

# GC/GC-MS Vial Selection Guide

*CoreFocus*



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## Chapter

# 2

## Vial Selection

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## 1-1. Overview

### Compatibility with Sample Capacity and Autosampler

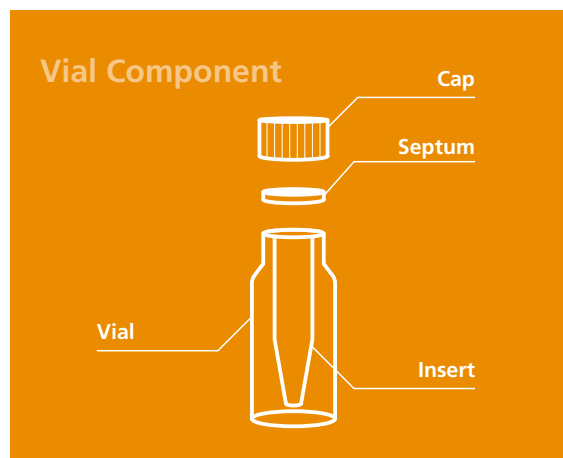
Choosing an appropriate vial requires consideration of factors such as the sample capacity, analysis method, and which autosampler is being used. When determining which vial to select, consider using the following table as a reference.

Use vol.	Vial	Usage	Compatible autosampler
Less than 1.5 mL	Vial insert (0.1 to 0.2 mL) Integrated vial (0.2 to 0.3 mL)	Use as a sample bottle or for liquid sample injection Most appropriate when the sample volume is limited	AOC-30/20 Series AOC-6000 Series
1.5 mL	1.5 mL glass vial	Use as a sample bottle or for liquid sample injection	AOC-30/20 Series AOC-6000 Series
4 mL	4 mL glass vial	Use as a sample bottle or for liquid sample injection Also used for cleaning solvents and waste liquid	AOC-30/20 Series
10 mL or more	10 mL glass vial 20 mL glass vial	For headspace	HS-10/20 Series AOC-6000 Series

### Vial Components

Mainly composed of a vial, cap, and septum, and sometimes used with a vial insert placed inside the vial.

To obtain the best analysis results, the most appropriate vial, cap, and septum need to be selected. Select the most appropriate items using this guide as a reference.



# 1-2. Vial Selection Guide

## Vial Form

### Vial neck

There are three types of vials: screw, crimp, and snap, according to the cap attachment method. Since highly volatile solvents are often used with GC and GC-MS, airtight screw neck or crimp neck vials are recommended.

Type	Sealing property	Remarks
Screw	High	Screw type caps can be attached and detached easily. Highly versatile.
Crimp	Very High	Requires a dedicated crimping tool (crimper/decapper).
Snap	Medium	No tools required, but the airtightness is rather inferior.



Screw neck



Crimp neck

Select the appropriate cap according to the vial type as vial caps vary depending on the form of the vial neck.

### Vial bottom

Flat-bottom vials are used in most cases, but vials for headspace have rounded bottoms for compatibility with headspace samplers.

Rounded bottom vials should be used with the HS-20 series and HS-10 since flat-bottom vials may cause a malfunction.



Flat bottom



Rounded bottom

## Vial Glass

Vial glass is manufactured from chemically very low active glass. Type I borosilicate glass (33 or 51 Expansion), which is the highest grade in the United States Pharmacopeia (USP) and European Pharmacopoeia (EP) standards, has been adopted.

## Deactivated Glass

Suitable for chemical compounds that are easily adsorbed onto glass. The polarity of the glass surface is reduced by silanization to make the glass surface hydrophobic. It is also suitable for storing samples.

## Vials for Microscale Samples

When the sample volume is less than 1 mL, using vial inserts or integrated vials in which an insert is adhered inside the vial ensures liquid levels that are high enough to be aspirated by an autosampler.



