

Gas Filtration Catalogue



ABOUT SUPER CLEAN GAS FILTERS

Cartridge systems make changing gas filters quick and easy. A base plate allows cartridges to be exchanged without introducing oxygen. Spring-loaded check valves seal when a filter is removed and open only when a new filter has been locked in place. There is no longer a need for loosening and tightening fittings every time a trap is changed and your system will not become contaminated during the process.

WHY GAS PURITY IS IMPORTANT

Carrier gas should contain less than 1 ppm of oxygen, moisture, or other trace contaminants, to prevent column degradation, increase column lifetime, and decrease stationary phase bleed. The expense of using high-purity gases in combination with carrier gas line purifiers will be offset by longer column lifetime and less GC maintenance.

Contaminants cause ghost peaks to appear during temperature programming and degrade the validity of analytical data. Make-up gas also should be contaminant-free, or baseline fluctuations and excessive detector noise can occur; detector gases should be free of water and hydrocarbons, or excessive baseline noise can result. Gas purifiers remove these contaminants from gas sources, thereby improving system performance.

GAS FILTER SYSTEM COMPONENTS

**BASE PLATE**

Connecting unit with in- and outlet connectors for the gas line and two spring-loaded check valves that automatically start the flow of gas once a filter is installed.

**FILTER CARTRIDGE**

The filter cartridges are made of glass to prevent diffusion, and protected by a plastic housing for safety. The PTFE seals at the base of the Filter will only be punctured during installation on the base plate.

**UNIVERSAL RING NUT**

The Universal Ring Nut is used for mounting a filter cartridge or flush-cap to a base plate. It can also serve as a mounting point for the Electronic Maintenance Indicator device.

**ELECTRONIC INDICATOR**

Optional Electronic Maintenance Indicator device warns when scheduled replacement or maintenance is due.

**WALL MOUNT BRACKET SET**

Optional wall mounting brackets to mount a base plate to a wall.

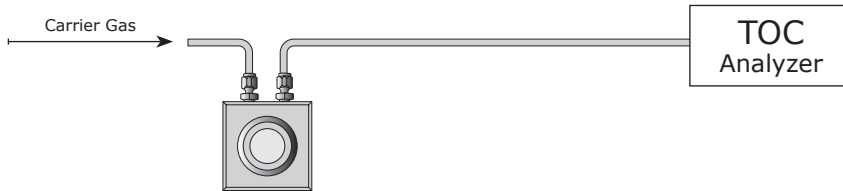


GC / MS (ITD/MSD)



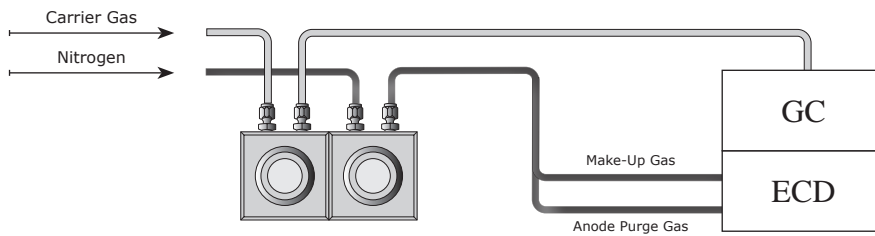
Product	Part No.	Qty
Triple Filter	226-50710-00	1
1 Position Base plate	226-50771-00	1
Kit Part Number	226-50751-00	

TOC Analyzer



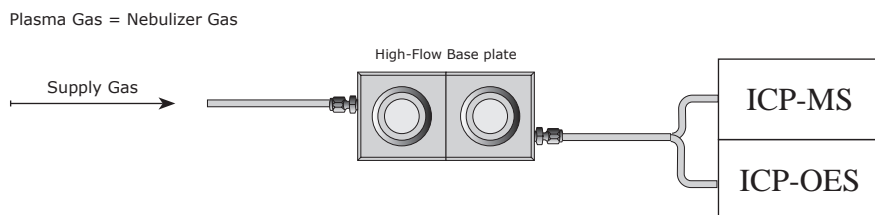
Product	Part No.	Qty
CO ₂ / Moisture Filter	226-50759-00	1
1 Position Base plate	226-50771-00	1
Kit Part Number	226-50740-00	

