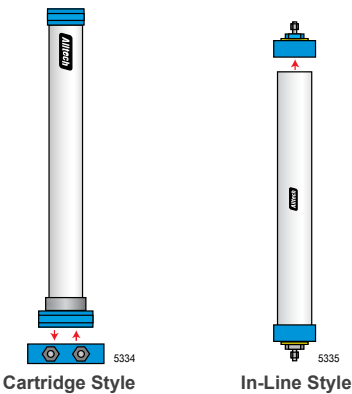


Gas Purifiers and Traps

Why Use Gas Purifiers?

A clean gas stream helps guarantee the quality of your GC analysis and the reliability of your results. It also helps prolong column life and minimize detector noise. Gas purifiers act as an insurance policy, protecting your instrumentation and analytical columns from these contaminants. They will not however, convert low purity gas into ultra high purity gas. Grace carries a variety of gas purifiers in two different styles. See **Table 1** for details.



	Cartridge Style	In-Line Style
Placement:	Stands on Benchtop	Freely supported on gas lines
Repeat Use:	Replace Cartridge	Refill*
Benefit:	Convenient access, stops gas flow when changing cartridges	Occupies wall space not bench space

*Refills for most materials are available. See specific gas purifiers for refill kit part numbers.

How Contaminants Affect Your Gas Stream

Follow the path that your carrier gas or detector fuel gases take to get to the GC. They start at either a gas tank or a gas generator, and travel through long lengths of tubing, pressure gauges, various fittings, and valves. Each is a potential culprit for introducing contaminants into your gas stream, which ultimately degrades chromatography results and shortens column life.

Typical contaminants, such as moisture, oxygen, and hydrocarbons wreak havoc with GC columns and detectors. Capillary and packed columns can degrade when exposed to moisture or oxygen, particularly at high temperatures. Detector performance may also be compromised. Since the detector can actually “see” the contaminants, spikes, baseline noise, and drift result.

Choosing the Right Gas Purifier for Your Application

There are a variety of gas purifiers available. Some remove a specific contaminant while others remove multiple contaminants from your gas stream. There are several factors you need to consider when selecting purifiers for your application. These include contaminants potentially present in your gas stream, gas purity levels required, flow and pressure limitations, space availability, and desired convenience when replacing spent traps.

Moisture, hydrocarbon, and oxygen traps are the most commonly used purifiers for GC applications. Moisture traps are typically packed with molecular sieves. After extensive heating, these crystalline structures lose their water of hydration opening a cavity that is readily filled with any compound that can fit. Water fits perfectly. However, it will also remove HCl, CO₂, SO₂, Cl₂, or any gas with an effective diameter smaller than water.

Hydrocarbon traps are packed with an activated charcoal that adsorbs any organic compound larger than methane. Size and molecular weight of the organic contaminants will greatly effect the capacity of the trap, and to a smaller degree, trap efficiency. Activated charcoal has a higher capacity for larger (>C₄) hydrocarbons than for smaller hydrocarbons.

Oxygen traps are packed with a metal catalyst. Oxygen is the most detrimental contaminant to analytical columns. It produces irreversible oxidation damage particularly to polar stationary phases. Refer to **Table 2** for a recommendation of what purifiers to use for various GC applications.

Table 2—Gas Purifier Recommendations			
System	Detector	Gas Stream	Recommended Purifier
<i>Packed Column GC</i>			
	All	Carrier Gas	Hydrocarbon, Moisture, Oxygen, and Indicating Oxygen
<i>Capillary Column GC</i>			
	All	Carrier Gas	Hydrocarbon, Moisture, Oxygen, and Indicating Oxygen
	ECD	Make-Up	Moisture and Oxygen
	FID	Make-Up	Hydrocarbon
	FID	Air for FID	Hydrocarbon
	FID	Hydrogen for FID	Hydrocarbon
	ELCD	ELCD Reaction Gas	Hydrocarbon

Physical Characteristics

You will also need to consider what physical characteristics your purifier should possess to meet your application requirements. Do you require 1/8" or 1/4" fittings, or are you performing bulk gas purification that requires 1/2" fittings? What are the pressure requirements of your application? This will determine if you need a purifier with a polycarbonate, glass, or metal body. Where will you be installing the purifier and is your installation space limited? This will determine the dimension and style of purifier you should choose.