## 1-3. Septum/Cap Selection Guide

### Septum

Obtaining accurate analysis results requires selecting the appropriate septum. A septum is influenced by penetration of the autosampler needle, interaction between the solvent used in analysis, the heat by headspace analysis, etc., so features such as its seal-ability, deactivation to the sample and heat resistance need to be considered.

Material	Appearance	Description
PTFE		The chemical resistance is stable, and the septum is inexpensive. Since it cannot be tightly sealed once a hole is made, it is not suitable for multiple injections and long-term sample storage.
Silicone/PTFE		Chemically-resistant septum is most commonly used. Its hardness is suitable for usage with an autosampler needle, it has high seal-ability and is suitable for multiple injections. It can be used for many GC and GC-MS analyses.
PTFE/Silicone/PTFE		A septum with PTFE coating on both sides will have the highest chemical resistance. As breakage of the septum is unlikely to occur when a needle passes through, it is suitable for multiple injections. It is relatively expensive among septa. It is suitable for analyses requiring high accuracy, such as microanalysis.



## CQ (Certificated Quality) Vial Septum

The bleed of the septum from siloxane bonds is very low due to the use of high-quality silicon polymer and a specific cleaning technique. This confirms that there was an absence of elution components from the vial in random inspections using GC/MS and LC/MS. A mass spec quality certificate is included with each CQ vial kit.



Mass spec quality certificate

## Septum for Headspace

In headspace analysis, heat resistance is an important factor to consider when selecting a septum. The heat resistance of various septa is listed below.

Material	Heat resistance temperature	Description
Silicone/PTFE	200 °C	Septum suitable for analysis of volatile organic compounds. Has low bleeding and high solvent resistance.
Silicone/PI	300 °C	Septum with excellent heat resistance that can keep bleeding to a minimum even when the temperature is raised. Adopted for Xtra Low Bleed HS Septum.

## Xtra Low Bleed HS Septum

Elution of the bleeding components is low even if the temperature is kept at 300 °C, enabling analysis at high temperatures, which had been difficult with a headspace sampler.



Xtra Low Bleed HS septum

## Caps

### Screw Cap and Crimp Cap

Select the appropriate cap according to the vial. Since highly volatile solvents are often handled with GC/GC-MS, screw top or crimp top vials are generally used.

A crimp top vial requires a dedicated tool for attachment and detachment and takes time to open and close. At the same time, the risk of contamination is low, making it suitable for applications in the areas of food and forensic medicine where emphasis is placed on security.



Screw cap



Crimp cap

### Septum-free Cap

Contaminants from the septum can often hinder high-precision analysis and the effects are especially significant when performing injection operations multiple times.

- **Septum-less cap**

A cap that does not use a septum and can be used as a vial cap for 1.5 mL screw vials; however, the airtightness of these caps is inferior to caps that use a septum.

- **Xtra Clean Conical Cap**

Xtra Clean Conical Caps are used with 4 mL vials into which cleaning solvents are put for the AOC series. Conical caps have a pre-hole opening so that septum-originated contaminants will not be generated.

For cleaning solvents, injection operations are performed repeatedly and the effects of contaminants from the septum are likely to occur. It is therefore recommended to use this cap.



Septum-less cap



Xtra Clean Conical cap

### Magnetic Cap

Cap made of steel that is used for multifunctional autosamplers. Compatible with vial conveyance using a magnet.



Magnetic caps

# 1-4. First Choice for Vials

We recommend using the table below as a guide for selecting the most appropriate vial based on application. These high-quality consumables can be used for many types of analyses.

