



## High Pressure and Alternative Fuel Filtration



# High Pressure Filtration

High pressure compressors are used in a variety of applications. Many owners, operators and designers of high pressure compressed air or gas systems rely on Finite for high-quality air treatment filters. End users of high pressure compressed air, such as scuba divers and fire rescue workers, depend on this high quality breathable air.

Throughout the stages of compression many contaminants can enter into the system. Excessive amounts of liquid aerosols and solid particulate contamination are common in high pressure systems. In addition, higher temperature levels are possible and may cause liquid oils to varnish. This contamination can lead to poor component performance and wear that may lead to unscheduled maintenance. Even submicronic contaminants in compressed air or gas systems can foul multistage compressors, increase maintenance costs or eventually make it into your final product.

Finite offers a variety of high pressure compressed air and gas filters. With our wide range of elements, we have a solution for every stage of compression, as well as at the point of use. Whether you are storing high pressure air or gas or using a continuous flow, you can count on Finite to protect your equipment from contamination. Finite is the solution to ending high pressure contamination fouling.



## Alternative Vehicles Need High Pressure Filtration

Compressed Natural Gas, or CNG, is a leading alternative to traditional fuel for the automotive industry. CNG is used in passenger vehicles, pickup trucks, in transit and on school buses. It can be less expensive than gasoline, and is more environmentally friendly – it reduces the amount of carbon monoxide, carbon dioxide and hydrocarbon vehicle Exhaust emissions.

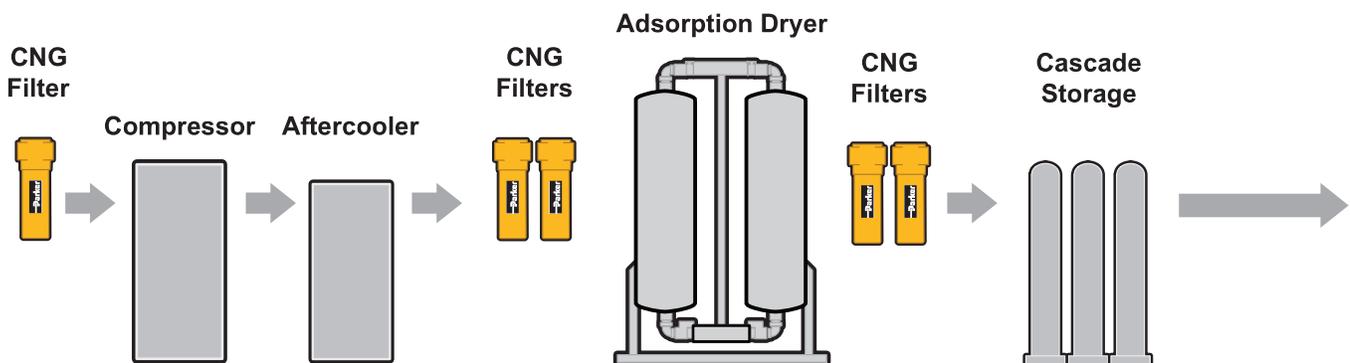
Natural gas is gathered from a pipeline and travels to a connecting

compressor station. The gas is elevated to pressures ranging from 2000 PSIG up to 5000 PSIG and the resultant CNG is stored in large tanks. The CNG then makes its way to a gas dispenser where it is ready for use in natural gas vehicles.

Contaminants can enter into the gas at any stage of this processing. Filters are critical at each stage to ensure clean gas as a final product. Contamination that collects during handling, water that condenses

in tanks and compressors that leak oil into the fuel stream are all problems that could shorten the life of expensive equipment, create unnecessary downtime and increase maintenance costs.

From pipeline to engine, Finite filters provide the critical filtration required for most alternative fuel systems. See page 5 for more detailed information on this application.



# How to select your Finite Filter:

The following steps will help you to choose the correct filter for your application. If there are other factors involved or if you have special requirements, call one of Finite's application engineers.

## Step 1: Determine your application

Evaluate the requirements of your application. The sketches on the following pages depict popular examples of breathing air, PET bottle blowing and alternative fuel applications.

## Step 2: Choose your filtration media type

What type of filtration is needed? Coalescing filter media removes solid and liquid contaminants from gas streams. Particulate filter media removes solids from gas streams. Adsorber media removes hydrocarbon vapors from gas streams. See the following pages for more detailed information.

## Step 3: Choose your filtration grade and efficiency

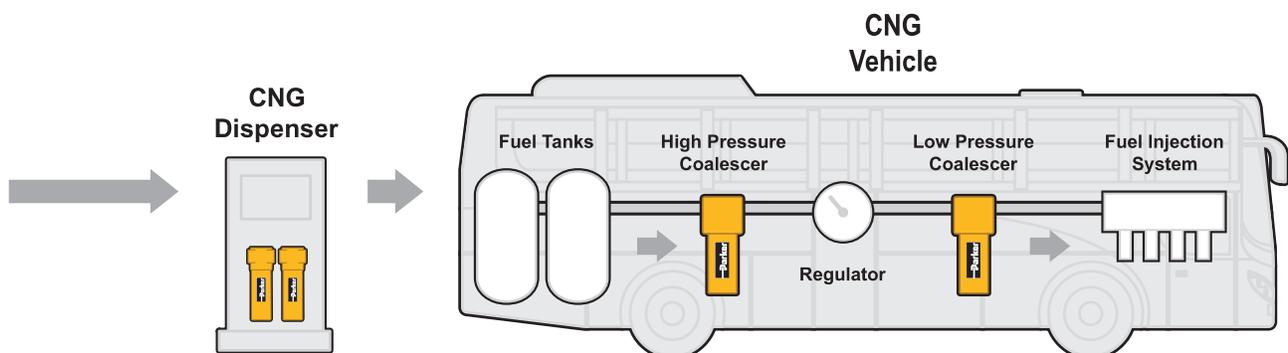
Are you searching for a specific micron rating... or efficiency rating? If so, page 7 provides a complete breakdown of Finite's filter media grades and their performance specifications.

## Step 4: Consider your operating conditions

What are the operating conditions of your application? Key criteria to consider: flow, pressure, temperature, materials of construction (stainless steel, nylon, aluminum, etc.). samples throughout this section provide detailed descriptions of the various products available.

## Step 5: Use flow charts to determine filter size

Flow charts are provided for each high pressure filter series. Flows are listed at various operating pressures. Filters are available with flows up to 6500 SCFM and pressure ratings up to 6000 PSIG.



# Applications

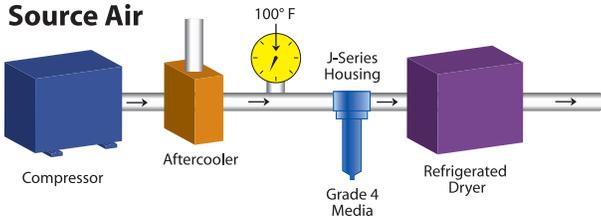
## High Pressure Breathing Air

The filtration of compressed air is critical to ensure that it meets stringent air quality requirements for use in breathing air applications as set forth by North American agencies such as the Occupational Health and Safety Administration (OSHA) and Canadian Standards Association (CSA). Breathing air is used for scuba tanks, fire rescue equipment, and emergency

respiratory gear. Any contaminants in the air stream may cause equipment damage and malfunction, requiring costly repairs and replacements, and ultimately creating a hazardous situation for any users of high pressure breathing air apparatus. The use of filters will protect the consumer's health and keep equipment safe and fully operational. At the source, a

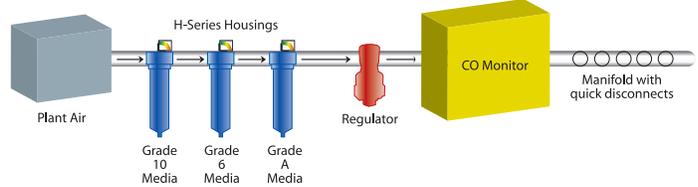
coalescing filter will remove any oil or other liquid contaminants that may be carried downstream. At the point of use, conventional compressed air must be free of impurities such as moisture, oil vapors and any harmful tastes and/or odors before it can safely be used as breathing air.