GC / ECD



Product	Part No.	Qty
Triple Helium Filter	226-50752-00	1
Oxygen/Moisture Filter	226-50758-00	1
2 Position Base plate	226-50772-00	1
Kit Part Number	226-50781-00	

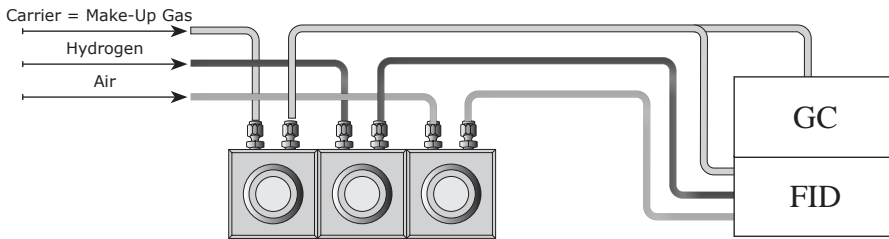
ICP-OES / ICP-MS



Product	Part No.	Qty
High Flow Oxygen/Moisture Filter Bundle	226-50766-00	1
ICP-MS Base plate	226-50776-00	1
Kit Part Number	226-50767-00	

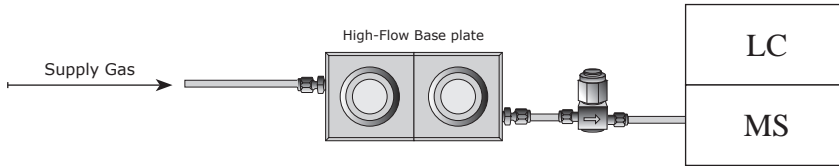
GC / FID

GC/FID Solution 2 (Carrier Gas = Make-Up Gas)

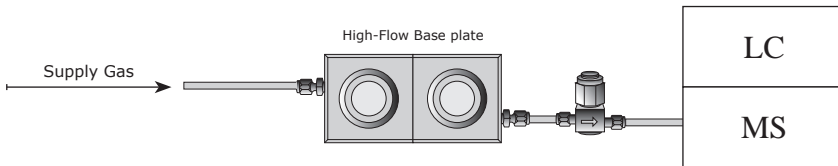


Product	Part No.	Qty
Triple Filter	226-50710-00	1
Hydrocarbon/Moisture Filter	226-50750-00	2
3 Position Base plate	226-50773-00	1
Kit Part Number	226-50751-00	

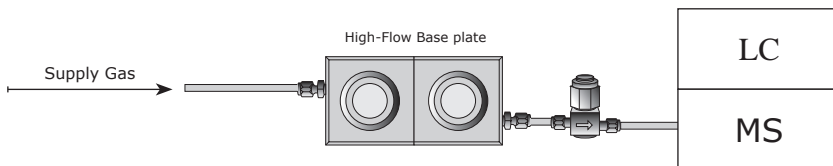
LC/MS



Product	Part No.	Qty
High Flow Hydrocarbon Filter Bundle	226-50760-00	1
Particle Filter	226-50794-01	1
High Flow Base plate	226-50775-01	1
Kit Part Number	226-50720-00	



Product	Part No.	Qty
High Flow Moisture Filter Bundle	226-50762-00	1
Particle Filter	226-50794-01	1
High Flow Base plate	226-50775-01	1
Kit Part Number	226-50722-00	



Product	Part No.	Qty
High Flow Hydrocarbon/Moisture Filter Bundle	226-50764-00	1
Particle Filter	226-50794-01	1
High Flow Base plate	226-50775-01	1
Kit Part Number	226-50724-00	

Catalog No. 226-50710-00
226-50712-00 (Helium)

Usable for	Benefit
GC/MS	Higher data accuracy and less maintenance
GC/TCD	Greater sensitivity and less maintenance



GC/MS TRIPLE FILTER KIT

The triple combination filter kit is ideal for purifying GC/MS carrier gases. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge.