## Liquid sample injection autosampler (AOC-30/20 Series)

Usage	Use vol.	Name	Quantity	P/N	Remarks
Sample vial	Less than 1.5 mL	Integrated screw vial (0.2 mL)	100	227-34104-01	An inset is welded to the inside of the vial.
		Screw cap & septum for 1.5 mL, silicone (blue)/PTFE (white)	100	227-34106-01	Low bleed septum equivalent to a CQ vial.
	1.5 mL	CQ vial kit (1.5 mL)	100	227-34120-01	Set of extremely clean 1.5 mL vials. Comes with a certificate of quality.
Vial for cleaning/waste liquid	4 mL	4 mL screw vial	100	227-34132-01	Transparent, bottle only
Cap for cleaning/waste liquid		Screw cap for 4 mL (white)	100	227-34135-01	Cap only
Septum for cleaning vials		Xtra Clean Conical Cap	12	227-35600-01	Since injection operations are performed repeatedly when cleaning, it is recommended to use the Xtra Cap, which does not generate contaminants from the septum.
Septum for waste liquid vials		Vial septum for 4 mL, PTFE (white)	1,000	227-34133-01	

### CQ (Certificated Quality) Vial

CQ vials are high-quality vials with significantly reduced septum bleeding. Analysis using a low-quality vial not only causes poor analysis results, but also poses a risk of contaminating the equipment or losing valuable samples. CQ vials always provide reliable analysis results and come with a certificate that guarantees quality.

### Xtra Clean Conical Cap

Appropriate as a vial cap for cleaning solvents. Due to its septum-less structure, cleaning solvents are not contaminated by the septum. As a result, this cap offers reliable, long-term use for multi-specimen analysis.

## Headspace sampler (HS Series)

Usage	Use vol.	Name	Quantity	P/N	Remarks
Crimp vial kit	10 mL	10 mL crimp vial kit	100	227-34153-02	Clear vial, PTFE (white)/silicone (blue) septum, pressure-released type
	20 mL	20 mL crimp vial kit		227-34153-03	Clear vial, PTFE (white)/silicone (blue) septum, pressure-released type

Note: When using a crimp vial, crimper and decapper are required separately



## Multifunctional autosampler (AOC-6000 series)

### For liquid injection

Usage	Use vol.	Name	Quantity	P/N	Remarks
Vial	1.5 mL	1.5 mL screw vial, transparent	100	227-34102-01	
		1.5 mL screw vial, amber	100	227-34102-11	
Vial cap		Screw cap & septum for 1.5 mL, silicone (white)/PTFE (red)	100	227-34111-01	

### For HS, ITEX-DHS

Usage	Use vol.	Name	Quantity	P/N	Remarks
Vial	20 mL	20 mL crimp vial, transparent	100	227-34140-01	
Vial cap		Magnetic crimp cap & septum for 20 mL, silicone (blue)/PTFE (white)	100	227-34148-01	Iron cap

Note: When using a crimp vial, a crimper or decapper is required.

### For SPME, SPME Arrow

Usage	Use vol.	Name	Quantity	P/N	Remarks
Vial	20 mL	20 mL screw vial, transparent	100	227-34141-01	
Vial cap	10-20 mL	Magnetic screw cap & septum for 10-20 mL, silicone (white)/PTFE (blue)	100	227-34152-01	For AOC-6000 Plus Iron cap
	10-20 mL	Magnetic screw cap & septum for 10-20 mL, silicone (blue)/PTFE (white)	100	227-34151-01	For AOC-6000 Iron cap

For liquid sample preparation (automatic addition of internal standard substance and automatic concentration preparation of standard sample) and automatic derivatization for phenol

Usage	Use vol.	Name	Quantity	P/N	Remarks
Vial	1.5 mL	1.5 mL screw vial, transparent	100	227-34102-01	
		1.5 mL screw vial, amber	100	227-34102-11	
	20 mL	20 mL screw vial, transparent	100	227-34141-01	
Vial cap	1.5 mL	Screw cap & septum for 1.5 mL, silicone (white)/PTFE (red)	100	227-34111-01	
		Magnetic screw cap & septum for 1.5 mL, silicone (white)/PTFE (red)	100	227-34158-01	Iron cap
	10-20 mL	Magnetic screw cap & septum for 10-20 mL, silicone (white)/PTFE (blue)	100	227-34152-01	Iron cap

# Vial Selection



## 2-1. Vial Kits

- Vial, vial cap, and vial septum can be purchased together.
- For vial products for the AOC-6000 series, please refer to page 9 "Multifunctional autosampler (AOC-6000 series)".