Purifier Styles

Grace offers two purifier styles—in-line and cartridge. The in-line style is the traditional style that is most commonly used. It can be directly installed into your gas lines with no support depending on its dimension or can be easily mounted on the wall with mounting clips. In-line purifiers must be removed from the gas line to be refilled or regenerated. We recommend installing them with quick-connect connectors and keeping an extra purifier on hand.

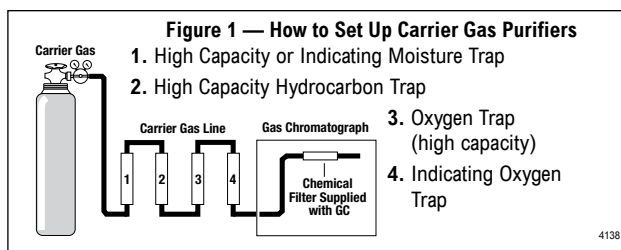
The cartridge style purifier sits on the countertop for easy access when it is time to replace spent traps. The cartridge style can be installed in series with shut off valves allowing you to easily isolate them from your gas lines when it is time to replace them. Cartridge purifiers allow you to quickly remove the spent purifier from your gas line and replace it with a new one.

Purifier Capacity

Purifier capacity indicates the amount of contaminant a trap is capable of removing before it reaches its point of saturation. It is dependent on both the adsorbent's capabilities and purifier's volume. You need to consider the amount of impurities in your gas stream and the volume of gas you need to purify. If you are purifying a large volume of gas or a less pure gas, you should select a high capacity trap with a large volume adsorbent bed that will trap and retain more contaminants.

Purifier Efficiency

Purifier efficiency is the most important purifier characteristic. It indicates how effective the adsorbent is at removing the desired contaminant from your gas stream. If your application requires high purity levels or the lowest detection limits, select a purifier that is packed with a highly efficient adsorbent material that removes contaminants to ppb levels.



Gas Purifier Installation Order

The order in which you install purifiers into your gas lines is very important. **Figure 1** demonstrates the correct order for installing purifiers into your carrier gas line. The moisture trap should be placed first in line. Both hydrocarbon and oxygen traps will adsorb water. Installing a moisture trap before these traps prevents them from becoming prematurely saturated with moisture. It also allows them to more effectively remove their specified contaminants from the gas stream. The hydrocarbon trap should be placed after the moisture trap. A high-capacity oxygen trap and an indicating oxygen trap should be placed closest to the GC. We recommend installing the series of purifiers as close to the GC as possible.

Gas purifiers should be installed in a vertical position to prevent channeling. Channeling is a phenomenon that occurs when a purifier is installed in a horizontal position. The adsorbent bed settles and the gas stream passes over the top of the bed rather than through the bed. The gas stream does not sufficiently interact with the adsorbent bed to effectively remove impurities.

Gas purification systems simplify purifier installation in to your gas lines. Systems are available as multi-adsorbent single purifiers or compact panels that contain multiple purifiers.

Purifier Replacement/Regeneration

You need to replace your gas purifiers before they are fully saturated. You can either change them at a predetermined time interval or use an indicating trap that changes color as it becomes saturated. There are potential problems with scheduled replacements. Undetected leaks or accidental exposure to air during cylinder changes can prematurely saturate gas purifiers. Early breakthrough means your column and detectors are exposed to a constant stream of damaging contaminants. An indicating trap located downstream from a high capacity trap is the best way to determine when it's time to replace a spent trap. Some purifiers contain both the high capacity and indicating adsorbent in the same purifier body while others rely on a separate trap that serves solely as an indicator. Either way, purifier replacement should coincide with the first signs of color change in the indicating adsorbent.

Moisture Traps

Remove Moisture From Your Gas System

- Eliminate stationary phase degradation
- Increase column life
- Improve the quality of your chromatography

Remove moisture from gas cylinders, regulators and gas lines with a Grace moisture trap. In addition to H₂O, most traps (except the ALL-Pure™ and Sodium Sulfate) also remove HCl, SO₂, NO₂, H₂S, CO₂, oil, and small aliphatics. Both indicating and non-indicating traps are available. Many traps can be regenerated and are refillable—order refill kits separately.



