert, 32 x 11.6mm, clear glass, 1st hydrol. class, label + filling lines, "Top Bonded"	Short Thread Vial with integrated 0,3ml Micro-Insert, 32 x 11.6mm, clear glass, 1st hydrol. clas	Short Thread Vial with integrated 0,3ml Micro-Insert, 32 x 11.6mm, amber glass, 1st hydrol. clas	0,9ml Total Mikroliter Short Thread Vial 32 x 11,6mm, clear glass, 1. hydrol. class
SILANIZED KG 09 0196s	SILANIZED KG 09 0197s	SILANIZED KG 09 0188s	"Top Bonded"	"Base Bonded"	"Base Bonded"	
R. vol. < 120µl	R. vol. < 120µl	R. vol. < 120µl	R. vol. < 1 µl	R. vol. < 1 µl	R. vol. < 3 µl	R. vol. < 1 µl
100 pcs.per PP-Box						

Vials ND9 (Forts.)



KG 09 0863 KG 09 0864	KG 09 1201 KG 09 1321
1,1ml Microliter Short Thread Vial 32 x 11.6mm, clear glass, 1st hydrol. class (Amber Glass)	1.1ml Microliter Short Thread Vial , 32 x 11.6mm, clear glass, 1st hydrol. clas (Amber Glass)
	SILANIZED KG 09 1201s
R. vol. < 15 µl	R. vol. < 15 µl
100 pcs.per PP-Box	

3.2 Micro-Inserts for Short Thread Vials with 6mm opening



ME 06 0218	ME 06 0361	ME 06 0362	ME 06 0232	ME 06 1174
0.1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 15mm top	0,1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 12mm top	0,2ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, flat bottom	0,1ml Micro-Insert, 29 x 5.7mm, clear glass, 1st hydrol. class, with assembled plastic spring	0.1ml PE Micro-Insert, 29 x 6mm, clear, with plastic spring
SILANIZED ME 06 0218s			SILANIZED ME 06 0232s	
R. vol. < 4 µl	R. vol. < 4 µl	R. vol. < 8 µl	R. vol. < 4 µl	R. vol. < 4 µl
100 pcs.per PP-Box				

3.3 Plastic Micro-Vials ND9



KG 09 0446	KG 09 0447	KG 09 0468	KG 09 0469
1.5ml PP Short Thread Vial, transparent, filling lines, 32 x 11.6mm, slightly concave shaped bottom	1,5m PP Short Thread Vial, amber, filling lines, 32 x 11.6mm, slightly concave shaped botto	0,7ml PP Short Thread Micro-Vial, transparent, 32 x 11.6mm	0,3ml PP Short Thread Micro-Vial, transparent, 32 x 11.6mm
R. vol. < 110µl	R. vol. < 110µl	R. vol. < 80µl	R. vol. < 4 µl
100 pcs.per PP-Box			

3.4 PP Short Thread Seals ND9



- Screw cap with the design of a crimp cap; therefore suitable for robotic handling.
- Already assembled seal with slit liner available, in order to avoid vacuum within the vial in case of multiple injections.
- Short thread seals also available as closed top version for storage purposes

3.4.1 PTFE virginal Seals

- Very inert and temperature resistant therefore also as coating on most other septa
- No elastomer therefore limited sealing and reclosing characteristics
- Only recommended for non-critical HPLC applications
- Mostly used by Merck/Hitachi and Waters



Art. No.	SV 09 0774	SV 09 0507	SV 09 0781	SV 09 0782	SV 09 0783	SV 09 0784	SV 09 0785
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole	PP SC, blue, closed top
Septa	PTFE virginal, 53° shore D, 0,2mm						
100 pcs. per PE-Bag							

3.4.2 Natural Rubber/TEF Seals

- Ideal for multiple injections due to its reclosing properties
- Temperature resistant from -40° C to 120° C
- Used frequently in GC and HPLC



Art. No.	SV 09 0659	SV 09 0433	SV 09 0435	SV 09 0436	SV 09 0434	SV 09 0432	SV 09 0786
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole	PP SC, blue, closed top
Septa	Natural Rubber red-orange/TEF transparent, 60° shore A, 1,0mm						
100 pcs. per PE-Bag							

3.4.3 Silicone white/PTFE red Seals

- Is the purest synthetic elastomer and is therefore used for critical analyses
- Temperature resistance from -60° C to 200° C
- Preferably recommended for single use injections due to less good reclosing properties



Art. No.	SV 09 0661	SV 09 0159	SV 09 0666	SV 09 0166	SV 09 0162	SV 09 0160	SV 09 0787
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole	PP SC, blue, closed top
Septa	Silicone white/PTFE red, 55° shore A, 1,0mm						
100 pcs. per PE-Bag							

3.4.4 RedRubber/PTFE beige Seals

- New synthetic rubber comparable to silicone in terms of purity
- Temperature resistance from -40° C to 150° C
- Preferably recommended for single use injections due to less good reclosing properties



Art. No.	SV 09 0775	SV 09 0776	SV 09 0777	SV 09 0778	SV 09 0779	SV 09 0780
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole
Septa	RedRubber/PTFE beige, 45° shore A, 1,0mm					
100 pcs. per PE-Bag						

3.4.5 PTFE red/Silicone white/PTFE red Seals

- Is the purest synthetic elastomer and is therefore used for critical analyses
- Temperature resistance from -60° C to 200° C
- Silicone septa coated with PTFE on both sides for low particle formation



Art. No.	SV 09 0663	SV 09 0164	SV 09 0668	SV 09 0167	SV 09 0675	SV 09 0678
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole
Septa	PTFE red/Silicone white/PTFE red, 45° shore A, 1,0mm					
100 pcs. per PE-Bag						

3.4.6 Silicone white/Alu Seals

- Temperature resistance from -60° C to 200° C



Art. No.	SV 09 0913	SV 09 0948	SV 09 0949	SV 09 0952	SV 09 0950	SV 09 0951
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole
Septa	Silicone white/Aluminum foil silver, 50° shore A, 1,0mm					
100 pcs. per PE-Bag						

3.4.7 (Y-pre-cut) Seals

- With pre-cut septa only the silicone material is slit in Y-shape while the PTFE lamination remains intact. This way concentration changes occurring with completely slit septa can be avoided.
- Ideal penetration aid for blunt and thick instrument needles, and prevents the concentration fluctuations that frequently occur with slit or cross slit septa



Art. No.	SV 09 1241	SV 09 1240	SV 09 1239	SV 09 1234
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole
Septa	Silicone white/PTFE red, 55° shore A, 1,0mm (Y-slit)		Silicone white/PTFE red, 55° shore A, 1,0mm (Y-pre-cut)	
100 pcs. per PE-Bag				

3.4.8 Silicone white/PTFE blue, slit Seals

- Is the purest synthetic elastomeric and is therefore used for critical analyses
- Temperature resistance from -60° C to 200° C
- Preferably recommended for single use injections due to less good reclosing properties
- Slit septa in HPLC as penetration aid for blunt needles and to create a valve effect in case of multiple injections
- Application in GC, HPLC and headspace analysis



Art. No.	SV 09 0662	SV 09 0187	SV 09 0667	SV 09 0163	SV 09 0674	SV 09 0677
Cap	PP SC, transparent, 6mm hole	PP SC, blue, 6mm hole	PP SC, red, 6mm hole	PP SC, black, 6mm hole	PP SC, green, 6mm hole	PP SC, yellow, 6mm hole
Septa	Silicone white/PTFE blue, slit, 55° shore A, 1,0mm					
100 pcs. per PE-Bag						

3.4.9 Seals for high temperature analysis and trace analysis

- 9mm short thread seals with high purity PTFE virginal, or Aluminum septa
- **Perfect for GC-MS and LC-MS**
- An O-ring ensures 100% tightness

**Chromatogram
GC/MS**



Art. No.	SV 09 1005	SV 09 1004	SV 09 1007	SV 09 1006
Cap	PP SC, transparent, w. hole	PP SC, blue, w. hole	PP SC, transparent, w. hole	PP SC, blue, w. hole
Septa	Aluminum Septa (additional sealing through O-ring)	Aluminum Septa (additional sealing through O-ring)	PTFE virginal, 0,25mm (additional sealing by O-ring)	PTFE virginal, 0,25mm (additional sealing by O-ring)
Hardness			53° shore A	53° shore A
Thickness	0,06mm	0,06mm	0,20mm	0,20mm
100 pcs. per PE-Bag				

3.4.10 UltraBond Seals ND9

(Cap + Liner form an inseparable unit, so that the liner cannot be pushed into the vial even with a blunt needle)

- A special feature of an UltraBond closure system is that the screw cap and septa form an inseparable unit. This is made of a patented manufacturing process in which the molecular structure of the contact surface of the PP screw cap and the septa is modified in such a way that they form a strong bond without the use of adhesives.
- Comparable systems on the market are LECTRABOND Seals from WATERS® and the INTERSEAL closure from Agilent



Art. No.	SV 09 0165	SV 09 0772	SV 09 0773
Cap	PP SC, blue, 6mm hole	PP SC, blue, 6mm hole	PP SC, blue, 6mm hole
Septa	Silicone white/PTFE red	Silicone beige/PTFE white	Silicone beige/PTFE white, slit
Hardness	45° shore A	45° shore A	45° shore A
Thickness	1,3mm	1,0mm	1,0mm
100 pcs. per PE-Bag			

3.4.11 Magnetic Short Thread Seals, 6mm centre hole

(for CTC GC PAL + Thermo Scientific TriPlus Autosampler)

- More convenient and safer in handling than 11mm magnetic crimp seals.
- Ready-to-use closures.



Art. No.	SV 09 1153	SV 09 1173	SV 09 1124
Cap	PP SC, blue, with assembled magnetic crimp cap ND11, gold, 6mm hole	PP SC, blue, with assembled magnetic crimp cap ND11, gold, 6mm hole	PP SC, blue, with assembled magnetic crimp cap ND11, gold, 6mm hole
Septa	Silicone white/PTFE red	Silicone white/PTFE blue, slit	Natural Rubber red-orange/TEF transparent
Hardness	45° shore A	55° shore A	60° shore A
Thickness	1,0mm	1,0mm	1,0mm
100 pcs. per PE-Bag			

3.4.12 9mm Short Thread PP Cap with thinned penetration area

Art. No.	SK 09 1314
Cap	PE screw cap with thinned penetration area, transparent
100 pcs. per PE-Bag	



3.5 Special 2in1 Kits for Short Thread ND9

- Each combination of a short-thread vial ND9 is now available with any 9mm short-thread seal listed in the catalogue as a practical 2in1 kit!
100 Vials and 100 Seals per Box



3.6 Short thread vials ND9, with pre-assembled screw seals ND9

- Prescrewed vials reduce the risk of contamination of the vials in the laboratory. Furthermore, special applications (e.g. in the tobacco industry) may require a pre-sealed vial.

4. Screw Neck ND10

The vials are preferentially used on instruments of the following manufacturers: Jasco, PerkinElmer, Shimadzu, Varian, Waters®, etc.
(Please have a look at the autosampler compatibility chart on pages 62 – 73 to see on which models they can be used)

- Wide opening allows easy filling
- Wide range of micro inserts
- Each combination of a 1.5ml threaded vial is available with a suitable screw cap as a 2in1 kit
- Closed top screw seals for storage
- Single septa as replacement available



4.1 Screw Neck Vials ND10, wide opening, 10-425 thread and Mikroliter Vials ND10



GW 10 0451	GW 10 0452	GW 10 0453	GW 10 0861 GW 10 0862	GW 10 1319 GW 10 1320
1,5ml Screw Neck Vial, 10-425 Thread, 32 x 11,6mm, clear glass, 1st hydrol. class, wide opening	1,5ml Screw Neck Vial, 10-425 Thread, 32 x 11,6mm, clear glass, 1st hydrol. class, wide opening, label + filling lines	1,5ml Screw Neck Vial, 10-425 Thread, 32 x 11,6mm, amber glass, 1st hydrol. class, wide opening, label + filling lines	1,1ml Screw Neck Vial, 10-425 Thread, 32 x 11,6mm, clear glass, (Amber Glass) 1st hydrol. class	1,1ml Screw Neck Vial, 10-425 Thread, 32 x 11,6mm, clear glass, (Amber Glass) 1st hydrol. clas
R. vol. < 120 µl	R. vol. < 120 µl	R. vol. < 120 µl	R. vol. < 15 µl	R. vol. < 15 µl
100 pcs. per PP-Box				

4.2 Micro-Inserts for Vials with wide opening

➤ Special features of our micro insert ME 06 0232 with polymer spring.

1. The geometry of the three spreader feet is specially designed so that the feet press against the inner walls of the vial when it is inserted into it, thus ensuring a centric fit and thus reliable sampling.
2. The hardness of the polymer spring is specially adapted to ensure that there is sufficient elasticity for easy insertion, but that sufficient counter pressure is generated by the spring mechanism to ensure that the insert always presses against the septa and prevents the sample from leaking.



ME 06 0218	ME 06 0361	ME 06 0362	ME 06 0232	ME 06 1174
0,1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 15mm top	0,1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 12mm top	0,2ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, flat bottom	0,1ml Micro-Insert, 29 x 5,7mm, clear glass, 1st hydrol. class, with assembled plastic spring	0,1ml PE Micro-Insert, 29 x 6mm, clear, with plastic spring
SILANIZED ME 06 0218s			SILANIZED ME 06 0232s	
R. vol. < 4 µl	R. vol. < 4 µl	R. vol. < 8 µl	R. vol. < 4 µl	R. vol. < 8 µl
10 x 100 pcs.per PP-Box				

4.3 PP Screw Seals ND10

- Our 10-425 PP Screw Seals can be offered in a variety of septa
- In standard assembled and therefore available from stock, the seals are available as follows
- On request the Seals ND10 can be delivered with further septa materials or with a different cap color



Art. No.	SV 10 0461	SV 10 0462	SV 10 0463	SV 10 0464	SV 10 0502
Cap	PP Srew Cap, black, 7mm hole				PP SC, black, closed top
Septa	Natural Rubber red-orange/TEF transparent	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, slit	Natural Rubber red-orange/TEF transparent
Hardness	60° shore A	45° shore A	45° shore A	55° shore A	60° shore A
Thickness	1,3mm	1,3mm	1,0mm	1,5mm	1,0mm
100 pcs. per PE-Bag					

4.4 Septa 10mm for Screw Caps ND10

- Please note that the diameter of the septa is designed to match our cap design. We cannot guarantee an optimal press-fit of the septa in caps of other manufacturers!
- Further septa made of other materials such as Viton, Butyl/PTFE etc. are available on request!



Art. No.	SE 10 0098	SE 10 0496	SE 10 0497	SE 10 0498	SE 10 0499
Septa	PTFE virginal	Natural Rubber red-orange/TEF transparent	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, slit
Hardness	53° shore A	60° shore A	45° shore A	45° shore A	55° shore A
Thickness	0,20mm	1,0mm	1,3mm	1,0mm	1,5mm
1.000 pcs. per PE-Bag					

4.5 PP Screw Caps ND10

- High-quality PP Screw Caps with thread 10-425 are available as standard caps.
- Available with hole and as closed top version, black
- Other cap colors are available on request



Art. No.	SK 10 0500	SK 10 0501
Cap	PP Screw Cap, black, 7mm hole	PP Screw Cap, black, closed top
100 pcs. per PE-Bag		

5. Crimp Neck ND11

The vials are preferentially used on instruments of the following manufacturers: Agilent, Carlo Erba, CTC, DANI, Fisons, Gerstel, Jasco, PerkinElmer, Shimadzu, Spark, Thermo Scientific, Varian, etc.
(Please have a look at the autosampler compatibility chart on pages 67 - 78 to see on which models they can be used)

- Standard vials for GC and HPLC.
- Vials with a barcode label can be obtained as well as pre-crimped vials.
- Wide range of suitable standard crimp Seals, micro inserts and appropriate crimping and decapping tools



5.1 Crimp Neck Vials ND11, wide opening and Micro-Vials ND11



RR 11 0176	RR 11 0198	RR 11 0199	RR 11 0322 RR 11 0323	RR 11 0680	RR 11 0681	RR 11 1200 RR 11 1316	SR 11 1123
1.5ml Crimp Neck Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, wide opening	1,5ml Crimp Neck Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, wide opening, label + filling lines	1,5ml Crimp Neck Vial, 32 x 11.6mm, amber glass, 1st hydrol. class, wide opening, label + filling lines	Crimp Neck Vial with integrated 0.2ml Micro-Insert, 32 x 11.6mm, clear glass, (Amber Glass) clear glass, 1st hydrol. class, label + filling lines	Crimp Neck Vial with integrated 0,3ml Micro-Insert, 32 x 11.6mm, clear glass, 1st hydrol. class	Crimp Neck Vial with integrated 0,3ml Micro-Insert, 32 x 11.6mm, clear glass, 1st hydrol. class	1.1ml Microliter-Vial, Crimp Neck 32 x 11.6mm, clear glass, (Amber Glass) 1st hydrol. class	0,9ml Total Microliter Snap/Crimp Ring Vial ND11, 32 x 11.6mm, clear glass, 1st hydrol. class
SILANIZED RR 11 0176s		SILANIZED RR 11 0199s	"Top Bonded"	"Base Bonded"	"Base Bonded"	SILANIZED RR 11 1200s	
R. vol. < 100 µl	R. vol. < 100 µl	R. vol. < 100 µl	R. vol. < 3 µl	R. vol. < 4 µl	R. vol. < 15 µl	R. vol. < 15 µl	R. vol. < 1 µl
100 pcs.per PP-Box							

5.1 Crimp Neck Vials ND11 (Cont.)



RR 11 0366	RR 11 0367	RR 11 0872	RR 11 0873
0,9ml Micro-Vial, 32 x 10mm, clear glass, 1st hydrol. class, conical	1,1ml Micro-Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, conical	1,1ml Microliter Crimp Neck Vial 32 x 11.6mm clear glass, 1st hydrol. class	1,1ml Microliter Crimp Neck Vial 32 x 11.6mm clear glass, 1st hydrol. class
R. vol. < 2 µl	R. vol. < 4 µl	R. vol. < 15 µl	R. vol. < 15 µl
100 pcs.per PP-Box			

