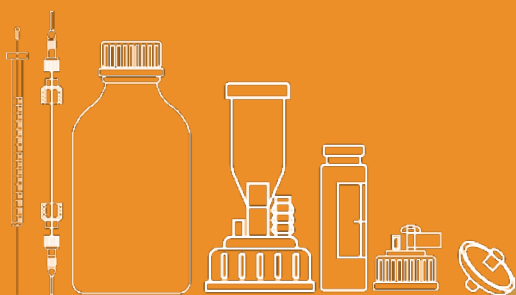




2025

*Humble Analysis
Materials Always Good*



*Optimized and safer solutions
from sample preparation to daily
analysis for the fascinating world
of chromatography*

OUR CULTURE

"Quality, Efficiency and Service" is our culture.

We are dedicated in the development of laboratory chromatographic consumables industry.



6,000+
Factory Area



100,000
Cleanroom Workshop



90+
Employees

About Us

Ningbo Excellent New Materials Co., Ltd. (brand HAMAG), founded in 2005, is headquartered in Ningbo, a major seaport city and hub of advanced manufacturing in China.

HAMAG began with the production of high-quality HPLC sample vials and has since expanded into the R&D, manufacturing, sales, and system integration of a wide range of chromatographic consumables. Our facilities cover more than 6,000 m², equipped with a Class 100,000 cleanroom, advanced automated production lines, and supported by a team of 90+ employees. All operations are certified to ISO 9001:2015, ensuring stringent quality and reliability.

Over nearly two decades of expertise and continuous innovation, HAMAG has built strong partnerships with research institutes and universities worldwide. Today, our products are trusted in over 80 countries, including across Europe and the United States, serving the most demanding scientific applications that require precision and cleanliness.





Laboratory



Globalization



Support

60+

Countries

1000+

Pharmaceutical Enterprises

200+

Government Users

600+

Third-party Labs

300+

Academic and Research Institutions

2000+

Distributors & Sub-dealers



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Selection Guide

Vial's Identification

Selection
Guide

Flagship Product
Series

Autosampler
Series

Headspace/
Purge Series

Storage
Series

Sample
Preparation

GC
Consumables

LC
Consumables

IC
Consumables

Others



9-425 Screw
2mL
12*32mm



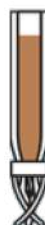
8-425 Screw
2mL
12*32mm



11mm crimp
2mL
12*32mm



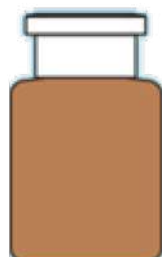
9mm Screw
1.2mL
12*32mm



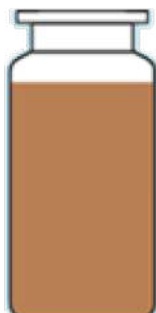
5mm Insert
Suit for 8mm vial



6mm Insert
Suit for 9mm/11mm vial



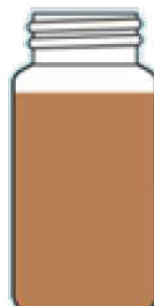
20mm Crimp Headspace
5mL
22.5*38mm



20mm Crimp Headspace
10mL
22.5*46mm



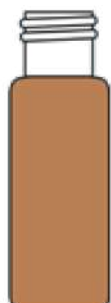
20mm Crimp Headspace
20mL
22.5*75.5mm



18mm Screw Headspace
10mL
22.5*46mm



18mm Screw Headspace
20mL
22.5*75.5mm



13-425 Screw
4mL
15*45mm



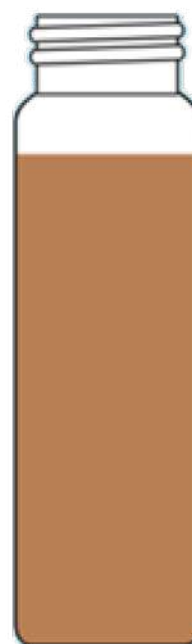
15-425 Screw
8mL
17*60mm



20-400 Screw
16mL
22.5*56mm



24-400 Screw EPA/VOC
20mL
27.5*57mm



24-400 Screw EPA/VOC
40mL
27.5*95mm

Vial Selection

Suitability for the autosampler

Please refer to the "Vial and Autosampler Compatibility" or consult with us for advise.

Vial compatibility

When selecting a vial, the compatibility between the analyte and the solvent needs to be considered.

Common sample characteristics and corresponding vial usage schemes are as follows:

- Light sensitive samples: Brown glass vial;
- Highly polar samples (which are easily absorbed by glass): deactivated vials;
- Small quantities sample: inserts or high-recovery vials;
- Ion analysis: polypropylene vials

Vial material selection

Linear expansion coefficient refers to the changes of glass length with every time the temperature changed by one degree. In short, The lower the COE is, the greater the temperature change that the glass can withstand. The USP(United States Pharmacopoeia) classified its type based on its water resistance.

- USP I, Class A 3.3 and 5.0 borosilicate glass
- USP I, Class B 7.0 borosilicate glass (Deactivated or not)
- USP Types II, III, and NP soda lime glass
- Polypropylene (PP)

Which vial is best for my sample volume?

The following factors should be taken into account, analysis type, analysis platform and sample volume.

<2mL	2 mL	>2 mL
Micro Vial (15 µL -800 µL)	Glass Vial (2 mL)	4 mL Glass Vial
High Recovery Glass Vial (30 µL -50 mL)	PP Vial (2 mL)	Headspace HS Vial (10 mL-20 mL)
Glass Insert (100 µl -400 µL)	Deactivated Glass Vial (2 mL)	40 mL Glass Vial (Purge)
Well Plate (150 µL -1.2 mL)		Storage Vial (3 mL-60 mL)
PP Insert (250 µL)		Sampling Bottle (100 mL-500 mL)
Centrifuge Tube (500 µL)		Storage Bottle (60 mL-500 mL)
Vial Fixed with Insert (250 µL -300 µL]		Tube (3.5 mL-60 mL)

Cap with Septum Selection

Septum Selection

- PTFE/Silicone Septa: It has the corrosion resistance of PTFE and the sealing performance of silicone. The high temperature resistance range is usually -40~-200°C. For normal-phase solvents with strong penetrability, such as n-hexane, methylene chloride, etc., it will cause swelling if the liquid level is too high.

- PE Septa: The most economical, suitable for storing non-corrosive samples, but it is not recommended for long-term storage

of liquids, it is recommended to store at room temperature.

Cap Selection

- Thread Neck: Typically suitable for LC and LC/MS applications, provides a low evaporation, reusable, no tool needed. Screw top vial caps are available in both caps designed for automated sampling and solid top caps designed for storage.

- Crimp Top: Best suited for GC and GC/MS applications and volatile compounds. It provides the best seal for long-term storage when properly crimped.

- Snap Top: The sealing performance is not as good as the above.

- Plug: It is sealed with a PE stopper, and the sealing and corrosion resistance are average, but it is economical and convenient. Only available with certain autosamplers

- Cap pre-bonded with septa: It has good chemical inertness. Even if it is in contact with concentrated acid, alkali or strong oxidant at high temperature, it will not be affected. At the same time, the elasticity of the silicone can ensure the sealing performance; It can also ensure that the septum will not be separated from the cover during transportation. Keeps the septum from poking into the vial, even with thick and blunt syringes.

Septum Selection

Septum and sample compatibility

Make sure the chosen septum is chemically compatible with the sample. The chemical compatibility of septa may vary with the influence of some factors like solvent concentration, molecular weight, temperature, etc.

During the manufacturing process, the Hamag septum undergoes a unique heat treatment and chemical treatment process to limit the loss of siloxane in the material, but when the septum undergoes puncture injection, heating, interaction of multiple solvents or a combination of three factors, it may still lead to leaching or loss of siloxane in the septum.

Septum chemical compatibility

	PTFE	PTFE/Silicone	PTFE/silicone/ PTFE	PTFE/ Rubber	Fluororubber	PTFE/Butyl Rubber
Acetonitrile	√	√	√	√		√
Hydrocarbons (Hexane, Heptane, Methane)	√		√	√	√	
Methanol	√	√	√	√		√
Benzene	√		√		√	
THF	√		√			
Toluene	√		√			
DMF	√	√	√			√
DMSO	√	√	√			√
Ether	√	√	√			
Chlorinated solvents (dichloromethane)	√		√		√	
Ethanol	√	√	√	√	√	√
Acetic acid	√	√	√			√
Acetone	√	√	√			
Phenol	√	√	√		√	√
Cyclohexane	√		√	√	√	
* For highly sensitive samples we recommend PTFE/Silicone/PTFE septa						

Cap and septum compatibility

	High Performance	PTFE	PTFE/ silicone	PTFE/ silicone/ PTFE	PTFE/ Rubber	Fluororubber	Butyl Rubber
Temperature Range	-40 °C ~260 °C	Up to 260 °C	-40 °C ~200 °C	-40 °C ~200 °C	-40 °C ~90 °C	-40 °C ~260 °C	-50 °C ~150 °C
Muti-sampling	No	No	Yes	Yes	No	no	No
Cost	Premium	Economical	Economical	Premium	Value Choice	Economical	Economical
Resistance to coring	Excellent	/	Excellent	Excellent	/	/	/
Reconmended for Storage	No	No	Yes	Yes	No	No	No
Best For	High Temperature Headspace Application	Superior chemical insertnesss short cycle and single injections	Most common HPLC and GC analysis, not as resistant to coring as P/S/P	Superior performance for ultra trace analyses, repeat injections, internal standards	Chlorosilanes, more economical option for single injections	Chlorinated solvents, higher temperature	Organic solvents acetic acids; No leak

Flagship Product Series



- ⊙ Made of borosilicate glass, polypropylene (PP); adhesive-free bonding
- ⊙ Polytetrafluoroethylene (PTFE) offers excellent chemical inertness, resistance to acids, bases, high temperatures, and adhesion, ensuring compatibility with diverse laboratory needs and enhancing analytical accuracy.
- ⊙ Sample vials available in clear or amber glass, providing superior integrity and consistency, specially designed for HPLC/GC-MS and high-demand analytical testing.
- ⊙ Pre-assembled cap and septa minimize contamination.
- ⊙ Typical applications: food, consumer goods, pharmaceuticals, environmental, medical, chemical, materials, and packaging industries.

9-425 2 mL Glass Vial	Part No.	3BF01025	3BF01005 <input checked="" type="checkbox"/>	3BF01037	3BF01029 <input checked="" type="checkbox"/>
	Desc.	2 mL Clear Screw Neck Vial 9 mm/Glass	2 mL Clear Screw Neck Vial 9 mm/Glass/Graduated & Writable	2 mL Amber Screw Neck Vial 9 mm/Glass	2 mL Amber Screw Neck Vial 9 mm/USP1 Glass/Graduated & Writable
	Image				
9 mm Open-top Screw PP Cap with Septum	Part No.	3BF01084	3BF01099	3BF01404	3BF01142
	Desc.	Blue Cap with White PTFE/Red Silicone Septum 9 mm	Blue Cap with Pre-slit White PTFE/Red Silicone Septum 9 mm	Blue Cap Bonded with Beige PTFE/White Silicone Septum 9 mm	Blue Cap Bonded with Pre-slit Beige PTFE/White Silicone Septum 9 mm
	Image				
Glass Insert for 9-425 Vial	Part No.	3BL00008	3BL00001		
	Desc.	300 µL Glass Insert /Flat Bottom/6×31 mm	250 µL Glass Insrt /Conical Bottom with PP Stand/6×29 mm		
	Image				

20 mm Crimp Headspace Glass Vial and Open-top Al Cap with Septum	Part No.	3BF07007	3BF07016	3BF07048	3BF07036
	Desc.	20 mL Clear Crimp Vial 22.5×75 mm Flat Bottom/Glass	20 mL Clear Crimp Vial 22.5×75 mm Flat Bottom/USP 1 Glass	Siliver Al Cap with Beige PTFE/White Silicone Septum 20×3 mm	Siliver Cap with White PTFE/White Silicone Septum 20×3 mm/Low-bleeding
	Image				
40 mL TOC Vial Suit Ultra-clean	Part No.	3BF08014			
	Desc.	40 mL TOC Glass Vial Suit with Anti-dust Cover			
	Image				
Autosampler Syringe	Part No.	3BL03124		3BL03130	
	Desc.	10 µL microsyringe; Fixed needle, 10 µL , stainless steel plunger, conical tip, 23s–26s, 42		10 µL microsyringe; Fixed needle, 10 µL , stainless steel plunger, conical tip, 23, 42	
	Image				
Electric Capper/Decapper	Part No.	3BF19086			
	Desc.	Electric Capper			
	Image				
Deuterium Lamp	Part No.	3BK03015	3BK03016	3BK03018	3BK03019
	Desc.	LC Deuterium Lamp G1314-60100/60101	LC Deuterium Lamp 2140-0813/0820	LC Deuterium Lamp 5190-0917	LC Deuterium Lamp 228-34016-02
	Image				
Capillary Column	Part No.	3BK09171		3BK09053	
	Desc.	Type A Capillary/Stainless steel. End A: Hand-tight fitting; End B: Long metal fitting		Type A Capillary/Stainless steel. End A: Hand-tight fitting; End B: Hand-tight fitting	
	Image				

2 mL Autosampler Vial Series



- ⦿ Made of borosilicate glass or polypropylene (PP); adhesive-free bonding
- ⦿ PTFE offers excellent chemical inertness, resistance to acids, bases, high temperatures, and adhesion, ensuring compatibility with diverse laboratory needs and enhancing analytical accuracy.
- ⦿ Sample vials available in clear or amber glass, providing superior integrity and consistency, specially designed for HPLC/GC-MS and high-demand analytical testing.
- ⦿ Pre-assembled cap and septa minimize contamination.
- ⦿ Typical applications:
food, consumer goods, pharmaceuticals, environmental, medical, chemical, materials, and packaging industries.