### Source Air



### Breathing Air

#### Point of use



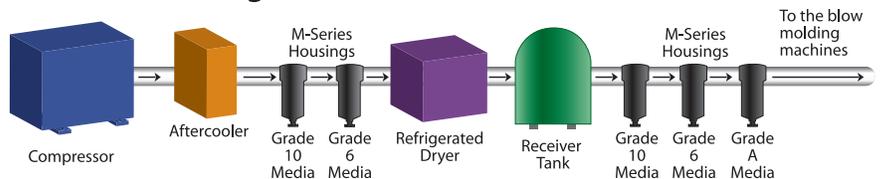
For more information on H-Series filters, please see Bulletin 1300-993C.



## PET Blow Molding

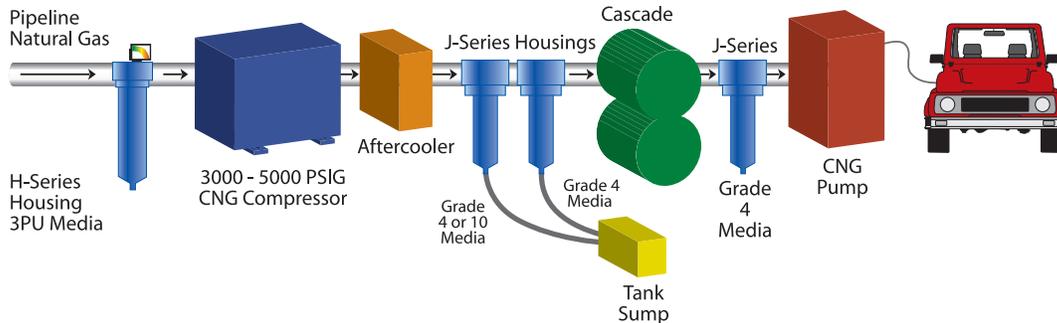
PET, or polyethylene terephthalate, is a recyclable material used to make bottles by blow molding. Food and beverage containers are just a few of the many products that can be manufactured from this thermoplastic. In order to ensure that these products remain contaminant free throughout a process, they must be manufactured with clean, dry air. The proper combination of filters will prevent compressor oils, pipe scale and other damaging impurities from building up on equipment.

### PET Blow Molding



## At the CNG Fueling Station

Installing a lower pressure particulate filter (H-Series Housing 3PU Media) before the compressor station will remove pipe scale to prevent compressor damage. Before the gas is transported from storage to the dispenser, prefiltration of the gas with two-stage coalescing will eliminate solids, oil and water generated during underground transit. For extra protection, a high efficiency coalescer should be placed at the gas dispenser to protect sensitive dispenser metering equipment and prevent oil from making its way into the vehicle.



For more information on H-Series filters, please see Bulletin 1300-993C/USA.

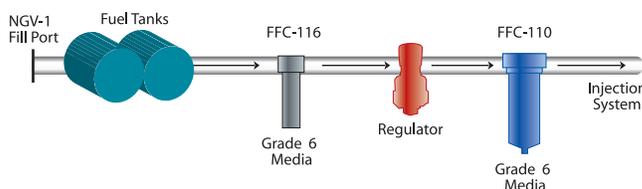


## Other applications include:

- General high pressure compressed air
- High pressure testing
- Offshore applications
- High pressure gas storage
- Corrosive gases
- Specialty gases
- Air-blast circuit breakers
- Leak testing of hydraulic equipment
- Shipboard air distribution systems

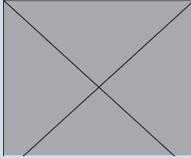
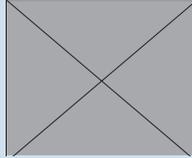
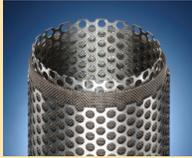
## Onboard CNG Vehicles

Filtration is the key to guarding against damaging contaminants that could ruin a fuel system. Installing a coalescer upstream of the high pressure regulator extends the system's life and reduces maintenance costs. A low pressure filter can also be used downstream of the regulator to protect other fuel injection system components.

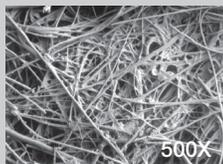


# Media Types, Grades, and Efficiencies

Coalescing elements are specially designed for the removal of liquid contaminants from gaseous flows. These media types flow from the inside of the element to the outside. Coalesced liquid (water and oil) collects in the bowl where it is drained, while clean air or gas exits the housing through the outlet port. Particulate contaminants are captured and held in the media.

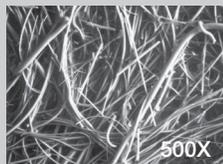
Coalescing Elements (removal of liquids and particulate)				Water Separator Element (removal of bulk liquids)
				
<b>Media Type C</b> Coalescing element composed of an epoxy saturated, borosilicate glass microfiber tube in intimate interlocking contact with a rigid retainer. Surrounded by a coarse fiber drain layer, retained by a synthetic fabric safety layer. Some models are available with molded elastomeric end seals (CU), or with metal end caps and fluorocarbon gaskets.	<b>Media Type H</b> Coalescing element similar to type "C," however no rigid retainer is used. Typically used in applications with low or constant flow rates.	<b>Media Type Q</b> Coalescing element with the same configuration as "C" tube, but with "3P" type pleated cellulose prefilter built-in. Includes molded elastomeric end seals (QU). Some models offer the option of metal end caps and fluorocarbon gaskets.	<b>Media Type 7CVP</b> Coalescing element made of pleated glass media. Metal retained for added strength. Includes metal end caps and fluorocarbon gaskets for proper sealing. Only available in Grade 7.	<b>Media Type 100WS</b> This all stainless steel element has two metal retainers with rolled mesh screen in between. This cleanable element combines liquid droplets and aerosols, separating the liquids from the gas stream in systems with high liquid loads.
<b>For use with:</b> <ul style="list-style-type: none"> <li>• FFC-110 (800 PSIG)</li> <li>• FFC-110L (800 PSIG)</li> <li>• SN8S (500 PSIG)</li> <li>• M-Series (800 PSIG)</li> <li>• A5R/A1R (1000 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• FFC-112 (3600 PSIG)</li> <li>• FFC-112 SAE (3600 PSIG)</li> <li>• FFC-113 (3600 PSIG)</li> <li>• J-Series (5000 PSIG)</li> <li>• S5R/S1R (5000 PSIG)</li> <li>• FFC-116 (5000 PSIG)</li> <li>• SJ-Series (6000 PSIG)</li> </ul>	<b>For use with:</b> <ul style="list-style-type: none"> <li>• A5R/A1R (1000 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• S5R/S1R (5000 PSIG)</li> </ul>	<b>For use with:</b> <ul style="list-style-type: none"> <li>• M-Series (800 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> </ul>	<b>For use with:</b> <ul style="list-style-type: none"> <li>• SN8S (500 PSIG)</li> <li>• M-Series (800 PSIG)</li> </ul>	<b>For use with:</b> <ul style="list-style-type: none"> <li>• SN8S (500 PSIG)</li> <li>• M-Series (800 PSIG)</li> <li>• J-Series (5000 PSIG)</li> <li>• SJ-Series (6000 PSIG)</li> </ul>

## Grade 4



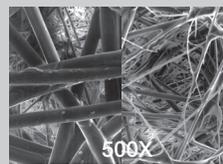
Grade 4 filter elements are very high efficiency coalescers; for elevated pressures or lighter weight gases. Recommended when system pressure exceeds 500 PSIG.