Catalog No. 226-50740-00

Usable for	Benefit
TOC Analyzer	Greater sensitivity
Zero-Air generator	Cleaner gas



TOC CO₂/MOISTURE FILTER KIT

The carbon dioxide/moisture combination filter kit is ideal for TOC analysers and Zero-Air generators. It removes both carbon dioxide and moisture from gas streams.

Catalog No. 226-50767-00

Usable for	Benefit
ICP-MS	Greater sensitivity
ICP-OES	Greater sensitivity



ICP-MS MOISTURE/OXYGEN FILTER KIT

Removes Oxygen and Moisture from gas streams.

Catalog No. 226-50780-00

Usable for	Benefit
GC/ECD	Greater sensitivity



GC/ECD FILTER KIT

Removes oxygen, moisture and hydrocarbons from the carrier gas and removes moisture and oxygen from the make-up and purge gas.

Catalog No.	226-50730-00
Usable for	Benefit
GC/FID	Greater sensitivity



FID 3 POSITION KIT

The FID Filter kit is the perfect all-in-one solution for purifying flame ionization detector (FID) fuel gases together with the carrier gas.

This kit removes hydrocarbons, moisture and oxygen from the carrier gas and removes both moisture and hydrocarbons from the Hydrogen and Air fuel gases.

Catalog No.	226-50720-00
Usable for	Benefit
LC/MS	Greater sensitivity



LC/MS HYDROCARBON KIT

Up to 20 L/min. of hydrocarbon-free nitrogen per minute with this LC/MS High Flow Kit

Catalog No.	226-50722-00
Usable for	Benefit
LC/MS	Greater sensitivity



LC/MS MOISTURE KIT

Up to 20 L/min. of moisture-free nitrogen per minute with this LC/MS High Flow Kit

Catalog No.	226-50724-00
Usable for	Benefit
LC/MS	Greater sensitivity



LC/MS COMBI (HYDROCARBON/MOISTURE) KIT

Removes Moisture and Hydrocarbons from high flow gas streams.

Catalog No. 226-50710-00
226-50752-00 (Helium)
226-50752-10 (Hydrogen)

Replacement Filter for GC/MS Triple Filter Kit



GC/MS TRIPLE (OXYGEN/MOISTURE/ HYDROCARBON) FILTER

The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge

Capacity

H₂O	1.8 g
O₂	75 mL
HC	4 g (as <i>n</i> -butane)

Catalog No. 226-50759-00

Replacement Filter for TOC CO₂/Moisture Filter Kit



TOC COMBI (CARBON DIOXIDE/ MOISTURE) FILTER

Removes carbon dioxide and moisture from gas streams.

Capacity

H₂O	3.5 g
CO₂	6 g

Catalog No. 226-50766-00

Replacement Filters for ICP-MS Moisture/Oxygen Filter Kit



ICP-MS COMBI (OXYGEN/MOISTURE) FILTER BUNDLE

Removes Oxygen and Moisture from the ICP-MS supply gas stream. To be used in combination with a high flow ICP-MS base plate.

Capacity

H₂O	7.2 g
O₂	150 mL

Catalog No. 226-50781-00

Replacement Filters for GC/ECD Filter Kit



GC/ECD FILTER BUNDLE

Removes oxygen, moisture and hydrocarbons from the carrier gas and removes moisture and oxygen from the make-up and purge gas.

Capacity

H₂O	1.8 g / 3.5
O₂	75 mL / 75 mL
HC	4 g (as <i>n</i> -butane)

Catalog No. 226-50761-00
Replacement Filters for FID 3 Position Filter Kit



**FID
 FILTER BUNDLE OF 3**

Removes Oxygen and Moisture from high flow gas streams. To be used in combination with a high flow base plate.

Capacity	
H ₂ O	7.2 g
O ₂	150 mL

Catalog No. 226-50760-00
Replacement Filters for LC/MS Hydrocarbon Filter Kit



**LC/MS
 HIGH FLOW HYDROCARBON
 FILTER BUNDLE**

Up to 20 L/min. of hydrocarbon-free nitrogen per minute. To be used in combination with a high flow base plate.