1 mL Shell Vial	Part No.	3BF02001	3BF02003	3BF02004	
	Desc.	1 mL Clear Glass Shell Vial 8.2×40 mm	1 mL Amber Glass Shell Vial 8.2×40 mm	PE Plug	
	Image				
8-425 2 mL Screw Neck Glass Vial	Part No.	3BF00043	3BF00005	3BF00010	3BF00012
	Desc.	2 mL Clear Vial 8 mm/Glass	2 mL Clear Vial Graduated & Writable 8 mm/Glass	2 mL Amber Vial 8 mm/USP 1 Glass	2 mL Amber Vial Graduated & Writable 8 mm/USP 1 Glass
	Image				
9-425 2 mL Screw Neck Glass Vial	Part No.	3BF01001	3BF01003 <input checked="" type="checkbox"/>	3BF01044	3BF01036
	Desc.	2 mL Clear Vial 9 mm/Glass	2 mL Clear Vial Graduated & Writable 9 mm/Glass	2 mL Amber Vial 9 mm/Glass	2 mL Amber Vial Graduated & Writable 9 mm/Glass
	Image				

9-425 2 mL Screw Neck Glass Vial	Part No.	3BF01019	3BF01021	3BF01041	3BF01027 <input checked="" type="checkbox"/>
	Desc.	2 mL Clear Vial 9 mm/USP 1 Glass	2 mL Clear Vial Graduated & Writable 9 mm/USP 1 Glass	2 mL Amber Vial Graduated & Writable 9 mm/USP 1 Glass	2 mL Amber Vial 9 mm/USP 1 Glass
	Image				
9-425 Screw Neck Vial Fixed with Insert 9-425 Screw Neck IC Vial	Part No.	3BF01050 <input checked="" type="checkbox"/>	3BF01051	3BF01079 <input checked="" type="checkbox"/>	3BF01053 <input checked="" type="checkbox"/>
	Desc.	Clear Glass Vial Fixed with 300 µL Insert/9 mm	Amber Glass Vial Fixed with 300 µL Insert/9 mm	Clear PP Vial Fixed with 300 µL Insert/9 mm	2 mL Clear PP IC Vial Graduated/9 mm
	Image				
9-425 Screw Neck High Recovery Glass vial One-step Filter Vial	Part No.	3BF01047 <input checked="" type="checkbox"/>	3BF01048	3BF14014	3BF14011
	Desc.	1.5 mL Clear Screw Neck Vial 11.6×32 mm /9 mm	1.5 mL Amber Screw Neck Vial 11.6×32 mm/9 mm	Filter Vial Nylon 0.22 µm Red Snap PP Cap with Red PTFE/White Silicone Septum	Filter Vial PES 0.22µm Black Snap Cap Red PTFE/White Silicone Septum
	Image				
11-425 2 mL Crimp/Snap Glass Vial	Part No.	3BF03005 <input checked="" type="checkbox"/>	3BF03009 <input checked="" type="checkbox"/>	3BF04003	3BF04005
	Desc.	2 mL Clear Crimp Top Vial Graduated & Writable 11 mm/Glass	2 mL Amber Crimp Top Vial Graduated & Writable 11 mm/Glass	2 mL Clear Snap Top Vial Graduated & Writable 11 mm/Glass	2 mL Amber Snap Top Vial Graduated & Writable 11 mm/USP 1 Glass
	Image				

Packing Info	White PP Box <input checked="" type="checkbox"/>	Blue PET Box <input checked="" type="checkbox"/>	Blue Acrylic Box	Pre-assembled Cap-on Kit	Cap-on Kit, Separate Caps
Image					

Cap with Septum for the Autosampler Vial



- Material & Construction: Made of borosilicate glass or polypropylene (PP) with adhesive-free bonding technology; surface modification of the septa and caps ensures secure assembly.
- Chemical Stability: PTFE septa offer excellent chemical inertness, resistant to acids, bases, high temperatures, and sticking, suitable for diverse laboratory applications and enhancing analytical accuracy.
- Septa Types: Available in solid, slit (single, cross, or Y-type) designs, compatible with various HPLC and GC systems.
- Pre-assembled Design: Caps and septa come pre-assembled to minimize contamination.
- Applications: Ideal for food, consumer goods, pharmaceuticals, environmental, medical, chemical, materials, and packaging laboratories.

8 mm Cap Septum	3BF00038	3BF00040	3BF00031
Desc.	Black Screw Open-top Cap 8 mm	Black Screw Solid-top Cap 8 mm	White PTFE/Red Silicone Septum 8.3×1.5 mm
Image			
8 mm Cap Septum	3BF00036	3BF00017	3BF00023
Desc.	Pre-slited White PTFE Red Silicone Septum/8.3×1.5 mm	Black Open-top Cap Red Silicone Septum 8 mm/White PTFE	Black Solid-top Cap Red Silicone Septum 8 mm/White PTFE
Image			
9 mm Cap Septum	3BF01103	3BF01107	3BF01111
Desc.	White PTFE/Red Silicone Septum 9 mm	Pre-slited White PTFE/Red Silicone Septum 9 mm	Cross Pre-slited White PTFE/Red Silicone Septum 9 mm
Image			
9 mm Cap Septum	3BF01109	3BF01112	3BF01106
Desc.	Blue PTFE/White Silicone Septum 9 mm	Pre-slited Blue PTFE/White Silicone Septum 9 mm	Pre-slited Y-shape White PTFE/Red Silicone Septum 9 mm
Image			

9 mm Cap Septum	3BF01084	3BF01080	3BF01099
Desc.	Blue Screw Open-top Cap White PTFE/Red Silicone Septum 9 mm	Blue Screw Open-top Cap Red PTFE/White Silicone Septum 9 mm	Blue Screw Open-top Cap Pre-slited Open-top White PTFE Red Silicone Septum 9 mm
Image			
9 mm Cap Septum	3BF01098	3BF01092	3BF01087
Desc.	Blue Screw Open-top Cap Blue PTFE/White Silicone Septum 9 mm	Blue Screw Open-top Cap with Pre-slited Open-top Blue PTFE White Silicone Septum 9 mm	Blue Screw Open-top Cap Cross Pre-slitedOpen-top White PTFE Red Silicone Septum 9 mm
Image			
9 mm Cap Septum	3BF01404	3BF01142	3BF01093
Desc.	Blue Screw Open-top Cap Bonded with Septum Natural PTFE/White Silicone Septum 9 mm	Blue Screw Open-top Cap Septum Bonded with Pre-slited Open-top Natural PTFE/White Silicone Septum/9 mm	Blue Screw Solid-top PP Cap White PTFE/Red Silicone Septum 9 mm
Image			
9 mm Cap Septum	3BF01097	3BF01082	3BF01115
Desc.	Black Screw Solid-top Cap Red PTFE/White Silicone Septum 9 mm	Blue Screw Open-top Cap 9 mm Red PTFE White Silicone/ Red PTFE Septum	Blue Screw Open-top PP Cap 9 mm
Image			
11 mm Cap Septum	3BF14017	3BF14020	3BF03012
Desc.	Natural PP Open-top Cap White PTFE/Red Silicone Septum 11 mm	Natural PP Open-top Cap with Pre-slited Open-top Red PTFE White Silicone Septum 11 mm	Crimp Al Open-top Cap White PTFE/Red Silicone Septum 11 mm
Image			
11 mm Cap Septum	3BF03013	3BF03019	3BF03017
Desc.	Crimp Al Open-top Cap with Clear PTFE/Red Butyl Rubber Septum/11 mm	Sliver Open-top Al Cap ϕ 11 mm	11 mm Clear PTFE/Red Butyl Rubber Septum
Image			

Insert for Autosampler Vial



- ⦿ Application: Primarily used in chromatographic analysis to ensure precise sample introduction, improving injection accuracy and reproducibility while minimizing sample loss.
- ⦿ Variety: Available in different materials (e.g., plastic, glass) and designs (e.g., graduated, with footed support) to meet specific analytical requirements.
- ⦿ Usage Notes: Proper positioning is essential to match the autosampler needle depth, ensuring complete sealing and preventing evaporation-related leakage or sample loss
- ⦿ Key Features: Polypropylene footed inserts provide shock absorption, enabling efficient sample recovery while protecting the injection needle from damage

Insert for 8-425	Part No.	3BL00003	3BL00004		3BL00005	
	Desc.	250 μ L Glass Insert Flat Bottom/5 \times 31 mm	200 μ L Glass Insert Conical Bottom/5 \times 31 mm		150 μ L Glass Insert Conical Bottom with PP Support Feet/5 \times 29 mm	
	Image					
Insert for 9-425/ 11 mm Crimp/ 11 mm Snap	Part No.	3BL00008 <input checked="" type="checkbox"/>	3BL00010	3BL00012	3BL00001 <input checked="" type="checkbox"/>	3BL00011
	Desc.	300 μ L Glass Insert Flat Bottom/6 \times 31 mm	250 μ L Glass Insert Conical Bottom/6 \times 31 mm	250 μ L PP Insert Round Bottom/6 \times 31 mm	250 μ L Glass Insert Conical Bottom with PP Support Feet/6 \times 29 mm	250 μ L PP Insert Conical Bottom with PP Support Feet/6 \times 29 mm
	Image					

Vial Rack/Holder

Excellent durability and strength; Central storage compartment for organizing small items or accessories;
Stackable vertically or horizontally to save bench or storage space

Vial Rack/ Holder	Part No.	3BF09001	3BF09002 <input checked="" type="checkbox"/>	3BF09003
	Desc.	Blue PP Rack 5 \times 10 Wells	Blue PP Rack with Central Storage Compartment 5 \times 10 Wells	Blue PP Vial Holder with Cover 10 \times 10 Wells
	Image			

Headspace/Purge Series

18 mm Screw Headspace Vial Series



- Easy Handling: No special tools required; simple manual rotation for quick opening and closing, ideal for frequent injections.
- Efficient Septa: Equipped with PTFE/silicone septa of various thicknesses. Thinner than crimp headspace septa, ensuring both airtight sealing and smooth needle penetration.
- Wide Compatibility: Compatible with most autosamplers and manual injection systems; the most commonly used cap design in laboratories.
- Reliable Sealing: Screw-thread design creates a tight seal between cap and vial, crucial for preserving volatile samples and preventing contamination during analysis.

18 mm Screw Neck Headspace Vial	Part No.	3BF20002	3BF20003	3BF20004	3BF20005
	Desc.	10 mL Clear Screw Neck Headspace Vial Round Bottom 22.5×46 mm	10 mL Amber Screw Neck Headspace Vial Round Bottom 22.5×46 mm	20 mL Clear Screw Neck Headspace Vial Round Bottom 22.5×75 mm	20 mL Amber Screw Neck Headspace Vial Round Bottom 22.5×75 mm
	Image				
18 mm Screw Neck Headspace Vial Cap Septum	Part No.	3BF20018 ✓	3BF20019		
	Desc.	Sliver Magnetic Headspace Cap Blue PTFE/White Silicone Septum	Sliver Magnetic Headspace Cap Red PTFE/White Silicone Septum		
	Image				
18 mm Screw Neck Headspace Vial Cap/Septum	Part No.	3BF20039	3BF20031 ✓	3BF20034	3BF20032
	Desc.	Sliver Magnetic Open-top Cap	Blue PTFE/White Silicone Septum/17.5×1.5 mm	Blue PTFE/White Silicone Septum/17.5×2.5 mm	Red PTFE/White Silicone Septum/17.5×1.5 mm
	Image				

20 mm Crimp Headspace Vial Series



- 🕒 Variety Options: Available in clear or amber glass, with flat- or round-bottom designs to meet diverse analytical needs.
- 🕒 Precision Manufacturing: Beveled neck finish, uniform wall thickness, and high-quality molding ensure excellent thermal shock resistance and reliable compatibility with autosamplers.
- 🕒 Septa Configuration: Supplied with PTFE/silicone septa in various thicknesses, offering both airtight sealing and easy needle penetration.
- 🕒 Cap Options: Choice of magnetic or non-magnetic aluminum caps. Magnetic caps allow automated handling by autosamplers, improving operational efficiency.
- 🕒 Secure Sealing: Crimping tools provide a firm, leak-tight seal between cap and vial, ideal for preserving volatile samples and preventing contamination or evaporation.

Headspace/ Purge Series	Crimp Top Headspace Vial	Part No.	3BF07001	3BF07002	3BF07005	
		Desc.	5 mL Clear Crimp 22.5×38 mm	5 mL Amber Crimp 22.5×38 mm	6 mL Clear Crimp 22×39.5 mm	
		Image				
	Crimp Top Headspace Vial	Part No.	3BF07015 <input checked="" type="checkbox"/>	3BF07013	3BF07107	3BF07014
		Desc.	10 mL Clear Crimp 22.5×46 mm Long Neck	10 mL Clear Crimp 22.5×46 mm Short Neck	10 mL Clear Crimp 22.5×46 mm Round Bottom	10 mL Amber Crimp 22.5×46 mm
		Image				
	Crimp Top Headspace Vial	Part No.	3BF07007 <input checked="" type="checkbox"/>	3BF07012	3BF07009	3BF07010
		Desc.	20 mL Clear Crimp 22.5×75 mm Flat Bottom	20 mL Clear Crimp Graduated & Writable/ 22.5×75 mm Flat Bottom	20 mL Amber Crimp 22.5×75 mm Flat Bottom	20 mL Clear Crimp 22.5×75 mm Round Bottom
		Image				

Crimp Top Glass Headspace Vial/20 mm Top	Part No.	3BF07017	3BF07018	3BF07019	3BF07021
	Desc.	50 mL Clear Crimp Vial/ Graduated & Writable	50 mL Clear Crimp Vial	100 mL Clear Crimp Vial	100 mL Amber Crimp Vial
	Image				
20 mm Al Open-top Cap and Septum	Part No.	3BF07048 <input checked="" type="checkbox"/>	3BF07056	3BF07060	3BF07034 <input checked="" type="checkbox"/>
	Desc.	Sliver Open-top Al Cap Natural PTFE/White Silicone Septum/20×3 mm	Sliver Open-top Al Cap White PTFE/Blue Silicone Septum/20×3 mm	Sliver Open-top Al Cap White PTFE/Natural Silicone Septum/20×3 mm	Sliver Open-top Al Cap White PTFE/White Silicone Septum/20×3 mm
	Image				
20 mm Al Open-top Cap and Septum	Part No.	3BF07051	3BF07042	3BF07037	3BF07045
	Desc.	Sliver Press-relief Open- top Al Cap Beige PTFE/ White Silicone Septum	Blue Magnetic Open-top Al Cap Clear PTFE/Light Blue Silicone Septum	Blue Magnetic Open- top Al Cap Natural PTFE/ White Silicone Septum	Red Magnetic Open-top Al Cap Natural PTFE/ Light Blue Silicone Septum
	Image				
20 mm Septum/ Plug	Part No.	3BF07027	3BF07030	3BF07031	
	Desc.	Gray Butyl Stopper	Butyl Stopper/PTFE Septum with Groove	Molded Butyl Rubber/ PTFE Septum	
	Image				
20 mm Crimp Cap Septum	Part No.	3BF07036 <input checked="" type="checkbox"/>	3BF07055	3BF07081	3BF07088
	Desc.	Sliver Open-top Al Cap White PTFE/Silicone Septum 20×3 mm Low Bleeding	Sliver Open-top Al Cap Clear PTFE/ Light Blue Silicone Septum 20×3 mm Tem. Resistance up to 250 °C	Sliver Open-top Al Cap 20 mm	Blue Flip off Cap 20 mm

40 mL Purge Vial Series



TOC (Total Organic Carbon)

TOC is a key parameter for water quality assessment in environmental monitoring, pharmaceuticals, semiconductors, and the food & beverage industries. By measuring the total amount of organic carbon in water samples, TOC directly reflects the degree of organic contamination and serves as a critical indicator of water purity.