## Grade 6



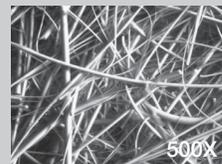
Grade 6 filter elements are used when "total removal of liquid aerosols and suspended fines" is required. Because of its overall performance characteristics, this grade is most often recommended below 500 PSIG.

## Grade 7CVP



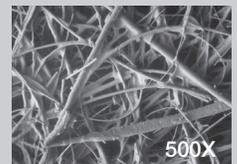
Grade 7CVP filter elements are made with two layers. The inner layer (left) effectively traps dirt particles, protecting and extending the life of the outer layer. The coalescing outer layer (right) consists of a dense matrix of glass fibers, providing highly efficient aerosol removal.

## Grade 8



Grade 8 filter elements provide high efficiency filtration in combination with high flow rate and long element life.

## Grade 10

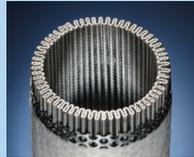


Grade 10 filters are used as prefilters for grade 6 to remove gross amounts of aerosols or tenacious aerosols which are difficult to drain. This grade is often used as a 'coarse' coalescer.

## Media Grades:

Particulate filters such as G, F, T and 3P flow from the outside of the element to the inside. Particles collect in the element, while the clean air exits through the outlet port.

Adsorption elements are used to remove vapors (hydrocarbon or water) that are not removed by the coalescing filter. Hydrocarbon vapors collect in the element, while clean air exits the housing through the outlet port. In this element, the air or gas flows from the outside of the element to the inside.

Particulate Removal Element (removal of solids)				Adsorption Element (removal of odors)	Liquid Propane Element (removal of particulates)
					
<b>Media Type 3P</b>	<b>Media Type G</b>	<b>Media Type F</b>	<b>Media Type T</b>	<b>Media Type A</b>	<b>Media Type LPG</b>
<p>Pleated cellulose particulate removal element. Includes molded elastomeric end seals (3PU). Some models offer the option of metal end caps and fluorocarbon gaskets.</p> <p><b>For use with:</b></p> <ul style="list-style-type: none"> <li>• SN8S (500 PSIG)</li> <li>• M-Series (800 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• J-Series (5000 PSIG)</li> <li>• SJ-Series (6000 PSIG)</li> </ul>	<p>Particulate removal element constructed of the same fiber matrix as type "C", but with no rigid retainer or drain layer.</p> <p><b>For use with:</b></p> <ul style="list-style-type: none"> <li>• A5R/A1R (1000 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• S5R/S1R (5000 PSIG)</li> <li>• S1IL (5000 PSIG)</li> </ul>	<p>Particulate removal element like "G" tube, except fluorocarbon saturant replaces epoxy.</p> <p><b>For use with:</b></p> <ul style="list-style-type: none"> <li>• A5R/A1R (1000 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• S5R/S1R (5000 PSIG)</li> <li>• S1IL (5000 PSIG)</li> </ul>	<p>Particulate removal element like "G" tube, except high temperature fluorocarbon saturant replaces epoxy.</p> <p><b>For use with:</b></p> <ul style="list-style-type: none"> <li>• A5R/A1R (1000 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• S5R/S1R (5000 PSIG)</li> <li>• S1IL (5000 PSIG)</li> </ul>	<p>Hydrocarbon vapor removal element. Ultrafine grained, highly concentrated, activated carbon sheet media. Includes molded elastomeric end seals (AU). Some models offer the option of metal end caps and fluorocarbon gaskets. Maximum hydrocarbon inlet concentration .5 to 2 PPM.</p> <p><b>For use with:</b></p> <ul style="list-style-type: none"> <li>• SN8S (500 PSIG)</li> <li>• M-Series (800 PSIG)</li> <li>• SM-Series (1200 PSIG)</li> <li>• J-Series (5000 PSIG)</li> <li>• SJ-Series (6000 PSIG)</li> </ul>	<p>High efficiency pleated element that is offered in either a 1-micron or 5-micron rating. The pleated element construction guarantees a long filter life and the pleated media is backed on both sides by a rugged epoxy coated steel screen for high strength during peak flow rate conditions.</p>

## Parker Finite Media Specifications

Finite media grades determine the filtration efficiency. Capture efficiencies are available up to 99.995%.

Micron ratings range from 0.01 to 3 micron. The columns on the right note both the wet and dry pressure drops.

Grade 3P

Grade A



Three micron pleated cellulose filters are used for particulate interception where very high dirt holding capacity and a relatively fine pore structure are required.

A (Adsorption) filters are used to remove hydrocarbon vapor, most typically in preparation for breathing air. (Must be preceded by grade 6C coalescer.)

Media Grade	Coalescing Efficiency 0.3 to 0.6 Micron Particles	Maximum Oil Carryover <sup>1</sup> PPM w/w	Micron Rating	Pressure Drop (PSID) @ Rated Flow <sup>2</sup>	
				Media Dry	Media Wet <sup>5</sup>
4	99.995%	0.003	0.01	1.25	3-4
6	99.97%	0.008	0.01	1.0	2-3
ME	99.95%	0.02	0.3	0.5	1.0
7	99.5%	0.09	0.5	0.25	0.5-0.7
8	98.5%	0.2	0.5	0.5	1-1.5
10	95%	0.85	1.0	0.5	0.5
100WS	99+ <sup>3</sup>	N/A	100	< 0.25	< 0.25
3P	N/A	N/A	3.0	0.25	N/A
A	99+ <sup>4</sup>	N/A	3.0	1.0	N/A

<sup>1</sup>Tested per ISO 12500-1 at 40 ppm inlet.

<sup>2</sup>Add dry + wet for total pressure drop.

<sup>3</sup>Bulk liquid removal efficiency.

<sup>4</sup>Oil vapor removal efficiency is given for A media.

<sup>5</sup>Media wet with 10-20 wt. oil

# H-Series Filters

## 1-1/4" to 3" Port Size

### 500 PSIG Pressure Filters

- Pressures to 500 PSIG
- Coalescing, particulate and adsorption elements available
- Connections from 1/4" to 3"
- Flows from 190 to 1600 SCFM (@ 100 psig)
- Temperatures to 450° F
- Manual drains only should be used with flammable gases
- Media types available: C or Q (grades 4, 6 and 10), 7CVP, 3P & 100WS (See below)
- 1/4" thru 1" port sizes should not be used for Natural Gas applications (see "M" Series for these applications)



See the "H-Series" filters in the "Compressed Air and Gas Filtration" section of this catalog for further information.

# SN8S High Flow Filter (Stainless Steel)

500 PSIG Pressure Filters

Parker Finite's 500 PSIG SN8S filter is the best solution for most critical or corrosive compressed air/ gas applications. Its 2" NPT stainless steel housing is a perfect fit for food processing, bottling plants and pharmaceutical manufacturing, where stainless steel system components are required. Bulk liquid from gas separation, oil coalescing, particulate removal and vapor adsorber filter elements are available. The housing has a plugged 1/4" NPT drain connection. The optional ADS-50 (see "Accessories" section of this catalog) stainless steel auto drain can be easily connected with standard pipe fittings. Bottling plants use stainless steel system components for their critical processes. In applications where stainless steel is required, use the SN8S to remove contaminants from your compressed air or gas system.