Alltech® Cartridge Style Moisture Trap

A) Cartridge Style Moisture Trap

- Simply replace the cartridge when spent
- Gas flow stops while cartridge is changed
- Order baseplate unit separately below

In-Line Style Moisture Traps

B) Alltech® Standard Moisture Trap

- Suitable for air lines
- Refillable
- SS screen at outlet prevents particulates from entering the gas stream

C) Alltech® Traditional Hydro-Purge™ Moisture Trap

- Sorbsil® Chameleon® indicating material
- SS screens at each end prevent particulates from entering the gas stream

D) Alltech® Hydro-Purge™ II Moisture Trap

- 40µm SS frits in endfittings prevent particulates from entering the gas stream
- Larger capacities than the Traditional Hydro-Purge™

In-Line Style Moisture Traps (continued)

E) Alltech® Glass Moisture Trap

- Best for carrier gas lines
- Glass housing eliminates diffusion
- 40µm SS frits in endfittings prevent particulates from entering the gas stream



F) ALL-Pure™ Moisture Trap

- Removes moisture down to <1 ppb
- Specific for H₂O and CO₂ only
- SS body endures 1000psig pressure limit



G) Alltech® High-Pressure Gas Drier

- Handles pressures up to 1800psig



H) Alltech® BIG Moisture Trap

- High capacity—removes up to 130mL of moisture
- One-piece body handles pressures up to 250psig
- 40µm SS frits in endfittings prevent particulates from entering the gas stream



I) Alltech® Sodium Sulfate Moisture Trap

- Specifically designed to remove only H₂O
- Contains Sorbsil® Chameleon® indicating material

In-Line All-Purpose Trap

J) Alltech® Excelasorb Multi-purpose Trap

- Removes oxygen, moisture, hydrocarbons, and carbon dioxide
- Serves as three traps in one
- Stainless steel fittings with 40µm stainless steel frits
- Mounting clip available (Part No. 8619281)

Cartridge Moisture Traps

Photo	Cartridge Description	Capacity	Efficiency	Pressure Limit	Fitting	Dimensions (L x o.d.)	Indicator	Part No.	Refill Kit Part No.
Cartridge Style Trap									
A	Cartridge Moisture Trap	14mL	<1ppm	100psig	N/A	13.2" x 1.5"	Yes	81005	8132
	Baseplate Unit	—	—	—	—	—	—	81025	—
In-Line Style Traps									
B	Standard Moisture Trap	12mL	<1ppm	100psig	1/8"	13" x 1.25"	Yes	8121	8132
					1/4"			8125	N/A†
		31mL			1/8"	14.5" x 2"		8123	N/A†
					1/4"			8128	N/A†
C	Hydro-Purge™	13mL	<1ppm	100psig	1/4"	9.9" x 1.5"	Yes	14505	14637
D	Hydro-Purge™ II	22mL	<25ppb	125psig	1/8"	8.6" x 1.5"	Yes	14626	14642
					1/4"			14625	14642
		36mL	<20ppb		1/8"	12.8" x 1.5"		14628	14642
					1/4"			14627	14642
E	Glass Moisture Trap	16mL	<10ppb	125psig	1/8"	12.25" x 1.5"	Yes	7214	7218
					1/4"			7216	7218
F	ALL-Pure™ Moisture Trap†	35mL	<1ppb	1000psig	1/8"	22.5" x 1.5"	No	7034	—†
					1/4"			7036	
G	High-Pressure Gas Drier†	27mL	<1ppm	1800psig	1/4"	11.5" x 1.5"	No	8113	—†
H	BIG Moisture Trap	130mL	<5ppb	250psig	1/8"	17.5" x 2.4"	No	7207	7202
					1/2"			7211	
I	Sodium Sulfate Moisture Trap	59mL**	<1ppm	100psig	1/4"	9.0" x 1.5"	Yes	81533	81534
J	Excelasorb Multi-purpose Trap	***	‡	500	1/8"	17" x 2.375"	No	8619282	—
					1/4"			8619280	—

*Length is measured from endfitting to endfitting. †These traps are disposable. **Capacity based on 50% efficiency. ***Oxygen: 1200mg, Moisture: 46gm, Hydrocarbon: 30gm, Carbon Dioxide: 100gm. ‡Oxygen: <2ppb, Moisture: <10ppb, Hydrocarbon: <20ppb, Carbon Dioxide: <1ppm.