### For AOC-30/20 Series (including two vial kits for AOC-6000 series)

Outline	Use vol.	Glass	Septum type	Cap color	Quantity	P/N	Remarks
CQ vial kit	1.5 mL	Clear	Silicone (white)/PTFE (blue)	White	100	227-34120-01	Comes with a certificate of quality, low bleed septum
Screw vial kit	1.5 mL	Clear	Silicone (white)/PTFE (red)	White	100	227-34121-01	
Screw vial kit	1.5 mL	Clear	Silicone (white)/PTFE (red)	Blue	100	227-34121-02	
Screw vial kit	1.5 mL	Clear	Silicone (white)/PTFE (red)	Gold (Iron)	100	227-34121-03	Magnetic cap, for multifunctional autosampler (AOC-6000 series)
Crimp vial kit	1.5 mL	Clear	Silicone (white)/PTFE (red)	Silver (Aluminium)	100	227-34121-04	
Screw vial kit	1.5 mL	Amber	Silicone (white)/PTFE (red)	White	100	227-34121-11	
Screw vial kit	1.5 mL	Amber	Silicone (white)/PTFE (red)	Blue	100	227-34121-12	
Screw vial kit	1.5 mL	Amber	Silicone (white)/PTFE (red)	Gold (Iron)	100	227-34121-13	Magnetic cap, for multifunctional autosampler (AOC-6000 series)
Crimp vial kit	1.5 mL	Amber	Silicone (white)/PTFE (red)	Silver (Aluminium)	100	227-34121-14	
Screw vial kit	4 mL	Clear	Silicone (white)/PTFE (red)	White	100	227-34138-01	
Screw vial kit	4 mL	Clear	Silicone (white)/PTFE (red)	Black	100	227-34139-01	

### For HS-20 Series · HS-10 Series

Outline	Use vol.	Glass	Septum type	Cap material	Quantity	P/N	Remarks
Crimp vial kit	20 mL	Clear	Silicone (blue)/PTFE (white)	Aluminum cap	100	227-34153-01	10 mm hole
Crimp vial kit	20 mL	Clear	Silicone (blue)/PTFE (white)	Aluminum cap	100	227-34153-03	8 mm hole, pressure release type
Crimp vial kit	10 mL	Clear	Silicone (blue)/PTFE (white)	Aluminum cap	100	227-34154-01	10 mm hole
Crimp vial kit	10 mL	Clear	Silicone (blue)/PTFE (white)	Aluminum cap	100	227-34153-02	8 mm hole, pressure release type
Screw vial kit	20 mL	Clear	Silicone (blue)/PTFE (white)	Iron cap	100	227-34155-01	Magnetic screw, 8 mm hole Septum thickness 1.3 mm
Screw vial kit	20 mL	Clear	Silicone (white)/PTFE (blue)	Iron cap	100	227-34153-05	Magnetic screw, 8 mm hole Septum thickness 1.5 mm
Screw vial kit	10 mL	Clear	Silicone (blue)/PTFE (white)	Iron cap	100	227-34156-01	Magnetic screw, 8 mm hole Septum thickness 1.3 mm
Screw vial kit	10 mL	Clear	Silicone (white)/PTFE (blue)	Iron cap	100	227-34153-04	Magnetic screw, 8 mm hole Septum thickness 1.5 mm

## 2-2. Screw Vials (for AOC-30/20 series)

For screw vials, caps and septa for the AOC-6000 series, please refer to page 9 "Multifunctional autosampler (AOC-6000 series)".



### Capacity of 1.5 mL or less

- Screw vials with a capacity of 1.5 mL or less are mainly used for liquid autosamplers (AOC-30/20 series).
- Most integrated vials have the same dimensions as 1.5 mL vials and, therefore, can be used with the caps described in the tables below.
- For the AOC-20 series, a white cap is recommended.



### Vials

The following is a list of 1.5 mL screw vials. Caps and septum must be purchased separately.