## Specifications:

Model Number	Port Size (NPT)	Max. Pressure	Max. Temp. for each Element Type	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Body	Internals	Bowl				Length	Width
SN8S	2"	500 PSIG (34 bar)	175°F(CU, 3PU, AU), 175°F(7CVP), 175°F (100WS), 175°F (DS)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluoro-carbon	14.6 oz (431.8 ml)	32.0 lbs (14.5 kg)	27.7" (703.6 mm)	6.3" (160.0 mm)

## Flow Rates (SCFM):

Model	Media Grade	100 PSIG	250 PSIG	500 PSIG
SN8S	4CU/4DS	340	785	1526
	6CU/6DS	450	1038	2019
	8CU/8DS	600	1385	2692
	10CU/10DS	750	1731	3366
	3PU	750	1731	3366
	AU	450	1038	2019
	7CVP	750	1731	3366
	100WS	750	1731	3366

## How to Order:

<b>SN8S X 1</b>
Standard
SN8S X 1

## How to Order Replacement Elements:

Element and housing sold separately. Elements available (one per Box):

- \*CU24-187 X 1
- \*DS24-187 X 1
- 3PU24-187 X 1
- AU24-187 X 1
- 7CVP24-187 X 1
- 100WS24-187 X 1

\*Insert grade: 4, 6, 8, 10

**Example:** 6CU24-187 X 1

# M-Series Filters

## 800 PSIG Pressure Filters

Parker Finite's M-Series provides the needed filtration for a wide variety of compressed air/ gas applications. Varied porting and connection styles, along with a robust design make this an extremely versatile filter. It is a perfect fit for interstage filtration applications for multistage, high pressure gas compressors. The aluminum heads and drawn aluminum bowls are compatible with special gases such as argon, hydrogen, compressed natural gas, and helium. This housing design minimizes the problem of porosity often present with housings made by die casting.

PET bottle blowing plants rely on the filtration protection of the M-Series to meet stringent standards for contact with food and beverage containers.



### Specifications:

Model Number	Port Size NPT	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
MN1S	1/4"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	5.1 oz (150 ml)	1.83 lbs (0.83 kg)	7.89" (200 mm)	3.06" (78 mm)
MN1L	1/4"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	4.7 oz (140 ml)	2.19 lbs (0.99 kg)	10.28" (261 mm)	3.06" (78 mm)
MN15S	3/8"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	5.1 oz (150 ml)	1.82 lbs (0.82 kg)	7.89" (200 mm)	3.06" (78 mm)
MN15L	3/8"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	4.7 oz (140 ml)	2.17 lbs (0.98 kg)	10.28" (261 mm)	3.06" (78 mm)
MN2S	1/2"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	5.1 oz (150 ml)	1.80 lbs (0.82 kg)	7.89" (200 mm)	3.06" (78 mm)
MN2L	1/2"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	4.7 oz (140 ml)	2.15 lbs (0.98 kg)	10.28" (261 mm)	3.06" (78 mm)
MN3S	3/4"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	9.1 oz (270 ml)	5.01 lbs (2.27 kg)	10.83" (275 mm)	4.55" (116 mm)
MN4S	1"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	9.1 oz (270 ml)	4.90 lbs (2.22 kg)	10.83" (275 mm)	4.55" (116 mm)
MN4L	1"	800 PSIG (55 bar)	175°F (79°C)	Machined Aluminum	Stainless Steel/ Plastic	Aluminum	Buna-N	9.1 oz (270 ml)	5.54 lbs (2.51 kg)	14.36" (365 mm)	4.55" (116 mm)
MN8S	2"	800 PSIG (55 bar)	175°F (79°C)	Sand Cast Aluminum	Aluminum	Aluminum	Buna-N	14.9 oz (440 ml)	10.37 lbs (4.71 kg)	18.60" (472 mm)	5.91" (150 mm)

## How to Order:

<b>M</b>	<b>N</b>	<b>2</b>	<b>S</b>	—				<b>6</b>	<b>Q</b>	<b>U</b>	<b>G</b>
Series Name	Port Type	Port Size	Bowl	Media Grade	Media Type	End Seal	Accessories				
<b>M</b>	<b>N</b> (NPT)	<b>1</b> (1/4") <b>15</b> (3/8") <b>2</b> (1/2") <b>3</b> (3/4") <b>4</b> (1") <b>8</b> (2")	<b>S</b> (Standard)  <b>L</b> (Long) Note: L is not available for 3/4" and 2" port size housings	<b>4</b>	<b>C</b> (Coalescer)	1/4" - 1" port size: Leave blank for no end seal or <b>U</b> (Urethane)	<b>N</b> (No Accessories)  <b>G</b> (Gauge)   Option <b>(G)</b> is a great way to monitor pressure drop and determine when to replace the filter element.				
				<b>6</b>							
				<b>8</b>	<b>Q</b> (Coalescer with built-in pre-filter)	<b>U</b> (Urethane) Standard on all sizes					
				<b>10</b>							
				Leave blank	<b>100WS</b>	1/4" - 1" port size: <b>U</b> (Urethane)					
				Leave blank	<b>7CVP</b> (only available on 2" port)	Leave blank (standard fluorocarbon end seals)					
Leave blank	<b>3P</b> (Pleated Cellulose) Particulate element	1/4" - 1" port size: <b>U</b> (Urethane)									
Leave blank	<b>A</b> (Adsorber)	1/4" - 1" port size: <b>U</b> (Urethane)									
Leave blank			2" port size: <b>V</b> (Fluorocarbon)								

**Examples:** MN2S-6QUG, MN3S-3PUN, MN8S-6CVG, MN8S-7CVPG

**Mounting brackets available:** MB-2 (1/4" - 1/2" port size) and BK-3 (3/4" - 1" port size)

## How to Order Replacement Elements:

Housings are sold with one element. Build your own replacement element with the chart below:

Housing (_ Port Type)	Media Grade and Type	Element Size
M_1S M_15S M_2S	*C,*CU,*QU, 3PU, AU, 100WSU	10-025
M_1L M_15L M_2L	*C,*CU,*QU, 3PU, AU, 100WSU	10-050 (for 100WSU use 10-025)
M_3S M_4S	*C,*CU,*QU, 3PU, AU, 100WSU	15-060
M_4L	*C,*CU,*QU, 3PU, AU, 100WSU	15-095 (for 100WSU use 15-060)
M_8S	*CV,*QU, 3PV, AV, 100WS, 7CVP	25-130

- Determine the housing you have by choosing from the "Housing" column on the chart.
- Determine the element type and grade you need.  
\*Insert grades 4,6,8, or 10 for C, CU, CV, or QU.
- Determine the corresponding element size by choosing from the "Element Size" column on the chart.
- Combine "Element Grade and Type" designation with "Element Size" to get element part number.

**Examples:** 3PU10-025, 6CU10-025

Element Box quantity depends on media type selected.



**Note:** "\_" insert port type from "How to Order" section above.

## M-Series Flow Rates (SCFM):

Filter Housing	Media Grade	100 PSIG	250 PSIG	500 PSIG	800 PSIG
<b>M_1S</b>	4C/4Q	11	25	49	78
	6C/6Q	15	35	67	107
	7CVP	NA	NA	NA	NA
	8C/8Q	20	46	90	142
	10C/10Q	25	58	112	178
	3P	25	58	112	178
	100WS	50	115	224	355
	A	15	35	67	107
<b>M_1L</b>	4C/4Q	23	53	103	163
	6C/6Q	30	69	135	213
	7CVP	NA	NA	NA	NA
	8C/8Q	41	95	184	291
	10C/10Q	50	115	224	355
	3P	50	115	224	355
	100WS	50	115	224	355
	A	30	69	135	213
<b>M_15S</b>	4C/4Q	15	35	67	107
	6C/6Q	20	46	90	142
	7CVP	NA	NA	NA	NA
	8C/8Q	27	62	121	192
	10C/10Q	33	76	148	235
	3P	33	76	148	235
	100WS	66	152	296	469
	A	20	46	90	142
<b>M_15L</b>	4C/4Q	30	69	135	213
	6C/6Q	40	92	179	285
	7CVP	NA	NA	NA	NA
	8C/8Q	55	127	247	391
	10C/10Q	66	152	296	469
	3P	66	152	296	469
	100WS	66	152	296	469
	A	40	92	179	285
<b>M_2S</b>	4C/4Q	19	44	85	135
	6C/6Q	25	57	112	178
	7CVP	NA	NA	NA	NA
	8C/8Q	34	78	153	242
	10C/10Q	42	97	189	299
	3P	42	97	189	299
	100WS	83	192	372	590
	A	25	58	112	178