Typical Applications:

- ☉ Drinking Water: Evaluates the concentration of organic pollutants as a representative indicator of water quality.
- ☉ Food Safety: Detects organic contaminants in process water to ensure product safety and quality control.
- ☉ Environmental Protection: Monitors organic pollution in natural waters to assess the impact of industrial discharge, agricultural runoff, and municipal wastewater.
- ☉ Pharmaceuticals: Verifies cleaning validation to prevent cross-contamination; supports wastewater monitoring and process control to ensure compliant discharge.

Wide Application:

Ideal for sample pretreatment, purge-and-trap, and headspace analysis in environmental monitoring, food safety, chemical analysis, and pharmaceuticals.

High-quality Construction:

40 mL glass vial with screw-thread design; PTFE/silicone cap and septa for reliable sealing and chemical resistance.

Ultra-clean Performance:

Manufactured under ISO 9001 in Class 100,000 cleanrooms; multi-step low-TOC rinsing ensures TOC < 10 ppb.

Reduced Rise:

Minimizes organic residue and sample contamination, ensuring accurate analysis.

Broad Compatibility:

Fits most TOC analyzers, including GE, Sievers, Tekmar, Shimadzu, Agilent, and Thermo Fisher.



40 mL Purge Vial Kit	Part No.	3BF08014	
	Desc.	50 pcs/pk, 10 pks/box TOC, <10 ppb	
	Image		

Storage Series

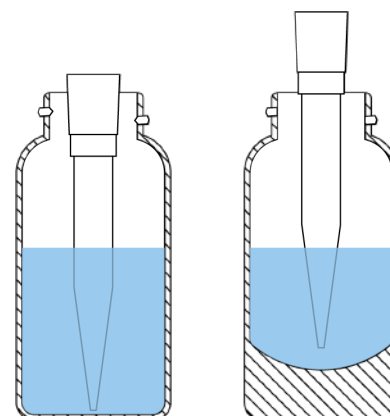
Micro Storage

- Inner Vial Structure: Consist of an outer vial and an inner liner vial sharing the same neck and opening; conical bottom design facilitates sample recovery.
- Material: Outer vial available in clear or amber glass; inner vial made of amber glass, suitable for light-sensitive storage.
- Sealing design: Screw-neck design with polypropylene (PP) cap and septa; inner neck wall features an annular groove for improved sealing; selected models enhance anti-evaporation performance.
- Application advantages: Minimize sample residue and loss; ideal for aliquoting and storage of high-value liquid/powder samples such as biopharmaceuticals and reference standards.
- Compatibility: Directly adaptable to existing filling lines, enabling flexible packaging for different dosages.
- Typical applications: Environmental testing, food analysis, biotechnology, pharmaceutical, and related fields.



Key Operation

Operation	Key Structural Interaction Points	Risks of Improper Operation
Opening	Separation of the septum from the sealing groove requires vertical force	Tilting the cap during opening may tear the septum
Filling	Liquid forms laminar flow along the inner vial sidewall	Direct impact on the vial bottom can cause sample foaming or crystallization
Sealing	The septum must be compressed to at least 80% of the sealing groove depth	The septum must be compressed to at least 80% of the sealing groove depth



Storage Series

Screw PP Cap with Rubber Septum	With sealing groove
Wide-open Top	Injection area
Integrated Inner Liner	Fixed
Clear Area	To see the liquid level

13-425 Screw Neck Micro Storage Glass Bottle	Part No.	3BF12001 <input checked="" type="checkbox"/>	3BF12002	3BF05017 <input checked="" type="checkbox"/>	3BF05011
	Desc.	0.6 mL Screw Amber/15×35 mm	0.5 mL Screw Amber/Empty Bottom 16×52 mm	Black Screw Solid-top Cap with Natural PTFE/Natural Silicone Septum	Red Screw Solid-top Cap Natural PTFE/Natural Silicone Septum
	Image				
13 mm Crimp Top Micro Storage Glass Bottle	Part No.	3BF07025	3BF07026	3BF07032	3BF07092
	Desc.	0.5 mL Amber/13 mm	0.3 mL Amber/13 mm	Gray Butyl Rubber Stopper/13 mm	Blue Flip off Al Cap/13 mm
	Image				

Screw Neck Sample Vial




- Construction: Consist of glass vial body, PP cap, and PTFE/silicone septa.
- Material & Color: Available in clear or amber glass; amber is used for light-sensitive samples.
- Applications: Suitable for chromatographic analysis (GC/HPLC), sample storage, and storage of pharmaceutical intermediates.
- Sealing Design: Screw-thread ensures consistent sealing; septa thickness options (e.g., 1.5 mm or 3 mm) accommodate multiple injections.
- Chemical Properties: PP caps offer excellent chemical resistance for diverse sample types.
- Automation Compatibility: Precisely machined vial diameter supports GC/HPLC autosamplers and robotic handling.

Fields	Applications
Analytical Testing	Chromatography analysis, DNA testing, genome sequencing
Pharmaceutical Manufacturing	Injections, oral solutions, animal health
Environmental Testing	Water quality testing, air quality analysis
Chemical Research	Reaction medium storage, property studies
Food & Beverage Testing	Food safety analysis, beverage quality control
Cosmetic Testing	Ingredient analysis, safety evaluation
Biotechnology	Cell culture, protein research

13 mm Crimp Top Glass Vial	Part No.	3BF07024	3BF07023	3BF07032	3BF07092
	Desc.	3 mL Clear Vial/13 mm	3 mL Amber Vial/13 mm	Gray Butyl Stopper 13 mm	Blue Flip-off Cap 13 mm
	Image				
3 mL Screw Neck Vial, Cap with Septum	Part NO.	3BF05010	3BF05017	3BF06022	
	Desc.	3 mL Amber Vial 15×35 mm	Black Screw Solid-top Cap Natural PTFE/ Natural Silicone	3 mL Clear/17.6×35 mm	
	Image				
3 mL Screw Neck Vial, Cap with Septum	Part No.	3BF06049	3BF06048		
	Desc.	White Screw Cap Gray PTFE Septum 1.5 mm	Black Screw Cap Gray PTFE Septum 1.5 mm		
	Image				

13-425 Screw Neck Glass Bottle	Part No.	3BF05001 	3BF05002	3BF05005 	3BF05006
	Desc.	4 mL Clear Vial/ 14.7×45 mm	4 mL Clear Vial/ Graduated & Writable/14.7×45 mm	4 mL Amber Vial/ 14.7×45 mm	4 mL Amber Vial/ Graduated & Writable/14.7×45 mm
	Image				
13-425 Cap Septum	Part No.	3BF05017 		3BF05013	
	Desc.	Black Screw Solid-top PP Cap Natural PTFE/ Natural Silicone		Black Screw Open-top PP Cap Natural PTFE/ Natural Silicone	
	Image				
15-425 Screw Neck Glass Vial	Part No.	3BF06010	3BF06012	3BF06013	3BF06014
	Desc.	8 mL Clear Vial/ 17×60 mm	8 mL Amber Vial/ 17×60 mm	12 mL Clear Vial/ 18.4×66 mm	12 mL Amber Vial/ 18.4×66 mm
	Image				
15-425 Cap Septum	Part No.	3BF06036	3BF06044	3BF06041	3BF06038
	Desc.	Black Solid-top PP Cap PTFE/Silicone Septum	Black Solid-top PP Cap with PE Septum	Black Open-top PP Cap PTFE/Silicone Septum	Black Solid-top PP Cap PTFE/PE Septum
	Image				
20-400 Screw Neck Glass Vial	Part No.	3BF06004	3BF06005	3BF06006	
	Desc.	16 mL Clear/22.5×56 mm	16 mL Amber/22.5×56 mm	20 mL Clear/22.5×75 mm	
	Image				

20-400 Screw Neck Glass Vial	Part No.	3BF06008	3BF06007	3BF06009	
	Desc.	20 mL Amber/22.5×75 mm	20 mL Clear/22.5×86 mm	20 mL Amber/22.5×86 mm	
	Image				
Cap Septum	Part No.	3BF06029	3BF06031	3BF06032	3BF06033
	Desc.	Black Solid-top Cap PTFE/Silicone Septum	White Solid-top Cap PTFE/Silicone Septum	Black Solid-top Cap PE Septum	Black Open-top Screw Cap PTFE/Silicone Septum
	Image				
24-400 Screw Neck Glass Vial	Part No.	3BF08003	3BF08005	3BF08013	3BF08015
	Desc.	20 mL Clear 27.5×57 mm	20 mL Amber 27.5×57 mm	40 mL Clear 27.5×95 mm	40 mL Amber 27.5×95 mm
	Image				
24-400 Screw Neck Glass Vial	Part No.	3BF08022		3BF08025	
	Desc.	60 mL Clear/30×125 mm		60 mL Amber/30×125 mm	
	Image				
24-400 Cap Septum	Part No.	3BF08037	3BF08043	3BF08036	3BF08032
	Desc.	Black Solid-top Cap PTFE/Silicone Septum	Black Solid-top Cap PE Septum	White Open-top Cap PTFE/Silicone Septum 22.5×3 mm	White Open-top Cap Pre-bonded with PTFE/Silicone Septum 22.5×1.5 mm
	Image				

24-400 Cap Septum	Part No.	3BF08042	3BF08052	3BF08048	3BF08060
	Desc.	Black Solid-top Cap Pre-bonded with Al Foil Septum	PTFE/Silicone Septum 22×3 mm	PTFE/Silicone Septum 22×2 mm	Bakelite Cap with PE Sealing Septum
	Image				
QR-coded Glass Bottle Kit	Part No.	3AC00765		3AC00766	
	Desc.	60 mL Amber/Wide-mouth		120 mL Amber/Wide-mouth	
		White PP Screw Neck Solid-top Cap with PTFE/Silicone Septum; 264 pcs/carton		White PP Screw Neck Solid-top Cap with PTFE/Silicone Septum; 132 pcs/carton	
	Image				
QR-coded Glass Bottle Kit	Part No.	3AC00767	3AC00768	3AC00769	
	Desc.	250 mL Amber/Wide-mouth	500 mL Amber/ Wide-mouth	580 mL Amber/Narrow-mouth	
		White PP Screw Neck Solid-top Cap with PTFE/Silicone Septum; 64 pcs/carton	White PP Screw Neck Solid-top Cap with PTFE/Silicone Septum; 36 pcs/carton	Blue PP Screw Neck Solid-top Cap with PTFE/Silicone Septum/Al Foil/with Loc; 40 pcs/carton	
	Image				

General Storage



The bottle consists of an outer shell and an inner vial sharing the same neck and opening, with a conical bottom design. Available in amber and clear glass to suit different drug filling requirements. The inner vial is made of amber glass for light-sensitive sample storage. Screw-top design with polypropylene cap and septa provides secure sealing.

Design features:

Inner neck wall with an annular groove to enhance sealing performance. Some models use screw-thread finish combined with PP caps to reduce evaporation.

Applications:

Laboratory use: ideal for dispensing and storing high-value liquids or powders (e.g., biopharmaceuticals, reference standards), minimizing sample residue and loss.

Compatible with existing filling lines, enabling flexible packaging for different dosages.

Multi-industry use: suitable for environmental testing, food analysis, biotechnology, and related fields.