Capacity	
HC	24 g (as <i>n</i> -butane)

Catalog No. 226-50762-00
Replacement Filters for LC/MS Moisture Filter Kit



**LC/MS
 HIGH FLOW MOISTURE FIL-
 TER BUNDLE**

Removes moisture from high flow gas streams. To be used in combination with a high flow base plate.

Capacity	
H ₂ O	14.4 g

Catalog No. 226-50764-00
Replacement Filters for LC/MS Combi (hydrocarbon/
 moisture) Filter Kit



**LC/MS
 HIGH FLOW COMBI (HYDRO-
 CARBON/MOISTURE) FILTER
 BUNDLE**

Removes Moisture and Hydrocarbons from high flow gas streams. To be used in combination with a high flow base plate.

Capacity	
HC	12 g (as <i>n</i> -butane)
H ₂ O	7.2 g

Catalog No. 226-50754-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



MOISTURE FILTER

Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

Capacity

H₂O	7.2 g
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Catalog No. 226-50755-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



OXYGEN FILTER

Oxygen is a column killer. It is present even in UHP gases, as minutes leaks at fittings allow oxygen to influx against the concentration gradient. Because oxygen can enter a gas line at any fitting or during gas bottle exchange, the oxygen trap should be the last connection before the gas line enters the chromatograph.

Capacity

O₂	150 mL
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Catalog No. 226-50756-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



HYDROCARBON FILTER

Use a hydrocarbon trap if your gas has a potential source of hydrocarbon contaminants or if you suspect you are observing carrier gas ghost peaks. Install the hydrocarbon trap after the moisture trap, to prevent moisture from degrading the hydrocarbon-trapping ability of the activated carbon in the hydrocarbon trap.

Capacity

HC	12 g (as <i>n</i> -butane)
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Catalog No. 226-50757-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



CARBON DIOXIDE FILTER

Removes carbon dioxide from gas streams. To be used in combination with a Moisture Filter

Capacity

CO₂	12 g
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Catalog No. 226-50750-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



COMBI (HYDROCARBON/MOISTURE) FILTER

The Fuel Gas Filter is perfect for purifying flame ionization detector (FID) fuel gases, removing both moisture and hydrocarbons. Using the Fuel Gas Filter for FID Hydrogen and air will produce a stable baseline, improving overall reproducibility and sensitivity.

Capacity

H ₂ O	3.5 g
HC	6 g (as <i>n</i> -butane)

Catalog No. 226-50758-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



COMBI (OXYGEN/MOISTURE) FILTER

This Combi trap is ideal for purifying carrier gas. It contains oxygen and moisture scrubbers in one easy to change economical cartridge

Capacity

H ₂ O	3.5 g
O ₂	75 mL

Catalog No. 226-50759-00

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



COMBI (CARBON DIOXIDE/MOISTURE) FILTER

Removes carbon dioxide and moisture from gas streams.

Capacity

H ₂ O	3.5 g
CO ₂	6 g

Catalog No. 226-50751-00
226-50752-00 (Helium Specific)
226-50752-10 (Hydrogen Specific)

Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H ₂ , N ₂ , AR
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



TRIPLE (OXYGEN/MOISTURE/HYDROCARBON) FILTER

The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge

Capacity

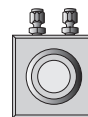
H ₂ O	1.8 g
O ₂	75 mL
HC	4 g (as <i>n</i> -butane)

Catalog No.	Fitting Type
226-50771-00	1/8" SS



1 POSITION BASE PLATE

Single position base plate

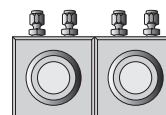


Catalog No.	Fitting Type
226-50772-00	1/8" SS



2 POSITION BASE PLATE

Double position base plate

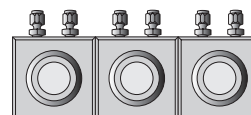


Catalog No.	Fitting Type
226-50773-00	1/8" SS



3 POSITION BASE PLATE

Three position base plate

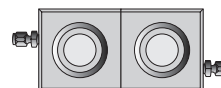


Catalog No.	Fitting Type
226-50776-00	1/8" SS



**ICP-MS
HIGH FLOW BASE PLATE**

High Flow Base plate for ICP-MS (in parallel)

