

## Classic Filters

### SG231 & SS232 Filter Housing

1/4" or 1/2" Ports, Pressure 100 & 150 PSI

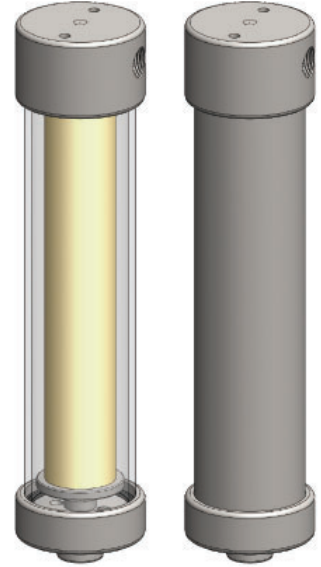
#### DESCRIPTION

SG231 and SS231 series filter housings are specified for 1/4" & 1/2" line size applications at low pressure. For applications over 150 psi the SS235 housings are available.

The housings are constructed from 316L stainless steel with a stainless steel or Pyrex glass. The Pyrex bowl is also fitted with a bowl guard (not shown). Standard housings have NPT ports and Viton seals. Other seal types are available as an option. BSPT and BSPP port types are also available.

The housings are free from welds and comply with NACE MR-01-75 and conform to SEP of PED 97/23/EC. These housings can also be supplied in a wide range of exotic materials, such as Hastelloy, Monel, Titanium etc.

A large selection of filter elements and adsorber cartridges are available.



#### SPECIFICATIONS TABLE 1

Housing Model	SG231.211	SG231.221	SG231.411	SG231.421	SS232.211	SS232.221	SS232.411	SS232.421
Port Spigot Size	1/4" NPT		1/2" NPT		1/4" NPT		1/2" NPT	
Drain	1/8" NPT	1/4" NPT	1/8" NPT	1/4" NPT	1/8" NPT	1/4" NPT	1/8" NPT	1/4" NPT
Max. Pressure, PSI (bar) <sup>1</sup>	100 (6.89)				150 (10.3)			
Max. Temperature, °F (°C) <sup>2</sup>	210 (98.9)				390 (199)			
Materials of Construction								
Head & Internals	316L SS							
Bowl	Pyrex				316L SS			
Seals	Viton (standard), PTFE, Chemraz, Nitrile, Kalrez, EPDM, Silicone							
Filter Element Size	25-178 (25 mm I.D. x 178 mm length)							
Standard Element	Borosilicate Glass Microfibers, K-Type Binder (PVDF); Other binder types are available.							
Adsorber Cartridge	25-178 (25 mm I.D. x 178 mm length)							
Adsorber Cartridge Media	See Table							
Principal Dimensions in Inches (mm)								
Diameter					2.2 (55.9)			
Height					9.65 (245)			
Volume, cc					250			
Weight, lbs	2.75				2.85			
Accessories								
Support Case					SC523			
Mounting Bracket					MBSS21			
<sup>1</sup> The pressure rating for model SS Above 390° F (when using appropriate rated seals) is reduced, consult us. Maximum temperature is 390° F using standard Viton seal. For temperatures to 615° F use a Chemraz seal								

## FILTER ELEMENTS

Each filter element type is available in a selection of grades covering a efficiency range from coarse bulk contamination removal and the essentially complete removal of submicron particles.

**PARTICULATE APPLICATIONS GRADE SELECTION TABLE- GAS TABLE 2**

% Removal of 0.1 micron particles							
Binder Type	Description	+99.99998%	+99.9999%	+99.99%	+99.5%	+95%	+75%
E	Epoxy Ester	3E	4E	5E	6E	7E	8E
K	PVDF Flouro-carbon	3K	4K	5K	6K	7K	8K
S	Silica Inorganic	3S	4S	5S	6S	7S	8S
L	Silicone	-	4L	-	6L	-	-

**COALESCING APPLICATIONS GRADE SELECTION TABLE- GAS TABLE 3**

% Removal of 0.1 micron particles					
Binder Type	Description	+99.99%	+99.5%	+95%	+75%
CE	Epoxy Ester	5CE	6CE	7CE	8CE
CK	PVDF Flourocarbon	5CK	6CK	7CK	8CK
CR	PVDF Flourocarbon	5CR	6CR	7CR	8CR
CS	Silica Inorganic	5CS	6CS	7CS	8CS
W	Silicone	5W	6W	7W-	8W-

**PARTICULATE APPLICATIONS GRADE SELECTION TABLE- LIQUID TABLE 4**

+98% Removal of particles at stated size							
Binder Type	Description	0.3 µm	1 µm	2 µm	8 µm	25 µm	75 µm
E	Epoxy Ester	3E	4E	5E	6E	7E	8E
K	PVDF Flouro-carbon	3K	4K	5K	6K	7K	8K
S	Silica Inorganic	3S	4S	5S	6S	7S	8S

## SERIES AD ADSORBER CARTRIDGE

Coalescing filter elements will only remove liquid aerosols and droplets. If there is a liquid in vapor form to be removed then an adsorber cartridge should be used in an additional housing as a final stage. Adsorption cartridges can also be used to remove elements of a gas, for example acidic gases. A range of adsorber materials are available and these are listed below.

### SPECIFICATIONS

Maximum Temperature: 122°F (50°C)

Materials of Construction:

Body- Microfiber filters

End Caps- PA

Seal- Viton



AD Type Adsorber Cartridge

**ADSORBER GRADES** TABLE 5

Grade	Adsorber	Principle Uses
01	Activated Carbon Granules	Removal of hydrocarbons and other organic vapors
02	Activated Carbon Cloth	Removal of hydrocarbons and other organic vapors
03	Molecular Sieve 4A	Removal of CO <sub>2</sub> , NH <sub>3</sub> , H <sub>2</sub> S, SO <sub>x</sub>
04	Molecular Sieve 13X	Removal of CO <sub>2</sub> , NH <sub>3</sub> , H <sub>2</sub> S, SO <sub>x</sub> , aromatics, amines
05	Silica Gel (Blue)	Removal of water vapor
05a	Silica Gel (Orange)	Removal of water vapor
06	Mixed Bases (Soda Lime)	Removal of acidic gases, CO <sub>2</sub> , SO <sub>x</sub> , NO <sub>x</sub> , HCl
07	Potassium Permanganate	Removal of SO <sub>x</sub> and other acidic gases
08	Hopcalite	Removal of CO by catalytic conversions to CO <sub>2</sub>
11	Activated Carbon Granules	Removal of Glycol
12	Calcium Carbonate	Gas Scrubbing
14	Copper Sulphate	Removal of Ammonia
15	Ferrous Sulphate	Gas Scrubbing

## ORDERING INFORMATION

### <sup>1</sup>Order Filter Housing and Filter

1) Select Housing Model (Table 1)

2) Select a seal Material code:

none= Viton (default standard)

T= PTFE

C= Chemraz

N= Nitrile

K= Kalrez

E= EPDM

S= Silicone

3) Select Filter Element Part Number (Tables 2, 3 or 4)

Part number examples:

Viton seal- SG231.211.4K

EPDM Seal- SG231.211.E.4K

### <sup>1</sup>Order Filter Housing and Adsorber Cartridge

1) Select Housing Model (Table 1)

2) Add suffix "AD" Followed by adsorber grade (Table 5)

Part number example:

SG231.211.AD14

<sup>1</sup> Refer to "Filter Elements" and "Adsorber Cartridges" bulletins to purchase separate from housing