5.2 Micro-Inserts for Vials with 6mm opening



ME 06 0218	ME 06 0361	ME 06 0362	ME 06 0232
0.1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 15mm top	0,1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 12mm top	0,2ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, flat bottom	0,1ml Micro-Insert, 29 x 5.7mm, clear glass, 1st hydrol. class, with assembled plastic spring
SILANIZED ME 06 0218s			SILANIZED ME 06 0232s
R. vol. < 4 µl	R. vol. < 4 µl	R. vol. < 8 µl	R. vol. < 4 µl
10 x 100 pcs.per PP-Box			

5.3 Aluminum Crimp Seals ND11

5.3.1 Natural Rubber/TEF Seals

- Perfect for multiple injections due to its reclosable properties
- Temperature resistant from -40° C to 120° C
- Used in GC and HPLC



Art. No.	BV 11 0216	BV 11 0650	BV 11 0651	BV 11 0652	BV 11 0653
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, green lacquered, 5,5mm hole	Aluminum Crimp Cap, red lacquered, 5,5mm hole	Aluminum Crimp Cap, blue lacquered, 5,5mm hole	Aluminum Crimp Cap, gold lacquered, 5,5mm hole
Septa	Natural Rubber red-orange/TEF transparent, 60° shore A, 1,0mm *tested instrument manufacturer quality*				
100 pcs. per PE-Bag					

5.3.2 Natural Rubber /Butyl/TEF Seals

- Three-layer, so-called sandwich septa made of natural rubber/butyl/TEF combines the excellent physical properties of natural rubber (resealing properties) with the excellent chemical properties of synthetic butyl (purity)
- Ideal for multiple injections, easier to penetrate than natural rubber/TEF seals



Art. No.	BV 11 0336	BV 11 0503	BV 11 0504	BV 11 0505	BV 11 0506
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, green lacquered, 5,5mm hole	Aluminum Crimp Cap, red lacquered, 5,5mm hole	Aluminum Crimp Cap, blue lacquered, 5,5mm hole	Aluminum Crimp Cap, gold lacquered, 5,5mm hole
Septa	Natural Rubber red-orange/Butyl/TEF transparent, 45° shore A, 1,0mm				
100 pcs. per PE-Bag					

5.3.3 RedRubber/PTFE Seals

- New synthetic rubber comparable to silicone in terms of purity
- Temperature resistance from -40° C to 150° C
- Preferably recommended for single use injections due to less good reclosing properties
- Applications in GC and HPLC



Art. No.	BV 11 0789	BV 11 0790	BV 11 0791	BV 11 0792	BV 11 0793
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, green lacquered, 5,5mm hole	Aluminum Crimp Cap, red lacquered, 5,5mm hole	Aluminum Crimp Cap, blue lacquered, 5,5mm hole	Aluminum Crimp Cap, gold lacquered, 5,5mm hole
Septa	RedRubber/PTFE beige, 45° shore A, 1mm *tested instrument manufacturer quality*				
100 pcs. per PE-Bag					

5.3 Aluminum Crimp Seals ND11 (Cont.)

5.3.4 Silicone white/PTFE red Seals

- Is the purest synthetic elastomer and is therefore used for critical analyses
- Temperature resistance from -60° C to 200° C
- Preferably recommended for single use injections due to less good reclosing properties
- Application in GC, HPLC and headspace analysis



Art. No.	BV 11 0172	BV 11 0794	BV 11 0795	BV 11 0796	BV 11 0797
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, green lacquered, 5,5mm hole	Aluminum Crimp Cap, red lacquered, 5,5mm hole	Aluminum Crimp Cap, blue lacquered, 5,5mm hole	Aluminum Crimp Cap, gold lacquered, 5,5mm hole
Septa	Silicone white/PTFE red, 45° shore A, 1,3mm				
100 pcs. per PE-Bag					

5.3.5 Other Silicone/PTFE Seals

- The purest synthetic elastomer and therefore used for critical analyses
- Silicone septa coated with PTFE on both sides for low particle formation
- Slit septa in HPLC as penetration aid for blunt needles to create a valve effect in case of multiple injections
- Temperature resistance from -60° C to 200° C



Art. No.	BV 11 0643	BV 11 0138	BV 11 0136
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole		
Septa	Silicone cream/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, slit
Hardness	55° shore A	45° shore A	55° shore A
Thickness	1,5mm	1,0mm	1,0mm
100 pcs. per PE-Bag			



Crimper and Decapper, please refer to chapter 17 on pages 46-51

5.3.6 Butyl/PTFE Seals

- Temperature resistance from -40° C to 120° C



Art. No.	BV 11 0130	BV 11 0382
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	
Septa	Butyl cream/PTFE grey	PTFE grey/Butyl cream/PTFE grey
Hardness	55° shore A	55° shore A
Thickness	1,3mm	1,0mm
100 pcs. per PE-Bag		

5.3 Aluminum Crimp Seals ND11 (Cont.)

5.3.7 High Temperature Seals

- Total phthalate free closure system (TPF closure); elastomer and halogen free septa
- Viton is resistant to a large number of corrosive organic substances; it has a high thermal and chemical resistance; main field of application in the petrochemical industry



Art. No.	BV 11 0978	BV 11 0604	BV 11 0875	BV 11 0918	BV 11 0135	BV 11 0134
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, clear lacquered, 5,5mm hole, with roll groove	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, clear lacquered, 5,5mm hole	Aluminum Crimp Cap, clear lacquered, 5,5mm hole
Septa	PTFE virginal	PTFE virginal	PTFE virginal (add. TPF O-ring)	Silicone white/Aluminum foil silver	Viton 1A	Viton 1A
Hardness	53° shore A	53° shore A	53° shore A	50° shore A	70° shore A	70° shore A
Thickness	0,25mm	0,25mm	0,25mm	1,3mm	1,0mm	1,5mm
Applicable		-200 °C bis +260 °C		-40 °C bis +220 °C		-40 °C bis +240 °C
100 pcs. per PE-Bag						

5.3.8 Magnetic Crimp Seals ND11

(for CTC PAL + Thermo Scientific TriPlus Autosampler)



Art. No.	BV 11 0798	BV 11 0715
Cap	Magnetic Crimp Cap, silver lacquered, 5mm hole	
Septa	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red
Hardness	45° shore A	45° shore A
Thickness	1,3mm	1,0mm
100 pcs. per PE-Bag		

5.3.9 Trace analysis and TPF closure systems

- Total phthalate free closure system (TPF closure); elastomer and halogen free septa




Art. No.	BV 11 0979	BV 11 0980
Cap	Aluminum Crimp Cap, clear lacquered, 5,5mm hole, with roll groove	
Septa	Aluminum Septa (additional sealing by TPF O-ring)	PTFE virginal, 0,25mm (additional sealing by TPF O-ring)
Hardness		53° shore A
Thickness	0,1mm	0,25mm
Packed per 100 pieces in plasticizer-free glass vial		




5.4 Septa 11mm Aluminum Crimp Seals ND11 (Cont.)

- Please note that the diameter of the septa is designed to match our cap design. We cannot guarantee an optimal press-fit of the septa in caps of other manufacturers!
- Further septa made of other materials are available upon request!



Art. No.	SE 11 0120	SE 11 0693	SE 11 0121	SE 11 0083	SE 11 0091	SE 11 0827
Septa	Silicone white/PTFE red	Silicone cream/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, slit	Viton, black	Silicone white/Aluminum foil, silver
Hardness	45° shore A	55° shore A	45° shore A	55° shore A	70° shore A	50° shore A
Thickness	1,3mm	1,5mm	1,0mm	1,5mm	1,0mm	1,3mm
1.000 pcs. per PE-Bag						



Art. No.	SE 11 0099	SE 11 0080	SE 11 0788	SE 11 0081	SE 11 0381
Septa	PTFE virginal	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	Butyl cream/PTFE grey	PTFE grey/Butyl cream/PTFE grey
Hardness	53° shore A	60° shore A	45° shore A	55° shore A	55° shore A
Thickness	0,20mm	1,0mm	1,0mm	1,3mm	1,3mm
1.000 pcs. per PE-Bag					

5.5 Aluminum Crimp Caps ND11

- Aluminium crimp caps are available in clear lacquer, green lacquer, red lacquer, blue lacquer and gold lacquer as standard
- Other colours can be supplied on request



Art. No.	BK 11 0123	BK 11 0126	BK 11 0127	BK 11 0125	BK 11 0128
Cap	11mm Aluminum Crimp Cap, clear lacquered, 5,5mm hole	11mm Aluminum Crimp Cap, green lacquered, 5,5mm hole	11mm Aluminum Crimp Cap, red lacquered, 5,5mm hole	11mm Aluminum Crimp Cap, blue lacquered, 5,5mm hole	11mm Aluminum Crimp Cap, gold lacquered, 5,5mm hole
1.000 pcs. per PE-Bag					

5.6 Special 2in1 Kits Aluminum Crimp Seals ND11

- Each combination of a crimp neck vial ND11 is now available with any 11mm crimp cap listed in the catalogue as a practical 2in1 kit!

100 Vials and 100 Seals per Box



5.7 Crimp Neck Vials ND11 with pre-crimped Aluminum Seals ND11

- Pre-crimped vials reduce the risk of contamination of vials in laboratories. Furthermore special applications could require a pre-crimped vial (e.g. in the tobacco industry).
- Pre-crimped vials are available with any of the crimp/snap neck vials and any seal of your choice.

6. Snap Ring Vials ND11

The vials are preferentially used on instruments of the following manufacturers: Agilent, CTC, DANI, Dionex, Jasco, Shimadzu, Spark, Thermo Scientific, Varian, VWR (Merck®)/Hitachi, Waters®, etc.
(Please have a look at the autosampler compatibility chart on pages 67 - 78 to see on which models they can be used)



The Universal Autosampler Vial

- Universally usable vials for almost all autosamplers, even for those with robotic handling.
- Vials can also be crimped with a standard 11mm Aluminum Crimp Seal, as the two snap ring lips have the same height as a crimp neck

6.1 Snap Ring Vials ND11, wide opening and appropriate Micro-Inserts



SR 11 0200	SR 11 0201	SR 11 0202	SR 11 0684 SR 11 0685	ME 06 0218	ME 06 0361	ME 06 0362	ME 06 0232
1,5ml Snap Ring Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, wide opening	1,5ml Snap Ring Vial, 32 x 11.6mm, clear glass, 1st hydrol. class, wide opening, label + filling lines	1,5ml Snap Ring Vial, 32 x 11.6mm, amber glass, 1st hydrol. class, wide opening, label + filling lines	Snap Ring Vial with integrated Micro-Insert, 32 x 11.6mm, clear glass, 1st hydrol. class (Amber Glass)	0,1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 15mm top	0,1ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, 12mm top	0,2ml Micro-Insert, 31 x 6mm, clear glass, 1st hydrol. class, flat bottom	0,1ml Micro-Insert, 29 x 5.7mm, clear glass, 1st hydrol. class, with assembled plastic spring
SILANIZED SR 11 0200s		SILANIZED SR 11 0202s	"Base Bonded"	SILANIZED ME 06 0218s			SILANIZED ME 06 0232s
R. vol. < 100 µl	R. vol. < 100 µl	R. vol. < 100 µl	R. vol. < 3 µl	R. vol. < 4 µl	R. vol. < 4 µl	R. vol. < 8 µl	R. vol. < 4 µl
100 pcs.per PP-Box							

Snap Ring Mikroliter Vials ND11



SR 11 0857 SR 11 0858	SR 11 1312 SR 11 1322	SR 11 1092	SR 11 0856
1,1ml Microliter Snap Ring Vial 32 x 11.6mm clear glass, 1st hydrol. class (Amber Glass)	1,1ml Mikroliter Snap Ring Vial 32 x 11.6mm clear glass, 1st hydrol. class (Amber Glass)	0,3ml PP Snap Ring Micro-Vial, transparent, 32 x 11.6mm	0,7ml PP Snap Ring Micro-Vial, transparent, 32 x 11.6mm
R. vol. < 15 µl	R. vol. < 15 µl	R. vol. < 4 µl	R. vol. < 25 µl

100 pcs.per PP-Box

6.2 PE Snap Ring Seals ND11

- Snap Caps in the design of an aluminum crimp cap; therefore also suitable for robots
- Fast and easy to close and open
- Snap ring vials ND11 can alternatively be closed with aluminum crimp seals ND11
- In standard snap ring caps are in transparent and blue available!

6.2.1 PE Snap Ring Seals ND11, with transparent cap



Art. No.	SN 11 0518	SN 11 0800	SN 11 0171	SN 11 0168	SN 11 0170	SN 11 0911	SC 11 1194
Cap	PE snap ring cap, transparent, 6mm hole						PE Cap
Septa	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	RedRubber/PTFE transparent	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, cross-slit	thinned penetration area
Hardness	60° shore A	45° shore A	45° shore A	45° shore A	45° shore A	55° shore A	
Thickness	1,0mm	1,0mm	1,0mm	1,3mm	1,0mm	1,0mm	
100 pcs. per PE-Bag							

6.2.2 PE Snap Ring Seals ND11, with blue cap



Art. No.	SN 11 0519	SN 11 0801	SN 11 0520	SN 11 0521	SN 11 0853
Cap	PE snap ring cap, blue, 6mm hole				
Septa	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, cross-slit
Hardness	60° shore A	45° shore A	45° shore A	45° shore A	55° shore A
Thickness	1,0mm	1,0mm	1,3mm	1,0mm	1,0mm
100 pcs. per PE-Bag					

6.3 Septa 10,5mm for Snap Ring Seals ND11



Art. No.	SE 11 0513	SE 11 0515	SE 11 0514	SE 11 0516
Septa	Natural Rubber red-range/TEF transparent	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, cross-slit
Hardness	60° shore A	45° shore A	45° shore A	55° shore A
Thickness	1,0mm	1,3mm	1,0mm	1,0mm
1.000 pcs. per PE-Bag				

6.4 PE Snap Ring Caps ND11



Art.	SC 11 0508	SC 11 0509
Cap	11mm Schnapping-Cap, transparent, with hole	11mm Schnapping-Cap, blue, with hole
Hole Size	6mm	6mm
100 pcs. per PE-Bag		

Further septa and PE Snap Ring Seals ND11 in other colors available on request!

7. Screw Neck ND13

The vials are preferentially used on instruments of the following manufacturers: Dionex, Shimadzu, Spark, Varian, VWR (Merck®)/ Hitachi, Waters® (Wisp 48 Position Carousel), etc.
(Please have a look at the autosampler compatibility chart on pages 62 – 73 to see on which models they can be used)

- Wide opening allows easy filling with viscous materials
- With closed screw caps ND13 ideal for storage
- Each vial and cap combination is now available as a practical 2in1 kit!



7.1 Screw Neck Vials ND13 and appropriate Micro-Inserts



GW 13 0454	GW 13 0456	GW 13 0455	GW 13 0457	GW 13 1283	ME 13 0458	FE 13 0459
4ml Screw Neck Vial, 45 x 14.7mm, clear glass, 1st hydrol. class	4ml Screw Neck Vial, 45 x 14.7mm, clear glass, 1st hydrol. class, label + filling lines	4ml Screw Neck Vial, 45 x 14.7mm, amber glass, 1st hydrol. class	4ml Screw Neck Vial, 45 x 14.7mm, amber glass, 1st hydrol. class, label + filling lines	3,5ml Mikroliter- Screw Neck Vial, 45 x 14.7mm, clear glass, 1st hydrol. class	0,3ml Micro- Insert, 40 x 6mm, clear glass, 1st hydrol. class, 15mm top Metal Spring required!	Spring 50 x 7.5mm
R. vol. < 400 µl	R. vol. < 400 µl	R. vol. < 400 µl	R. vol. < 400 µl	R. vol. < 15 µl	R. vol. < 9 µl	for Micro-Insert ME 13 0458
100 pcs.per PP-Box					10 x100 Stück	10 x100 Stück

7.2 PP Screw Seals ND13, black with hole



Art. No.	SV 13 0476	SV 13 0477	SV 13 0487	SV 13 0806	SV 13 0478	SV 13 0479
Cap	Polypropylene Screw Cap, black, 8.5mm centre hole					
Septa	Natural Rubber red- orange/TEF transparent	Silicone white/ PTFE red	Butyl ceme/ PTFE grey	Silicone cream/ PTFE red	PTFE red/ Silicone white/ PTFE red	Silicone white/ PTFE blue, slit
Hardness	60° shore A	45° shore A	55° shore A	55° shore A	45° shore A	55° shore A
Thickness	1,3mm	1,3mm	1,3mm	1,5mm	1,0mm	1,0mm
100 pcs. per PE-Bag						

7.3 PP Screw Seals ND13, black, closed top



Art. No.	SV 13 0488	SV 13 0489	SV 13 0805
Cap	Polypropylene Screw Cap, black, closed top		
Septa	Natural Rubber red-orange/TEF transparent	Butyl cream/PTFE grey	Silicone cream/PTFE red
Hardness	60° shore A	55° shore A	55° shore A
Thickness	1,3mm	1,3mm	1,5mm
100 pcs. per PE-Bag			

7.4 Septa 12mm

➤ Further septa made of other materials and/or available in other thicknesses!