Oxygen Traps

Protect Columns From Oxygen Contamination

Prevent oxidation of column stationary phases with Grace oxygen traps. Use an oxygen trap to help maintain column performance and prolong column life. Traps are available in cartridge and in-line styles. Choose an indicating trap to easily identify when trap is spent or to use in conjunction with larger capacity traps. Some traps can be regenerated—see table on following page.



Alltech® Cartridge Style Oxygen Traps

A) AT™-Indicating Oxy Cartridge

- Features the OXY-MAX™ adsorbent
- Easy to replace—simply change cartridge
- Gas flow stops while cartridge is charged
- Order baseplate separately below



B) AT™-Omni Cartridge

- Features the OXY-MAX™ adsorbent
- Also removes moisture and hydrocarbons
- Easy to replace—simply change cartridge
- Gas flow stops while cartridge is charged
- Order baseplate separately below



Don't forget the baseplate for cartridge style traps. Part No. **81025**.

In-Line Style Oxygen Traps

C) Alltech® Oxy-Trap™

- Features OXY-MAX™ adsorbent
- Compact coil design



D) Alltech® Large Oxy-Trap™

- Same as original Oxy-Trap™ except larger capacity

E) Alltech® Indicating Oxy-Trap™

- Features OXY-MAX™ adsorbent
- Glass housing eliminates diffusion



F) Alltech® Indicating Oxy-Purge®

- Glass housing eliminates diffusion
- Endfittings contain 40µm SS frits for particulate control



G) Oxy-Purge® N

- Also removes moisture
- Rugged aluminum housing
- 40µm SS frits in endfittings prevent particulates from entering gas stream



H) ALL-Pure™ Oxygen Trap

- Also removes moisture
- Capacity of 1030mL of oxygen



I) Oxi Clear™ Oxygen Trap

- Removes oxygen, moisture, and hydrocarbons



J) Alltech® BIG Oxygen Trap

- Our highest capacity trap—3000mL



K) Alltech® High-Pressure Oxy-Trap™

- Features OXY-MAX™ adsorbent
- Handles pressures up to 1800psig



Cartridge Oxygen Traps

Photo	Description	Capacity	Efficiency	Pressure Limit	Fitting	Dimensions (L x o.d.)	Indicator	Part No.
<i>Cartridge Style Traps</i>								
A	AT™-Indicating Oxy	104mL	<1ppb	100 psig	—	13.2" x 1.5"	Yes	81015
B	AT™-Omni	48mL	<1ppb	100 psig	—	13.2" x 1.5"	Yes	81012
	Baseplate Unit	—	—	—	—	—	—	81025

In-Line Style Traps

C	Oxy-Trap™	133mL	<1ppb	100psig	1/8"	3.5" dia coil	No	4001
					1/4"			4002
D	Large Oxy-Trap™	206mL	<1ppb	100psig	3/8"	3-7/8" dia coil	No	4003
E	Indicating Oxy-Trap™	20mL	<1ppb	100psig	1/4"	16" x .375"	Yes	4004
F	Indicating Oxy-Purge®	50mL	<3ppb	100psig	1/8"	9.5" x 1.5"	Yes	14563
					1/4"			14562
G	Oxy-Purge® N	156mL	<30ppb	250psig	1/8"	11" x 1.5"	No	14636
					1/4"			14635
H	ALL-Pure™ Oxygen Trap	1030mL	<5ppb	1000psig	1/8"	22.5" x 1.5"	No	7040
					1/4"			7042
I	Oxi Clear™ Trap	48mL	<5ppb	125psig	1/8"	5.5" x 2"	No	8866
					1/4"			8864
J	BIG Oxygen Trap	3000mL	<50ppb	250psig	1/8"	17.5" x 2.4"	No	7213
					1/4"			7215
					1/2"			7217
K	High-Pressure Oxy-Trap™	456mL	<1ppb	1800psig	1/4"	11.5" x 1.5"	No	8115

*Reducing ferrules are supplied for installation into 1/8" lines. †These traps are disposable.