Storage Series	Wide-mouth Glass Bottle	Part No.	3AC00013	3AC00010	3AC00009	3AC00007	3AC00002	3AC00001
		Desc.	37 mL Clear	30 mL Clear	50 mL Clear	60 mL Clear	100 mL Clear	120 mL Clear
		Image						
	Wide-mouth Glass Bottle	Part No.	3AC00011	3AC00008	3AC00004	3AC00003	3AC00005	3AC00006
		Desc.	40 mL Amber	60 mL Amber	100 mL Amber	120 mL Amber	250 mL Amber	500 mL Amber
		Image						
	Straight-sided/Narrow-mouth Glass Bottle	Part No.	3BF18002	3BF18001	3AC00037	3AC00019		
		Desc.	250 mL Amber Straight-sided Bottle	250 mL Clear Straight-sided Bottle	500 mL Amber Narrow-mouth Bottle	1000 mL Amber Narrow-mouth Bottle		
		Image						

Sample Preparation

Syringe Filter

- 13 mm: Suitable for sample volume ≤ 10 mL
- 25 mm: Suitable for sample volume 10–50 mL
- 0.22 μm : For columns with particle size < 3 μm , sterilization, or high-precision experiments (e.g., HPLC)
- 0.45 μm : For columns with particle size > 3 μm , routine filtration with balanced flow rate and efficiency



Part No.	Desc.	Packing Info.
3BG00224	Syringe Filter Nylon66 13 mm \times 0.22 μm	100 pcs/can
3BG00225	Syringe Filter Nylon66 13 mm \times 0.45 μm	100 pcs/can
3BG00226	Syringe Filter Nylon66 25 mm \times 0.22 μm	100 pcs/can
3BG00227	Syringe Filter Nylon66 25 mm \times 0.45 μm	100 pcs/can
3BG00065	Syringe Filter Nylon6 13 mm \times 0.22 μm	100 pcs/can
3BG00066	Syringe Filter Nylon6 13 mm \times 0.45 μm	100 pcs/can
3BG00067	Syringe Filter Nylon6 25 mm \times 0.22 μm	100 pcs/can
3BG00068	Syringe Filter Nylon6 25 mm \times 0.45 μm	100 pcs/can
3BG00232	Syringe Filter Hydrophilic PTFE 13 mm \times 0.22 μm	100 pcs/can
3BG00233	Syringe Filter Hydrophilic PTFE 13 mm \times 0.45 μm	100 pcs/can
3BG00234	Syringe Filter Hydrophilic PTFE 25 mm \times 0.22 μm	100 pcs/can
3BG00235	Syringe Filter Hydrophilic PTFE 25 mm \times 0.45 μm	100 pcs/can
3BG00216	Syringe Filter Hydrophilic PVDF 13 mm \times 0.22 μm	100 pcs/can
3BG00217	Syringe Filter Hydrophilic PVDF 13 mm \times 0.45 μm	100 pcs/can
3BG00218	Syringe Filter Hydrophilic PVDF 25 mm \times 0.22 μm	100 pcs/can
3BG00219	Syringe Filter Hydrophilic PVDF 25 mm \times 0.45 μm	100 pcs/can
3BG00228	Syringe Filter Hydrophobic PTFE 13 mm \times 0.22 μm	100 pcs/can
3BG00229	Syringe Filter Hydrophobic PTFE 13 mm \times 0.45 μm	100 pcs/can
3BG00230	Syringe Filter Hydrophobic PTFE 25 mm \times 0.22 μm	100 pcs/can
3BG00231	Syringe Filter Hydrophobic PTFE 25 mm \times 0.45 μm	100 pcs/can
3BG00220	Syringe Filter Hydrophobic PVDF 13 mm \times 0.22 μm	100 pcs/can
3BG00221	Syringe Filter Hydrophobic PVDF 13 mm \times 0.45 μm	100 pcs/can
3BG00222	Syringe Filter Hydrophobic PVDF 25 mm \times 0.22 μm	100 pcs/can
3BG00223	Syringe Filter Hydrophobic PVDF 25 mm \times 0.45 μm	100 pcs/can
3BG00240	Syringe Filter MCE 13 mm \times 0.22 μm	100 pcs/can
3BG00241	Syringe Filter MCE 13 mm \times 0.45 μm	100 pcs/can
3BG00242	Syringe Filter MCE 25 mm \times 0.22 μm	100 pcs/can
3BG00243	Syringe Filter MCE 25 mm \times 0.45 μm	100 pcs/can
3BG00236	Syringe Filter PES 13 mm \times 0.22 μm	100 pcs/can
3BG00237	Syringe Filter PES 13 mm \times 0.45 μm	100 pcs/can
3BG00238	Syringe Filter PES 25 mm \times 0.22 μm	100 pcs/can
3BG00239	Syringe Filter PES 25 mm \times 0.45 μm	100 pcs/can
3BG00029	Syringe Filter CA 13 mm \times 0.22 μm	100 pcs/can
3BG00030	Syringe Filter CA 13 mm \times 0.45 μm	100 pcs/can
3BG00031	Syringe Filter CA 25 mm \times 0.22 μm	100 pcs/can
3BG00032	Syringe Filter CA 25 mm \times 0.45 μm	100 pcs/can
3BG00033	Syringe Filter PP 13 mm \times 0.22 μm	100 pcs/can
3BG00034	Syringe Filter PP 13 mm \times 0.45 μm	100 pcs/can
3BG00035	Syringe Filter PP 25 mm \times 0.22 μm	100 pcs/can
3BG00036	Syringe Filter PP 25 mm \times 0.45 μm	100 pcs/can
3BG00150	Syringe Filter RC 25 mm \times 0.45 μm	100 pcs/can

Syringe Filter

○ A syringe filter is a commonly used laboratory filtration device, primarily applied in sample pretreatment, clarification of liquids/gases, and microbial or particulate removal. Its core function is to retain impurities via the membrane, ensuring the accuracy of subsequent analyses.

○ Individually packaged and sterilized by gamma irradiation.

○ Designed to avoid introducing inorganic contaminants; suitable for sample pre-filtration, solvent sterilization, and gas filtration.

○ Applicable in biopharmaceutical, environmental monitoring, and other laboratory fields.



Part No.	Desc.	Packing Info
3BG00037	Nylon 66, 13 mmx0.22, Sterile	100 pcs/box
3BG00038	Nylon 66, 13 mmx0.45, Sterile	100 pcs/box
3BG00039	Nylon 66, 25 mmx0.22, Sterile	100 pcs/box
3BG00040	Nylon 66, 25 mmx0.45, Sterile	100 pcs/box
3BG00041	Hydrophobic PTFE/13 mmx0.22 μm/Sterile	100 pcs/box
3BG00042	Hydrophobic PTFE/13 mmx0.45 μm/Sterile	100 pcs/box
3BG00043	Hydrophobic PTFE/25 mmx0.22 μm/Sterile	100 pcs/box
3BG00044	Hydrophobic PTFE/25 mmx0.45 μm/Sterile	100 pcs/box
3BG00045	Hydrophilic PTFE/13 mmx0.22 μm/Sterile	100 pcs/box
3BG00046	Hydrophilic PTFE/13 mmx0.45 μm/Sterile	100 pcs/box
3BG00047	Hydrophilic PTFE/25 mmx0.22 μm/Sterile	100 pcs/box
3BG00048	Hydrophilic PTFE/25 mmx0.45 μm/Sterile	100 pcs/box
3BG00049	Hydrophobic PVDF/13 mmx0.22 μm/Sterile	100 pcs/box
3BG00050	Hydrophobic PVDF/13 mmx0.45 μm/Sterile	100 pcs/box
3BG00051	Hydrophobic PVDF/25 mmx0.22 μm/Sterile	100 pcs/box
3BG00052	Hydrophobic PVDF/25 mmx0.45 μm/Sterile	100 pcs/box
3BG00053	Hydrophilic PVDF/13 mmx0.22 μm/Sterile	100 pcs/box
3BG00054	Hydrophilic PVDF/13 mmx0.45 μm/Sterile	100 pcs/box
3BG00055	Hydrophilic PVDF/25 mmx0.22 μm/Sterile	50 pcs/box
3BG00056	Hydrophilic PVDF/25 mmx0.45 μm/Sterile	50 pcs/box
3BG00057	PES/13 mmx0.22 μm/Sterile	100 pcs/box
3BG00058	PES/13 mmx0.45 μm/Sterile	100 pcs/box
3BG00059	PES/25 mmx0.22 μm/Sterile	50 pcs/box
3BG00060	PES/25 mmx0.45 μm/Sterile	50 pcs/box
3BG00061	MCE/13 mmx0.22 μm/Sterile	100 pcs/box
3BG00062	MCE/13 mmx0.45 μm/Sterile	100 pcs/box
3BG00063	MCE/25 mmx0.22 μm/Sterile	50 pcs/box
3BG00064	MCE/25 mmx0.45 μm/Sterile	50 pcs/box

Filter Membrane



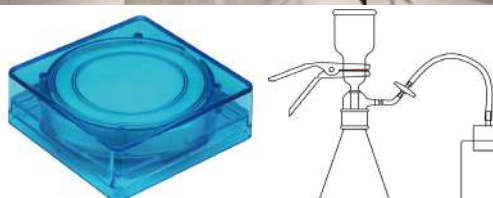
Filtration membranes are thin materials with selective separation capabilities, designed to isolate, concentrate, or purify specific components (liquids, gases, particles, or molecules) from mixtures through physical or chemical mechanisms. Their core functionality relies on differences in pore size, surface charge, or chemical affinity to achieve efficient separation.

Key Properties:

- ⦿ Separation Precision: Determined by membrane pore size and surface characteristics, directly affecting retention rate.
- ⦿ Flux: The volume of material passing through a unit area per unit time; influenced by membrane porosity and thickness.
- ⦿ Fouling Resistance: Ability to resist clogging, which impacts membrane lifespan (e.g., hydrophobic PVDF membranes reduce fouling).
- ⦿ Chemical Stability: Resistance to acids, bases, oxidizing agents, and other chemical environments (e.g., ceramic membranes stable within pH 0–14).

Types of Membranes:

- ⦿ Organic Membranes: Examples include polyamide (PA), polysulfone (PS), and polyvinylidene fluoride (PVDF); they are flexible, cost-effective, and widely used in water treatment applications.
- ⦿ Inorganic Membranes: Examples include ceramic, metal, and glass membranes; they offer high-temperature tolerance and strong chemical resistance, suitable for harsh industrial environments.



Part No.	Desc.	Packing Info
3BG01005	Filter Membrane NY Φ47 mmx0.45 μm	100 pcs/bag
3BG01007	Filter Membrane NY Φ47 mmx0.22 μm	100 pcs/bag
3BG01009	Filter Membrane PES Φ47 mmx0.45 μm	100 pcs/bag
3BG01011	Filter Membrane PES Φ47 mmx0.22 μm	100 pcs/bag
3BG01013	Filter Membrane MCE Φ47 mmx0.45 μm	100 pcs/bag
3BG01014	Filter Membrane MCE Φ47 mmx0.22 μm	100 pcs/bag
3BG01015	Filter Membrane Hydrophobic PVDF Φ47 mmx0.45 μm	100 pcs/bag
3BG01016	Filter Membrane Hydrophobic PVDF Φ47 mmx0.22 μm	100 pcs/bag
3BG01017	Filter Membrane Hydrophilic PVDF Φ47 mmx0.45 μm	100 pcs/bag
3BG01018	Filter Membrane Hydrophilic PVDF Φ47 mmx0.22 μm	100 pcs/bag
3BG01001	Filter Membrane Hydrophobic PTFE Φ47 mmx0.45 μm	100 pcs/bag
3BG01002	Filter Membrane Hydrophobic PTFE Φ47 mmx0.22 μm	100 pcs/bag
3BG01003	Filter Membrane Hydrophilic PTFE Φ47 mmx0.45 μm	100 pcs/bag
3BG01004	Filter Membrane Hydrophilic PTFE Φ47 mmx0.22 μm	100 pcs/bag
3BG01025	Filter Membrane, Nylon, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01026	Filter Membrane, Nylon, Sterile, Φ47 mmx0.22 μm	200 pcs/box
3BG01027	Filter Membrane, PES, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01028	Filter Membrane, PES, Sterile, Φ47 mmx0.22 μm	200 pcs/box
3BG01029	Filter Membrane, MCE, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01030	Filter Membrane, MCE, Sterile, Φ47 mmx0.22 μm	200 pcs/box
3BG01031	Filter Membrane, Hydrophobic PVDF, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01032	Filter Membrane, Hydrophobic PVDF, Sterile, Φ47 mmx0.22 μm	200 pcs/box
3BG01033	Filter Membrane, Hydrophilic HP PVDF, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01034	Filter Membrane, Hydrophilic HP PVDF, Sterile, Φ47 mmx0.22 μm	200 pcs/box
3BG01035	Filter Membrane, Hydrophobic PTFE, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01036	Filter Membrane, Hydrophobic PTFE, Sterile, Φ47 mmx0.22 μm	200 pcs/box
3BG01037	Filter Membrane, Hydrophilic HP PTFE, Sterile, Φ47 mmx0.45 μm	200 pcs/box
3BG01038	Filter Membrane, Hydrophilic HP PTFE, Sterile, Φ47 mmx0.22 μm	200 pcs/box

Disposable Syringe

- Biocompatibility: Compliant with ISO 10993 standards; free of plasticizers such as phthalates.
- Chemical Resistance: Resistant to common disinfectants, including ethanol and oxidizing agents.
- Transparency: Syringe barrel transmittance >90%, allowing clear observation of the liquid.
- Sterilization Methods: Ethylene Oxide (EO) Sterilization: Suitable for heat-sensitive materials; residual EO <0.1 ppm.
Gamma Irradiation: High penetration ability, though may cause yellowing in some plastics (e.g., PC).
- Infection Control: Prevents cross-contamination from reuse (e.g., reduces risk of HIV or hepatitis virus transmission by 99.6%).
- Accurate Dosing: Graduated scale error <±5% (ISO 7886-1 compliant); specialized syringes like insulin syringes achieve ±2% precision.
- Cost Efficiency: Unit price \$0.1–2; large-scale production reduces medical consumable costs.
- Convenience: Pre-filled syringes (e.g., for vaccines or biologics) ready for direct use, reducing preparation steps.