Art. No.	SE 12 0100	SE 12 0481	SE 12 0482	SE 12 0485	SE 12 0486	SE 12 0460
Septa	PTFE virginal	Natural Rubber red-orange/TEF transparent	Butyl cream/PTFE grey	Silicone white/PTFE red	PTFE red/Silicone white/PTFE red	Silicone white/PTFE blue, slit
Hardness	53° shore A	60° shore A	55° shore A	45° shore A	45° shore A	55° shore A
Thickness	0,25mm	1,0mm	1,3mm	1,3mm	1,0mm	1,0mm
1.000 pcs. per PE-Bag						

7.5 PP Screw Caps ND13



Art. No.	SK 13 0483	SK 13 0484	SK 13 0803	SK 13 0804
Cap	13mm Polypropylene Screw Cap , black, 8.5mm centre hole	13mm Polypropylene Screw Cap , black, closed top	13mm Polypropylene Screw Cap , white, 8.5mm centre hole	13mm Polypropylene Screw Cap , white, closed top
100 pcs. per PE-Bag				

7.6 Special 2in1 Kits Screw Neck ND13

➤ Each combination of a screw thread vial ND13 is now available with any ND13 screw cap listed in the catalogue as a practical 2in1 kit!

100 Vials and 100 Seals per Box



7.7 Screw Thread Vials ND13, with pre-assembled screw cap ND13

➤ Pre-screwed vials reduce the risk of contamination of the vials in the laboratory. Furthermore, special applications (e.g. in the tobacco industry) may require a pre-sealed vial.



8. Screw Neck ND15

- Screw Neck Vials for storage purposes made out of 1st hydrol. class glass.
- For sample volumes from 800 µl to 12000 µl
- Wide opening for safe filling
- Seals available with many different septa materials

8.1 Screw Neck Vials ND15



GW 15 0636	GW 15 0831	GW 15 0637	GW 15 0876
8ml Screw Neck Vial, 15-425, 61 x 16.6mm, clear glass, 1st hydrol. class	8ml Screw Neck Vial, 15-425, 61 x 16.6mm, amber glass, 1st hydrol. class	12ml Screw Neck Vial, 15-425, 66 x 18.5mm, clear glass, 1st hydrol. class	12ml Screw Neck Vial, 15-425, 66 x 18.5mm, amber glass, 1st hydrol. class
R. vol. 800 µl	R. vol. 800 µl	R. vol. 800 µl	R. vol. 800 µl
100 pcs. per Box			

8.2 PP Screw Seals ND15, black, closed top

- On the sample side, the aluminium foil with its outstanding chemical properties protects the sample, the soft inner core of PE foam provides the elasticity in the cap
- Our PP Screw Cap can be combined with any of the septa listed below



Art. No.	SV 15 0594	SV 15 0638	SV 15 0884	SV 15 0878	SV 15 1327
Cap	PP SC, black, closed top				
Septa	Natural Rubber red-orange/TEF transparent	Butyl red/PTFE grey	Viton, black	Silicone white/Aluminum foil silver	Butyl dark grey
Hardness	60° shore A	55° shore A	70° shore A	50° shore A	48° shore A
Thickness	1,3mm	1,6mm	1,0mm	1,3mm	2mm
100 pcs. per PE-Bag					

8.3 Septa 14mm and PP Screw Seals ND15



Art. No.	SE 14 0883	SE 14 0882	SE 14 0881	SE 14 0879	SE 14 1326	SK 15 0747	SK 15 0746
Septa / Cap	PTFE virginal, both sides plain	Viton, black	Butyl red/PTFE grey	Silicone white/Alu silver	Butyl dark grey	PP Screw Cap 15-425, black, with 9mm hole	PP Screw Cap 15-425, black, closed top
Hardness	53° shore D	70° shore A	55° shore A	50° shore A	48° shore A		
Thickness	0,25mm	1,0mm	1,6mm	1,3mm	2mm		
1.000 pcs. per PE-Bag							

Further septa and PP Screw Cap ND15 in other colors available on request!

9. Snap Cap Vials ND18 + ND22

- Easy to handle and inexpensive storage vials with push-on Snap Caps
- Caps and Vials separately obtainable.
- Quickly and easily to reopen and reseal.
- No liners are required in the cap.
- For storage of powders and solids.

9.1 Snap Cap Vials ND18 + ND22



SF 18 1273	SF 18 0189	SF 18 0190	SF 22 0191	SF 22 0192	SF 22 1397
3ml Snap Cap Vial ND18, 30 x 19mm, clear glass, 3st hydrol. class	5ml Snap Cap Vial ND18, 40 x 20mm, clear glass, 3st hydrol. class	10ml Snap Cap Vial ND18, 50 x 22mm, clear glass, 3st hydrol. class	15ml Snap Cap Vial ND22,, 48 x 26mm, clear glass, 3st hydrol. class	25ml Snap Cap Vial ND22, 65 x 26mm, clear glass, 3st hydrol. class	30ml Snap Cap Vial ND22, 75 x 27mm, clear glass, 3st hydrol. class
Volume of capacity 7,1ml	Volume of capacity 9,1ml	Volume of capacity 14ml	Volume of capacity 19ml	Volume of capacity 25ml	Volume of capacity 30ml
Residual volume 0,3ml	Residual volume 0,3ml	Residual volume 0,5ml	Residual volume 0,6ml	Residual volume 0,6ml	Residual volume 0,6ml
for SC 18 0067	for SC 18 0067	for SC 18 0067	for SC 22 0068	for SC 22 0068	for SC 22 0068
100 pcs.per PP-Box					

9.2 Appropriate PE Snap Caps ND18 + ND22, transparent, closed top

- Snap Caps are available in many other sizes
- For larger purchase quantities, our snap Caps can also be obtained in other colors



Art. No.	SD 18 0067	SD 22 0068
Descr.	18mm PE Snap Cap, 19.8 x 5.2mm, transparent, closed top, for ND18	22mm PE Snap Cap, 23.5 x 5.5mm, transparent, closed top, for ND22
VE	100 pcs. per PE-Bag	

9.3 2in1Kits (snap cap vial including cap)

KP 22 1431	KP 22 1432	KP 28 1398	KP 28 1367	KP 28 1377
2in1 Kit: 20ml Snap Cap Vial, 70x25mm, clear glass, 3st hydrol. class, incl. Snap Cap ND22	2in1 Kit: 20ml Snap Cap Vial, 55x27mm, clear glass, 3st hydrol. class, incl. Snap Cap ND22	2in1 Kit: 40ml Snap Cap Vial, 80x30mm, clear glass, 3st hydrol. class, incl. Snap Cap ND28	2in1 Kit: 50ml Snap Cap Vial, 100x30mm, clear glass, 3st hydrol. class, incl. Snap Cap ND28	2in1 Kit: 50ml Snap Cap Vial, 145x34mm, clear glass, 3st hydrol. class, incl. Snap Cap ND28
200 pcs. per Box				100 pcs. per Box

10. Headspace Precision Thread ND18

- The times when precision thread vials were mainly used on instruments with magnetic transport mechanism are over. In order to exclude difficulties and risks of a crimping process, instrument manufacturers are striving to make the closing process of the sample bottle and the associated tightness safer and more reproducible.
(Please refer to our compatibility overview on pages 67 - 78 to find out which bottle is especially suitable for which instrument)
- PerkinElmer has now added precision thread vials to its product range for all TurboMatrix 16, 40 and 110 autosamplers built after 01.09.2006.
- This means that almost all current headspace autosamplers (Agilent, CTC, Gerstel, PerkinElmer, Shimadzu, Varian) now offer the possibility of using these vials, which can be used universally for headspace + SPME. Another advantage is the thinner septa compared to the crimp caps, which are easier and more gentle on the needle to penetrate.



10.1 Headspace Precision Thread Vials ND18



HS 18 0233	HS 18 0348	HS 18 0234	HS 18 1183	HS 18 0349
10ml Precision Thread Vial ND18, 46 x 22.5mm, clear glass, 1st hydrol. class, rounded bottom	10ml Precision Thread Vial ND18, 46 x 22.5mm, amber glass, 1st hydrol. class, rounded bottom	20ml Precision Thread Vial ND18, 75,5 x 22.5mm, clear glass, 1st hydrol. class, rounded bottom	20ml Precision Thread Vial ND18, 75,5 x 22.5mm, clear glass, 1st hydrol. class, label + filling lines rounded bottom	20ml Precision Thread Vial ND18, 75,5 x 22.5mm, amber glass, 1st hydrol. class, rounded bottom
R. vol. 800 µl	R. vol. 800 µl	R. vol. 800 µl	R. vol. 800 µl	R. vol. 800 µl
100 pcs.per PP-Box				

10.2 Magnetic Universal Screw Seals ND18 for Precision Thread Vials

- Precision Thread Vials and Closures now also used on PerkinElmer TurboMatrix 16, 40 and 110 autosampler that have been constructed after 01.09.2006



Art. No.	SV 18 1287	SV 18 0575	SV 18 0177	SV 18 0854	SV 18 0920	SV 18 1289	SV 18 0585
Cap	Magnetic Screw Cap silver, 8mm centre hole						
Septa	Silicone blue/PTFE clear	Silicone blue transparent/PTFE white	Silicone white/PTFE blue	Silicone white/Aluminum foil silver	High-temperature septa (HTS), dark silicone/PTFE	moulded septa Butyl/PTFE	Butyl red/PTFE grey
Hardness	40° shore A	45° shore A	55° shore A	50° shore A	45° shore A	50° shore A	55° shore A
Thickness	3mm	1,3mm	1,5mm	1,3mm	3,0mm	3,0mm	1,6mm
100 pcs. per PE-Bag							

10.3 Septa 17,5mm for Magnetic Universal Screw Seals ND18



Art. No.	SE 17 0708	SE 17 0707	SE 17 0591	SE 17 0855	SE 17 0919	SE 17 0584
Septa	Silicone white/PTFE red	Silicone blue transparent/PTFE white	Silicone white/PTFE blue	Silicone white/Aluminum foil silver	High Temperature Septa (HTS), Silicone dark-red/PTFE	Butyl red/PTFE grey
Hardness	45° shore A	40° shore A	55° shore A	50° shore A	45° shore A	55° shore A
Thickness	1,3mm	1,3mm	1,5mm	1,3mm	3,0mm	1,6mm
100 pcs. per PE-Bag						

11. Headspace-Vials ND20 + ND18

11.1 General overview Headspace Vials ND18 + ND20



Article	HS 20 0238	HS 20 0239 HS 20 0352	HS 20 0207	HS 18 0931	HS 20 0354	HS 20 0355
Descr.	5ml Headspace-Vial, 38.2 x 22mm, clear glass, 1st hydrol. class,	20ml Headspace-Vial, 75.5 x 23mm, clear glass, 1st hydrol. class, (Amber Glass)	20ml Headspace-Vial, 75.5 x 23mm, clear glass, 1st hydrol. class, label + filling lines	20ml Headspace-Vial 75.5 x 23mm, clear glass, 1st hydrol. class, with screw thread ND18	5ml Crimp Neck Vial, 38 x 20mm, clear glass, 1st hydrol. class,	10ml Crimp Neck Vial, 54.5 x 20mm, clear glass, 1st hydrol. class
Features	HS-Crimp Neck, rounded bottom	HS-Crimp Neck, rounded bottom	HS-Crimp Neck, rounded bottom	Screw Neck ND18, rounded bottom	DIN Crimp Neck, flat bottom	DIN Crimp Neck, flat bottom
Filling Capacity	9,4ml	22ml	22ml	21,2ml	8ml	12,2ml
Residual volume	800µl	800µl	800µl	800µl	800µl	800µl
	PerkinElmer	PerkinElmer, Tekmar	PerkinElmer, Tekmar	PerkinElmer	Varian	Varian
100 pcs.per PP-Box						



Article	HS 20 0302 HS 20 0350	HS 20 0235	HS 20 0236	HS 20 0237 HS 20 0351	HS 20 0353 HS 20 0732	HS 20 0996
Descr.	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1st hydrol. class (Amber Glass)	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1st hydrol. class	20ml Headspace-Vial, 75.5 x 22.5mm, clear glass, 1st hydrol. class	20ml Headspace-Vial, 75.5 x 22.5mm, clear glass, 1st hydrol. class (Amber Glass)	20ml SPME Vial, 75.5 x 22.5mm, clear glass, 1st hydrol. class (Amber Glass)	5ml Headspace-Vial, 38,2 x 21,7mm, clear glass, 1st hydrol. class
Features	DIN Crimp Neck, rounded bottom	DIN Crimp Neck, flat bottom	DIN Crimp Neck, flat bottom	DIN Crimp Neck, rounded bottom	Special Crimp Neck, rounded bottom	HS-Rollrand, flat bottom
Filling Capacity	12,3ml	11,7ml	21,2ml	20,9ml	21,2ml	21,2ml
Residual volume	800µl	800µl	800µl	800µl	800µl	800µl
	Carlo Erba, CTC, Fisons, Varian (CP)	Carlo Erba, Dani, Fisons, Agilent	Carlo Erba, Dani, Fisons, Agilent	CTC PAL (Varian, Gerstel, Atas, Shimadzu, TriPlus HS)	SPME Flasche for CTC PAL	Metrohm
100 pcs.per PP-Box						

Screw Neck ND18

For the instruments on which this vial can be used, please refer to the compatibility chart below, or the compatibility chart on pages 62 - 73.

11.2 Screw Neck Vial ND18



Article	HS 18 0931
Descr.	20ml Headspace-Vial 75.5 x 23mm, clear glass, 1st hydrol. class
Filling Capacity	21,2ml
Residual volume	800µl
100 pcs.per PP-Box	

Compatibility-Overview		
PerkinElmer	HS40/ HS100/ HS101TurboMatri x HS16/ HS40/ HS40XL/ S40Trap/HS110/ HS110Trap	X
Spark	Alias	X
Teledyne Tekmar	7000/ 7000HT/ 7050/ HT3	X
Thermo Scientific	Trace 1300 Series	X

11.2.1 PP Screw Seals ND18

- For headspace analysis or as sample storage vials
- With our variety of septa we will find a customized solution for you



Art. No.	SV 18 1076	SV 18 1177	SV 18 0898	SV 18 1036	SV 18 1296
	Headspace			Storage	
Cap	PP SC, black, 12mm hole, GL 18			PP SC, black, closed top, GL 18	
Septa	Butyl red/ PTFE grey	Silicone white/PTFE blue	Silicone white/Aluminum foil silver	Butyl red/ PTFE grey	Butyl dark grey
Hardness	55° shore A	55° shore A	50° shore A	55° shore A	48° shore A
Thickness	1,6mm	1,5mm	1,3mm	1,6mm	3mm
100 pcs. per PE-Bag					

11.2.2 Septa 16mm and Screw Seals ND18



Art. No.	SE 16 0894	SE 16 0892	SE 16 1003	SE 16 0851	SE 16 1295	SK 18 0888	SK 18 0889
Septa / Cap	Natural Ruber red- range/TEF transparent	Viton, black	Butyl red/PTFE grey	Silicone white/ Aluminum foil silver	Butyl dark grey	PP Screw Cap ND18, black, With hole	PP Screw Cap ND18, black, closed top
Hardness	60° shore A	70° shore A	55° shore A	50° shore A	48° shore A		
Thickness	1,3mm	1,0mm	1,6mm	1,3mm	3mm		
1.000 pcs. per PE-Bag							

- Further septa available in other materials and thicknesses
- PP Screw Cap ND18 also available in white!

11.3 Aluminum Crimp Seals ND20

- Wide range of vials and seals required to cope with the large number of devices available on the market
- Besides the vial length and the tube diameter, the neck length also plays a major role when selecting a suitable ND20 headspace vial, since these are designed depending on the instrument
- For the selection of a suitable closure, the type of cap is very important in addition to the special requirements for the sealing disc (purity, hardness, thickness, etc.). The transport mechanism from the sampler to the analyser must be considered here in the first instance and thus ensures an initial pre-selection.

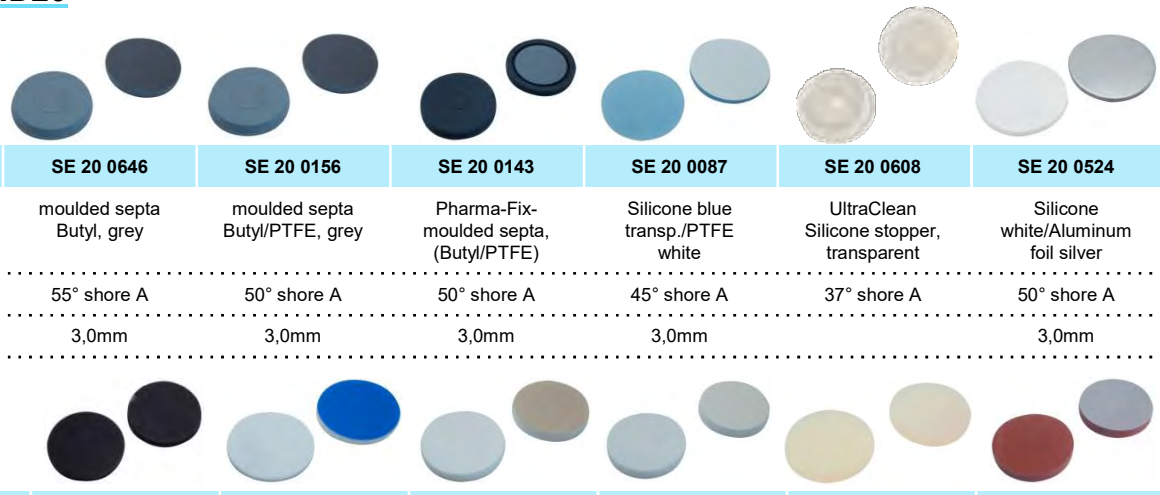
Overview of available cap types ND20

- Different characteristics compared
- Various colour coatings for easy sample differentiation
- Tamper-evident perforated caps to prevent manipulation and/or contamination of the septum during transport of the samples

Aluminium crimped cap	Headspace-cap	Centre tear-off cap	Flip-off Cap	Complete tear-off cap	Magnetic crimp cap	Magnetic crimp cap	Magnetic Bim-Metal Cap
10mm hole	8mm hole	8mm hole	8mm hole		6mm hole	8mm hole	8mm hole
	Pressure release cap; comparable with patented PerkinElmer Seal	Tamper evident crimp cap: Centre-Tear-Off part		Tamper evident crimp cap	CE HS500/ HS800/ CTC500/ Fisons HS500/ HS800	CTC Combi PAL	CTC Combi PAL

Basically each of the above mentioned Cap can be combined with a septa of your choice! The cap selection in the following chapter only represents our standard range.