Hydrocarbon, CO₂, and Sulfur Traps

Eliminate Detector Noise and Increase Baseline Stability

- Choose baseplate, cartridge, or in-line styles
- Indicating hydrocarbon trap available

Grace hydrocarbon traps adsorb trace amounts of hydrocarbons and organics from your gas stream. Most traps are packed with activated charcoal and adsorb organic compounds larger than methane. Traps are available in a baseplate style that sits on the benchtop, a cartridge style that allows for easy replacement of the trap (requires baseplate unit to be ordered separately), and an in-line style that is freely supported on gas lines. Traps for CO₂, and sulfur are also available.

Alltech® Cartridge Style Traps

A) Organic Cartridge Trap

- Economical

B) AT™-Omni Cartridge Trap

- Removes hydrocarbons, moisture, and oxygen
- Indicating for oxygen



Don't forget the baseplate for cartridge style traps. Part No. **81025**.

In-Line Style Traps

C) Alltech® Activated Charcoal Trap

- Two sizes available



D) Hydrocarbon Trap

- Economical
- 250psig pressure rating



E) Alltech® Hi-EFF™ Organic Trap

- Removes hydrocarbons and moisture
- Indicating for moisture



F) Alltech® BIG Hydrocarbon Trap

- Large 750cc size
- Helium purged prior to shipment



G) ALL-Pure™ Hydrocarbon Trap

- Removes hydrocarbons to <3ppb
- 1000psig pressure limit



H) Alltech® High-Pressure Charcoal Trap

- 1800psig pressure limit



I) Alltech® High-Pressure CO₂ Adsorber

- 1800psig pressure limit
- 27mL capacity
- Also removes NO₂













J) Sulfur Purifier

- Also removes moisture, oxygen, C₂ and above hydrocarbons, halocarbons, and fluoro lubricants



Cartridge and Baseplate Hydrocarbon, CO₂, and Sulfur Traps

Photo	Description	Size	Efficiency	Pressure Limit	Fitting	Dimensions (L x o.d.)	Indicator	Part No.	Refill Kit Part No.
<i>Cartridge Style</i>									
	A Organic Trap	150cc	<100ppb	100psig	—	13.2" x 1.5"	No	81010	8124
	B AT™-Omni Cartridge	—	<100ppb	100psig	—	13.2" x 1.5"	Yes (for O ₂ only)	81012	— [†]
	Baseplate	—	—	—	—	—	—	81025	—
<i>In-Line Style</i>									
	C Activated Charcoal Trap	120cc	<100ppb	100psig	1/4"	13" x 1.25"	No	8129	8124
		400cc				14.5" x 2.0"		8131	
	D Hydrocarbon Trap	200cc	<20ppb	250psig	1/8"	11.5" x 1.5"	No	14634	7200
					1/4"			14633	
	E Hi-EFF™ Organic	400cc	<100ppb	100psig	1/4"	14.5" x 2"	Yes (for H ₂ O only)	81350	81352
	F BIG Hydrocarbon Trap	750cc	<15ppb	250psig	1/8"	17.5" x 2.4"	No	7201	7200
					1/4"			7203	
					1/2"			7205	
	G ALL-Pure™ Hydrocarbon Trap	—	<3ppb	1000psig	1/8"	22.5" x 1.5"	No	7035	— [†]
					1/4"			7038	
	H High-Pressure Charcoal Trap	200cc	<100ppb	1800psig	1/4"	11.5" x 1.5"	No	8117	— [†]
	I High-Pressure CO ₂ Adsorber	200cc	—	1800psig	1/4"	11.5" x 1.5"	No	8119	— [†]
	J Sulfur Purifier	150cc	<1ppb	300psig	1/8"	21" x 1.5"	No	7006	— [†]

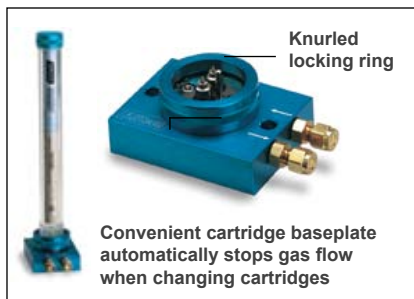
*Efficiency applies to compounds >C₄. **Length is measured from endfitting to endfitting. [†]These traps are disposable.