Use vol.	Type	Glass	Deactivation	Quantity	P/N	Remarks
1.5 mL	Screw	Clear		100	227-34102-01	
1.5 mL	Screw	Amber		100	227-34102-11	
1.5 mL	Screw	Clear	Silanized	100	227-34103-01	
1.5 mL	Screw	Amber	Silanized	100	227-34103-11	
0.2 mL	Integrated screw	Clear		100	227-34104-01	Low-volume insert is integrated inside the 1.5 mL vial.
0.2 mL	Integrated screw	Amber		100	227-34104-11	Low-volume insert is integrated inside the 1.5 mL vial.
0.3 mL	Integrated screw	Clear		100	227-34105-01	Low-volume insert is integrated inside the 1.5 mL vial.
0.3 mL	Integrated screw	Amber		100	227-34105-11	Low-volume insert is integrated inside the 1.5 mL vial.

### Vial cap/vial septum

The following is a list of caps (with a septum) for 1.5 mL screw vials. Caps and septum are not sold separately.



Applicable vial	Cap color	Septum type	Quantity	P/N	Remarks
1.5 mL screw vial	White	Silicone (blue)/PTFE (white)	100	227-34002-02	Premium product, low bleed septum
1.5 mL screw vial	White	Silicone (white)/PTFE (red)	100	227-34107-01	
1.5 mL screw vial	White	PTFE (red)/silicone (white)/PTFE (red)	100	227-34108-01	
1.5 mL screw vial	Black	Silicone (white)/PTFE (red)	100	227-34001-02	
1.5 mL screw vial	Black	PTFE (red)/silicone (white)/PTFE (red)	100	227-34110-01	
1.5 mL screw vial	Blue	Silicone (white)/PTFE (red)	100	227-34111-01	
1.5 mL screw vial	Blue	PTFE (red)/silicone (white)/PTFE (red)	100	227-34112-01	
1.5 mL screw vial	Red	Silicone (white)/PTFE (red)	100	227-34113-01	
1.5 mL screw vial	Red	PTFE (red)/silicone (white)/PTFE (red)	100	227-34114-01	
1.5 mL screw vial	Green	Silicone (white)/PTFE (red)	100	227-34115-01	
1.5 mL screw vial	Green	PTFE (red)/silicone (white)/PTFE (red)	100	227-34116-01	
1.5 mL screw vial	Yellow	Silicone (white)/PTFE (red)	100	227-34117-01	
1.5 mL screw vial	Yellow	PTFE (red)/silicone (white)/PTFE (red)	100	227-34118-01	
1.5 mL screw vial	Translucent	Septum-less	100	227-34119-01	Septum-less cap
1.5 mL screw vial	Gold	Silicone (white)/PTFE (red)	100	227-34158-01	Magnetic screw cap

## Capacity of 4 mL

- 4 mL screw vials are mainly used for liquid autosamplers (AOC-30/20 series).
- For the AOC-30/20 series, they are used as vials for cleaning/waste liquid.
- For the AOC-20 series, a white cap is recommended.

### Vial

The following is a list of 4 mL screw vials (vial bottles only). Caps and septum must be purchased separately.

Use vol.	Type	Glass	Deactivation	Quantity	P/N	Remarks
4 mL	Screw	Clear		100	227-34132-01	

### Vial cap/vial septum

The following is a list of caps and septum for 4 mL screw vials. For the AOC-20 series, a white cap is recommended.

Applicable vial	Cap color	Septum type	Quantity	P/N	Remarks
4 mL screw vial	Black	Silicone (white)/PTFE (red)	100	227-34136-01	
4 mL screw vial	Black	PTFE (red)/silicone (white)/PTFE (red)	100	227-34137-01	
4 mL screw vial		PTFE (white)	1,000	227-34133-01	Septum only
4 mL screw vial		Silicone (white)/PTFE (red)	100	227-34134-01	Septum only
4 mL screw vial	White		100	227-34135-01	Cap only
4 mL screw vial	Black		100	227-34159-01	Cap only
Xtra Clean Conical Cap		PP (polypropylene)	12	227-35600-01	For a 4 mL cleaning vial, used in place of a septum

## Capacity of 10 mL or more

- Vials with a capacity of 10 mL or more are mainly used for headspace samplers.
- The caps for screw-type HS vials are made of iron and can therefore be used as HS vials with the AOC-6000 series.
- Airtightness is somewhat inferior to a crimp vial.