Septa ND20



Art. No.	SE 20 0646	SE 20 0156	SE 20 0143	SE 20 0087	SE 20 0608	SE 20 0524
Septa	moulded septa Butyl, grey	moulded septa Butyl/PTFE, grey	Pharma-Fix- moulded septa, (Butyl/PTFE)	Silicone blue transp./PTFE white	UltraClean Silicone stopper, transparent	Silicone white/Aluminum foil silver
Hardness	55° shore A	50° shore A	50° shore A	45° shore A	37° shore A	50° shore A
Thickness	3,0mm	3,0mm	3,0mm	3,0mm		3,0mm

Art. No.	SE 20 0093	SE 20 0700	SE 20 0639	SE 20 0906	SE 20 0724	SE 20 0917
Septa	Viton 1A, black	Silicone white/ PTFE blue	Silicone white/ PTFE beige	Silicone white/ PTFE beige (HT Quality)	Silicone natur /PTFE beige (improved HT Quality)	HTS Septa, Silicone dark- red/PTFE
Hardness	70° shore A	55° shore A	45° shore A	45° shore A	45° shore A	45° shore A
Thickness	1,0mm	1,5mm	3,0mm	3,2mm	3,2mm	3,0mm

1.000 pcs. per PE-Bag

11.3.1 Butyl Seals

- Temperature resistant from -40° C to 120° C
- Due to missing PTFE lamination only suitable for uncritical analyses
- Inexpensive combination closure
- The moulded septa is purer and denser compared to a conventional punching septa




Art. No.	BV 20 0648	BV 20 0647	BV 20 0810	BV 20 0811	BV 20 0852	BV 20 0813
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre tear-off cap, clear lacquered	Completely tear-off cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole
Septa	moulded septa Butyl, grey, 55° shore A, 3,0mm					

100 pcs. per PE-Bag

11.3.2 Butyl/PTFE Seals

- Temperature resistant from -40° C to 120° C
- Complete PTFE lamination extends the range of applications to include more critical analysis



Art. No.	BV 20 0157	BV 20 0248	BV 20 0814	BV 20 0572	BV 20 0392	BV 20 0654	BV 20 0223
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace- Cap, clear lacquered	Centre-Tear- Off-Cap, clear lacquered	Complete- Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal- Cap, blue, 8mm hole
Septa	moulded septa Butyl/PTFE grey, 50° shore A, 3,0mm						

100 pcs. per PE-Bag

11.3.3 Pharma-Fix Seals (Butyl/PTFE)

- **Special Septa:** Special, moulded Butyl/PTFE liner that is only laminated with PTFE in the contact area towards the sample. On the glass rims the elastic Butyl achieves a very tight seal.
- Temperature resistant from -40°C up to 120°C.



Art. No.	BV 20 0145	BV 20 0249	BV 20 0573	BV 20 0144	BV 20 0300	BV 20 0686	BV 20 0222
Cap	Aluminum Crimp Cap clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre-Tear-Off-Cap, clear lacquered	Complete-Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Pharma-Fix-Septa, Butyl/PTFE, 50° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.4 Silicone blue transparent/PTFE white Seals

- Temperature resistant from -60°C to 200°C
- Soft septa for easy penetration
- Purest synthetic rubber, therefore used for critical analyses



Art. No.	BV 20 0133	BV 20 0244	BV 20 0574	BV 20 0113	BV 20 0395	BV 20 0712	BV 20 0215
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre-Tear-Off-Cap, clear lacquered	Complete-Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Silicone blue transparent/PTFE white, 45° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.5 Silicone white/PTFE beige Seals (HT-Quality)

- Temperature resistant from -60°C to 200°C
- Soft septa for easy penetration
- Purest synthetic rubber, therefore used for critical analyses
- Silicone natural/PTFE beige corresponds the improved Agilent HT quality



Art. No.	BV 20 0907	BV 20 0908	BV 20 0909	BV 20 0910	BV 20 0815	BV 20 0719	BV 20 0838
Cap	Aluminum Crimp Cap clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal-Cap, blue, 8mm hole	Aluminum Crimp Cap clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Magnetic Crimp Cap, silver, 8mm hole
Septa	Silicone white/PTFE white, 45° shore A, 3,2mm (HT-Quality)				Silicone natur/PTFE beige, 45° shore A, 3,2mm improved HT quality		
100 pcs. per PE-Bag							

11.3.6 Silicone white/PTFE beige

- Temperature resistant from -60°C to 200° C
- Silicone septa completely laminated with PTFE
- Often used on instruments of Shimadzu



Art. No.	BV 20 0640	BV 20 0641	BV 20 0926	BV 20 0927	BV 20 0928	BV 20 0645	BV 20 0642
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre-Tear-Off-Cap, clear lacquered	Complete-Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Silicone white/PTFE beige, 45° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.7 Silicone White/Aluminum foil, silver

- Completely with aluminium foil laminated silicone sept
- Often used on instruments of PERKINELMER
- The same chemical and physical properties like PTFE laminated septa
- Temperature resistant from -60°C to 220° C



Art. No.	BV 20 0525	BV 20 0527	BV 20 0830	BV 20 0526	BV 20 0731	BV 20 0839	BV 20 0823
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre-Tear-Off-Cap, clear lacquered	Complete-Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Silicone white/Aluminum foil, silver, 50° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.8 HTS Silicone dark-red/PTFE Seals

- New closure system with our HTS-Septa dark red/PTFE for high temperature areas in headspace analysis
- Temperature resistant from -60°C to 300° C

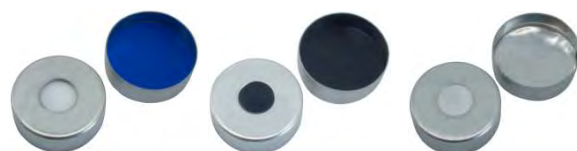


Art. No.	BV 20 0923	SE 20 0917
Cap	Magnetic Crimp Cap, silver, 6mm hole	-
Septa	High temperature septa (HTS), silicone dark-red/PTFE, 45° shore A, 3,0mm	
100 pcs. per PE-Bag		



11.3.9 Magnetic Seals for SPME Vials HS 20 0353 and HS 20 0732

- To facilitate penetration in the sensitive SPME phase, it is necessary to use thinner septa than the 3.0mm thick septa normally used in headspace.
- In addition, our Article BV 20 0699 is based on a thinned teflon barrier, as the PTFE lamination is the most difficult part of the septa to penetrate.
- Viton - see article BV 20 0816 - with its outstanding chemical and physical properties does not require any barrier, as it has a very good resistance to acids, oils and petrol. Temperature resistant from -40°C to 240°C, for a short time Viton even withstands temperature loads of 300°C!
- The ultra-thin full-surface aluminium foil of our article BV 20 0930 offers ideal protection, even against highly aggressive filling materials; combined with the only 1.3mm thin, high-purity white silicone, the Septa is very gentle to the needle



Art. No.	BV 20 0699	BV 20 0816	BV 20 0930
Cap	Magnetic Crimp Cap, silver, 8mm hole		
Septa	Silicone white/PTFE blue	Viton 1A, black	Silicone white/Aluminum foil silver
Hardness	55° shore A	70° shore A	50° shore A
Thickness	1,5mm	1,0mm	1,3mm
100 pcs. per PE-Bag			



HS 20 0353 HS 20 0732

thicker SPME crimp neck for thinner septa

11.4 Transport or intermediate seal for HS-edge/ rolled edge ND20 (Wash vial cap ND20)

- 20mm seal often used for washing vials for instruments
- Inexpensive and practical intermediate seal when taking samples outside on site
- Cap height of 8.4mm suitable for HS bottles with bevelled HS crimp neck.
- Cap height of 9.1mm for headspace vials with DIN crimp neck.



Art. No.	SN 20 0903	SN 20 0933	SN 20 0934	SN 20 0935	SN 20 0936	SN 20 0937	SN 20 0938
Cap		20mm PE-Cap, transparent, cap height 8,4mm, 4,3mm hole			20mm PE-Cap, transparent, cap height 9,1mm, 4,3mm hole		PE-Cap, transparent, cap height 9,1mm, 8mm hole
Septa	Natural Rubber red-orange/TEF transparent	Butyl cream/PTFE grey	Silicone blue/transparent/PTFE white	Natural Rubber red-range/TEF transparent	Butyl red/PTFE grey	Silicone blue/transparent/PTFE white	Silicone blue/transparent/PTFE white, cross-slit
Hardness	60° shore A	55° shore A	45° shore A	60° shore A	55° shore A	45° shore A	45° shore A
Thickness	1,3mm	1,3mm	1,3mm	1,3mm	1,3mm	1,3mm	1,3mm
100 pcs. per PE-Bag							

11.4.1 Septa 19,5mm for Washer Bottle Caps



Art. No.	SE 19 0902	SE 19 0939	SE 19 0940	SE 19 0941
Septa	Natural Rubber red-orange/ TEF transparent	Butyl cream/ PTFE grey	Silicone blue transparent/PTFE white	Silicone blue/ transparent/PTFE white, cross-slit
Hardness	60° shore A	55° shore A	45° shore A	45° shore A
Thickness	1,3mm	1,3mm	1,3mm	1,3mm
100 pcs. per PE-Bag				

11.4.2 PE Seals for Washer Bottles



Art. Nr	SD 20 0885	SD 20 0886	SD 20 0887
Cap	20mm PE Cap, transparent, 4,3mm hole, cap height 8,4mm	20mm PE Cap, transparent, 4,3mm hole, cap height 9,1mm	20mm PE Cap, transparent, 8mm hole, cap height 8,4mm
E.g..	for bevelled HS-Crimp Neck	for HS-Vials with DIN CrImp	for bevelled HS-Crimp Neck
100 pcs. per PE-Bag			

12. Screw Neck ND24 (EPA)

➤ The vials are preferentially used on instruments of the following manufacturers: Agilent, Dionex, Shimadzu, Tekmar, Thermo Scientific, Varian (Please have a look at the autosampler compatibility chart on pages 62 - 73 to see on which models they can be used)

- Broad range of EPA Vials in clear and amber glass manufactured out of Schott Fiolax tubings
- Packed in a certified class 100,000 clean room
- Volumes of 20ml, 30ml, 40ml and 60ml available.
- **Optional:** All types of EPA Vials can be delivered against a small surcharge with a certificate of cleanliness that might especially be needed for TOC analysis.
- **New:** EPA vials can also be pre-sealed with a screw cap of your choice



12.1 Screw Neck Vials ND24 (EPA)



Article	GW 24 0240	GW 24 0344	GW 24 0241	GW 24 0345	GW 24 0242	GW 24 0346	GW 24 0243	GW 24 0347
Descr.	20ml EPA Screw Neck Vial, 57 x27.5mm, clear glass, 1st hydrol. class	20ml EPA Screw Neck Vial, 57 x27.5mm, amber glass, 1st hydrol. class	30ml EPA Screw Neck Vial, 72,5x 27,5mm, clear glass, 1st hydrol. class	30ml EPA Screw Neck Vial, 72,5x 27,5mm, amber glass, 1st hydrol. class	30ml EPA Screw Neck Vial, 72,5x 27,5mm, clear glass, 1st hydrol. class	40ml EPA Screw Neck Vial, 95 x 27,5mm, amber glass, 1st hydrol. class	60ml EPA Screw Neck Vial, 140 x 27,5mm, clear glass, 1st hydrol. class	60ml EPA Screw Neck Vial, 140 x 27,5mm, amber glass, 1st hydrol. class
Filling Capacity	23,3	23,3	31,1	31,1	42,9	42,9	64,4	64,4
Residual volume	0,5	0,5	0,7	0,7	0,7	0,7	0,7	0,7
100 pcs.per PP-Box								

12.2 PP Screw Seals ND24

- Ready to use combination seals; no timeconsuming and "tricky" assembly.
- Available as closed top screw seals or with centre hole in white 24-400 caps.
- Broad variety of different septa materials for almost all applications.
- Also UltraBond Seals ND24 are offered, i.e. that the cap and the Silicone/PTFE liner of these seals form an inseparable unit avoiding the problem of liners falling out of the cap. This 100% firm fit of the liner is achieved by a patented process that requires no adhesives, but instead changes the molecular structure of both components to achieve the fixation.



12.2.1 PP Screw Seals ND24, with hole



Art. No.	SV 24 0552	SV 24 0175	SV 24 0904	SV 24 0956	SV 24 0174 UltraBond Seal
Cap	PP Screw Cap, white, 14mm hole				
Septa	Butyl red/ PTFE grey	Silicone natur/ PTFE beige (EPA Quality)	Silicone white/ Aluminum foil, silver	Silicone natur/ PTFE beige, cross-slit	Silicone natur/ PTFE beige (EPA Quality)
Hardness	55° shore A	45° shore A	50° shore A	45° shore A	45° shore A
Thickness	2,4mm	3,2mm	3,0mm	3,2mm	3,2mm
100 pcs. per PE-Bag					

12.2.2 PP Screw Seals ND24, closed top



Art. No.	SV 24 0553	SV 24 0291	SV 24 0905	SV 24 1323
Cap	PP Screw Cap, white, closed top			
Septa	Butyl red/ PTFE grey	Silicone natur/ PTFE beige (EPA Qualität)	Silicone white/ Aluminum foil, silver	Butyl dark grey
Hardness	55° shore A	45° shore A	50° shore A	48° shore A
Thickness	2,4mm	3,2mm	3,0mm	3,0mm
100 pcs. per PE-Bag				

12.3 Septa 22mm



Art. Nr	SE 22 0480	SE 22 0217	SE 22 0714	SE 22 0817
Septa	Butyl red/PTFE grey	Silicone natur/PTFE beige (EPA Quality)	Silicone white/PTFE blue, cross-slit	Silicone white/Alu silver
Hardness	55° shore A	45° shore A	55° shore A	50° shore A
Thickness	2,4mm	3,2mm	1,5mm	3,0mm
1.000 pcs. per PE-Bag				

12.4 PP Screw Cap ND24



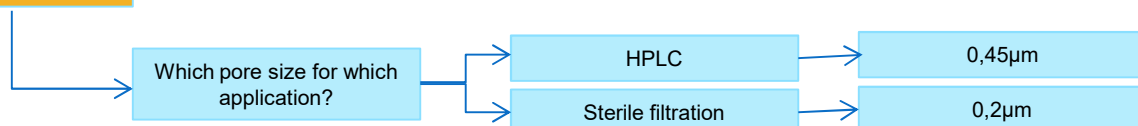
Art. Nr	SK 24 0247	SK 24 0246
Cap	PP Screw Cap 24mm, white, 14mm hole, thread 24-400	PP Screw Cap 24mm, white, closed top, thread 24-400
100 pcs. per PE-Bag		

13. HPLC Syringe filters



- Ultrasonic welded HPLC syringe filters with high-quality polypropylene housings for sample volumes from 1.0ml to 100ml. An improved welding technique ensures a significantly increased pressure resistance of the PP housings of up to 7 bar
- For direct identification our filters are labelled with the respective membrane type and pore size
- The Luer-Lock inlet (female) ensures easy and safe installation of the filter on the syringe
- CHROMA syringe filters are available in diameters of 15mm, 25mm and 30mm
- Pore sizes 0.2µm or 0.45µm
- On request with prefilter and/or as sterile version

Which pore size?



Which membrane?