Alltech® Gas Purification Cartridge Systems

- Replace spent purifiers without shutting down your system

Alltech® gas purification cartridges allow replacement of spent cartridges in seconds without shutting down your GC system. Simply pull the spent cartridge off the baseplate and push a new one into place.

A knurled locking ring keeps the cartridge locked in place. Four different purification cartridges are available. Multiple cartridges and baseplates can be plumbed together to customize a gas purification system for your application. Order each cartridge separately below.



Moisture Trap Cartridge—Filled with indicating Sorbsil® Chameleon® indicating material and molecular sieve pellets to maximize moisture removal and to indicate when the cartridge requires refilling or replacement. A refill kit is available below.

Organic Trap Cartridge—Removes non-methane hydrocarbons from your gas stream. A refill kit is available below.

AT™-Omni Cartridge—A multi-purpose cartridge filled with OXY-MAX™ and Hi-EFF™ Charcoal to effectively remove oxygen, moisture and hydrocarbons. AT™-Omni cartridges are disposable.

AT™-Indicating Oxy Cartridge—Filled with OXY-MAX™ and indicating oxygen adsorbent to efficiently remove oxygen and small amounts of moisture. The indicating material shows a color change when the cartridge is saturated. AT™-Indicating Oxy cartridges are disposable.

Gas Purification Cartridge Systems

Description	Part No.	Refill Kit Part No.
Cartridge System Base Unit*	81025	—
Moisture Trap Cartridge	81005	8132
Organic Trap Cartridge	81010	8124
AT™-Omni Cartridge	81012	—
AT™-Indicating Oxy Cartridge	81015	—

*Reducing ferrules are supplied for installation into 1/8" gas lines. Includes 1/4" fittings.

ALL-Pure™ Gas Purifiers

- One purifier removes multiple contaminants
- Reduce impurities to low ppb levels

ALL-Pure™ Gas Purifiers feature a unique proprietary broad spectrum adsorbent material that removes multiple contaminants with a single purifier. Replace three separate purifiers for oxygen, moisture, and hydrocarbons with a single ALL-Pure™ purifier. Purifiers are gas specific or choose purifiers specific for moisture, hydrocarbons, or oxygen.



4851

ALL-Pure™ Specifications

Dimensions:	400cc, 21" L x 1.5" o.d. (50.8cm x 3.8cm)
Max Flow:	500mL/min
Max. Pressure:	1000psig
Max. Temp:	80°C
Mounting:	Purifier must be mounted in vertical position

Purifier Selectivity and Purity Specifications*

Purifier	CO	CO ₂	O ₂	H ₂ O	Sulfur Compounds	Non-Methane Hydrocarbons
Helium Purifier:	<1	<1	<1	<1	<1	<3
Hydrogen Purifier:	<1	<1	<1	<1	<1	<3
Nitrogen Purifier:	<1	<1	<1	<1	<1	<3
Air Purifier:				<1		<3
Moisture Trap:		<1		<1		
Hydrocarbon Trap:						<3
Oxygen Trap:				<1	<1	

*Outlet levels listed indicate ppb concentration based on 50ppm nominal inlet concentration level.

ALL-Pure™ Gas Purifiers

Description	1/8" Fitting Part No.	1/4" Fitting Part No.
<i>ALL-Pure™ Gas Specific Purifiers</i>		
Helium Purifier	7008	7010
Hydrogen Purifier	7026	7028
Nitrogen Purifier	7007	7009
Air Purifier	7029	7031
<i>ALL-Pure™ Purifiers</i>		
Moisture Trap	7034	7036
Hydrocarbon Trap	7035	7038
Oxygen Trap	7040	7042

SGT Super Clean Filters

Improve Baselines, Minimize Interferences, and Reduce MS Maintenance

- Remove impurities to deliver 99.9999% pure gas
- Exchange filters in seconds, without introducing air into the system
- Diffusion-proof with glass and metal construction
- Pressure resistant up to 150psig (11 bar)

These SGT Super Clean filters can be used on all of your GC gas lines to deliver 99.9999% pure gas. Filters are available for oxygen, moisture and hydrocarbons. The Combi filter removes both moisture and hydrocarbons. The Triple filter removes moisture, oxygen, and hydrocarbons and is available purged with Argon for standard applications or purged with Helium for MS applications.