Filter Housing	Media Grade	100 PSIG	250 PSIG	500 PSIG	800 PSIG
<b>M_2L</b>	4C/4Q	38	88	171	270
	6C/6Q	50	115	224	355
	7CVP	NA	NA	NA	NA
	8C/8Q	68	157	305	483
	10C/10Q	83	192	372	590
	3P	83	192	372	590
	100WS	83	192	372	590
	A	50	115	224	355
<b>M_3S</b>	4C/4Q	61	141	274	434
	6C/6Q	80	185	359	569
	7CVP	NA	NA	NA	NA
	8C/8Q	109	252	489	775
	10C/10Q	133	307	597	946
	3P	133	307	597	946
	100WS	133	307	597	946
	A	80	184	359	569
<b>M_4S</b>	4C/4Q	76	175	341	541
	6C/6Q	100	231	449	711
	7CVP	NA	NA	NA	NA
	8C/8Q	136	314	610	967
	10C/10Q	166	383	745	1181
	3P	166	383	745	1181
	100WS	232	535	1041	1650
	A	100	231	449	711
<b>M_4L</b>	4C/4Q	106	245	476	754
	6C/6Q	140	323	628	995
	7CVP	NA	NA	NA	NA
	8C/8Q	191	441	857	1358
	10C/10Q	232	535	1041	1650
	3P	232	535	1041	1650
	100WS	232	535	1041	1650
	A	140	323	628	995
<b>M_8S</b>	4C/4Q	260	600	1167	1849
	6C/6Q	350	808	1571	2489
	7CVP	600	1385	2692	4267
	8C/8Q	465	1073	2087	3307
	10C/10Q	600	1385	2692	4267
	3P	600	1385	2692	4267
	100WS	600	1385	2692	4267
	A	350	808	1571	2489

**Note:** “\_” insert port type from the “How to Order” section on the previous page 11 for more information.

# FFC-110 Series Filters

## 800 PSIG Pressure Filters

Parker Finite's FFC-110 Series is often used onboard CNG (compressed natural gas) powered vehicles to prevent contaminants in the fuel tank from getting into the engine, protecting critical engine components, like fuel injectors. Its small size and lightweight allow for versatile installation and easy servicing. Each housing is black powder painted for long-term corrosion protection. These coalescers are ideal for operating environments up to 800 PSIG. Coalescing efficiencies of 95% (grade 10) or 99.97% (grade 6) can be chosen to match the filter to the application. Both the FFC-110 and FFC-110L have an 1/8" NPT drain port with a brass petcock manual drain.



### Specifications:

Model Number	Port Size NPT	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
FFC-110	1/4"	800 PSIG (55 bar)	221°F (105°C)	Chromated Aluminum	Stainless Steel & Plastic	Chromated Aluminum	Fluorocarbon	5.1 oz (150 ml)	1.5 lbs (0.68 kg)	7.8" (198.1 mm)	3.1" (78.7 mm)
FFC-110L	1/2"	800 PSIG (55 bar)	221°F (105°C)	Chromated Aluminum	Stainless Steel & Plastic	Chromated Aluminum	Fluorocarbon	4.7 oz (140 ml)	1.8 lbs (0.82 kg)	10.2" (259.1 mm)	3.1" (78.7 mm)

### Flow Rates (SCFM):

Model	Media Grade	100 PSIG	250 PSIG	500 PSIG	800 PSIG
FFC-110	6	15	35	67	107
	10	25	58	112	178
FFC-110L	6	50	115	224	355
	10	83	192	372	590

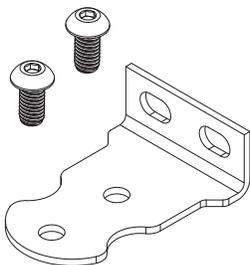
### How to Order:

<b>FFC-110</b>	<b>L</b>	<b>6</b>
Series Name	Bowl	Media Grade
FFC-110	Omit for standard L (Long)	6 10

**Example:** FFC-110-6 or FFC-110L-6

### Mounting Bracket Kit: 2222FFC

Kit includes bracket and 2 cap screws.



### Replacement Element Kits:

Filter Housing Model	Media Grade 6	Media Grade 10
FFC-110	CLS110-6K	CLS110-10K
FFC-110L	CLS110-6LK	CLS110-10LK

Replacement Element Kits include element, head-to-bowl o-ring, and lubricant.

### Certification:

ECE-R110

# A5R & A1R Series Filters

## 1000 PSIG Pressure Filters

This 1000 PSIG filter is constructed of lightweight aluminum and offers your choice of high efficiency particulate and coalescing filter elements. This product can be used for CNG or specialty gas applications. The A5R and A1R include a drain port with a plug. The connection size of the drain port matches the inlet and outlet connection size, making it ideal for bypass gas sampling of specialty gases.

\*Specify part number A5R for 1/8" NPT connections or A1R for 1/4" NPT connections.



### Specifications:

Model Number	Port Size NPT	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
A5R, A1R	1/8", 1/4"	1000 PSIG (68 bar)	225°F All Media Types	Aluminum	316 Stainless Steel	Aluminum	Fluorocarbon	0.25 oz (7.4 ml)	0.75 lbs (0.34 kg)	4.0" (101.6 mm)	1.75" (44.5 mm)

### Flow Rates (SCFM):

Model	Media Grade	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG
A5R/A1R	4	6.4	15	29	43	57
	6	8.4	19	38	56	75
	8	9.2	21	41	61	81
	10	10	23	45	67	88

### How to Order:

<b>A</b>	<b>1</b>	<b>R</b>	—	<b>6</b>	<b>C</b>	<b>04-23</b>
Series Name	Port Size NPT			Media Grade	Media Type	Element Size
A	5 (1/8") 1 (1/4")	R		4 6 8 10	G T F H C	04-023

Example: A1R-6C04-023

Mounting bracket available: MBS-1

### How to Order Replacement Elements:

Elements available:     \_ insert grade: 4, 6, 8, 10  
 \_G04-023 X 10  
 \_T04-023 X 10  
 \_F04-023 X 10  
 \_H04-023 X 10  
 \_C04-023 X 10

For more information on element selection, please see pages 6-7. Elements are sold in Box quantities of 10.

# SM-Series Filters

1200 PSIG Pressure Filters

Finite's stainless steel SM-Series housings are perfect for higher-pressure applications in corrosive working environments. Coalescing, particulate and adsorption filters are available. A threaded collar enables the user to easily remove the bowl for servicing, without having to remove the drain fitting and connections. The SM-Series has an SAE-4 drain port with plug.

Critical gas processing applications at elevated pressures rely on the SM-Series to provide clean, contaminant-free gas in corrosive environments.