### Vials

The following is a list of 10-20 mL screw vials (vial bottles only). Caps and septum must be purchased separately.

Use vol.	Type	Glass	Quantity	P/N	Remarks
20 mL	Screw	Clear	100	227-34141-01	
10 mL	Screw	Clear	100	227-34143-01	

### Vial cap/vial septum

The following is a list of caps and septum for 10-20 mL screw vials.

Applicable vial	Cap color	Cap material	Septum type	Quantity	P/N	Remarks
10-20 mL screw vial	Gold	Iron	Silicone (blue)/PTFE (white)	100	227-34151-01	
10-20 mL screw vial	Gold	Iron	Silicone (white)/PTFE (blue)	100	227-34152-01	Septum for SPME

## 2-3. Crimp Vials (for AOC-30/20 series)



- For crimp vials, caps and septa for the AOC-6000 series, please refer to page 9 "Multifunctional autosampler (AOC-6000 series)".
- Crimp vials have high seal-ability, making them suitable for analysis of highly volatile samples and headspace analysis.
- A dedicated crimping tool (crimper/decapper) is required for attaching/detaching crimp caps.

### Capacity of 1.5 mL

#### Vials

The following is a list of 1.5 mL crimp vials. Caps and septum must be purchased separately. Low-volume integrated vials are not included in the product lineup.

If a low-volume vial is needed, use a vial insert.

Use vol.	Type	Glass	Deactivation	Quantity	P/N
1.5 mL	Crimp	Clear		100	227-34122-01
1.5 mL	Crimp	Amber		100	227-34122-11
1.5 mL	Crimp	Clear	Silanized	100	227-34123-01
1.5 mL	Crimp	Amber	Silanized	100	227-34123-11

#### Vial cap/vial septum

The following is a list of caps (with a septum) for 1.5 mL crimp vials. Caps and septum are not sold separately.

Applicable vial	Cap material	Septum type	Quantity	P/N
1.5 mL crimp vial	Aluminum	Silicone (white)/PTFE (red)	100	227-34124-01
1.5 mL crimp vial	Aluminum	PTFE (red)/silicone (white)/PTFE (red)	100	227-34125-01

### Capacity of 4 mL

4 mL crimp vials are not included in the product lineup.

### Capacity of 10 mL or more

- Crimp vials with a capacity of 10 mL or more are mainly used for headspace samplers.
- Those with iron caps are compatible with magnet conveyance. These caps cannot be detached using a decapper (doing so may break the vial).
- Pressure-release type caps can prevent the vial from exploding as they release pressure when the pressure inside the vial increases more than 250 kPa.

#### Vials

The following is a list of 10-20 mL crimp vials (vials only). Caps and septum must be purchased separately.

Use vol.	Type	Glass	Quantity	P/N
20 mL	Crimp	Clear	100	227-34140-01
10 mL	Crimp	Clear	100	227-34142-01

## Vial cap/vial septum

The following is a list of caps and septum for 10-20 mL crimp vials.

Any of the following caps and septum can be attached to both 10 mL and 20 mL crimp vials.