Membran Select-Guide					
Liquid solutions			Organic liquid		Gaseous
Mechanically demanding alkaline samples	Biological samples, high predein absorption	Biological samples, low predein absorption	Organic solvent	Partially organic solvent	Even strongly oxidising gases
Nylon	CA Nylon	PES RC CA	Nylon PTFE	RC CA PTFE	PTFE

13.1 15mm HPLC Syringe filters

- 15mm syringe filter for small sample volumes
- Dead volume < 0,25ml
- Operating pressure: 7 bar
- Effective filter area: 1,77cm²
- For direct identification our filters are labelled with the respective membrane type and pore size
- The Luer-Lock inlet (female) ensures easy and safe installation of the filter on the syringe

Art. No.	Description
FI 17 0973	15mm HPLC Syringe filter, PTFE, 0,20µm
FI 17 0974	15mm HPLC Syringe filter, PTFE, 0,45µm
FI 17 0967	15mm HPLC Syringe filter, CA, 0,2µm
FI 17 0968	15mm HPLC Syringe filter, CA, 0,45µm
FI 17 0969	15mm HPLC Syringe filter, Nylon, 0,2µm
FI 17 0970	15mm HPLC Syringe filter, Nylon, 0,45µm
FI 17 0971	15mm HPLC Syringe filter, PES, 0,2µm
FI 17 0972	15mm HPLC Syringe filter, PES, 0,45µm
FI 17 0975	15mm HPLC Syringe filter, PVDF, 0,2µm
FI 17 0976	15mm HPLC Syringe filter, PVDF, 0,45µm
FI 17 0961	15mm HPLC Syringe filter, RC, 0,2µm
FI 17 0962	15mm HPLC Syringe filter, RC, 0,45µm

100 pcs. per PE-Bag



13.2 25mm HPLC Syringe filter

- 25mm Syringe filter for sample volumes up to 100ml
- Dead volume < 0,65ml
- Operating pressure: max. 7 bar
- Effective filter area: 490mm²
- For direct identification our filters are labelled with the respective membrane type and pore size
- The Luer-Lock inlet (female) ensures easy and safe installation of the filter on the syringe

Art. No.	Description
FI 25 0417	25mm HPLC Syringe filter, PTFE, 0,20µm
FI 25 0418	25mm HPLC Syringe filter, PTFE, 0,45µm
FI 25 0942	25mm HPLC Syringe filter, CA, 0,2µm
FI 25 0720	25mm HPLC Syringe filter, CA, 0,45µm
FI 25 0421	25mm HPLC Syringe filter, Nylon, 0,2µm
FI 25 0383	25mm HPLC Syringe filter, Nylon, 0,45µm
FI 25 0963	25mm HPLC Syringe filter, PES, 0,2µm
FI 25 0964	25mm HPLC Syringe filter, PES, 0,45µm
FI 25 0965	25mm HPLC Syringe filter, PVDF, 0,2µm
FI 25 0966	25mm HPLC Syringe filter, PVDF, 0,45µm
FI 25 0419	25mm HPLC Syringe filter, RC, 0,2µm
FI 25 0420	25mm HPLC Syringe filter, RC, 0,45µm

100 pcs. per PE-Bag



13.3 30mm HPLC Syringe filter

- 30mm Syringe filter for sample volume > 100ml, or fast filtration
- Dead volume < 175µl
- Operating pressure: max. 7 bar
- Effective filter area: 707mm²
- For direct identification our filters are labelled with the respective membrane type and pore size
- The Luer-Lock inlet (female) ensures easy and safe installation of the filter on the syringe

Art. No.	Description
FI 30 1094	30mm HPLC Syringe filter, PTFE, 0,20µm
FI 30 1095	30mm HPLC Syringe filter, PTFE, 0,45µm
FI 30 1096	30mm HPLC Syringe filter, CA, 0,2µm
FI 30 1097	30mm HPLC Syringe filter, CA, 0,45µm
FI 30 1098	30mm HPLC Syringe filter, Nylon, 0,2µm
FI 30 1000	30mm HPLC Syringe filter, Nylon, 0,45µm
FI 30 1099	30mm HPLC Syringe filter, PES, 0,2µm
FI 30 1100	30mm HPLC Syringe filter, PES, 0,45µm
FI 30 1101	30mm HPLC Syringe filter, PVDF, 0,2µm
FI 30 1102	30mm HPLC Syringe filter, PVDF, 0,45µm

100 pcs. per PE-Bag



14. GC Injection Port Septa

- Long-life, universal GC septums: for a minimum of 450 injections
 - Suitable for temperatures of up to 400 °C
 - With "Center Guide" for better needle guidance
 - Low bleeding (outgassing of siloxanes)
 - Excellent dissolving properties from the injection port
- Standard packaging of 25 pieces in re-sealable screw neck vial, on request also available in bulk packaging of 1,000 pieces



Art. No.	GC 07 0186	GC 09 0182	GC 10 0183	GC 11 0184	GC 17 0185
Descr.	Shimadzu Stopper, red	9,5mm High Performance GC Septa, red	10mm High Performance GC Septa red	11mm High Performance GC Septa red	17mm High Performance GC Septa red
	Shimadzu, all models	Agilent (HP), 5700/5880 Series Varian, Injector Type: Packed Columns Varian (CP), all models Tracor, 550,560 Gow-Mac, all models Finnigan, 9001, QCQ, GCQ, Trace2000 Antek Unicam, 4600	Agilent (HP), 5890/6890 Series, 5700/ 5880 Series Varian, Injector Type: Packed Columns Injector Type: Split/ Splitless	Agilent (HP), 5890/6850/6890 Series, 5700/5880 Series, 5880A Series Varian, 3300, 3400, 3500, 3600, 3700, Vista (Split/Splitless) Gow-Mac, 6890 Series PerkinElmer, Sigma Series, 900, 990 8000 Series Autosys (XL)	Thermo Scientific Quest, Trace Fisons/ Carlo Erba 8000 Series Finnigan, GCQ w/Trace
25 pcs. per Screw Neck Vial					

15. Injection Vials ND13

- High-quality injection bottles according to DIN/ISO made of tubular glass
- Production exclusively from glass of the 1st hydrolytic class
- Available in clear glass and amber glass
- Cleanroom-packed in a class 100,000 cleanroom, the "CleanPack" seal of quality guarantees this high quality standard



15.1 Injection Vials ND13



Art. No.	RR 13 0304	RR 13 0396	RR 13 0397	RR 13 0398
Descr.	2ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	2ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	4ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	4ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO
Dimensions	35 x 16mm	35 x 16mm	45 x 16mm	45 x 16mm
Pack	352 pcs. per PP-Box		upon request	

15.2 Injection Stoppers ND13



Art. No.	SE 13 0305	SE 13 0670
Descr.	13mm Injection Stopper, Brombutyl, grey	13mm Freeze Drying Stopper, Brombutyl, grey
Hardness	45° shore A	
Pack	upon request	

15.3 Crimp Caps ND13



Art. No.	Crimp Cap 13 0628	Crimp Cap 13 0303	FO 13 0607
Descr.	13mm aluminium crimp cap, clear lacquered, complete tear-off	13mm aluminium crimp cap, clear lacquered, centre tear-off	13mm Flip-Top/ Flip-Off Cap, red, centre tear-off
Pack	1.000 pcs.		

16. Injection Vial ND20

- High-quality injection bottles according to DIN/ISO made of tubular glass
- Production exclusively from glass of the 1st hydrolytic class
- Available in clear glass and amber glass
- Cleanroom-packed in a class 100,000 cleanroom, the "CleanPack" seal of quality guarantees this high quality standard



16.1 Injection Vial ND20, clear glass



Art. No.	RR 20 0400	RR 20 0316	RR 20 0492	RR 20 0549
Descr.	6ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	10ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	20ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	30ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO
Dimension	40 x 22mm	45 x 24mm	55 x 30mm	75 x 30mm
Content	6ml	10ml	20ml	30ml
Pack	186 pcs. per PP-Box	154 pcs. per PP-Box	91 pcs. per PP-Box	upon request

16.2 Injection Vial ND20, amber glass



Art. No.	RR 20 0399	RR 20 0251	RR 20 0548	RR 20 0550
Descr.	6ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	10ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	20ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	30ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO
Dimension	40 x 22mm	45 x 24mm	55 x 30mm	75 x 30mm
Content	6ml	10ml	20ml	30ml
Pack	186 pcs. per PP-Box	154 pcs. per PP-Box	91 pcs. per PP-Box	upon request

Injection Vials ND20 made of molded glass (cont.)

- High quality injection vials made of smelting glass according to DIN/ISO
- According to Article 3.2.1 of the European Pharmacopoeia PH, corresponds to glass type I. Eur.
- Dust and germfree packaging
- Clear glass and amber glass vials available
- Filling volume from 20ml - 100ml



16.3 Injection Vial ND20, clear glass (molded glass)



Art. No.	RR 20 0405	RR 20 0409	RR 20 0385	RR 20 0390
Descr.	20ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	30ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	50ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO	100ml Injection Vial, 1. hydrol. class, clear glass, according to DIN/ISO
Dimension	58 x 32mm	62 x 36mm	73 x 42,5mm	94,5 x 51,6mm
Content	20ml	30ml	50ml	100ml
Pack	252 pcs.per PE-foil	90 pcs.per PE-foil	90 pcs.per PE-foil	88 pcs.per PE-foil

16.4 Injection Vial ND20, amber glass (molded glass)



Art. No.	RR 20 0406	RR 20 0410	RR 20 0411	RR 20 0412
Descr.	20ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	30ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	50ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO	100ml Injection Vial, 1. hydrol. class, amber glass, according to DIN/ISO
Dimension	58 x 32mm	62 x 36mm	73 x 42,5mm	94,5 x 51,6mm
Content	20ml	30ml	50ml	100ml
Pack	252 pcs.per PE-foil	156 pcs.per PE-foil	130 pcs.per PE-foil	88 pcs.per PE-foil

16.5 Injection Stoppers ND20

➤ Suitable injection stoppers for injection vials made of tubular and smelting glass ND20



Art. No.	SE 20 0250	SE 20 0325	SE 20 0210	SE 20 0445
Descr.	20mm injection stopper, red-brown, Chlorbutyl, 48° Shore A	20mm injection stopper, grey, Chlorbutyl, 48° Shore A	20mm Butyl stopper, red-brown, Bromobutyl, 45° shore A	20mm Butyl stopper, grey, Bromobutyl, 37° shore A

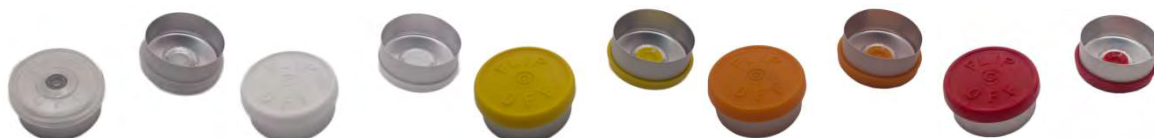


Art. No.	SE 20 0739	SE 20 0107	SE 20 0608	SE 20 0143
Descr.	20mm Freeze Drying Plug, light grey, Bromobutyl	20mm injection stopper, Butyl/PTFE, grey, 47° shore A	20mm UltraClean Silicone Stopper, transparent, 37° shore A	20mm Pharma-Fix Septa, Butyl/PTFE, 50° shore A, 3,0mm

16.6 Aluminum Crimp Cap ND20

16.6.1 Flip-Off - Centre Tear-Off Crimp Caps ND20 (tamper-evident crimp caps)

- Tamper-evident hole caps; tear-off plastic centre part prevents unauthorized manipulation of the samples
- Easier, faster and safer to open than conventional centre tear-off caps with aluminum centre part
- Available from stock in various colors to enable sample differentiation



Art. No.	FO 20 0281	FO 20 0551	FO 20 0280	FO 20 0577	FO 20 0295
Descr.	20mm flip-off cap, centre tear-off, transparent	20mm flip-off cap, centre tear-off, white	20mm flip-off cap, centre tear-off, yellow	20mm flip-off cap, centre tear-off, orange	20mm flip-off cap, centre tear-off, red



Art. No.	FO 20 0597	FO 20 0596	FO 20 0282	FO 20 0422	FO 20 0598
Descr.	20mm flip-off cap, centre tear-off, lavender	20mm flip-off cap, centre tear-off, violet	20mm flip-off cap, centre tear-off, dark-blue	20mm flip-off cap, centre tear-off, blue	20mm flip-off cap, centre tear-off, turquoise



Art. No.	FO 20 0600	FO 20 0309	FO 20 0599	FO 20 0595	FO 20 1044
Descr.	20mm flip-off cap, centre tear-off, dark-green	20mm flip-off cap, centre tear-off, green	20mm flip-off cap, centre tear-off, yellow-green	20mm flip-off cap, centre tear-off, black	20mm flip-off cap, centre tear-off, grey

1.000 pcs. per PE-Bag

16.6 Aluminum Crimp Caps ND20 (Cont.)

16.6.2 Centre Tear-Off Crimp Caps ND20 (tamper-evident crimp caps)

- Tamper-proof caps with holes; tear-off aluminum centre part prevents unwanted manipulation of the samples
- Available from stock in various colors to enable sample differentiation

					
Art. No.	BK 20 0275	BK 20 0276	BK 20 0277	BK 20 0278	BK 20 0279
Descr.	20mm Aluminum Crimp Cap, clear lacquered, centre-tear-off	20mm Aluminum Crimp Cap, blue lacquered, centre-tear-off	20mm Aluminum Crimp Cap, gold lacquered, centre-tear-off	20mm Aluminum Crimp Cap, green lacquered, centre-tear-off	20mm Aluminum Crimp Cap, red lacquered, centre-tear-off
1.000 pcs. per PE-Bag					

16.6.3 Complete Tear-Off Crimp Caps ND20 (tamper-evident crimp caps)

- Tamper-evident cap, which can be open completely by using a tear-off part and predetermined breaking lines on the side

					
Art. No.	BK 20 0019	BK 20 0109	BK 20 0110	BK 20 0111	BK 20 0112
Descr.	20mm Aluminum Crimp Cap, clear lacquered, complete tear-off	20mm Aluminum Crimp Cap, green lacquered, complete tear-off	20mm Aluminum Crimp Cap, red lacquered, complete tear-off	20mm Aluminum Crimp Cap, blue lacquered, complete tear-off	20mm Aluminum Crimp Cap, gold lacquered, complete tear-off
1.000 pcs. per PE-Bag					

16.6.4 Flip Tear-Up Caps ND20

- Tamper-evident cap, which can be open completely by using a tear-off part and predetermined breaking lines on the side

			
Art. No.	FT 20 1060	FT 20 0378	FT 20 0423
Descr.	20mm Flip Tear Up Cap, complete tear-off white	20mm Flip Tear Up Cap, complete tear-off red	20mm Flip Tear Up Cap, complete tear-off blue
1.000 pcs. per PE-Bag			

17 Infusion Vial ND32

- High-quality infusion vials according to DIN/ISO made of tubular glass
- Dust and germ-free packaging
- Clear glass and amber glass vials available
- Filling volumes from 70ml - 1000ml



17.1 Infusion Vial ND32, clear glass



Art. No.	RR 32 0626	RR 32 0414	RR 20 0713	RR 32 1048
Descr.	100ml Infusion Vial, 1. hydrol. class, clear glass, according to DIN/ISO	250ml Infusion Vial, 1. hydrol. class, clear glass, according to DIN/ISO	500ml Infusion Vial, 2. hydrol. class, clear glass, according to DIN/ISO	1000ml Infusion Vial, 2. hydrol. class, clear glass, according to DIN/ISO
Dimension	104 x 49mm	136 x 66mm	177 x 78mm	230 x 95mm
Content	100ml	250ml	500ml	1000ml

17.2 Infusion Vial ND32, amber glass



Art. No.	RR 32 1178	RR 32 0627	RR 32 1161
Descr.	100ml Infusion Vial, 1. hydrol. class, amber glass, according to DIN/ISO	250ml Infusion Vial, 1. hydrol. class, amber glass, according to DIN/ISO	500ml Infusion Vial, 2. hydrol. class, amber glass, according to DIN/ISO
Dimension	104 x 49mm	136 x 66mm	177 x 78mm
Content	100ml	250ml	500ml

17. Infusion ND32 (Cont.)

17.3 Infusion Stoppers ND32



Art. No.	SE 32 0694	SE 32 1059
Stopper	32mm Infusion stopper, red-brown, chlorbutyl	32mm Infusion stopper, red-brown, bromobutyl
Hardness	45° shore A	
1.000 pieces per PE double bag		

17.4 Crimp Caps ND32



Art. No.	BK 32 1091	FO 32 1275	FO 32 1282
Crimp Cap	32mm aluminum crimp cap, clear lacquered, centre tear-off with flap	32mm Flip-Off cap, red, centre tear-off	32mm Flip-Off cap, green, centre tear-off
1.000 pcs. per PE-Bag			

18. Crimping Tools

- Easy and convenient handling
- Chemically resistant surface finish especially designed for the application in labs
- Hardened crimping jaws made of a special alloy that guarantees long life
- Adjustable in crimping pressure limitation by a screw in the handle
- Additionally all Chroma Globe Crimping Tools are adjustable in crimping height by screwing up or down the pressure block in the crimping head with a hexagon key.
- The crimper sizes depend on the inner diameter of the respective crimp caps



18.1 Crimper

Crimper for Aluminum Crimp Caps

➤ Crimper for aluminium crimp caps are designed for a variety of cap types

Following are the most common types of caps:

- Standard aluminium crimp caps with hole
- Headspace crimp caps with pressure release system
- Centre tear-off caps
- Complete tear-off cap

Art. No.	Description	Cap Type (exemplary)
CR 07 0020	Crimper for 7.5mm Aluminum Crimp Cap	
CR 08 0001	Crimper for 8mm Aluminum Crimp Cap	
CR 11 0003	Crimper for 11mm Aluminum Crimp Cap	
CR 13 0005	Crimper for 13mm Aluminum Crimp Cap	
CR 20 0007	Crimper for 20mm Aluminum Crimp Cap	
CR 28 0009	Crimper for 28mm Aluminum Crimp Cap	
CR 30 0056	Crimper for 30mm Aluminum Crimp Cap	
CR 32 0010	Crimper for 32mm Aluminum Crimp Cap	
1 piece per Box		

Crimper for Flip-Off Crimp Caps

➤ Flip-off Crimper are suitable for our tamper-evident flip-off caps with tear-off plastic centre part (see caps in chapter 16.6.1 on page 47)

➤ **Caution:** Meanwhile there are a number of crimped caps on the market that come very close to our flip-off caps in terms of their centre tear-off function and appearance. Please note that even the smallest deviations in cap geometry have an effect on the sealing properties of our Crimper. Therefore please pay attention to the "Flip-off" writing on the crimping caps

Art. No.	Description	Cap Type (exemplary)
CR 11 0021	Crimper for 11mm Flip-off Cap	
CR 13 0013	Crimper for 13mm Flip-off Cap	
CR 16 0062	Crimper for 16,5mm Flip-off Cap	
CR 20 0015	Crimper for 20mm Flip-off Cap	
CR 28 0025	Crimper for 28mm Flip-off Cap	
CR 30 0026	Crimper for 30mm Flip-off Cap	
CR 32 0440	Crimper for 32mm Flip-off Cap	
1 piece per Box		

Crimper for Combination Caps


Art. No.	Description	Cap Type (exemplary)
CR 13 0545	Crimper for 13mm combination caps	
1 piece per Box		

Crimper for Flip-Tear-Up Crimp Caps


- Flip Tear Up Crimper are suitable for our tamper-evident Flip Tear Up Cap, which can be completely torn open on the side using a plastic tear-off part and predetermined breaking lines (complete tear-off function)
- Decapping tools are therefore not required

Art. No.	Description	Cap Type (exemplary)
CR 13 0014	Crimper for 13mm Flip Tear Up Cap	
CR 20 0016	Crimper for 20mm Flip Tear Up Cap	
1 piece per Box		


Crimper for Flip-Top with flush sides Crimp Caps

Art. No.	Description	Cap Type (exemplary)
CR 28 0064	20mm Crimper for Flip top with flush sides crimp caps	
1 piece per Box		

Crimper for 3 pc Tear-Off Crimp Caps

Art. No.	Description	Cap Type (exemplary)
CR 28 0053	Crimper for "3 pc Tear off" Crimp Caps	
1 piece per Box		

Crimper for Pump-Spray Crimp Caps (atomizers)

Art. No.	Description	Cap Type (exemplary)
CR 15 0022	Crimper for 15,5mm "spray pump" Seals	
CR 16 0023	Crimper for 16,5mm "spray pump" Seals	
CR 20 0024	Crimper for 20mm "spray pump" Seals	
1 piece per Box		

18.2 Crimper for clean room applications

- The crimping/decapping mechanism is corrosion and heat resistant, making applications possible directly in the clean room
- Even multiple applications do not cause damage to the tool
- Available in sizes from 7,5mm - 32mm
- Crimpers and Decappers are available
- Can optionally be equipped with special handles for better grip (also autoclavable; temperature resistance up to 150° C)
- Adjustable in the flare pressure limitation by means of adjusting screw in the handle
- Additionally all CHROMA Crimpers are height adjustable in the crimp head



Crimper for Aluminium Crimp Caps

➤ Crimper for aluminium crimp caps are designed for a variety of cap types

- Standard aluminium crimp caps with hole
- Headspace crimp caps with pressure release system
- Centre tear-off caps
- Complete tear-off cap

Following are the most common types of caps:

Art. No.	Description	Cap Type (exemplary)
CR 08 0253	Crimper for 8mm Aluminum Crimp Cap	
CR 11 0220	Crimper for 11mm Aluminum Crimp Cap	
CR 13 0221	Crimper for 13mm Aluminum Crimp Cap	
CR 20 0219	Crimper for 20mm Aluminum Crimp Cap	
CR 28 0267	Crimper for 28mm Aluminum Crimp Cap	
CR 30 0271	Crimper for 30mm Aluminum Crimp Cap	
CR 32 0274	Crimper for 32mm Aluminum Crimp Cap	
sterilisable for clean room applications		
1 piece per Box		

Crimper for Flip-Off Crimp Caps


➤ Flip-off Crimper are suitable for our tamper-evident flip-off caps with tear-off plastic centre part (see caps in chapter 16.6.1 on page 48)

➤ **Caution:** Meanwhile, there are a number of crimp caps on the market that come very close to our flip-off caps in terms of their centre tear-off function and appearance. Please note that even the smallest deviations in cap geometry have an effect on the sealing properties of our flanging pliers. Therefore please pay attention to the "Flip-off" writing on the crimping caps.