## Specifications:

Model Number	Port Size (NPT)	Max. Pressure	Max. Temp. for each Element Type	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
SMN1S, SMN2S	1/4", 1/2"	1200 PSIG (83 bar)	450°F (T) 350°F (H, G) 275°F (F) 175°F (C, CU, QU, 3PU, AU)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluoro-carbon	1.8 oz (53.23 ml)	3.6 lbs (1.6 kg) .75 lbs/.34 kg	5.2" (132 mm)	3.0" (76 mm)
SMN1M, SMN2M	1/4", 1/2"	1200 PSIG (83 bar)	450°F (T) 350°F (H, G) 275°F (F) 175°F (C, CU, QU, 3PU, AU)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluoro-carbon	1.8 oz (53.23 ml)	4.7 lbs (2.1 kg)	7.7" (196 mm)	3.0" (76 mm)
SMN1L, SMN2L	1/4", 1/2"	1200 PSIG (83 bar)	450°F (T) 350°F (H, G) 275°F (F) 175°F (C, CU, QU, 3PU, AU)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluoro-carbon	1.8 oz (53.23 ml)	5.7 lbs (2.6 kg)	9.7" (246 mm)	3.0" (76 mm)

## SM-Series Flow Rates (SCFM):

Filter Housing Model	Media Grade	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG	1200 PSIG	Filter Housing Model	Media Grade	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG	1200 PSIG
SMN1S	4	10	23	45	67	88	106	SMN2S	4	16	37	72	107	142	169
	6	13	30	58	87	115	138		6	22	51	99	147	195	233
	8	17	39	76	113	150	181		8	29	67	130	193	257	307
	10	22	51	99	147	195	233		10	37	85	166	247	327	392
	3PU	22	51	99	147	195	243		3PU	37	85	166	247	327	392
	AU	13	30	58	87	115	138		AU	22	51	99	147	195	233
SMN1M	4	20	46	90	133	177	212	SMN2M	4	32	74	144	213	283	339
	6	26	60	117	173	230	275		6	43	99	193	287	380	456
	8	34	78	153	227	301	360		8	58	134	260	387	513	615
	10	44	102	197	293	389	466		10	74	171	332	493	655	784
	3PU	44	102	197	293	389	466		3PU	74	171	332	493	655	784
	AU	26	60	117	173	230	275		AU	43	99	193	287	380	456
SMN1L	4	28	65	126	187	248	296	SMN2L	4	45	104	202	300	398	477
	6	36	83	162	240	318	382		6	60	138	269	400	531	635
	8	47	108	211	313	416	498		8	81	187	363	540	717	858
	10	62	143	278	413	548	657		10	104	240	467	693	920	1102
	3PU	62	143	278	413	548	657		3PU	104	240	467	693	920	1102
	AU	36	83	162	240	318	382		AU	60	138	269	400	531	635

## How to Order:

<b>SM</b>	<b>N</b>	<b>1</b>	<b>M</b>	—	<b>6</b>	<b>C</b>		<b>N</b>
Series Name	Port Type	Port Size	Bowl		Element Grade	Element Type	End Seal	Accessories
SM	N (NPT)	1 (1/4") 2 (1/2")	S (Short) M (Medium) L (Long)		4 6 8 10  Leave blank	C (Coalescer) Q (Coalescer with built-in prefilter) G T F H  3P (Pleated Cellulose) Particulate Element	Leave blank for no end seal (Available on type G,T,F,H,C)  U (Urethane end seals, available on types C,Q,3P,A)	N (No Accessories)
					Leave Blank	A (Adsorber)		

**Examples:** SMN2S-8GN, SMN1L-6CUN, SMN2M-3PUN, SMN1M-AUN

**Mounting bracket available:** MBS-2

## How to Order Replacement Elements:

Housing	Element Grade and Type	Element Size
SMN1S, SMN2S	*C, *CU, *QU, *H, *F, *G, *T, 3PU, AU	10-025
SMN1M, SMN2M	*C, *CU, *QU, *H, *F, *G, *T, 3PU, AU	10-050
SMN1L, SMN2L	*C, *CU, *QU, *H, *F, *G, *T, 3PU, AU	10-070

- Determine the housing you have.
- Determine the element type and grade you need. \*Insert grades 4,6,8 or 10. See pages 6-7 for more detail on grade selection.
- Determine the corresponding element size.
- Combine "Element grade and Type" designation with "Element Size" to get part number. For Example: 6QU10-050. Box quantity depends on media type selected.

# FFC-112 Series Filters

## 3600 PSIG Pressure Filters

Compressed Natural Gas (CNG) powered vehicles such as airport shuttles, delivery vehicles, medium and light duty trucks and buses, taxis, and passenger vehicles have come to rely on the Parker Finite FFC-112 Filter Series to protect critical engine components from contamination present in CNG fuel.

The submicronic solid and lubricant aerosols that may be carried over during CNG compression process as well as contaminants that can be generated by the storage and distribution of the natural gas, must be removed to protect the fuel injectors and pressure reducing valves onboard CNG vehicles. The FFC-112 Filter Series offers two Coalescing efficiencies of 95% (Grade 10) or 99.97% (Grade 6) to meet your filtration requirements. Both ¼" NPT and SAE-6 port connections are available in the FFC-112 Filter Series and the housing is rated for 3600 psig (248 barg). It is small in size, yet the robust lightweight aluminum design allows for versatile installation and easy servicing. The housing is anodized for long life and corrosion resistance in the harshest of operating environments.

There are two variations of the FFC-112 Filter Series available. The FFC-112L includes a longer bowl with no drain plug, while the Extended bowl (FFC-112E) includes a longer bowl along with the same stainless steel SAE-6 ported drain plug as the standard FFC-112. These versions with the longer bowls have up to 5 times the sump capacity of the standard FFC-112 filter housing for those applications where liquid contamination is a problem.



### Features and Benefits:

- Protects critical engine components such as fuel injectors and regulators
- Three different variations
- Standard length with drain plug (FFC-112)
- E-Extended bowl with drain plug (FFC-112E)
- L-Long bowl with no drain plug (FFC-112L)
- Robust anodized aluminum construction can withstand harsh operating environments
- Two different coalescing efficiencies available, 95% (Grade 10) and 99.97% (Grade 6)
- Large sump capacity
- Small, lightweight size
- 1/4" NPT and SAE port sizes
- Mounting bracket kit available
- ECE-R110 Certified Standard (FFC-112) and Long Bowl (FFC-112L)

## Specifications:

Model Number	Port Size	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
FFC-112	1/4" NPTF	3600 PSIG (248 barg)	221°F (105°C)	Anodized Aluminum	Nylon Micro-glass	Anodized Aluminum	Fluorocarbon	0.5 oz (15 cc)	1.1 lbs (0.5 kg)	4.73" (120.1 mm)	2.28" (57.8 mm)
FFC-112-SAE	SAE-6	3600 PSIG (248 barg)	221°F (105°C)					0.5 oz (15 cc)	1.1 lbs (0.5 kg)	4.73" (120.1 mm)	2.28" (57.8 mm)
FFC-112E	1/4" NPTF	3600 PSIG (248 barg)	221°F (105°C)					2.5 oz (75 cc)	1.9 lbs (0.9 kg)	8.48" (215.4 mm)	2.28" (57.8 mm)
FFC-112E-SAE	SAE-6	3600 PSIG (248 barg)	221°F (105°C)					2.5 oz (75 cc)	1.9 lbs (0.9 kg)	8.48" (215.4 mm)	2.28" (57.8 mm)
FFC-112L	1/4" NPTF	3600 PSIG (248 barg)	221°F (105°C)					2.5 oz (75 cc)	1.9 lbs (0.9 kg)	8.48" (215.4 mm)	2.28" (57.8 mm)
FFC-112L-SAE	SAE-6	3600 PSIG (248 barg)	221°F (105°C)					2.5 oz (75 cc)	1.9 lbs (0.9 kg)	8.48" (215.4 mm)	2.28" (57.8 mm)

## Flow Rates (SCFM):

Filter Housing Model	SCFM in Natural Gas											
	Media Grade	Coalescing Efficiency	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3600 PSIG
All FFC-112 Models	6	99.97%	12	28	55	81	108	161	214	267	321	384
	10	95%	18	42	82	122	162	242	321	401	481	576

## How to Order:

<b>FFC-112</b>	—	<b>L</b>	—	<b>SAE</b>	—	<b>6</b>	<b>Examples:</b> FFC-112L-SAE-6, FFC-112-6, FFC-112L-6
Series Name		Bowl		Port		Media Grade	
<b>FFC-112</b>		Omit for Standard <b>L</b> (Long) <b>E</b> (Extended)		Omit for 1/4" NPT <b>SAE</b> = SAE-6		<b>6</b> <b>10</b>	