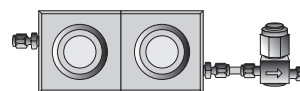


Catalog No.	Fitting Type
226-50775-01	1/4" Brass
226-50775-00	1/4" SS



**LC/MS
HIGH FLOW BASE PLATE**

High Flow double position base plate (in parallel)



Catalog No.	Clip Type
226-50798-00	Filter Cartridge
226-50797-00	Universal Ring Nut
Usable for	
All base plates with Universal Ring Nut	



ELECTRONIC INDICATOR

Electronic Maintenance Indicator device warns when scheduled filter replacement or base plate maintenance is due.

Catalog No.	226-50799-00
Usable for	
All base plates	



UNIVERSAL RING NUT

Universal Ring Nut to mount a filter or flush-cap on a base plate.

Catalog No.	226-50770-00
Usable for	
All base plates	



O-RING REPLACEMENT SET

O-ring replacement set for replacing the O-rings on the in- and outlet valves on a base plate.

Catalog No.	226-50790-00
Usable for	
All base plates	



WALL-MOUNT BRACKET SET

Wall mounting brackets to mount a Base plate on a wall.

Catalog No.	226-50796-00
Usable for	
All base plates	



UNIVERSAL FLUSH-CAP SET

Flush-cap that mounts on a base plate, and allows the gas to pass through the base plate without a filter attached.

Catalog No.	Connection Type
226-50792-01	1/4" Brass
226-50791-01	1/8" Brass
226-50792-00	1/4" SS
226-50791-00	1/8" SS
Usable for	
1, 2, 3 and 4 position base plates	



STANDARD BASE PLATE CONNECTOR SET

Replacement connectors for standard base plates.

Catalog No.	Connection Type
226-50793-01	1/4" Brass
226-50793-00	1/4" SS
Usable for	
High flow base plates	



HIGH FLOW BASE PLATE CONNECTOR SET

Replacement connector for high flow base plates.

Catalog No.	Description
226-50794-01	0.5 Micron Particle Filter (1/4" Brass)
226-50795-00	0.5 Micron Particle Filter Cup Replacement Pack



PARTICULATE FILTER

Particulate filter for high flow base plates.

Catalog No. 226-50700-00

Specifications

Usable For Fused Silica Capillary Column \varnothing 0.5
Use with 0.25mm ID to 0.53mm ID
tubing (0.78mm OD maximum).

Dimensions 9.2 cm x 1.7 cm x 1.7 cm

Weight 94 g



SHORTIX™ GC

In Gas chromatography, the Glass Quick-Fit connection is often used (e.g. for Retention Gaps, Guard Columns). This connection will only be leak-tight when the column is cut extremely straight and without any damage to the fused-silica column wall.

Catalog No. 226-50700-01

Specifications

Usable For Fused Silica Capillary Column \varnothing
0.25micron

Dimensions 9.7 cm x 1.7 cm x 1.7 cm

Weight 94 g



SHORTIX™ CE-CEC

For CE/CEC analyses, a clean and straight cut of the capillary column is needed to assure symmetrical Field-Strength over the inlet of the column. When there is no symmetrical Field-Strength, the analytical results will be non-reproducible.

Catalog No. 226-50700-10

Specifications

Usable For Shortix™ GC



**MAINTENANCE KIT
FOR SHORTIX™ GC**

Includes diamond cutting wheel, O-rings and a tool to open the column cutter.

Catalog No. 226-50700-11

Specifications

Usable For Shortix™ CE-CEC



**MAINTENANCE KIT FOR
SHORTIX™ CE-CEC**

Includes diamond cutting wheel, O-rings and a tool to open the column cutter.



Shimadzu Corporation

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