Art. No.	Description	Cap Type (exemplary)
CR 13 0257	Crimper for 13mm Flip-Off Cap	
CR 20 0263	Crimper for 20mm Flip-Off Cap	
CR 28 0269	Crimper for 28mm Flip-Off Cap	
CR 30 0273	Crimper for 30mm Flip-Off Cap	
CR 32 0444	Crimper for 32mm Flip-Off Cap	
sterilisable for clean room applications		
1 piece per Box		

Crimper for „Flip-Tear-Up“ Crimp Caps


- Flip Tear Up crimper are suitable for our tamper-evident Flip Tear Up Cap, which can be torn open completely by means of a plastic tear-off piece and predetermined breaking lines on the side (complete tear-off function)
- Decapper are therefore not required

Art. No.	Description	Cap Type (exemplary)
CR 13 0258	13mm crimper for Flip Tear Up Cap, height adjustable	
CR 20 0265	20mm crimper for Flip Tear Up Cap, height adjustable	
sterilisable for clean room applications		
1 piece per Box		


Crimper for Flip-Top with flus sides Crimp Caps

Art. No.	Description	Cap Type (exemplary)
CR 20 0264	20mm crimper for Flip-off with flush sides, height adjustable, for clean rooms, (sterilisable and autoclavable)	
sterilisable for clean room applications		
1 piece per Box		

Crimper for 3 pc Tear-Off Crimp Caps

Art. No.	Description	Cap Type (exemplary)
CR 28 0270	28mm crimper for „3 pc tear off“ Caps, height adjustable	
sterilisable for clean room applications		
1 piece per Box		

Crimper for Pump-Spray Crimp Caps (atomizer)

Art. No.	Description	Cap Type (exemplary)
CR 15 0259	15,5mm crimper for Pump Spray closures, height adjustable	
CR 16 0260	16,5mm crimper for Pump Spray closures, height adjustable	
CR 18 0493	18mm crimper for Pump Spray closures, height adjustable	
CR 20 0266	20mm crimper for Pump Spray closures, height adjustable	
sterilisable for clean room applications		
1 piece per Box		

18.3 Manual Decapping Tools

18.3.1 Decapper for Aluminum Crimp Caps

- Easy and convenient handling
- Chemical resistant powder coating
- High quality construction for durability and long life
- Adjustable in the crimping pressure limitation by means of adjusting screw in the handle



Art. No.	Description	Cap Type (exemplary)
DC 08 0002	8mm decapper	
DC 11 0004	11mm decapper	
DC 13 0006	13mm decapper	
DC 20 0008	20mm decapper	
DC 28 0011	28mm decapper	
DC 30 0027	30mm decapper	
DC 32 0012	32mm decapper	
1 piece per Box		

18.3.2 Cleanroom Decappers for Aluminium Crimp Caps

Art. No.	Description	Cap Type (exemplary)
DC 08 0254	8mm decapper, sterilisable for clean room applications	
DC 11 0255	11mm decapper, sterilisable for clean room applications	
DC 13 0256	13mm decapper, sterilisable for clean room applications	
DC 20 0262	20mm decapper, sterilisable for clean room applications	
DC 28 0268	28mm decapper, sterilisable for clean room applications	
DC 30 0272	30mm decapper, sterilisable for clean room applications	
DC 32 0231	32mm decapper, sterilisable for clean room applications	
1 piece per Box		

18.3.3 Opening Pliers

- Simple and convenient handling
- Inexpensive alternative for decappers
- Made of stainless steel, therefore also sterilisable and autoclavable



Art. Nr	Description	Cap Type (exemplary)
ÖS 08 0150	opening pliers, sterilisable for clean room applications	
ÖS 11 0151	opening pliers, sterilisable for clean room applications	
ÖS 13 0152	opening pliers, sterilisable for clean room applications	
ÖS 20 0070	opening pliers, sterilisable for clean room applications	
ÖS 30 0153	opening pliers, sterilisable for clean room applications	
1 piece per Box		

18.4 Manual Table Crimper

- Manually operated crimping and decapping tool
- **User-friendly handling**, the bottle is crimped or de-crimped by operating the hand lever handle
- **Exchangeable crimping and decapping heads** are available in almost 100 sizes (see chapter crimping and decapping heads on page 48f.)
- **No tools necessary** for changing the crimping heads
- Ideal use in combination with our CHROMA POWER CRIMPER, as the crimping and decapping heads fit on both machines
- Adjustable, constant and **reproducible crimping pressure**



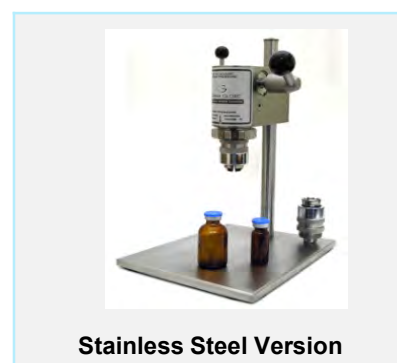
Overview of our 6 available models



- Ideal use in combination with the CHROMA TABLE CRIMPER as the crimping and decapper heads fit on both units

Art. No.	Workspace	Height	Weight
TC 00 0312	Steel; 25,4 x 30,5cm	45,72cm	9,5kg
TC 00 0212	Steel; 20,3 x 25,4cm	35,56cm	7,4kg
TC 00 0310	Granite; 25,4 x 30,5cm	48,9cm	10,9kg
TC 00 0531	Granite; 20,3 x 25,4cm	38,75cm	8,4kg
TC 00 0311	Stainless steel; 25,4 x 30,5cm	45,72cm	9,5kg
TC 00 0213	Stainless steel; 20,3 x 25,4cm	35,56cm	7,4kg

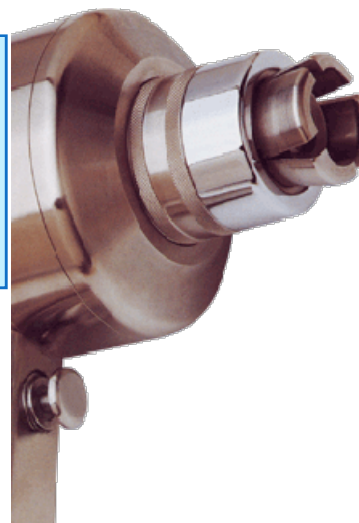
1 piece per Box






18.5 Pneumatic Crimping Tool

18.5.1 Pneumatic Hand-held Crimping Tool

- Crimping and decapping tool, operated by compressed air (6.2bar = 90psi minimum net pressure)
- **Easy handling**; just by pushing the button the vial is crimped or decapped
- **Exchangeable crimping and decapping heads** are available in almost 100 sizes (see chapter 18.5.1.1 crimping and decapping heads on page 58f.)
- No tools necessary for **changing the crimping heads**
- Ideal use in combination with our CHROMA POWER CRIMPER, as the crimping and decapping heads fit on both machines
- Adjustable, constant and **reproducible crimping pressure**



Art. No.	Art. No.	Art. No.
PC 00 0066	PC 00 0578	PC 00 0592
Pneumatic Basic Crimping Tool, including pressure regulator, safety valve and Nylon (PA) twisted hose (Basic version)	Hanging device with balancer for pneumatic crimping tool (Optional)	Stand, foot pedal and compressed air hose for pneumatic crimping tool (Optional)
		
1 piece	1 piece	1 piece









18.5.1.1 Crimping Heads for Pneumatic Crimping Tool and Table Crimper

- **Exchangeable crimping and decapping heads** for CHROMA table crimper and/or CHROMA POWER CRIMPER
- With about 100 different sizes we cover almost every need (**separate sale**)
- **No tools** are required to change to another size or device.




18.5.1.1 Crimping Heads (Cont.)






Crimping Heads for Aluminum Crimp Caps





Art.	CR 07 0028	CR 08 0029	CR 11 0030	CR 13 0031	CR 20 0032	CR 28 0044	CR 30 0033	CR 32 0034
								
Descr.	C-Head for 7.5mm Alu Crimp Caps	C-Head for 8mm Alu Crimp Caps	C-Head for 7.5mm Alu Crimp Caps	C-Head for 13mm Alu Crimp Caps	C-Head for 20mm Alu Crimp Caps	C-Head for 28mm Alu Crimp Caps	C-Head for 30mm Alu Crimp Caps	C-Head for 32mm Alu Crimp Caps
Pack	1 piece per Box							

Crimping Heads for Flip-off Crimp Caps








Art.	CR 11 0035	CR 13 0036	CR 16 0063	CR 20 0037	CR 28 0038	CR 30 0057	CR 32 0039
							
Descr.	C-Head for 11mm Flip-off Crimp Cap	C-Head for 13mm Flip-off Crimp Cap	C-Head for 16mm Flip-off Crimp Cap	C-Head for 20mm Flip-off Crimp Cap	C-Head for 28mm Flip-off Crimp Cap	C-Head for 30mm Flip-off Crimp Cap	C-Head for 32mm Flip-off Crimp Cap
Pack	1 piece per Box						

Other Crimping Heads

Art.	CR 13 0048	CR 20 0049	CR 32 0059	CR 28 0061	CR 28 0054
					
Descr.	C-Head for 13mm FLIP TEAR UP Crimp Cap	C-Head for 20mm FLIP TEAR UP Crimp Cap	C-Head for 32mm FLIP TEAR UP Crimp Cap	C-Head for 28mm Short Tear off Crimp Cap	C-Head for 28mm 3pc Tear Off Crimp Cap
Pack	1 piece per Box				

Art.	CR 15 0050	CR 16 0051	CR 20 0052	CR 20 0065
				
Descr.	C-Head for 15,5mm PUMP SPRAY Crimp Cap	C-Head for 16,5mm PUMP SPRAY Crimp Cap	C-Head for 20mm PUMP SPRAY Crimp Cap	C-Head for 20mm Flip top with flush sides Crimp Cap
Pack	1 piece per Box			



18.5.1.2 Decapping Heads

Art.	DC 08 0040	DC 11 0041	DC 13 0042	DC 20 0043	DC 28 0045	DC 30 0046	DC 32 0047
							
Descr.	D-Head for 8mm Alu Crimp Caps	D-Head for 11mm Alu Crimp Caps	D-Head for 13mm Alu Crimp Caps	D-Head for 20mm Alu Crimp Caps	D-Head for 28mm Alu Crimp Caps	D-Head for 30mm Alu Crimp Caps	D-Head for 32mm Alu Crimp Caps
Pack	1 piece per Box						

18.5.2 Vertical Pneumatic Crimping Tool

- Crimping and decapping tool operated by compressed air
- **User-friendly handling**, the vial is crimped or decapped by pressing the release button
- **Exchangeable crimping and decapping heads** (sold separately) for the following sizes and cap types
- **No tools are required** to change to another size or type of cap
- **Space-saving installation** by using a suspension device; spring balancer compensates the weight and guarantees smooth and precise closing or opening
- Adjustable, constant and **reproducible crimping pressure**









Art.	VC 00 0368	VC 00 0729
		
Descr.	Vertical pneumatic crimping machine; includes the basic unit and a pressure reducer, a safety valve and a suitable compressed air hose	Hanging device with spring balancer for vertical pneumatic crimping tool
Pack	1 piece per Box	

18.5.2.1 Crimping Heads for Vertical Pneumatic Crimping Tool

- Crimping heads are available for Standard Aluminum Crimp Cap and Flip-Off Crimp Cap in sizes 8mm - 20mm
- Sorted by size below



Art.	CV 08 0369	CV 11 0371	CV 13 0373	CV 13 0374	CV 20 0376	CV 20 0377
Cap						
Descr.	C-Head for 8mm Alu Crimp Caps	C-Head for 11mm Alu Crimp Caps	C-Head for 13mm Alu Crimp Caps	C-Head for 13mm Flip-off Crimp Cap	C-Head for 20mm Alu Crimp Caps	C-Head for 20mm Flip-off Crimp Cap
Pack	1 piece per Box					

18.5.2.2 Decapping Heads for Vertical Pneumatic Crimping Tool

- Decapping heads for Aluminum Crimp Cap are available in the sizes 8mm - 20mm
- Sorted by size below



Art.	DV 08 0370	DV 11 0372	DV 13 0375	DV 20 0391
Cap				
Descr.	D-Head for 8mm Alu Crimp Caps	D-Head for 11mm Alu Crimp Caps	D-Head for 13mm Alu Crimp Caps	D-Head for 20mm Alu Crimp Caps
Pack	1 piece per Box			

19. Screw Neck Vials and Seals for Storage Purposes

- Screw Neck Vials for storage purposes made out of 1st hydrol. class glass
- Clear and amber Vials available

19.1 Screw Neck Vials for Storage Purposes



Article	GW 08 0193	GW 08 0799	GW 13 0454	GW 13 0455	GW 15 0636 GW 15 0831	GW 15 0637 GW 15 0876
Descr.	1.5ml Screw Neck Vial, 8-425 thread, 32 x 11.6mm, clear glass, 1st hydrol. class, small opening	1.5ml Screw Neck Vial, 8-425 thread, 32 x 11.6mm, amber glass, 1st hydrol. class, small opening	4ml Screw Neck Vial, 45 x 14.7mm, clear glass, 1st hydrol. Class	4ml Screw Neck Vial, 45 x 14.7mm, amber glass, 1st hydrol. Class	8ml Screw Neck Vial, 15-425, 61 x 16.6mm, clear glass, (amber glass) 1. hydrol. class	12ml Screw Neck Vial, 15-425, 66 x 18.5mm, clear glass, (amber glass), 1. hydrol. class
Thread	8-425	8-425	13-425	13-425	15-425	15-425
Filling volume (ml)	1,9	1,9	5	5	8,9	12
Residual volume (µl)	<110	<110	<400	<400	800	800
	100 pcs.per PP-Box				100 pcs. per Box	











Article	GW 18 1078	GW 20 1012	GW 24 0240 GW 24 0344	GW 24 0241 GW 24 0345	GW 24 0242 GW 24 0346	GW 24 0243 GW 24 0347
Descr.	16ml Screw Neck Vial, 18-400, 71 x 20.6mm, clear glass, 1st hydrol. Class	20ml Screw Neck Vial, 20-400, 86 x 22.7mm, clear glass, 1st hydrol. Class	20ml EPA Screw Neck Vial, 24-400, 57 x 27.5mm, clear glass, (amber glass), 1. hydrol. class	30ml EPA Screw Neck Vial, 24-400, 72.5 x 27.5mm, clear glass, (amber glass), 1. hydrol. class	40ml EPA Screw Neck Vial, 24-400, 95 x 27.5mm, clear glass, (amber glass), 1. hydrol. class	60ml EPA Screw Neck Vial, 24-400, 140x27.5mm, clear glass, (amber glass), 1. hydrol. class
Thread	18-400	20-400	24/400	24/400	24/400	24/400
Filling volume (ml)	17,4	24,5	23,3	31,1	42,9	64,4
Residual volume (µl)	0,8	0,8	0,5	0,7	0,7	0,7
	100 pcs.per PP-Box					






19.2 PP Screw Seals for Storage Vials

- Seals available with numerous septa materials
- Cost-effective seal variations with maximum tightness

PP Screw Seals for ND8, ND13, ND15, ND18, ND20 and ND24

8-425				
Art.No.	SV 08 0760	SV 08 0767	SV 08 1001	SV 08 0762
Cap	Polypropylen Screw Cap, black, closed top, thread 8-425			
Septa	Natural Rubber red-orange/TEF transparent	RedRubber/PTFE beige	Butyl cream/PTFE grey	Silicone white/PTFE red
Hardness	60° shore A	45° shore A	55° shore A	45° shore A
Thickness	1,3mm	1,0mm	1,3mm	1,3mm
Pack	10 x 100 pcs.			