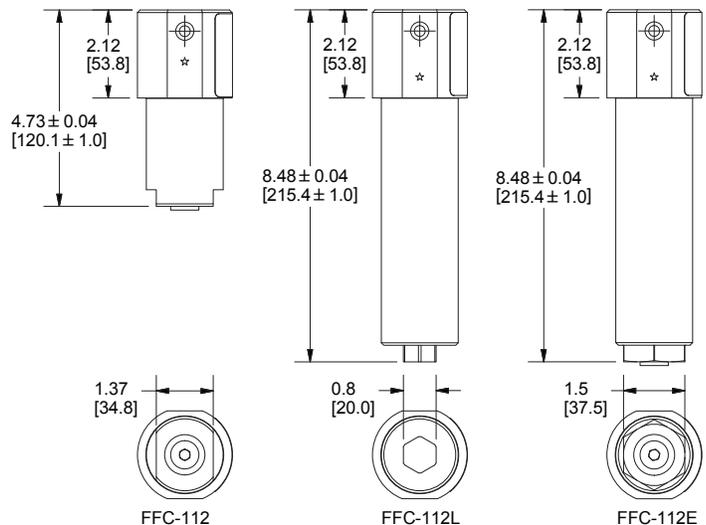
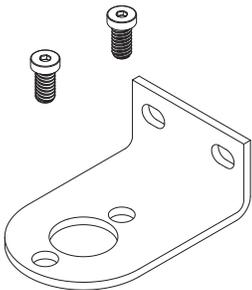
## Replacement Element Kits:

Filter Housing Model	Media Grade 6	Media Grade 10
All FFC-112 Models	CLS112-6K	CLS112-10K

Replacement Element kits include element, head-to-bowl o-ring, and lubricant.

## Mounting Bracket Kit: MB-2S

Kit includes bracket and 2 cap screws.



## Certification:

ECE-R110 for FFC-112 and FFC-112L

# FFC-113 Series Filters

## 3600 PSIG Pressure Filters

The FFC-113 is a popular filter choice onboard alternative fuel vehicles. Tiny solid and liquid contaminants can foul critical engine components, diminishing engine performance. These contaminants are typically generated during the compression, storage, and dispensing of alternative fuel gases like CNG. The FFC-113 removes sub-micronic contaminants with removal efficiencies from 95% (grade 10) to 99.97% (grade 6) ensuring long service intervals for components like fuel injectors and regulators. Its robust 303 stainless steel construction and 3600 PSIG design pressure and relatively light weight combine to provide a unit that will withstand the harsh operating environments found on heavy duty vehicles like buses and trucks. It is supplied with 1/2" NPT or SAE connections and is designed for flows exceeding 1550 SCFM at 3600 PSIG. Each housing is also fitted with a stainless steel SAE-6 ported drain plug.



### Specifications:

Model Number	Port Size	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
FFC-113	1/2" NPT	3600 PSIG (248 bar)	221°F (105°C)	303 Stainless Steel	303 Stainless Steel	303 Stainless Steel	Fluoro- carbon	5.0 oz (147.9 ml)	5.5 lbs (2.5 kg)	8.06" (204.7 mm)	2.97" (75.44 mm)
FFC-113-SAE	SAE-8										

### Flow Rates in Natural Gas (SCFM):

Filter Housing Model	Media Grade	Coalescing Efficiency	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3600 PSIG
All FFC-213 Models	6	99.97%	37	84	164	244	324	483	643	802	962	1153
	10	95%	51	141	274	407	539	805	1071	1337	1603	1922

### How to Order:

<b>FFC-113</b>	—	<b>SAE</b>	—	<b>10</b>
Series Name		Port		Media Grade
<b>FFC-113</b>		Omit for 1/2"NPT <b>SAE = SAE-8</b>		<b>6</b> <b>10</b>

Examples: FFC-113-6, FFC-113-SAE-10

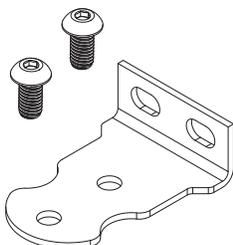
### Replacement Element Kits:

Filter Housing Model	Media Grade 6	Media Grade 10
All FFC-113 Models	DLS113-6K	DLS113-10K

Replacement Element kits include element, head-to-bowl o-ring, and lubricant.

### Mounting Bracket Kit: 2222FFC

Kit includes bracket and 2 cap screws.



### Certification:

ECE-R110

# FFC-213 Series Filters

## 3600 PSIG Pressure Filters

Heavy duty vehicles, such as buses and long haul trucks, can now rely on the new lightweight aluminum FFC-213 filters. They protect critical engine components from contaminants present in alternative fuel gas systems.

The new FFC-213 is another popular filter choice for onboard alternative fuel vehicles. Tiny solid and liquid contaminants can foul critical engine components, diminishing engine performance. These contaminants are typically generated during the compression, storage, and dispensing of alternative fuel gases like CNG. The FFC-213 removes sub-micronic contaminants with removal efficiencies from 95% (grade 10) to 99.97% (Grade 6) ensuring long service intervals for components like fuel injectors and regulators. Its lightweight aluminum construction and 3600 PSIG design pressure combine to provide a filter option that will withstand the harsh operating environments found on heavy duty vehicles like trucks and buses. It is supplied with either 1/2" NPT or SAE connections and is designed for flows exceeding 1550 SCFM at 3600 PSIG. Each housing is also fitted with a stainless steel SAE-6 drain plug.



### Features and Benefits:

- Anodized aluminum construction can withstand harsh operating environments
- Two different coalescing efficiencies available, 95% (Grade 10) and 99.97% (Grade 6)
- Large sump capacity
- Lightweight
- 1/2" NPT and SAE port sizes
- Mounting bracket kit available
- Protects critical engine components such as fuel injectors and regulators

## Specifications:

Model Number	Port Size	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
FFC-213	1/2" NPT	3600 PSIG (248 bar)	221°F (105°C)	Aluminum	Stainless Steel	Aluminum	Fluoro-carbon	5.0 oz (148 ml)	3.5 lbs (1.6 kg)	8.43" (214 mm)	3.25" (82.55 mm)
FFC-213-SAE	SAE-8										

## Flow Rates in Natural Gas (SCFM):

Filter Housing Model	Media Grade	Coalescing Efficiency	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3600 PSIG
All FFC-213 Models	6	99.97%	37	84	164	244	324	483	643	802	962	1153
	10	95%	51	141	274	407	539	805	1071	1337	1603	1922

## How to Order:

<b>FFC-213</b>	—	<b>SAE</b>	—	<b>10</b>
Series Name		Port		Media Grade
<b>FFC-213</b>		Omit for 1/2" NPT <b>SAE = SAE-8</b>		<b>6</b> <b>10</b>

Examples: FFC-213-6, FFC-213-SAE-10

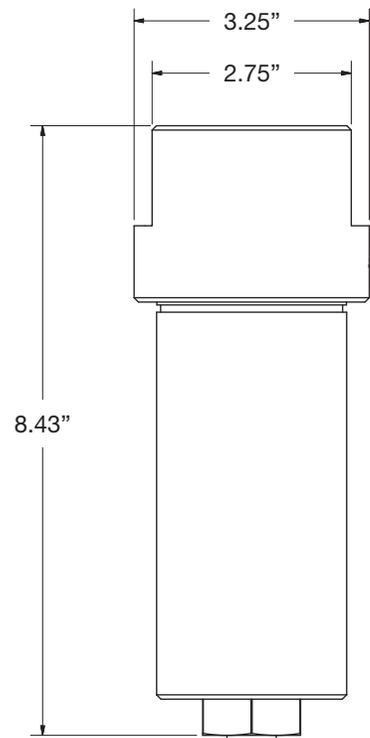
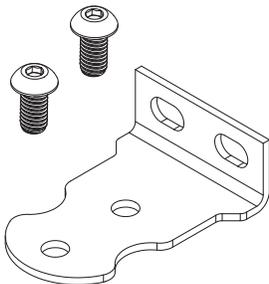
## Replacement Element Kits:

Filter Housing Model	Media Grade 6	Media Grade 10
All FFC-213 Models	DLS113-6K	DLS113-10K

Replacement Element kits include element, head-to-bowl o-ring, and lubricant.