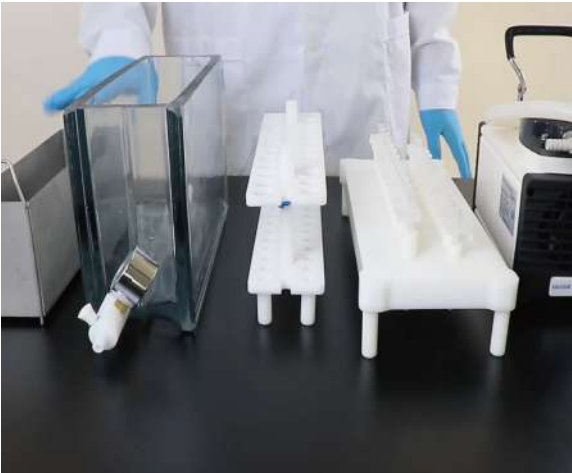
With Rubber Plunger

Part No.	Volume	Desc.	Packing Info	
3AJ04001	1mL	Disposable Syringe /Without Needle/Rubber Plunger Sterile	100 pcs/pk	60 pks/ctn
3AJ04002	2mL	Disposable Syringe /Without Needle/Rubber Plunger Sterile	100 pcs/pk	36 pks/ctn
3AJ04003	3 mL	Disposable Syringe /Without Needle/Rubber Plunger Sterile	100 pcs/pk	36 pks/ctn
3AJ04004	5mL	Disposable Syringe /Without Needle/Rubber Plunger Sterile	100 pcs/pk	25 pks/ctn
3AJ04005	10 mL	Disposable Syringe /Without Needle/Rubber Plunger Sterile	100 pcs/pk	18 pks/ctn
3AJ04006	20 mL	Disposable Syringe /Without Needle/Rubber Plunger Sterile	100 pcs/pk	10 pks/ctn
3AJ04007	1ml	Disposable Syringe /Without Needle/Rubber Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04008	2 mL	Disposable Syringe /Without Needle/Rubber Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04009	3mL	Disposable Syringe /Without Needle/Rubber Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04010	5mL	Disposable Syringe /Without Needle/Rubber Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04011	10 mL	Disposable Syringe /Without Needle/Rubber Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04012	20 mL	Disposable Syringe /Without Needle/Rubber Plunger /in Bulk	100 pcs/pk	50 pks/ctn

With Rubber-free Plunger

Part No.	Volume	Desc.	Packing Info	
3AJ04013	1mL	Disposable Syringe /Without Needle/Rubber-free Plunger Sterile	100 pcs/pk	60 pks/ctn
3AJ04014	2mL	Disposable Syringe /Without Needle/Rubber-free Plunger Sterile	100 pcs/pk	36 pks/ctn
3AJ04015	3 mL	Disposable Syringe /Without Needle/Rubber-free Plunger Sterile	100 pcs/pk	36 pks/ctn
3AJ04016	5mL	Disposable Syringe /Without Needle/Rubber-free Plunger Sterile	100 pcs/pk	25 pks/ctn
3AJ04017	10 mL	Disposable Syringe /Without Needle/Rubber-free Plunger Sterile	100 pcs/pk	18 pks/ctn
3AJ04018	20 mL	Disposable Syringe /Without Needle/Rubber-free Plunger Sterile	100 pcs/pk	10 pks/ctn
3AJ04019	1ml	Disposable Syringe /Without Needle/Rubber-free Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04020	2 mL	Disposable Syringe /Without Needle/Rubber-free Plunger /in Bulk	100 pcs/pk	50 pks/ctn
3AJ04021	3mL	Disposable Syringe /Without Needle/Rubber-free Plunger /In Bulk	100 pcs/pk	50 pks/ctn
3AJ04022	5mL	Disposable Syringe /Without Needle/Rubber-free Plunger /in Bulk	100 pcs/pk	50 pks/ctn
3AJ04023	10 mL	Disposable Syringe /Without Needle/Rubber-free Plunger /in Bulk	100 pcs/pk	50 pks/ctn
3AJ04024	20 mL	Disposable Syringe /Without Needle/Rubber-free Plunger /In Bulk	100 pcs/pk	50 pks/ctn

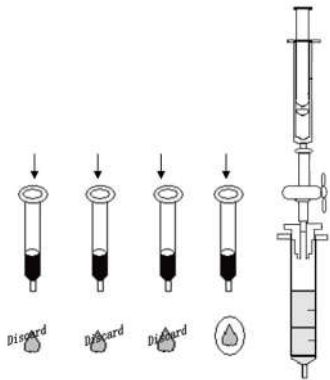
SPE



A Solid-Phase Extraction (SPE) system is an instrument used for sample pretreatment. It selectively retains target compounds on an adsorbent while removing interfering substances, enabling sample purification and enrichment. SPE is widely applied in environmental monitoring, food safety, pharmaceutical analysis, and is especially suitable for trace organic compound separation and detection.

Applications:Environmental monitoring: Detection of pollutants such as polycyclic aromatic hydrocarbons (PAHs) and pesticide residues in water and soil. Food and pharmaceutical testing: Enrichment of active drug components, food additives, or illegal substances.Biomedical research: Separation of metabolites or toxins from blood or urine.

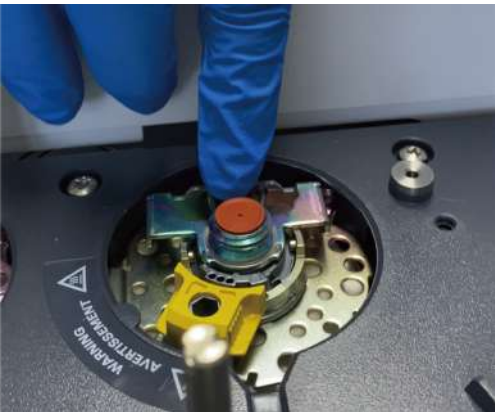
Step	Solvent/Parameters	Applicable Scenario
Activation	Methanol 5 mL (flow rate 2 mL/min)	Enrichment of PAHs in environmental water samples
Elution	Acetonitrile:Methanol (8:2), flow rate 1 mL/min	Analysis of drug metabolites
Large-Volume Loading	Divide into 10 loads of 2 L each for 20 L water sample	Detection of contaminants in drinking water



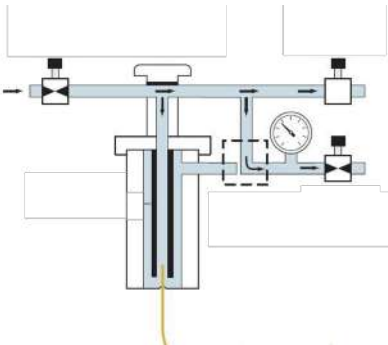
SPE	Part No.	3GC02001	3GC02002	3GC02003
	Desc.	12-port	19-port	24-port
	Image			
Parts for SPE	Part No.	3GC02117	3GC02045	3GC02005
	Desc.	Oil Free Pump	Flow Control Valve	PTFE Adapter
	Image			

Sample Preparation

Inlet Septum



- Sample Septum (also called Injection Septum) is a critical consumable used to seal the injection port in gas chromatography (GC) and other analytical instruments:
 - Sealing Function: Prevents air from entering the chromatography system, maintains carrier gas pressure stability, and ensures a closed flow path.
 - Puncture Resistance: Withstands multiple punctures from injection needles (especially for autosamplers) without leakage or sample loss.
 - High-Temperature Resistance: Tolerates high injection port temperatures (typically 100–400 °C), preventing material degradation and contamination.
- Typical Applications:
- Gas Chromatography Analysis: Seals the injection port to prevent air interference with the carrier gas flow.
- High-Throughput Testing: Frequent puncture scenarios with autosamplers require low-stick, wear-resistant septa.
- Trace Analysis: PTFE septa reduce interference from volatile contaminants, enhancing detection sensitivity.



Centrifugation Procedure:

- Balancing and Pre-cooling: Ensure centrifuge tubes are balanced by weight and center of gravity; pre-cool centrifuge to 4 °C.
- Centrifugation Parameters:
- Routine Concentration: 12,000 × g for 15–30 minutes; remain at target speed until the run is complete.
- Acceleration: Set to the lowest setting to prevent membrane damage.

Key Considerations:

- Molecular Weight Cut-off (MWCO) Selection: Should be ≤1/3 of the target protein’s molecular weight (e.g., use a 10 kDa ultrafiltration unit for a 35 kDa protein).
- Centrifugation Adjustment: Actual speed can be lower than the recommended value to extend membrane lifespan.
- Leak Prevention: When concentrating to ~1 mL, check filtrate with BSA; if leakage occurs, replace the tube and repeat centrifugation.
- Buffer Replacement: After concentrating to 1 mL, add fresh buffer and repeat 3 times to achieve ~1000-fold exchange.
- Avoid Protein Precipitation: If precipitation occurs during centrifugation, reduce protein concentration or change buffer.

Part No.	Description	Spec.	Material	Packing Info	Image
3BJ15001	Silicone Rubber Inlet Septum	7 mm/5 mm	Dark Red Silicone Rubber	50 pcs/bottle	
3BJ15004	Silicone Rubber Inlet Septum	11 mm	Dark Red Silicone Rubber	10 pcs/bag	
3BJ15006	Silicone Rubber Inlet Septum	11 mm	High Temperature Resistance Green Silicone Rubber	10 pcs/bag	
3BJ15007	Silicone Rubber Inlet Septum	11mm	High Temperature Resistance Green Silicone Rubber	50 pcs/bag	

Injector



- Sample needles deliver samples through septa or by connecting to the injection valve into the chromatography column or detector, ensuring continuity and accuracy of the analytical process. Their design must balance sealing performance, durability, and instrument compatibility.
- Typical Structure: Includes syringe barrel, plunger, needle, and locking mechanism, with corrosion-resistant materials (e.g., PTFE needle tips, metal spring sealing systems).
- Special Design: Headspace injection needles use HD plunger technology to dynamically compensate for temperature changes, enhancing gas-tightness at high temperatures.

By Application:

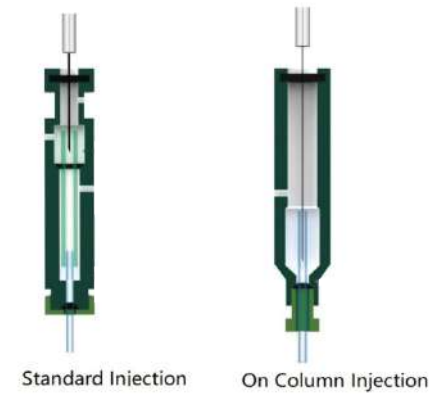
Gas Chromatography (GC) needles: Small volume (10–25 µL), needle tips often conical or beveled.

Liquid Chromatography (LC) needles: Larger volume (25–100 µL), flat tips to prevent damage.

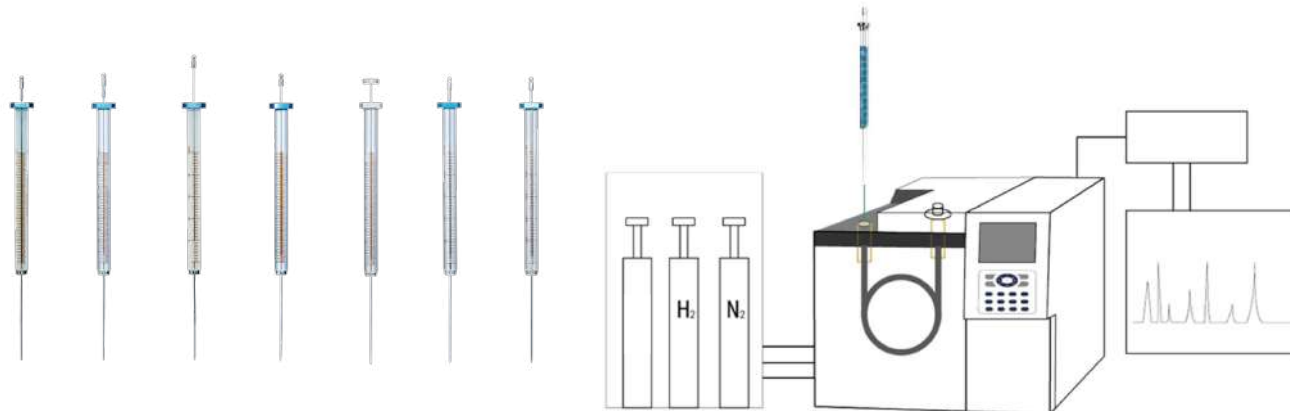
Gas-tight needles: For gas samples or highly volatile liquids, with enhanced sealing performance.

Sample Needle Usage – Operational Guidelines:

- Pre-injection Preparation
Ensure the needle is clean and free of residue, with no tip wear or deformation; use flat-tipped needles for LC and beveled needles for GC.
Samples must be fully dissolved and filtered through 0.2–0.45 µm membranes to prevent particles from clogging the needle or chromatography column.
- Injection Procedure
Manual Injection: Insert the needle vertically into the injection port and push to the bottom. Inject slowly and evenly to avoid bubbles or pressure surges.
Automatic Injection: Ensure the needle tip aligns with the injection port to prevent leaks or tip damage due to misalignment.
- Post-injection Handling
Wipe the needle tip immediately with lint-free paper to prevent residual droplets from contaminating the instrument or samples.
For mobile phases containing buffer salts, flush the needle hole with pure water first, then replace with organic solvent to avoid salt crystallization and blockage.



Typical Needle Specifications and Dimensions				
Needle Gauge	Outer Diameter (mm)	Outer Diameter (in)	Inner Diameter (mm)	Inner Diameter (in)
22	0.71	0.028	0.41	0.016
23s	0.635	0.025	0.11	0.0045
5	0.50	0.020	0.20	0.08
26s	0.47	0.0184	0.11	0.045
Plunger Type	Sample Type	Features	Suitable Samples	
PTFE-Tipped Injection Needle	For Gas and Liquid Samples	Equipped with a precise mechanical plunger head, which forms a tight seal during operation, ensuring the needle closely adheres to the inner wall of the syringe, preventing sample residue.	Particularly useful for viscous or heterogeneous samples, as it reduces sample deposition that can cause the plunger to stick.	
Precision Plunger Injection Needle	For Liquid Samples	Stainless steel plunger allows precise manual fixation to the matching glass syringe, creating a tight seal for liquids	Especially suitable for homogeneous samples that do not precipitate or bond with glass.	



Compatible with A-GC Automatic Gas Chromatography Injection Needles

Part No.	Desc.	Cross Reference Part No.	Packing Info
3BL03122	Automatic injection needle /fixed tip /10 μ L / PTFE plungertip / conical needle /23S /42	5181-8809, 5183-4730 (6)	1 pc/box
3BL03144	Automatic injection needle /fixed tip /10 μ L /stainless steel plunger / conical needle /23s /42	9301-0713, 9301-0725 (6)	1 pc/box
3BL03129	Automatic injection needle /fixed tip /5 μ L/ stainless steel plunger /conical needle /23S-26S /42	5181-1273, 5181-8810 (6)	1 pc/box
3BL03124	Automatic injection needle /fixed tip /10 μ L /stainless steel plunger / conical needle /23S-26S/ 42	5181-1267, 5181-3360 (6)	1 pc/box
3BL03121	Automatic injection needle /fixed tip/10 μ L/PTFE plungertip / conical needle/23S-26S/42	5181-3354, 5181-3361 (6)	1 pc/box
3BL03128	CTC injection needle / fixed tip / 10 μ L / stainless steel plunger / conical needle / 26S / 51 / with plunger	G6500-80116	1 pc/box
3BL03127	Manual injection needle / 10 μ L / stainless steel plunger / beveled tip / 26 / 50 / with plunger guard	5190-1483, 8004-0001	1 pc/box

Compatible with S

Part No.	Desc.	Cross Reference Part No.	Packing Info
3BL03130	Automatic injection needle /fixed tip/10 μ L/stainless steel plunger /conical needle/23/ 42	S221-34618	1 pc/box
3BL03133	Automatic injection needle / fixed tip /10 μ L / PTFE plunger tip / conical needle /23 / 42	221-74469	1 pc/box
3BL03127	Manual injection needle /fixed tip / 10 μ L/ stainless steel plunger /beveled tip /26/ 50 /with plunger guard	670-12552-01	1 pc/box

Compatible with T

Part No.	Desc.	Cross Reference Part No.	Packing Info
3BL03186	10 μ L automatic injection needle / needle length 50 mm / 25G / tapered fixed tip / outer diameter 0.5 mm	36500525	1 pc/box
3BL03187	10 μ L automatic injection needle / needle length 50 mm / 25G / fixed tip / outer diameter 0.5 mm	36500525	1 pc/box
3BL03188	CTC injection needle / fixed tip / 10 μ L / stainless steel plunger / conical needle / 23 / 51 / with plunger	365D3741	1 pc/box
3BL03189	10 μ L automatic injection needle / needle length 51 mm / 23G / fixed tip / outer diameter 0.64 mm	36520060	1 pc/box

Compatible with SGE

Part No.	Desc.	Cross Reference Part No.	Packing Info
3BL03126	Automatic injection needle / fixed tip / 10 μ L / stainless steel plunger / conical needle / 23S / 42	002810	1 pc/box

O-rings



⦿ O-ring is a circular elastic sealing element with a round cross-section. It achieves static or dynamic sealing by compressing and deforming to fill gaps.