13-425				
Art. No.	SV 13 0488	SV 13 0489	SV 13 0805	SV 13 1329
Cap	Polypropylen Screw Cap, black, closed top, thread 13-425			
Septa	Natural Rubber red-orange/TEF transparent	Butyl ceme/PTFE grey	Silicone white/PTFE red	Butyl dark grey
Hardness	60° shore A	55° shore A	55° shore A	48° shore A
Thickness	1,3mm	1,3mm	1,5mm	2mm
Pack	10 x 100 pcs.			

15-425					
Art. No.	SV 15 0594	SV 15 0638	SV 15 0884	SV 15 0878	SV 15 1327
Cap	Polypropylen Screw Cap, black, closed top, thread 15-425				
Septa	Natural Rubber red-orange/TEF transparent	Butyl red/PTFE grey	Viton, black	Silicone white/Aluminum foil silver	Butyl dark grey
Hardness	60° shore A	55° shore A	70° shore A	50° shore A	48° shore A
Thickness	1,3mm	1,6mm	1,0mm	1,3mm	2mm
Pack	10 x 100 pcs.				

19.2 PP Screw Seals for Storage Vials (Cont.)

18-400			
Art. No.	SV 18 1300	SV 18 1303	SV 18 1304
Cap	Polypropylen Screw Cap, black, closed top, thread 18-400		
Septa	Butyl cream/PTFE grey	Silicone white/PTFE red	Butyl dark grey
Hardness	55° shore A	55° shore A	48° shore A
Thickness	1,6mm	1,5mm	3mm
Pack	10 x 100 pcs.		

20-400			
Art. No.	SV 20 1017	SV 20 1021	SV 20 1330
Cap	Polypropylen Screw Cap, white, closed top, thread 20-400		
Septa	Natural Rubber red-orange/TEF transparent	Butyl cream/PTFE grey	Silicone white/PTFE red
Hardness	60° shore A	55° shore A	45° shore A
Thickness	1,3mm	1,3mm	1,3mm
Pack	10 x 100 pcs.		

24-400				
Art. No.	SV 24 0553	SV 24 0905	SV 24 1323	SV 24 0291
Cap	Polypropylen Screw Cap, white, closed top, thread 24-400			
Septa	Butyl red/PTFE grey	Silicone white/Aluminum foil silver	Butyl dark grey	Silicone natur/PTFE beige (EPA Quality)
Hardness	55° shore A	50° shore A	48° shore A	45° shore A
Thickness	2,4mm	3,0mm	3mm	3,2mm
Pack	10 x 100 pcs.			

20. Washer Bottles

➤ Wash bottles made of glass of the 1. hydrol. class

20.1 Washer Bottles

As the sensitivity of the analytical instruments increases, the cleaning and rinsing process of the syringe, which takes the sample from the autosampler vial and then injects it, becomes more and more important. To prevent carry-over from one sample to another, the syringe must be rinsed after each injection. The bottles in which the solvent for rinsing is provided are the so-called wash bottles.



Article	GW 13 0454	HS 20 0235	HS 20 0354	HS 20 0302
Descr.	4ml Screw Neck Vial, 45 x 14.7mm, clear glass, 1st hydrol. class	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1st hydrol. class, flat bottom	5ml Crimp Neck Vial, 38 x 20mm, clear glass, 1st hydrol. class, flat bottom	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1st hydrol. class, flat bottom
Washer bottle for	Agilent: 7673, 7683 PerkinElmer: Waste + Wash Vial	Thermo Finnigan: AS2000, AS300, A200S	Varian: 8400, 8410	Varian: CTC PAL Shimadzu: AOC-5000
100 pcs. per PP-Box				

20.2 Washer Bottles Seals

➤ On request numerous septa variants are available!
➤ Below are the most common wash bottle seals








Art. No.	SV 13 0477	see article text	SN 20 0903	SN 20 0938	SN 20 0937
Cap	13mm Polypropylen Screw Cap black, 8,5mm hole	13mm Polypropylen Screw Cap black, 8,5mm hole (SK 13 0483)	20mm PE Cap, transparent, 4,3mm hole, cap height 8,4mm	20mm PE Cap, transparent, 4,3mm hole, cap height 9,2mm	20mm PE Cap, transparent, 4,3mm hole, cap height 9,2mm
Septa	Silicone white/ PTFE red	12mm Septa, PTFE virginal, 53° shore D, 0,25mm (SE 12 0100)	Natural Rubber red- orange/TEF transparent	Silicone blue transp./PTFE white, slit	Silicone blue transp./PTFE white
Hardness	55° shore A	53° shore D	60° shore A	45° shore A	45° shore A
Thickness	1,3mm	0,25mm	1,3mm	1,3mm	1,3mm
Cleaning cap for			Varian: 8400, 8410	Varian: CTC	Varian: CTC, 8400, 8410 Thermo Finnigan: A200S Shimadzu: AOC-5000
100 pcs. per PE-Bag					

21. Septa for Schott Screw Caps GL14 – GL45

- Washed replacement septa for thread screw cap GL14-GL45
- Especially for Schott ScrewCap made of Silicone white/ PTFE beige in 3,2mm thickness or of Butyl red/ PTFE grey with 2,5mm thickness

Silicone white/PTFE beige

Art.	SE 12 0986	SE 16 0849	SE 23 0987	SE 30 0988	SE 43 0738
					
Descr.	12,5mm Septa, Silicone natur/ PTFE beige for GL14	16,7mm Septa, Silicone natur/ PTFE beige for GL18	23,4mm Septa, Silicone natur/ PTFE beige for GL25	30,3mm Septa, Silicone natur/ PTFE beige for GL32	43,2mm Septa, Silicone creme/ PTFE beige for GL45
Hardness	45° shore A	45° shore A	45° shore A	45° shore A	55° shore A
Thickness	3,2mm	3,2mm	3,2mm	3,2mm	3,2mm
Pack	100 pcs. per PE-Bag				

Butyl red/PTFE grey

Art.	SE 12 0989	SE 16 0990	SE 23 0991	SE 30 0992	SE 45 0993
					
Descr.	12,9mm Septa, Butyl red/PTFE grey for GL14	16,7mm Septa, Butyl red/PTFE grey for GL18	23,4mm Septa, Butyl red/PTFE grey for GL25	30,3mm Septa, Butyl red/PTFE grey for GL32	43,2mm Septa, Butyl red/PTFE grey for GL45
Hardness	55° shore A	55° shore A	55° shore A	55° shore A	55° shore A
Thickness	1,6mm	1,6mm	2,5mm	2,5mm	2,5mm
Pack	100 pcs. per PE-Bag				

22. Special Products

- Special products can be carried out in every area of our delivery programme
- Special products are not necessarily stock items and may therefore require certain minimum purchase quantities

22.1 Special Vials



Art. No.	RR 11 0472	KG 09 1237	FB 22 1315	GW 40 1040
Description	2.5ml Crimp Neck Vial, 41 x 11.6mm, clear glass, 1st hydrol. class, wide opening	2.5ml Short Thread Vial, 41 x 11.6mm, clear glass, 1st hydrol. class, wide opening	13ml Shell Vial, 48 x 22mm, clear glass, 1st hydrol. class, Special bottom for NIR measurements	100ml Cylindrical glass,, 93,5 x 49mm, clear glass, 3st hydrol. class, Thread DIN40
Filling volume (ml)	2,7	2,7	13	115,5
		100 pcs.per PP-Box		63 pieces

22.2 Culture Tubes

- **NEW:** Culture tubes and matching GL18 PP Screw Seals with inexpensive autoclavable sealing septa made of butyl or butyl/PTFE
- Optionally available as practical 2in1 kits (100 vials and 100 seals per carton)




Art. No.	GW 18 1338	Art. No.	SV 18 1296	SV 18 1339
Description	12ml Culture Tubes GL18, 100 x 16mm, clear glass, 3st hydrol. class	Cap	PP Screw Cap, black, closed top for Culture Tubes (GL18)	PP Screw Cap, black, closed top for Culture Tubes (GL18)
Filling volume	12ml	Septa	Butyl dark grey	Butyl red/PTFE grey
Residual volume	800µl	Hardness	48° shore A	55° shore A
	100 pcs. per Box	Thickness	3mm	1,6mm
			100 pcs. per PE-Bag	

Culture Tubes as practical 2in1 kits



Art. No. 2in1 Kit	Art. No. Vials	Art. No. Seals
KP 18 1340	GW 18 1338	SV 18 1296
KP 18 1341	GW 18 1338	SV 18 1339
each 100 Vials and Seals per Box		

CHROMA GLOBE GbR Autosampler- Kompatibilitäts- Übersicht 		Rolland ND8	Rolland ND8	Rolland ND8	Rolland ND8	Rolland ND8	Rolland ND8	Gewinde ND8	Gewinde ND8	Kurzgewinde ND9	Gewinde ND10	Rolland ND11	Rolland ND11	Rolland ND11
		RR 08 0326 RR 08 0327	RR 08 0328	RR 08 0329 RR 08 0330	RR 08 0331 RR 08 0332	RR 08 0317 RR 08 0333	RR 08 0334	GW 08 0133 GW 08 0739 GW 08 0194 GW 08 0155	GW 08 0356	KG 08 0196 KG 08 0197 KG 08 0189 KG 08 0369 KG 08 0365	GW 10 0451 GW 10 0452 GW 10 0463	RR 11 0473 RR 11 0176 RR 11 0198 RR 11 0222 RR 11 0294	RR 11 0366	RR 11 0367
		Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 2 Seite 10	Kapitel 2 Seite 10	Kapitel 3 Seite 13	Kapitel 4 Seite 17	Kapitel 5 Seite 19	Kapitel 5 Seite 19	Kapitel 5 Seite 19	
Agilent	1050								X		X			
Agilent	1050 (34 Pos. Tray)				X									
Agilent	1090								X		X			
Agilent	1090 (34 Pos. Tray)				X									
Agilent	1100								X		X			
Agilent	1200								X		X			
Agilent	G1888A													
Agilent	7673A				X				X		X			
Agilent	7683A				X		X		X		X			
Agilent	HS7694													
Agilent	7695A													
Agilent	79856(A)								X		X			
Agilent	6880								X		X			
Agilent	6890								X		X			
Agilent	8850 (27 Pos. Tray)								X		X			
Agilent	8850 (22 Pos. Tray)													
Agilent	8890								X		X			
Agilent	CTC HTS+HTC PAL	X			X	X			X		X			
Agilent	CTC GC PAL	X			X	X			X		X			
Agilent	CTC Gombi PAL													
Agilent	Tekmar SOLATEk72													
Agilent	Archoh Plug + Trap													
Agilent	AQUATek 70													
Agilent	7693A							X			X			
Agilent	HS7694													
Agilent	7697A													
AI	42 vial tray							X	X	X	X		X	
AI	60 vial tray		X	X	X			X		X	X			
AI	CTC A200S	X				X		X		X	X			
AI	Headspace													
AIM	CPS-100							X		X	X			
AIM	CPS-200							X		X	X			
Alcott	708 AL													
Alcott	728													
Alcott	738							X	X	X	X			
Alcott	719 AL							X	X	X	X			
Alcott	719 D / D-PCS							X	X	X	X			
Analytik Jena	multi N/C 3000 (TOC)													
Antec Leyden	AS 100							X	X	X	X			
Antec	736 Unisampler							X	X	X	X			
Antec	738							X	X	X	X			
Beckman	501				X			X	X	X	X			
Beckman	502 / 502e				X			X	X	X	X			
Beckman	504	X				X								
Beckman	507 / 507e				X			X	X	X	X			
Beckman	508 (System Gold)								X					
Beckman	Marathon							X	X	X	X		X	
Beckman	Promis							X	X	X	X		X	
Beckman	Triathlon Standard Tray							X	X	X	X		X	
Beckman	Triathlon LSV Tray				X									
Beckman	Triathlon Super-LSV Tray													
Beckman	Triathlon Micro-Tray	X				X								
Bruker	LC51													
Cambridge	205 Series							X	X	X	X			
Cambridge	300 Series							X	X	X	X			
Carlo Erba	AS100	X			X	X		X	X	X	X		X	
Carlo Erba	AS200	X				X		X	X	X	X		X	
Carlo Erba	A200LC	X				X		X	X	X	X		X	
Carlo Erba	AS200S	X				X		X	X	X	X		X	
Carlo Erba	AS300	X			X	X		X	X	X	X		X	
Carlo Erba	AS800, 42 vial tray							X	X	X	X		X	
Carlo Erba	AS800, 60vial tray		X	X	X			X	X	X	X			
Carlo Erba	HS250													
Carlo Erba	HS500													
Carlo Erba	HS800													
Carlo Erba	HS850													
Cecil Instruments	CE4300							X	X	X	X			
Cecil Instruments	AutoQuest								X	X	X			
CTC (LEAP)	LC PAL (216 Pos.)							X	X	X	X		X	
CTC (LEAP)	HTX PAL, HTC PAL, HTS PAL (200 Pos. Tray)	X												
CTC (LEAP)	HTX PAL, HTC PAL, HTS PAL (54/96 Pos. Tray)				X			X	X	X	X		X	
CTC (LEAP)	HTX PAL, HTC PAL, HTS PAL (32 Pos. Tray)													
CTC (LEAP)	Comb PAL (200 Pos. Tray), GC PAL (200 Pos. Tray)	X												


CHROMA GLOBE GbR Autosampler- Kompatibilitäts- Übersicht		Rolland ND8	Rolland ND8	Rolland ND8	Rolland ND8	Rolland ND8	Rolland ND8	Gewinde ND8	Gewinde ND8	Kurzgewinde ND9	Gewinde ND10	Rolland ND11	Rolland ND11	Rolland ND11
		RR 08 0326 RR 08 0327	RR 08 0328	RR 08 0329 RR 08 0330	RR 08 0331 RR 08 0332	RR 08 0317 RR 08 0333	RR 08 0334	GW 08 0133 GW 08 0733 GW 08 0194 GW 08 0155	GW 08 0356	KG 08 0196 KG 08 0197 KG 08 0189 KG 08 0369 KG 08 0365	GW 10 0451 GW 10 0452 GW 10 0463	RR 11 0473 RR 11 0176 RR 11 0198 RR 11 0822 RR 11 0294	RR 11 0366	RR 11 0367
		Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 2 Seite 10	Kapitel 2 Seite 10	Kapitel 3 Seite 13	Kapitel 4 Seite 17	Kapitel 5 Seite 19	Kapitel 5 Seite 19	Kapitel 5 Seite 19	
CTC (LEAP)	Combi PAL (98 Pos. Tray), GC PAL (98 Pos. Tray)				X				X		X		X	
CTC (LEAP)	Combi PAL SPME Mode (98 Pos. Tray)								X		X		X	
CTC (LEAP)	Combi PAL (92 Pos. Tray), GC PAL (92 Pos. Tray)													
CTC (LEAP)	Combi PAL SPME Mode (92 Pos. Tray)													
CTC	PAL HPLC Systems	X						X	X	X	X			
CTC	PAL Combi-xt Liquid Mode	X						X	X	X	X			
CTC	Combi-xt Headspace Option													
CTC	GC-xt Headspace Option	X						X	X	X	X			
CTC	PAL HTC-xt	X						X	X	X	X			
CTC	HTC-xt	X						X	X	X	X			
CTC	HTC-xt	X						X	X	X	X			
CTC	HTC-xt	X						X	X	X	X			
CTC	Combi-xt SPME Options											X		
CTC	A200S	X				X		X	X	X	X			
CTC	A200 LC	X				X		X	X	X	X		X	
CTC	HS 500													
Dart	ALS 39 90								X		X			
Dart	ALS 96 80								X		X			
Dart	ALS 1000								X		X			
Dart	HS39 50													
Dart	HS88 50													
Dart	Master AS								X		X			
Dimatec	2000													
Dionex	Gna 50			X					X		X			
Dionex	AS 50				X				X	X				
Dionex	Summit ASI 100, Micro-Tray (192 Pos.)			X										
Dionex	Summit ASI 100, Analytical-Tray (117 Pos.)							X	X		X			
Dionex	Summit ASI 100, Semiprep-Tray (63 Pos.)													
Dionex	Famos (LC Packings/Dionex)							X	X	X	X			
Dionex	UltMate Analytical, cylindrical, WP-3000 SL, 120 Pos. Rack (2mj)							X	X	X	X			
Dionex	UltMate Micro, conical, WPS-3000 SL, 120 (3x40) Pos. Rack (250µl)				X									
Dionex	UltMate Semipreparative, WPS-3000 SL, 68 (3x22) Pos. Rack (4mj)													
Dionex	UltMate Nano/ Cap/Micro, WPS-3000 SL, 216 (3x72) Pos. Rack (1.2mj)			X										
Dionex	ASE 200													
Dionex	AS 40													
Dionex	HS-HV							X						
Dimatec	Dimatec 200													
Dimatec	Dimatec 300													
Dimatec	Dimatec 400													
D-Star	DAS 10							X			X			
Dynatech	42 vial tray							X	X	X	X		X	
Dynatech	60 vial tray		X	X	X			X	X	X	X			
Dynatech	LC2000			X										
Dynatech	GC111		X					X			X			
Dynatech	GC311		X					X			X			
EST Analytical	Cobra L/S GC Autosampler, 120 vial tray							X	X	X	X			
EST Analytical	Cobra L/S GC Autosampler, 60 vial tray													
EST Analytical	Markelov HS9000													
EST Analytical	Archon P/T													
EST Analytical	Centurion 100													
Finnigan	A200S	X				X		X	X		X			
Fisons	AS100	X			X	X		X	X	X	X		X	
Fisons	AS200	X				X		X	X		X		X	
Fisons	A200LC	X				X		X	X	X	X		X	
Fisons	AS200S	X				X		X	X	X	X		X	
Fisons	AS300	X			X	X		X	X	X	X		X	
Fisons	AS800, 42 vial tray							X	X	X	X		X	
Fisons	AS800, 60 vial tray		X	X	X			X	X	X	X		X	
Fisons	HS250													
Fisons	HS500													
Fisons	HS800													
Fisons	HS850													
GBC	Avantia Ultra Z								X		X			
GE Instruments	Sievers® 900													
Gerstel	MPS2	X			X	X					X		X	
Gilson	201/202							X	X					
Gilson	221/222							X	X					