Applicable vial	Cap material	Septum type	Quantity	P/N	Remarks
10-20 mL crimp vial	Aluminum	Silicone (blue)/PTFE (white)	100	227-34144-01	10 mm hole
10-20 mL crimp vial	Aluminum	Silicone (blue)/PTFE (white)	100	227-34145-01	Recommended product, 8 mm hole, pressure release
10-20 mL crimp vial	Aluminum	Silicone (white)/PTFE (beige)	100	227-34147-01	10 mm hole, for high temperatures (up to 200 °C)
10-20 mL crimp vial	Iron	Silicone (blue)/PTFE (white)	100	227-34148-01	8 mm hole, magnet compatible
10-20 mL crimp vial	Iron (bimetal)	Silicone (blue)/PTFE (white)	100	227-34149-01	8 mm hole, magnet compatible, easier to detach than iron caps
Xtra Low Bleed septum	-	Silicone/PI	100	225-40950-91	Septum only, for high temperatures (up to 300 °C), used in combination with cap (225-40956-02)
Heat resistant crimp cap	Iron	-	100	225-40956-02	Cap only, for high temperatures (up to 300 °C), 8 mm hole, used in combination with Xtra Septum (225-40950-91)

## Crimper/Decapper

Required for attaching/detaching a crimp vial cap.

### Manual crimper/decapper

Outline	Compatible cap diameter	P/N	Remarks
Manual crimper	11 mm	227-35506-01	For 1.5 mL crimp vial
Manual crimper	20 mm	227-35506-02	For 10 mL /20 mL crimp vial
Manual decapper	11 mm	227-35507-01	For 1.5 mL crimp vial
Manual decapper	20 mm	227-35507-02	For 10 mL /20 mL crimp vial

### Auto crimper/decapper

There are two types of auto crimpers and decappers: a rechargeable type and a high-power type with a power cord.

Electronic battery auto crimper/decapper (integration of main body and jaw part)

Outline	Compatible cap diameter	P/N	Remarks
Auto crimper	11 mm	227-35500-01	For 1.5 mL crimp vial
Auto crimper	20 mm	227-35500-02	For 10 mL /20 mL crimp vial
Auto decapper	11 mm	227-35501-01	For 1.5 mL crimp vial
Auto decapper	20 mm	227-35501-02	For 10 mL /20 mL crimp vial

Electronic high-power auto crimper/decapper (non-integration of main body with a power cord and jaw part)

Outline	Compatible cap diameter	P/N	Remarks
Main body	-	227-35003-01 (For JPN) 227-35003-02 (For USA) 227-35003-03 (For UK) 227-35003-04 (For AU) 227-35003-05 (For EU) 227-35003-06 (For CN)	<ul style="list-style-type: none"> <li>•With power cord</li> <li>•Jaw part corresponding to each cap diameter is required separately</li> </ul>
Auto crimper jaw part	11 mm	227-35504-01	For 1.5 mL crimp vial
Auto crimper jaw part	20 mm	227-35504-02	For 10 mL /20 mL crimp vial
Auto decapper jaw part	11 mm	227-35505-01	For 1.5 mL crimp vial
Auto decapper jaw part	20 mm	227-35505-02	For 10 mL /20 mL crimp vial



Manual crimper/decapper



Electronic battery



Electronic high-power

Auto crimper/decapper

## Stand for crimper/decapper

Outline	P/N	Remarks
Base for auto crimper/decapper	227-35510-01	The base is easy to assemble and hardware is included.
Stand for manual and auto crimper/decapper	227-35508-01	The stand is available for use with both the electronic and manual crimping tools.



Base for auto crimper/decapper



Stand for manual and auto crimper/decapper

## 2-4. Vial Inserts

- Vial inserts may be used when sample volumes are limited.
- Inserts are compatible with 1.5 mL screw vials (Chapter 2-2) and 1.5 mL crimp vials (Chapter 2-3).
- Flat bottom type inserts are recommended as they can reduce the risk of contacting the autosampler syringe.

### Vial Insert

The following is a list of vial inserts.

Note: When using the AOC-6000 series, use a flat-bottomed vial insert.

Use vol.	Deactivation	Quantity	P/N	Remarks
0.1 mL		100	227-34128-01	Resin leg bottom
0.2 mL		100	227-34129-01	Flat bottom
0.1 mL	Silanized	100	227-34130-01	Resin leg bottom
0.2 mL	Silanized	100	227-34131-01	Flat bottom



Flat bottom



Resin leg bottom

Vial Insert

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