Filters feature a quick change baseplate/cartridge design. Cartridges can be exchanged within seconds, during analysis, and without tools. 1-, 2-, 3-, or 4-position baseplates are available and will accept any of the GC filter cartridges. Baseplates must be ordered separately (except for systems). Filter cartridge bundles include the most popular filters in one package. Various filter systems are available and include the appropriate baseplate.



Triple Filter F0301
shown on baseplate
(order separately).

6516

SGT Super Clean Filter Specifications

Maximum Flow:	7.0L/min
Efficiency:	<0.1ppm at 2L/min
Maximum Pressure:	150psig
Connectors:	1/8" Brass

SGT Super Clean Filter Capacities

Type of Filter	H ₂ O	O ₂	Hydrocarbon (as n-butane)	Indicator
Moisture:	7.2g	—	—	Yes
Oxygen:	—	1000mL	—	Yes
Hydrocarbon:	—	—	12.0g	No
Combi:	3.6g	—	6.0g	Moisture Only
Triple (Argon):	1.8g	500mL	4.0g	Moisture & Oxygen
Triple (Helium):	2.0g	600mL	4.0g	Moisture & Oxygen

Filters and Baseplates

Description	Part No.
<i>Filter Cartridges</i>	
Triple Filter (Argon packed)	F0301
Triple Filter (Helium packed)	F0302
Combi Filter	F0201
Moisture Filter	F0101
Oxygen Filter	F0102
Hydrocarbon Filter	F0103
<i>Baseplates</i>	
1-Position Baseplate	B0010
2-Position Baseplate	B0020
3-Position Baseplate	B0030
4-Position Baseplate	B0040

Filter Bundles and Systems

Description	Part No.
<i>Filter System (Cartridges+Baseplate)</i>	
1-Triple (Argon packed) + 1-position Baseplate	B1010
1-Triple (Helium packed) + 1-position Baseplate	B1011
2-Combi + 2-position Baseplate	B1020
2-Moisture + 2-position Baseplate	B1022
1-Triple (Argon packed) + 2-Combi + 3-position Baseplate	B1030
1-Oxygen + 1-Moisture + 2-Hydrocarbon + 4-position Baseplate	B1040

technical assistance

Contact Tech Support: Phone: 1.800.255.8324 (North America)

Email: contact.alltech@grace.com

Online: www.discoverysciences.com

Purifier Accessories

Universal Mounting Panel

- Mount up to five purifiers for easy monitoring and replacement
 - Pre-drilled for easy mounting
 - Fits most manufacturers' purifiers
- This lightweight aluminum mounting panel will hold up to five purifiers. Pre-drilled holes are spaced at 3/4" centers in five vertical rows to allow for maximum versatility. Mounting clips to accommodate purifiers from 7/8" to 2-1/2" o.d. (2.2cm to 6.4cm) are sold separately below. Panel measures 17" W x 24" H (43.2cm W x 61cm H).



Universal Mounting Panel		
Description	Qty.	Part No.
Universal Mounting Panel	ea	7220
Universal Mounting Clips		
Fits 7/8" to 1" o.d. Traps	2/pk	7221
Fits 1-1/8" to 1-3/8" o.d. Traps	2/pk	7223
Fits 1-3/8" to 1-5/8" o.d. Traps	2/pk	7225
Fits 1-5/8" to 1-7/8" o.d. Traps	2/pk	7227
Fits 2" to 2-1/2" o.d. Traps	2/pk	7229

In-Line Particulate Filter

- Economically remove particulates from gas streams



This brass in-line particulate filter is a convenient, inexpensive way to remove particulates from critical gas streams. Each unit includes one 10 micron filter cartridge. The maximum pressure rating is 500psig.

In-Line Particulate Filters	
Description	Part No.
1/4" In-line Brass Filter	8052
1/8" In-line Brass Filter	8054



related products
Need a leak detector?
Ensure leak-free installation of your gas purifiers. See page 267 for gas leak detectors.

technical assistance
Contact Tech Support: Phone: 1.800.255.8324 (North America)
Email: contact.alltech@grace.com
Online: www.discoverysciences.com