CHROMA GLOBE GbR
Autosampler-
Kompatibilitäts-
Übersicht



		Reifend ND11	Schnappring ND11	Gewinde ND13	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Gewinde ND24 (EPA)
		RR 11 0472	SR 11 0200 SR 11 0201 SR 11 0202	GW 13 0454 GW 13 0455 GW 13 0457 GW 13 0458	HS 20 0238	HS 20 0302 HS 20 0350	HS 20 0239 HS 20 0352 HS 20 0207	HS 20 0235 HS 20 0236	HS 20 0237 HS 20 0353 HS 20 0351 HS 20 0732 HS 18 0239 HS 18 0348 HS 18 0234	HS 20 0364	HS 20 0355	GW 24 0240 GW 24 0344 GW 24 0345 GW 24 0242 GW 24 0246 GW 24 0243	
		Kapitel 5 Seite 15	Kapitel 5 Seite 24	Kapitel 7 Seite 26	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kap. 10+11 Seite 30f.	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 12 Seite 39	
Gilson	221M01												
Gilson	222M02												
Gilson	Aspec												
Gilson	Aspec XL												
Gilson	Aspec XL4												
Gilson	221.XL/222.XL												
Gilson	223												
Gilson	231.XL/232.XL/ 233.XL												
Gilson	Nano Injektor												
Gilson	235/235P/SP, 235/SP, 235P												
Gynkotec	Gina 50		X	X									
Haoh Lange	HL 650 TOC-TN											X	
HTA	HT200H							X					
HTA	HT250D	X	X					X					
HTA	HT280T	X	X					X					
HTA	HT360A	X	X										
HTA	HT300L		X					X					
ICI	LC1600	X											
IMT GmbH	VSP4000											X	
IMT GmbH	PTA3000												
Jasco	AS 2055/ AS 2055 (j)		X										
Jasco	AS 2057/ AS 2057 (j)		X										
Jasco	AS 2059		X										
Knauer	K-3800 (Basic Marathon)		X		X								
Knauer	Smarline K 2950		X		X								
Knauer	PLATINblue AS-1		X										
Konik-Tech	Robokrom Statio HS					X			X				
Konik-Tech	Robokrom HRC												
Konik-Tech	Robokrom HPLC		X										
Kontron	MSI 560			X									
Kontron	300, 400		X										
LDC	71R-60												
LDC	Marathon		X										
LDC	Promis		X										
LEAP	siehe CTC												
OI Analytical	1020A											X	
OI Analytical	1088											X	
OI Analytical	1096+											X	
OI Analytical	455 1A											X	
OI Analytical	1552											X	
Perkin Elmer	Series 200, 25 vial tray				X								
Perkin Elmer	Series 200, 85 vial tray				X								
Perkin Elmer	Series 200, 91/ 100 vial tray												
Perkin Elmer	Series 200, 205 vial tray												
Perkin Elmer	Series 200, 225 vial tray												
Perkin Elmer	AI-1												
Perkin Elmer	AS-100 / AS-100B												
Perkin Elmer	AS2000/AS2000B												
Perkin Elmer	AS-300												
Perkin Elmer	AS8300												
Perkin Elmer	Autosystem												
Perkin Elmer	HS 6				X								
Perkin Elmer	HS40 / HS100/101				X		X						
Perkin Elmer	TurboMatrix HS 18 / HS40 / HS40XL/ HS40 Trap/ HS 110/ HS 110 Trap				X* nicht geeignet für TurboMatrix TM 110		X		X* für TurboMatrix TM 16, 110 produziert nach dem 1.9.06				
Perkin Elmer	Integral 4000												
Perkin Elmer	ISS-100, 85 vial tray				X								
Perkin Elmer	ISS-100, 100 vial tray												
Perkin Elmer	ISS-200, 85 vial tray				X								
Perkin Elmer	ISS-200, 100 vial tray												
Perkin Elmer	ISS-200, 145 vial tray												
Perkin Elmer	ISS-225, 205 vial tray												
Perkin Elmer	ISS-225, 100 vial tray + 80 vial tray												
Perkin Elmer	ISS-225, 85 vial tray				X								
Perkin Elmer	ISS-225, 25 vial tray				X								
Perkin Elmer	LC 600, 42 vial tray												
Perkin Elmer	LC 600, 60 vial tray												
Perkin Elmer	Clarus 400, 500, 600												
Pharmacia	LKB 2157-010		X										
Pharmacia	LKB 2157-020	X											
Polymer	PL-AS RT		X	X									
Quina Elektronik	QHSS-40							X					

CHROMA GLOBE GbR Autosampler- Kompatibilitäts- Übersicht 		Rolland ND6	Rolland ND6	Rolland ND6	Rolland ND6	Rolland ND6	Rolland ND6	Gewinde ND6	Gewinde ND6	Kurzgewinde ND9	Gewinde ND10	Rolland ND11	Rolland ND11	Rolland ND11
		RR 09 0326 RR 09 0327	RR 09 0328	RR 09 0329 RR 09 0330	RR 09 0331 RR 09 0332	RR 09 0317 RR 09 0333	RR 09 0334	GW 09 0133 GW 09 0739 GW 09 0194 GW 09 0155	GW 09 0356	KG 09 0196 KG 09 0197 KG 09 0189 KG 09 0289 KG 09 0365	GW 10 0451 GW 10 0452 GW 10 0463	RR 11 0473 RR 11 0176 RR 11 0198 RR 11 0199 RR 11 0822 RR 11 0294	RR 11 0366	RR 11 0367
		Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 2 Seite 10	Kapitel 2 Seite 10	Kapitel 3 Seite 13	Kapitel 4 Seite 17	Kapitel 5 Seite 19	Kapitel 5 Seite 19	Kapitel 5 Seite 19
Sodars														
SGE	LS-3200	X				X					X			
Shimadzu	AOC-5000	X			X	X								
Shimadzu	AOC-14/1400				X					X			X	
Shimadzu	AOC-17							X	X	X	X	X	X	
Shimadzu	AOC-20 / 20i / 20s / 150 Pos. Tray							X	X	X	X	X	X	
Shimadzu	LC-20A							X	X	X	X	X	X	
Shimadzu	SIL-2AS				X			X	X	X	X	X	X	
Shimadzu	SIL-6A				X			X	X	X	X	X	X	
Shimadzu	SIL-6B / SIL-7A / SIL-8A / SIL-9A							X	X	X	X	X	X	
Shimadzu	SIL-10A / SIL-10AF / SIL-10AP / SIL-10Ai / SIL-10AiL / Rack-S 100 Pos				X			X	X	X	X	X	X	
Shimadzu	SIL-10A / SIL-10AF / SIL-10AP / SIL-10Ai / SIL-10AiL / Rack L 80 Pos													
Shimadzu	SIL-10A / SIL-10AF / SIL-10AP / SIL-10Ai / SIL-10AiL / Rack MTP2 192 Pos													
Shimadzu	SIL-10HTA / SIL-10HTC 350 Pos Tray													
Shimadzu	SIL-10HTA / SIL-10HTC 140 Pos Tray							X		X	X			
Shimadzu	SIL-10HTA / SIL-10HTC 100 Pos Tray													
Shimadzu	SIL-10ADvp							X	X	X	X	X	X	
Shimadzu	HTA 200H													
Shimadzu	SIL-20A (Prominence) 105 vial tray / SIL-20AG (Prominence) 70 vial tray				X			X	X	X	X	X	X	
Shimadzu	SIL-20A / SIL-20AG (Prominence) 175 vial tray													
Shimadzu	SIL-20A / SIL-20AG (Prominence) 50 vial tray													
Shimadzu	LC2010C + LC2010A 360 Pos. Tray													
Shimadzu	LC2010C + LC2010A 140 Pos. Tray							X		X	X	X	X	
Shimadzu	LC2010C + LC2010A 100 Pos. Tray													
Shimadzu	ASI-V													
Shimadzu	HSS-2B													
Shimadzu	SIL 30-ACMP							X		X		X		
Sievers (GE Instruments)	Sievers® 900													
Spark	Marathon Basin, Standard 96 Pos. Tray							X	X	X		X	X	
Spark	Marathon Basin Prep King Size 48 Pos. Tray													
Spark	Midas, Standard 84 Pos. Tray							X	X	X		X	X	
Spark	Midas, Large Capacity 96 Pos. Tray							X	X	X		X	X	
Spark	Midas, Large Volume 24 Pos. Tray													
Spark	Atlas							X	X	X		X	X	
Spark	Promis							X	X	X		X	X	
Spark	SPH 125								X	X		X	X	
Spark	Triathlon, Standard 96 Pos. Tray							X	X	X		X	X	
Spark	Triathlon, LSV 72 Pos. Tray													
Spark	Triathlon, Super-LSV 32 Pos. Tray													
Spark	Triathlon, Micro 160 Pos. Tray					X								
Spark	Endurance 48 Pos. Tray	X						X	X	X		X	X	
Spark	Reliance 48 Pos. Tray							X	X	X		X	X	
Spark	Intervy									X		X		
Spark	Prospekt 2											X		
Spark	Reliance/Symbiosis Pharma											X		
Spark	Dried Blood Spot (DBS)											X		
Spark	Intervy							X		X		X		
Spark	Optimas							X		X		X		
Spectra-Physics	8375							X		X		X		
Spectra-Physics	8380							X		X		X		
Spectra-Physics	Spectra SYSTEM AS1000	X			X	X		X		X		X	X	
Spectra-Physics	Spectra SYSTEM AS3000	X		X	X	X		X		X		X	X	
Spectra-Physics	Spectra SYSTEM AS3500	X		X	X	X		X		X		X	X	
Sylam	S 5200									X				
Talbot												X		
Teledyne Tekmar	7000 / 7000HT / 7050													
Teledyne Tekmar	AQUATEk 70 / SOLATEk 72TM													
Teledyne Tekmar	STS-8000 TOC													
Teledyne Tekmar	HT3													
Thermo Scientific	AS1000 (Trace GC)	X			X	X		X		X		X	X	
Thermo Scientific	AS200	X				X		X	X	X		X	X	
Thermo Scientific	AS300	X			X	X		X	X	X		X	X	
Thermo Scientific	AS2000 30 vial Tray													
Thermo Scientific	AS2000 90 vial Tray (Trace GC)				X			X	X	X		X	X	

CHROMA GLOBE GbR Autosampler- Kompatibilitäts- Übersicht 		Referenz ND11	Schnappring ND11	Gewinde ND13	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Headspace ND20 (ND18)	Gewinde ND24 (EPA)
		RR 11 0472	SR 11 0200 SR 11 0201 SR 11 0202	GW 13 0454 GW 13 0455 GW 13 0457 GW 13 0458	HS 20 0238	HS 20 0302 HS 20 0350	HS 20 0239 HS 20 0352 HS 20 0207	HS 20 0235 HS 20 0236	HS 20 0237 HS 20 0353 HS 20 0351 HS 20 0752 HS 18 0239 HS 18 0348 HS 18 0234	HS 20 0364	HS 20 0355	GW 24 0240 GW 24 0344 GW 24 0345 GW 24 0242 GW 24 0246 GW 24 0243	
		Kapitel 5 Seite 15	Kapitel 5 Seite 24	Kapitel 7 Seite 26	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 11 Seite 31	Kapitel 12 Seite 39	
Thermo Scientific	AI3000 (H/ AS3000(L)/ AS3500 (Trace GC + Fokus GC)					X							
Thermo Scientific	A200LC		X										
Thermo Scientific	Spectra SYSTEM AS 1000		X										
Thermo Scientific	Spectra SYSTEM AS 2000	X	X										
Thermo Scientific	Spectra SYSTEM AS 3500		X										
Thermo Scientific	AS200S												
Thermo Scientific	AS100		X										
Thermo Scientific	AS800, 42 vial tray	X											
Thermo Scientific	AS900, 60 vial tray												
Thermo Scientific	HS250					X							
Thermo Scientific	HS500					X							
Thermo Scientific	HS300					X		X					
Thermo Scientific	HS350					X		X					
Thermo Scientific	HS2000					X		X					
Thermo Scientific	TriPlus (+GC PAL) (AS/HS/Duo)	X				X		X					
Thermo Scientific	TriPlus HS					X		X					
Thermo Scientific	TriPlus SPME					X		X					
Thermo Scientific	HiPer TOC											X	
Thermo Scientific	Surveyor (Surveyor Plus)		X			X							
Thermo Scientific	Accela High-Speed LC Autosampler (200 Pos.)		X										
Thermo Scientific	Accela Open Autosampler		X										
Thermo Scientific	Trace 1300 Series		X		X		X	X					
Toson	AS-8010		X										
Toson	TSK-8080		X	X									
Tracor	770 / 771 / 772												
TSP	8875		X										
TSP	9980		X										
Unicam	4247												
Unicam	4710												
Unicam	4700 (GC)												
Unicam	4700 (LC)												
Unicam	LC-XP			X									
Unicam	S4 / S8												
Varian	Prostar 400, Standard 96 Pos. Tray		X										
Varian	Prostar 400, King Size 48 Pos. Tray				X								
Varian	ProStar 410, Standard 84 Pos. Tray	X	X			X							
Varian	ProStar 410, Large Capacity 96 Pos. Tray	X	X										
Varian	ProStar 410, Large Volume 24 Pos. Tray					X							
Varian	ProStar 420, Standard 96 Pos. Tray	X	X										
Varian	ProStar 420, LSV 72 Pos. Tray			X									
Varian	ProStar 420, Super-LSV 32 Pos. Tray				X	X							
Varian	ProStar 420, Micro 160 Pos. Tray												
Varian	Prostar 430, 48 Pos. Tray		X										
Varian	8035												
Varian	9000												
Varian	8400 (100 Pos.)								X				
Varian	8410-Autoinjector (10 x 2ml, 6 x 5ml, 5 x 10ml)								X	X			
Varian	8100												
Varian	8200												
Varian	CP-910, 911, 912												
Varian	CP-940, 941												
Varian	LC 9100/LC9095/LC9090		X										
Varian	Archon											X	
Varian	Combi PAL (200 Pos. Tray), GC PAL (200 Pos. Tray)					X							
Varian	Combi PAL (96 Pos. Tray), GC PAL (96 Pos. Tray)					X							
Varian	Combi PAL SPME Mode (96 Pos. Tray)					X							
Varian	Combi PAL (32 Pos. Tray), GC PAL (32 Pos. Tray)					X		X					
Varian	Combi PAL SPME Mode (32 Pos. Tray)					X		X					
Varian	Genesis							X					
Varian	Marathon Basis, Standard 96 Pos. Tray		X										
Varian	Marathon Basis, Präp, King Size 48 Pos. Tray				X								

CHROMA GLOBE GbR
Autosampler-
Kompatibilitäts-
Übersicht



		Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8	Rölland ND8
		RR 08 0326 RR 08 0327	RR 08 0328	RR 08 0329 RR 08 0330	RR 08 0331 RR 08 0332	RR 08 0317 RR 08 0333	RR 08 0334	GW 08 0133 GW 08 0733 GW 08 0194 GW 08 0155	GW 08 0356	KG 08 0196 KG 08 0197 KG 08 0189 KG 08 0369 KG 08 0365	GW 10 0451 GW 10 0452 GW 10 0453	RR 11 0473 RR 11 0175 RR 11 0198 RR 11 0822 RR 11 0294	RR 11 0366	RR 11 0367		
		Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 1 Seite 8	Kapitel 2 Seite 10	Kapitel 2 Seite 10	Kapitel 3 Seite 13	Kapitel 4 Seite 17	Kapitel 5 Seite 19	Kapitel 5 Seite 19	Kapitel 5 Seite 19		
Varian	ViSta							X		X						
Varian	GP-9020 / GP-9025															
Varian	GP-9060															
Varian	GP-9010									X			X			
Varian	920-LO/940-LC							X								
Viscotek	Vortex™															
Viscotek	GPC Autosampler							X		X	X					
WVR	Hitachi Chromaster							X		X			X			
WVR (Merck®)/ Hitachi	L2200 (LaChrom Elite) L2200-U (LaChrom Ultra) (200 Pos. Tray)							X		X						
WVR (Merck®)/ Hitachi	L2200 (LaChrom Elite) (128 Pos. Tray)															
WVR (Merck®)/ Hitachi	L7200 (LaChrom), (80 Pos. Tray)/ L7260 (LaChrom) (120 Pos. Tray)							X		X						
WVR (Merck®)/ Hitachi	L7250 (LaChrom) (Rack Holder for combination Racks)				X			X		X						
WVR (Merck®)/ Hitachi	855-A40 (108 Pos. Tray)							X		X						
WVR (Merck®)/ Hitachi	L-9100							X		X						
WVR (Merck®)/ Hitachi	AS 2000 (50 Pos. Tray)							X		X			X			
WVR (Merck®)/ Hitachi	AS 4000 (150 Pos. Tray)							X		X			X			
WVR (Merck®)/ Hitachi	AS 4000 (198 Pos. Tray)				X											
WVR (Merck®)/ Hitachi	AS 6000				X			X		X						
Waters®	ACQUITY™ UPLC Systeme									X						
Waters®	Wisp 48 position															
Waters®	Wisp 96 position															
Waters®	717, 96 Position Carousel															
Waters®	717, 48 Position Carousel															
Waters®	Alliance®									X	X	X				
Waters®	Alliance® GPC 2000															
Waters®	Alliance HT Syst.									X	X	X				
Waters®	Alliance® 2790/2795									X	X	X				
Waters®	Acquity Sample Organizer									X						
Waters®	Acquity CapLC/ Waters/ Nano Acquity									X						
Waters®	Alliance 2690/2695									X (nicht für KG 09 0365)	X	X				