⦿ **Material & Properties:** Made of elastic materials such as rubber or polyurethane, it is installed in pre-machined grooves. Upon compression, it deforms to block fluid or gas leakage paths. It has a wide pressure tolerance (0.1–60 MPa) and high elastic recovery, and in dynamic sealing, it can withstand reciprocating or rotational motion of components.

Applications:

Static sealing: Sealing fixed connections such as pipe flanges and hydraulic cylinder end caps.

Dynamic sealing: Sealing moving parts like hydraulic piston rods and pump shafts.

Specialized fields:

Gas Chromatography (GC): Sealing between injection port liners and chromatographic columns to prevent carrier gas leakage.

High-temperature/high-pressure equipment: Using high-temperature resistant materials (e.g., CPU) for extreme conditions.

Part No.	Desc.	Cross Reference Part No.	Image
3BJ00102	Fits 6.25 mm liner 10 pcs/box	A: 5188-5365 T: 2900A241 R: 22241	
3BJ00103	Fits 6.25 mm liner 10 pcs/box, 5 boxes/pk	A: 5190-2269 T: 2900A241 R: 22242	

Part No.	Desc.	Cross Reference Part No.	Packing Info	Image
3BJ00001	100% Craphite Ferrule, 0.5 mm ID Fits 0.1-0.32 mm ID Column	227-35006-01	10 pcs/box	
3BJ00002	100% Craphite Ferrule, 0.8 mm ID Fits 0.45-0.53 mm ID Column	227-35009-01	10 pcs/box	
3BJ00003	100% Craphite Ferrule, 0.5 mm ID Fits 0.1-0.32 mm ID Column	A: 5080-8853 T: 290GA139	10 pcs/box	
3BJ00004	100% Craphite Ferrule, 0.8 mm ID Fits 0.45-0.53 mm ID Column	A: 500-2118 T: 290GA140	10 pcs/box	
3BJ00005	15% Craphite/85%Vespel Gasket, 0.4 mm ID Fits 0.25 mm Column (Long)	A: 5062-3508 T: 29033496	10 pcs/box	
3BJ00006	15% Craphite/85%Vespel Gasket, 0.5 mm ID Fits 0.32 mm Column (Long)	A: 5062-3506 T: 29033497	10 pcs/box	
3BJ00007	15% Craphite/85%Vespel Gasket, 0.8 mm ID Fits 0.53 mm Column (Long)	A: 5062-3538 T: 290VP144	10 pcs/box	
3BJ00008	15% Craphite/85%Vespel Gasket 0.3 mm ID (Compatible with Column 0.1-0.25 mm)	A: 5181-3323 T: 290VA191	10 pcs/box	
3BJ00009	15% Craphite/85%Vespel Gasket 0.38 mm ID (Compatible with Column 0.32 mm)	A: 5062-3514 T: 290VA192	10 pcs/box	
3BJ00010	15% Craphite/85%Vespel Gasket 0.63 mm ID (Compatible with Column 0.53 mm)	A: 5062-3512 T: 290VA193	10 pcs/box	

Glass Wool



Chromatography glass wool is a commonly used auxiliary consumable in gas chromatography (GC), mainly for packing injection port liners. With excellent thermal stability and chemical inertness, it remains stable under high-temperature conditions.

Key Functions

- Facilitates Sample Vaporization: Provides a uniform heating environment, minimizes thermal discrimination, and ensures complete vaporization of liquid samples.
- Filters Impurities: Traps non-volatile residues, septa debris, and other particulates, preventing contamination of the chromatographic column and extending its lifetime.
- Improves Accuracy and Reproducibility: Reduces sample distribution bias, ensuring stable peak shapes and reliable data.
- Protects Injection System: Cleans residual sample from the syringe needle during injection, minimizing cross-contamination.

Part No.	Desc.	Packing Info	Image
3BJ13001	Deactivated Glass Wool	1 g/bottle	

Filament

Part No.	Compatible Module	Cross Reference Part No.	Image
3CC00145	GCMS-TO8030/TO8040, GCMS-OP2010/OP2010S/ OP2010PLUS	A: 225-10340-91	
3CC00146	Filament / High-Temperature / EI Ion Source – Compatible with 5973, 5975, 5977, 7000A/B/C, 7200	A: 225-10340-91	

MSD Filament is the core component of the Mass Spectrometer Detector (MSD) ion source. Ionizes sample molecules via Electron Impact (EI), generating an ion stream for subsequent mass spectrometry analysis. Directly affects detector sensitivity and instrument stability.

Chromatography Lamp is the key light source for liquid chromatography detectors (e.g., tungsten lamp, deuterium lamp).

Functions:

- Stable Light Source: Tungsten lamps emit a continuous spectrum, deuterium lamps cover the UV range; light is dispersed via a monochromator for sample absorbance detection.
 - Supports Detection Sensitivity: Lamp intensity determines detector sensitivity. Dim or damaged filaments should be replaced promptly.
 - Ensures System Stability: Abnormal lamp behavior (flickering, fluctuating brightness) increases baseline noise; regular maintenance is required.
- Wavelength Coverage
- Deuterium Lamp: 190–400 nm
- Tungsten Lamp: Up to 900 nm

Maintenance Guidelines

- Inspect filament condition regularly (breakage, aging).
- Replace and calibrate according to the instrument’s manual.
- Filament performance must be evaluated in conjunction with detector type (UV, visible, diode array) and application context.

Mobile Phase Solvent Bottle



The mobile phase solvent bottle is a specialized container for storing and supplying solvents in liquid chromatography. It features excellent sealing, chemical resistance, and transparency to ensure experimental accuracy and safety.

Accessories & Functions

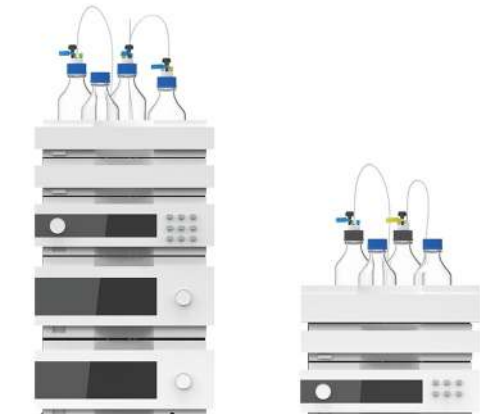
- Cap Design: Available with 1–6 ports, supporting diameters from 1 mm to 6 mm for different tubing requirements; Optional vent holes and vent tubes minimize solvent evaporation and contamination risks.
- Additional Functions: Customizable with filters and degassing devices to enhance solvent purity and experimental efficiency; Compatible with major chromatography systems such as Agilent, Waters, and Sciencome.

Application Scenarios

Storage and stable supply of mobile phase in HPLC experiments; Widely used in pharmaceutical, chemical, and environmental analysis fields.

























Notes:

- Storage and Filling: Leave adequate headspace when filling to prevent overflow caused by thermal expansion or contraction; Store in a cool, ventilated area, away from direct sunlight and high temperatures; Before first use, rinse with solvent and dry thoroughly to avoid contamination from residues.
- Operating Guidelines: Clearly label solvent name, concentration, and expiration date to prevent misuse or confusion; Do not mix different types of solvents to avoid unwanted chemical reactions.
- Maintenance and Cleaning: Clean regularly with organic solvent followed by pure water, then dry before storage; Inspect sealing performance periodically. Avoid overtightening or loosening of the cap to prevent leakage or contamination.



Solvent Bottle (With Cap, USP 1 Glass)	Part No.	3BF17023	3BF17024	3BF17025	3BF17026	3BF17027
	Desc.	100 mL Clear	250 mL Clear	500 mL Clear	1000 mL Clear	2000 mL Clear
	Image					
Solvent Bottle (With Cap, USP 1 Glass)	Part No.	3BF17028	3BF17029	3BF17030	3BF17031	3BF17032
	Desc.	100 mL Amber	250 mL Amber	500 mL Amber	1000 mL Amber	2000 mL Amber
	Image					

LC
Consumables

Muti-port Solvent Bottle (Without Cap, USP 1 Glass)	Part No.	3BF17035	3BF17043	3BF17051	3BF17036
	Desc.	2-port 1000 mL Clear	3-port 1000 mL Clear	4-port 1000 mL Clear	2-port 2000 mL Clear
	Image				
Muti-port Solvent Bottle (Without Cap, USP 1 Glass)	Part No.	3BF17044	3BF17052	3BF17039	3BF17047
	Desc.	3-port 2000 mL Clear	4-port 2000 mL Clear	2-port 1000 mL Amber	3-port 1000 mL Amber
	Image				
Muti-port Solvent Bottle (Without Cap, USP 1 Glass)	Part No.	3BF17055	3BF17040	3BF17048	3BF17056
	Desc.	4-port 1000 mL Amber	2-port 2000 mL Amber	3-port 2000 mL Amber	4-port 2000 mL Amber
	Image				
GL45 Cap	Part No.	3BF17001 	3BF17002	3BF17003 	3BF16245
	Desc.	1-port GL45 Cap	2-port GL45 Cap	3-port GL45 Cap	4-port GL45 Cap
	Image				
GL45 Cap	Part No.	3BF16118	3BF17060	3BF17057	3BF16050
	Desc.	5-port GL45 Cap	3-port GL45 Cap	GL45 Solid Top Cap	PTFE/Silicone Septum for 3BF17057
	Image				
Storage Cap	Part No.	3BF16023	3BF16168		
	Desc.	Raised-center Solid Top GL45 Cap	White Plug		
	Image				

Waste Collection System



High-precision sealing technology (e.g., double O-rings, chemically resistant gaskets) ensures zero leakage during waste liquid storage or transfer, suitable for high-temperature or corrosive liquid environments. Some products are equipped with one-way vent valves and pressure balance systems to prevent overflow caused by pressure changes.

Typical Applications:

🕒 **Laboratory Waste Management:** Used for collecting waste liquids from HPLC systems, biosafety cabinets, and other laboratory equipment, preventing the release of volatile organic compounds (VOCs). Can be integrated with centralized waste handling systems for multi-station collection and environmentally compliant disposal.

🕒 **Industrial and Medical Applications:** Used as sealing components in high-temperature coating lines or medical instrument sterilization, ensuring operational safety. Suitable for temporary storage of corrosive media in chemical production, preventing toxic spills and environmental contamination.



Safety Cap	3BF16004 <input checked="" type="checkbox"/>	3BF16005	3BF16049	3BF16049	3BF17051
Desc.	1-port	2-port	Check Value Assembly	Threaded Adapter $\phi 37 \times 4 / \phi 40 \times 4$	1000 mL 4-port Bottle
Image					
Waste Collect	3BF16009 <input checked="" type="checkbox"/>	3BF16121	3BF16011 <input checked="" type="checkbox"/>	3BF16022	3BF16019
Desc.	GL45 Waste Bottle Cap (1 Large + 2 Small Ports, with Exhaust Filter Port)	GL45 10L Waste PP Jar 230×230×305 mm	S60 Waste Bottle Cap (1 Large + 2 Small Ports, with Exhaust Filter Port)	S60 20L GL45 Waste Bottle Cap (1 Large + 2 Small Ports, with Exhaust Filter)	Exhaust Filter
Image					

Solvent Filter/Deuterium Lamp



Solvent Filter

A solvent filter is a critical laboratory device used to purify mobile phases, such as solvents for HPLC, by physically removing particulate impurities, microorganisms, and other contaminants to ensure solvent purity.

☉ Types & Applications: Bottle-top filter: Installed directly on solvent bottles, suitable for batch filtration

In-line filter: Integrated into the chromatography flow path for real-time filtration of the mobile phase

Syringe filter: Small device for rapid filtration of small-volume samples, e.g., prior to HPLC injection

☉ Application Areas: Chromatography: HPLC mobile phase filtration and degassing

Pharmaceutical & Biotech: Preparation of sterile solutions and microbial testing

Environmental Monitoring: Removal of suspended particles from water samples










Part No.	Desc.	Cross Reference Part No.	Packing Info
3BK00001	Glass Filter	5041-2168	pc
3BK00002	Stainless Steel Fritted Filter	5062-8517	pc
3BK00003	PTFE Fritted Filter	01018-60025	pc
3BK00066	PTFE Connector / Compatible with Glass Solvent Inlet Filter	228-45707-91	pc
3BK00159	Stainless Steel filter	/	pc
3BK00124	Stainless Steel Fritted Filter (Five-stage)	700003616	pc

Deuterium Lamp (D2 Lamp)

A deuterium lamp is a gas-discharge light source that generates a continuous ultraviolet spectrum through the excitation of deuterium atoms. Its emission wavelength ranges from 190 to 400 nm, suitable for analytes that absorb in this UV range. In chromatography, the deuterium lamp provides a stable UV light source to support photometric detection and absorbance analysis.

Part No.	Spec.	Cross Reference Brand	Packing Info	
3BK03010	WAS081142	W	1 pc/pk	
3BK03011	WAT052586		1 pc/pk	
3BK03012	201000281, 201000273		1 pc/pk	
3BK03015	G1314-60101, G1314-60100	A	1 pc/pk	
3BK03016	2140-0813, 2140-0820		1 pc/pk	
3BK03018	5190-0917		1 pc/pk	
3BK03019	228-34016-02	S	1 pc/pk	
3BK03020	228-55626, 228-63621		1 pc/pk	
3BK03021	228-55626-01, 228-63621-01		1 pc/pk	
3BK03022	228-37401-91		1 pc/pk	
3BK03183	062-65055-05/L6380		1 pc/pk	
3BK03023	L6302-40	P	1 pc/pk	
3BK03185	890-2430, 890-2550/2J1-1500	H	1 pc/pk	
3BK03024	6074.1110, L6999-52	S	1 pc/pk	
3BK03025	6083.1110		1 pc/pk	
3BK03026	6074.2000 (D2 Lamp), 6083.2000		1 pc/pk	

Capillary

Part No.	Desc.	Image
3BK09003	Type A Capillary, No Connector, 0.17 mm, 150 mm	
3BK09005	Type A Capillary, No Connector, 0.17 mm, 250 mm	
3BK09009	Type A Capillary, No Connector, 0.17 mm, 450 mm	
3BK09016	Type A Capillary, No Connector, 0.12 mm, 150 mm	
3BK09018	Type A Capillary, No Connector, 0.12 mm, 250 mm	
3BK09022	Type A Capillary, No Connector, 0.12 mm, 450 mm	
3BK09028	Type A Capillary, Short Metal Connector at Both A and B Ends, 0.17 mm, 150 mm	
3BK09030	Type A Capillary, Short Metal Connector at Both A and B Ends, 0.17 mm, 250 mm	
3BK09034	Type A Capillary, Short Metal Connector at Both A and B Ends, 0.17 mm, 450 mm	
3BK09041	Type A Capillary, Short Metal Connector at Both A and B Ends, 0.12 mm, 150 mm	
3BK09043	Type A Capillary, Short Metal Connector at Both A and B Ends, 0.12 mm, 250 mm	
3BK09047	Type A Capillary, Short Metal Connector at Both A and B Ends, 0.12 mm, 450 mm	
3BK09053	Type A Capillary, Hand-tightened Connector at Both A and B Ends, 0.17 mm, 150 mm	
3BK09055	Type A Capillary, Hand-tightened Connector at Both A and B Ends, 0.17 mm, 250 mm	
3BK09059	Type A Capillary, Hand-tightened Connector at Both A and B Ends, 0.17 mm, 450 mm	
3BK09066	Type B Capillary, No Connector, 0.17 mm, 150 mm	
3BK09068	Type B Capillary, No Connector, 0.17 mm, 250 mm	
3BK09072	Type B Capillary, No Connector, 0.17 mm, 450 mm	
3BK09079	Type B Capillary, No Connector, 0.12 mm, 150 mm	
3BK09081	Type B Capillary, No Connector, 0.12 mm, 250 mm	
3BK09085	Type B Capillary, No Connector, 0.12 mm, 450 mm	
3BK09091	Type B Capillary, Hand-tightened Connector at Both A and B Ends, 0.17 mm, 150 mm	
3BK09093	Type B Capillary, Hand-tightened Connector at Both A and B Ends, 0.17 mm, 250 mm	
3BK09097	Type B Capillary, Hand-tightened Connector at Both A and B Ends, 0.17 mm, 450 mm	
3BK09104	Type B Capillary, Hand-tightened Connector at Both A and B Ends, 0.12 mm, 150 mm	
3BK09106	Type B Capillary, Hand-tightened Connector at Both A and B Ends, 0.12 mm, 250 mm	
3BK09110	Type B Capillary, Hand-tightened Connector at Both A and B Ends, 0.12 mm, 450 mm	
3BK09116	Type C Capillary, No Connector, 0.17 mm, 150 mm	
3BK09118	Type C Capillary, No Connector, 0.17 mm, 250 mm	
3BK09122	Type C Capillary, No Connector, 0.17 mm, 450 mm	
3BK09129	Type C Capillary, No Connector, 0.12 mm, 150 mm	
3BK09131	Type C Capillary, No Connector, 0.12 mm, 250 mm	
3BK09135	Type C Capillary, No Connector, 0.12 mm, 450 mm	
3BK09141	Type C Capillary, Short Metal Connector at Both Ends, 0.17 mm, 150 mm	
3BK09143	Type C Capillary, Short Metal Connector at Both Ends, 0.17 mm, 250 mm	
3BK09147	Type C Capillary, Short Metal Connector at Both Ends, 0.17 mm, 450 mm	
3BK09154	Type C Capillary, Short Metal Connector at Both Ends, 0.12 mm, 150 mm	
3BK09156	Type C Capillary, Short Metal Connector at Both Ends, 0.12 mm, 250 mm	
3BK09160	Type C Capillary, Short Metal Connector at Both Ends, 0.12 mm, 450 mm	
3BK09166	OEM Type A Capillary, Hand-tightened Connector at A End, Long Metal Connector at B End, 0.17 mm, 150 mm	
3BK09168	OEM Type A Capillary, Hand-tightened Connector at A End, Long Metal Connector at B End, 0.17 mm, 250 mm	
3BK09172	OEM Type A Capillary, Hand-tightened Connector at A End, Long Metal Connector at B End, 0.17 mm, 450 mm	
3BK09179	OEM Type B Capillary, Hand-tightened Connector + Long Metal Connector, 0.17 mm, 150 mm	
3BK09181	OEM Type B Capillary, Hand-tightened Connector + Long Metal Connector, 0.17 mm, 250 mm	
3BK09185	OEM Type B Capillary, Hand-tightened Connector + Long Metal Connector, 0.17 mm, 450 mm	
3BK09192	OEM Type B Capillary, Hand-tightened Connector + Long Metal Connector, 0.12 mm, 150 mm	
3BK09194	OEM Type B Capillary, Hand-tightened Connector + Long Metal Connector, 0.12 mm, 250 mm	
3BK09198	OEM Type B Capillary, Hand-tightened Connector + Long Metal Connector, 0.12 mm, 450 mm	

Capillary Loop/Restriction Capillary



Capillary Loop:

High-performance, durable, and user-friendly component for injection valves. Suitable for various experimental conditions, widely used across different injection valve sizes, and a preferred material in many laboratories. Proper usage under recommended experimental conditions ensures accurate and stable results.

Restriction Capillary:

Dimension 0.13×3000 mm, compatible with Agilent, Shimadzu, Thermo, and Waters HPLC systems. Pre-installed with two detachable two-way fittings and screw connections at both ends. At 1 mL/min flow rate, pressure ≥60 bar (varies by system). For pressures above 100 bar, multiple capillaries can be connected in series without additional components.



Part No.	Desc.	Packing Info	Cross Reference Part No.
3BK16001	Stainless Steel Restriction Capillary 100μL, for G1313A G1329A/B, 1120, 1220 Infinity	1 pc/bag	01078-87302
3BK16203	Stainless Steel Restriction Capillary 100μL, for G1313AG1329A/B Stainless Steel	1 pc/bag	G7129-60500
3BK16204	PEEK Restriction Capillary 5μL/ PEEK for HPLC Manual Sampler	1 pc/bag	/
3BK16212	PEEK Restriction Capillary 10μL/ PEEK For HPLC Manual Sampler	1 pc/bag	/
3BK16213	PEEK Restriction Capillary 20μL/ PEEK For HPLC Manual Sampler	1 pc/pk	/
3BK16214	PEEK Restriction Capillary 50μL/ PEEK For HPLC Manual Sampler	1 pc/pk	/
3BK16215	PEEK Restriction Capillary 100μL/ PEEK for Manual Sampler	1 pc/pk	/
3BK09288	Stainless Steel Restrictor Capillary Specification: 0.12 × 2000 mm, U/U type Structure: Pre-installed with 2 removable two-way connectors at both ends (some models with threaded connectors) Material: Stainless steel Features: For flow restriction in HPLC systems; pressure-resistant, stable flow, easy installation and maintenance	1 pc/pk	5022-2159

PEEK Connector



PEEK Connector (Polyether Ether Ketone Connector)

The PEEK connector is a fluidic component made from high-performance engineering plastic PEEK, widely used in analytical instruments, biopharmaceuticals, and industrial applications.

Key Features:

- ⦿ **High Temperature Resistance:** Long-term use up to 260–300 °C , short-term up to 330–350 °C , maintaining mechanical strength and sealing at high temperatures.
- ⦿ **Chemical Resistance:** Excellent resistance to strong bases, strong acids (except concentrated sulfuric and nitric acid), and organic solvents (e.g., methanol, acetonitrile).
- ⦿ **Mechanical Performance:** High strength and wear resistance (better than metals), capable of withstanding pressures up to 420 bar (~6000 psi).
- ⦿ **Biocompatibility:** ISO 10993 certified, suitable for medical devices and biopharmaceutical applications.

Applications:

- ⦿ **HPLC (High-Performance Liquid Chromatography):** For connecting pumps, injection valves, and detector flow paths; replaces stainless steel connectors to reduce metal ion contamination.
- ⦿ **GC (Gas Chromatography):** Connects columns and detectors under high-temperature conditions, preventing sealing failures.

Installation & Maintenance

- ⦿ **Cutting Recommendation:** Use a dedicated PEEK cutting tool to ensure smooth, burr-free port ends.
- ⦿ **Solvent Limitation:** Avoid exposure to DMSO, dichloromethane, and concentrated sulfuric acid to prevent swelling or corrosion.
- ⦿ **Sealing Check:** Tighten by hand 1/4–1/2 turn to achieve a seal; over-tightening may damage the threads.

Parameter Specification

Pressure Resistance ≤420 bar (6000 psi)
 Operating Temperature from -60 °C to +300 °C (Long-term)
 Chemical Resistance: Resistant to >90% organic solvents and acids/bases
 Oxygen Permeability: Lower than Stainless Steel and PTFE

Part No.	Spec.	Length	Desc.	Packing Info
3BK18001	1/16	20 mm	PEEK Connector - Integral / 10-32UNF	10 pcs/bag
3BK18002	1/16	18 mm	PEEK Connector - Integral Large Round Head / 10-32UNF	10 pcs/bag
3BK18003	1/16	1C19:C208 mm	PEEK Connector - Integral Small Flat Head / 10-32UNF	10 pcs/bag
3BK18004	1/16	19 mm	PEEK Connector - Integral Hexagon / 10-32UNF	10 pcs/bag
3BK18005	1/8	19 mm	PEEK Connector - Split Type / 1/4-28UNF	1 pc/bag
3BK18006	1/16	22 mm	PEEK Connector - Split Type / 10-32UNF	1 pc/bag
3BK18007	1/8 to 1/8	25 mm	PEEK Connector - Through-Wall Two-Way / External 3/8-24UNF Internal 1/4-28UNF ×2	1 pc/bag
3BK18008	1/16 to 1/16	36.7 mm	PEEK Connector - Two-Way / Internal 10-32UNF to 10-32UNF	1 pc/bag
3BK18009	1/8 to 1/8 to 1/8	28 mm	PEEK Connector - Three-Way / 1/4-28UNF ×3	1 pc/bag
3BK18010	1/16 to 1/16 to 1/16 to 1/16	28.7 mm	PEEK Connector - Four-Way / 10-32UNF ×4	1 pc/bag
3BK18011	1/16 or 1/8	25 mm	PEEK Connector - Luer Connector / Internal Both Ends 1/4-28UNF or 10-32UNF	1 pc/bag
3BK18012	1/16	18 mm	Plug / 10-32UNF	10 pcs/bag
3BK18013	1/16	34.8mm	Adapter / 10-32UNF	1 pc/bag
3BK18014	1/8	/	PEEK Cutting Ring / For Split Type Connector	10 pcs/bag
3BK18015	1/8 to 1/8	36.7 mm	PEEK Connector - Two-Way / Internal 1/4-28UNF to 1/4-28UNF	1 pc/bag

Two-way Connector



The chromatography two-way connector is a critical component in systems such as HPLC and GC, used to:

- ⊙ Switch flow paths
- ⊙ Control dead volume
- ⊙ Connect columns in series
- ⊙ Its performance directly affects system sealing, pressure tolerance, and analytical precision.

Part No.	Spec.	Desc.
3BL04048	21.5 mm	316L Stainless Steel Connector, Length 21.5 mm, Max Pressure 140 MPa, Internal Thread 10-32 UNF
3BL04046	26 mm	316L Stainless Steel Connector, Length 26 mm, Max Pressure 140 MPa, Internal Thread 10-32 UNF
3BL04047	27 mm	316L Stainless Steel Connector, Length 27 mm, Max Pressure 140 MPa, Internal Thread 10-32 UNF
3BK18007	1/8 to 1/825 mm	PEEK Connector - Through-Wall Two-Way, External Thread 3/8-24 UNF, Internal Thread 1/4-28 UNF×2
3BK18008	1/16 to 1/1636.7 mm	PEEK Connector - Two-Way, Internal Thread 10-32 UNF to 10-32 UNF
3BK18011	1/16 or 1/825 mm	PEEK Connector - Luer Connector, Internal Thread Both Ends 1/4-28 UNF or 10-32 UNF
3BK18013	1/1634.8 mm	Adapter, Thread 10-32 UNF
3BK18015	1/8 to 1/836.7 mm	PEEK Connector - Two-Way, Internal Thread 1/4-28 UNF to 1/4-28 UNF

HPLC Needle & Needle Seat



⊙ The HPLC needle and needle seat are critical components of the HPLC system. The needle seat supports the needle, which accurately introduces samples into the system, ensuring smooth sample entry for chromatographic separation and analysis.

⊙ HPLC Needle: Injection component of the HPLC system, used to accurately introduce samples. Replace the needle if it becomes bent, has burrs, dull, leaks, or is blocked.

⊙ HPLC Needle Seat: Supports the needle and guides samples into the system. Check for leaks if buffer crystallization or blockage occurs, and consider backflushing the needle seat capillary if needed.



Part No.	Desc.	Packing Info	Cross Reference Part No.	Compatibility
3BL04984	Needle Assembly: For G1313A and G1329A/B autosamplers, compatible with needle seats G1329-87017 and G1329-87012	1 pc/bag	G1313-87201	For 1100, 1200 Autosampler
3BL04059	Needle Seat: Made of PEEK, 0.17 mm ID capillary, compatible with needle assembly G1313-87201.	1 pc/bag	G1329-87017	For 1100, 1200 Autosampler

Filter Core/Check Valve



The inlet valve is a critical component in chromatography, used to accurately introduce samples into the chromatographic system. Its functions include controlling sample volume, switching mobile phase paths, and minimizing cross-contamination.

Classification by Operation

- Manual Injection Valve: Switches flow paths via manual rotation of the valve stem; suitable for small-scale laboratory analyses. Examples: Agilent 7725i (stainless steel), 9725i (PEEK material).
- Automated Injection Valve: Integrated into autosamplers; controlled programmatically for high-throughput analysis and improved reproducibility.

Classification by Application

- Gas Chromatography (GC) Injection Valve. Used with micro syringes: 10 µL for packed columns, 1 µL for capillary columns. Example: Six-port valve, suitable for gaseous or liquid samples.
- High-Performance Liquid Chromatography (HPLC) Injection Valve: High-pressure manual injection valve, rated up to 1200 bar. Suitable for high-flow, large-volume preparative chromatography.

Operation Modes & Precautions (Typical Operation Modes)

- Split Injection: Suitable for high-concentration samples; most of the sample gas is vented through the split outlet, with only 1%-5% entering the column to reduce column load. Use liners with a reduced diameter or glass wool to ensure uniform vaporization and prevent solid residue.
- Splitless Injection: Suitable for trace analysis; delay the split valve opening so that the entire sample enters the column.

Maintenance & Common Issues

- Contamination Handling: Periodically backflush or replace the screens to prevent column head contamination and peak splitting.
- Seal Inspection: Use a soap-film flow meter to check for leaks in the split gas line, ensuring stable flow rates

Part No.	Desc.	Cross Reference Part No.	Unit	Image
3BK08001	M1 Reflector Mirror	/	pc	
3BK08002	Grating Assembly	/	pc	
3BK08003	Large Lens Assembly: Detector Lens & Light Source Lens	/	pc	
3BK08004	Small Lens Assembly: Detector Lens & Light Source Lens	/	pc	
3BK05001	HPLC Pump Valve Stems; 400 Bar Active Inlet Valve Stem: For Agilent 1100, 1200, 1260 Infinity LC pumps	A: 5062-8562	pc	
3BK05002	HPLC Pump Valve Stems; 600 Bar Active Inlet Valve Stem: For 1200 LC system, 1260 Infinity II, SFC system, and 1260 Infinity LC system	A: G1312-60020	pc	
3BK01001	HPLC Pump Outlet Check Valve: For Agilent 1100, 1200, 1260 Infinity LC pumps	A: G1312-60067	pc	
36K01002	Check Valve: For Thermo U3000 analytical LC	T: 6041.2301	pc	
3BK01004	Ruby Check Valve: For Waters 2695, E2695, 2690	W: 700000254	pc	
3BK01005	Ceramic Check Valve: For Waters 2695, E2695, 2690	W: 700002399	pc	
3BK05206	Inlet Valve: For LC-10ADvp, 20AD, 20ADR, 20AD-SP, 20AB, 2030, 2030plus, 2040, 40DX-R, 40D, BXRi, 2050, 15C, 16A, 20AT	S: 228-48249-96 S: 228-48249-97 S: 228-52964-95	pc	
3BK19207	Outlet Valve: For LC-10AD, 20AD, ADXR, 20ADSP, 20AB, 2030, 2030plus, 2040, 2050	S: 228-34976-91 S: 228-45705-91 S: 228-53334-96	pc	

PTFE Filter Core



Failure Indication:

A dirty valve stem can cause elevated pump pressure. For example, when flushing with pure water at 5 mL/min, a pressure reading above 10 bar may indicate a contaminated flush valve stem.

Maintenance Recommendation:

It is recommended to replace the flush valve stem when replacing the pump seals to maintain system stability.

Part No.	Product Name	Packing Info	Desc.	Cross Reference Part No.
3BK00138	PTFE Filter Core	5 pcs/bag	Compatible with Agilent 1290 Infinity Binary Pump Also compatible with 1260 Infinity, 1200, and 1100 series analytical pumps	01018-22707

Plunger & Plunger Seal



Plunger

The plunger is a critical component of the chromatographic pump, made from high-purity single-crystal sapphire for maximum durability. Precisely cut to optimized angles and accurately positioned in stainless steel fixtures, it minimizes wear on both the plunger and the seal, ensuring long-term stable pump operation.

Plunger Seal

The seal tightly surrounds the plunger, forming a dynamic seal during reciprocating motion to prevent mobile phase leakage from the pump head. It ensures stable system pressure and precise flow rates while withstanding high-frequency friction and chemical corrosion.

Failure Modes

- ⊗ Leakage: Mobile phase seeps through the gap between pump head and plunger, contaminating the instrument and potentially corroding electronic components.
- ⊗ Pressure Instability: Seal failure causes pressure fluctuations in the pump chamber, resulting in retention time drift and peak broadening.
- ⊗ Plunger Damage: Residual particles entering the seal gap may scratch the plunger surface, triggering cascading failures.

Part No.	Desc.	Packing Info	Cross Reference Part No.	Compatible Module
3BK15001	Sapphire Plunger Volume: 100 µL Compatible Models: Agilent 1100, 1200, 1260, 1120, 1220 pumps and autosamplers	1 pc/bag	5063-6586	Compatible Models: Agilent 1100, 1200, 1260, 1120, 1220 pumps and autosamplers
3BK15101	Plunger Seal (Reversed Phase) Material: Graphite-filled PTFE	2 pcs/bag	5063-6589	Resistant to strong organic solvents (e.g., dichloromethane, n-hexane) and buffer salts, with high-pressure stability superior to PE material (pressure rating >40 MPa) Must be used with sapphire plunger (5063-6586) Suitable for aqueous and polar organic solvents (e.g., methanol, acetonitrile)
3BK15102	Plunger Seal (Normal Phase) Material: PE Packaging: 2 pieces per pack	2 pcs/bag	0905-1420	Cost-effective, ideal for routine analysis; not compatible with tetrahydrofuran (THF) due to swelling risk

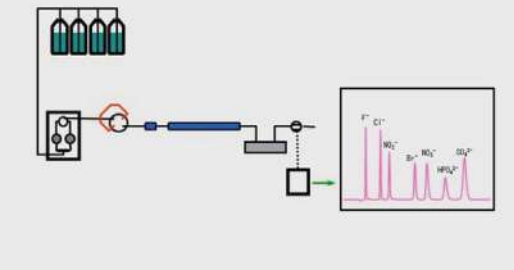
Eluent Bottle for Ion Chromatography



The IC eluent bottle is a dedicated container designed for storing and delivering eluents (mobile phase) in ion chromatography analysis. Its primary function is to ensure the stability of eluent composition during high-pressure pump delivery, minimizing environmental interference to guarantee reliable separation performance and analytical reproducibility.

Key Design Features:

Pressure-Resistant Sealing Structure
Thick-walled design (e.g., polypropylene, wall thickness ≥ 3 mm) withstands 0.2–0.3 MPa without leakage or deformation.
Precision-matched interfaces with dual sealing rings or chemically resistant gaskets ensure tight connection and compatibility with high-pressure pump aspiration.



Nitrogen Pressurization System
Nitrogen purging through the cap maintains a positive-pressure environment, preventing air contact (e.g., CO₂ dissolution altering hydroxide-based eluents) and reducing bubble formation during aspiration. Multi-port cap designs support simultaneous connections for eluent tubing, nitrogen line, and exhaust channel.

Material Options

Polypropylene (PP): Resistant to acids and bases, suitable for standard eluents (e.g., carbonate or methanesulfonic acid systems).
Glass: Chemically inert, suitable for highly corrosive or high-purity eluents; should be used with explosion-proof protection.
High-Temperature Resistant Material: Certain products can withstand high-temperature sterilization (e.g., autoclaving).

Capacity Range

Eluent Bottle for Ion Chromatography	Part No.	3BF15001	3BF06019	3BF06116
	Desc.	2000 mL White PP Bottle with Cap 3 Ports	8 mL Clear Screw Neck Glass Vial 18.4×46 mm	Black Open-top PP Cap with Star Pre-slit PTFE/Silicone Septum
	Image			

Vial Rack



- Blue Sample Vial Rack:
One-piece injection molded, durable and impact-resistant
With storage compartment for caps and septa
Stackable design for space saving
- White Sample Vial Rack: Detachable design for easy storage and handling
- Sample Vial Storage Box with Lid: Suitable for refrigeration storage

White Sample Vial Rack	Part No.	3BF09005	3BF09006	3BF09007
	Desc.	φ20 mm 4×10 Positions	φ25 mm 3×8 Positions	φ31 mm 3×7 Positions
	Image			
Autosampler Vial/Rack	Part No.	3BF09001	3BF09002 <input checked="" type="checkbox"/>	3BF09003
	Desc.	5×10 Positions	5×10 Positions With Storage Compartment	10×10 Positions
	Image			

Manual Crimpers & Decappers



- ⦿ The manual crimper is a hand-operated sealing tool designed for laboratory, pharmaceutical, and food & beverage applications. Featuring power-free operation and flexibility, it is ideal for small-scale production or emergency sealing needs.
- ⦿ Compared with earlier models, its weight is reduced by approximately 25–30%, minimizing wrist fatigue and discomfort during intensive use, thereby enhancing user experience.
- ⦿ Material: Handles are made of durable fiber-reinforced resin with steel-reinforced core.
- ⦿ Durability: The 11 mm crimper can seal at least 100,000 vials, while the 20 mm crimper can seal at least 80,000 vials before noticeable wear affects performance.

11 mm +20 mm Decapper	Part No.	3BF19001	3BF19002	3BF19004	3BF19003	
	Desc.	Capper 11 mm	Decapper 11 mm	Capper 20 mm	Decapper 20 mm	Packing Info
	Image					
Capper for 13 mm +20 mm Flip off cap	Part No.	3BF19007		3BF19008	3BF19364	
	Desc.	Capper for Flip off 13 mm		Capper for Flip off 20 mm	Capper for Flip off 8 mm	
	Image					

Electric Capper and Decapper with Battery

Part No.	Desc.	Cross Reference Part No.	Packing Info	Image
3BF19086	Electric Capper for 20 mm Cap	5191-5615(5190-3189); 227-35500-02;60180-ECR20	1 pc/pk	
3BF19085	Electric Decapper for 20 mm Cap/22 mm Flip-off Cap	5191-5613(5190-3191); 227-35501-02;60180-EDCB20	1 pc/pk	
3BF19084	Electric Capper for 11 mm Cap	5191-5616(5190-3188); 227-35500-01;60180-ECR11	1 pc/pk	
3BF19083	Electric Decapper for 11 mm Cap/13 mm Flip-off Cap	5191-5614(5190-3190); 227-35501-01;60180-EDCB11	1 pc/pk	
3BF19360	Electric Capper for 13 mm Cap	/	1 pc/pk	
3BF19361	Electric Capper for 13 mm Flip off Cap	/	1 pc/pk	
3BF19362	Electric Capper for 15 mm Flip off Cap	/	1 pc/pk	
3BF19363	Electric Capper for 20 mm Flip off Cap	/	1 pc/pk	
3BF21185	Electric Capper/Decapper Holder	5190-4066;227-35510-01; ECRH-STAND	1 pc/pk	

Dissolution Filter



Function:

A key consumable in dissolution testing, designed to remove undissolved particles (e.g., excipients, disintegration fragments) from dissolution media. It effectively terminates the dissolution process and protects downstream analytical instruments (such as HPLC) from clogging, ensuring data accuracy and reproducibility.

Materials:

UHMWPE (Ultra-high-molecular-weight polyethylene): Low adsorption, resistant to acids, alkalis, and organic solvents; suitable for routine dissolution tests.
PVDF (Polyvinylidene fluoride): Excellent resistance to organic solvents, ideal for samples containing special solvents (e.g., DMSO).
PP (Polypropylene): Cost-effective option, suitable for coarse filtration or large-volume sample pretreatment.

Design Features:

Pore Size Precision: Commonly 0.45 µm and 0.22 µm, meeting HPLC and other analytical requirements.
3D Porous Structure: Sintered gradient pore design combining depth filtration with surface retention.

Key Technical Features

High Filtration Efficiency: Porosity ≥70%; captures ~70% of particles in the 0.45–1.0 µm range, effectively protecting analytical instrument flow paths.
Low Adsorption & High Purity: Made from ultra-pure materials with minimal extractables, preventing loss of active pharmaceutical ingredients.
Pressure Resistance & Compatibility: Withstands dissolution tester positive/negative pressure systems (≤0.2 MPa); compatible with major brands such as Agilent and Hanson Research

Scenarios	
Conventional Water-Soluble Drugs:	Use UHMWPE 0.45 µm filters with low adsorption to ensure stable and reliable results.
Organic Solvent Systems (e.g., lipophilic drugs):	Use PVDF filters, offering strong resistance to organic solvents and maintaining sample integrity.
Large-Volume Sample Prefiltration:	Use PP filters, cost-effective and suitable for coarse filtration and preliminary processing.

Maintenance & Storage Notes


Regular Replacement: Replace the filter after each experiment to prevent clogging and abnormal pressure.
Backflush Function: If supported by the instrument, use the backflush function to prolong filter service life.
Storage Conditions: Store filters in a cool, dry, and clean environment. Avoid high temperatures, humidity, and direct sunlight to maintain physical and chemical stability.

Part No.	Desc.	Cross Reference Part No.	Packing Info	Image
3BK07099	10 µm Dissolution Filter Core	17-4003	50 pcs/bag	
3BK07100	1 µm Dissolution Filter Core	17-4001, 17-4000, 17-4005	50 pcs/bag	
3AF00098	Glass Tube Flat Top Round Bottom	/	250 pcs/bag	

Dissolution Vessel



A key container in dissolution testing, used to hold dissolution media. During drug release studies, the sample is placed in the vessel with dissolution medium and stirred using a paddle or basket to simulate in vivo dissolution.

Part No.	Product Name	Spec.	Desc.	Packing Info	Image
3BK07785	Dissolution Vessel	USP 1 Glass	Clear Glass 1000 mL, for 708-DS.	1 pc/pk	



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