## Mounting Bracket Kit: 2222FFC

Kit includes bracket and 2 cap screws.



# J-Series Filters

5000 PSIG Pressure Filters

## Why do high pressure systems need filtration?

High pressure compressors are used in a variety of applications. Many owners, operators and designers of high pressure compressed air or gas systems rely on Parker's Finite Filter Operation for high efficiency filters. End users of high pressure compressed air, such as scuba divers and fire rescue workers, depend on high quality breathable air.

Throughout the stages of compression many contaminants can enter into the system. Excessive amounts of liquid aerosols, primarily lubricant oil carryover and solid particulate contamination are common in high pressure systems. In addition, higher temperature levels are possible and may cause liquid oils to varnish. This contamination can lead to poor component performance and wear that may lead to unscheduled maintenance. Even submicronic contaminants in compressed air or gas systems can foul multistage compressors, increasing maintenance costs and impacting product quality.

Parker's Finite Filter Operation offers a variety of high pressure compressed air and gas filters. With our wide range of elements, we have a solution for every stage of compression, as well as at the point of use. Whether you are storing high pressure air or gas or using a continuous flow, count on Parker to protect your equipment from contamination. Parker Finite is the solution to ending high pressure contamination fouling.

Parker's Finite Filter Operation's J-Series Filters are designed to filter contaminants such as rust, pipe scale, compressor lubricant oil, and water from compressed gases. These filters are often used in high pressure compressed natural gas (CNG) systems, not only as inter-stage filters in the multi-stage compression of the gas, but also in the storage and delivery of the gas for CNG powered vehicles.



Compressed Natural Gas Dispensing

Parker's varied media choices remove up to 99.995% of both solid and liquid aerosols, and contaminants as small as 0.01 microns in size. An activated carbon media is also available which removes oil vapor. This stage of filtration is often used as the final filter before the storage of high pressure breathing air used by scuba divers, firefighters, and others who utilize portable breathing devices.

The filter housings and the replaceable elements used in this product line have an extremely robust construction, specially designed for use in system pressures up to 5,000 psig. Five housing sizes and two thread styles (NPT or SAE) are available with connections ranging from 1/4" to 2"; temperatures up to 350°F, and flows up to 26,000 SCFM at 5,000 PSIG.

## High Pressure Breathing Air



J-Series filters are used in a number of applications, ranging from breathing air for scuba divers, to high-pressure hydraulic circuit testing, to a variety of uses in the alternative fuel industry.



Urban CNG-Powered Vehicles

## J-Series High Pressure Filters

- CNG, alternative fuel and breathing air filters
- Pressures to 5000 PSIG
- Coalescing, particulate and adsorption filter elements available
- Spheroidal Graphite Cast Iron

## Filter Element Features

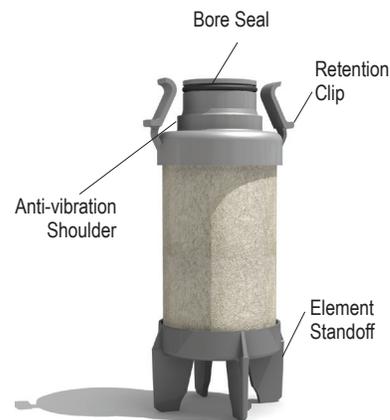
Parker Finite offers six filter media grades ensuring that we have the correct media choice for nearly any application requirement.

Available are coalescing grades with 95% to 99.995% efficiency and pleated or UNI-CAST coalescing media designs. Additionally, a bulk liquid separator, a particulate removal and oil vapor removal choices are standard offerings.

Each element uses a retention clip design that ensures the element is seated and sealed properly. This built-in, fail-safe feature will virtually eliminate any possibility of contaminant by-pass and is unique amongst high pressure filters.

Each element is composed of internal and external plated carbon steel retainers which provide the element with a 75+ PSID burst rating. Each element also features a bore seal interface with the housing, an anti-vibration shoulder, and an integrated standoff which minimizes the likelihood of any movement of the element, even during severe system pulsations.

Element standoff lengths were designed for each housing size to allow an optimal volume of liquid contaminant to be collected in the filter's quiet zone, further minimizing any chance of contaminant carryover.

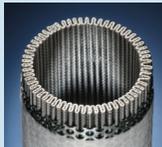
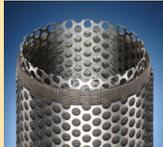


## Filter Housing Features

- Robust, spheroidal graphite-cast iron offers higher mechanical strength, improved ductility, and increased shock resistance, assuring the user that this filter is built for the task at hand.
- Head to bowl bore seal ensures greater seal integrity.
- Threaded mounting holes on top of filter head allow each size to be easily panel mounted when line mounting is not an option.
- Engraved flow direction arrow in filter's head notifies the user of proper flow direction. One direction flow for all media choices reduces the possibility of a housing being installed improperly.
- The spheroidal graphite cast iron head and steel bowl are nickel plated for corrosion resistance. The completed assembly is finished with a UV stable epoxy powder paint that will allow the filter to stand-up to harsh outdoor conditions.
- An imprinted aluminum part number tag ensures that each unit's identifying information will be visible in the years ahead.
- SAE-6 steel drain plug with positive o-ring seal installed. This port also allows the easy installation of Finite's JDK5000H or JDK5000V high pressure drain kits which allow the safe removal of liquid contamination at system pressures.
- Bowls are designed to be easily tightened or loosened with a standard socket wrench.
- Bowls feature a slotted positional locator which enables the element to be positively retained, therefore having a low bowl removal clearance.



## Element Types and Media Grade Options

Coalescers: Removes: Oil, water, liquids	Water Separators: Removes: Bulk liquids	Adsorber: Removes: Oil vapor (odor)	Particulate: Removes: Solid contaminants
<p>Coalescing elements are specially designed for the removal of liquid contaminants from gaseous flows. These media types flow from the inside of the element to the outside. Coalesced liquid collects in the bowl where it is drained, while clean air or gas exits the housing through the outlet port. Particulate contaminants are captured and held in the media.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><b>Type C</b></p> <p>The Finite UNI-CAST coalescing elements are made of epoxy saturated borosilicate glass microfiber and includes a polyester drain layer. (1)(2)</p> </div> <div style="text-align: center;">  <p><b>Type 7CP</b></p> <p>This pleated coalescer is made of fluorocarbon saturated borosilicate glass microfiber and includes a polyester drain layer. (1)(2)</p> </div> </div>	<p>In this element, the gas or liquid flows from the inside of the element to the outside.</p> <div style="text-align: center;">  <p><b>Type WS</b></p> <p>The Finite water separator element is composed of wrapped stainless steel mesh. (1)(2)</p> </div>	<p>Adsorption elements are used to remove vapors (hydrocarbon) that are not removed by the coalescing filter. Hydrocarbon vapors collect in the element, while clean air exits the housing through the outlet port. In this element, the air or gas flows from the inside of the element to the outside.</p> <div style="text-align: center;">  <p><b>Type A</b></p> <p>Our Type A media is wrapped activated carbon. This element has a galvanized carbon steel inner retainer and a stainless steel perforated metal outer retaining layer. (2)</p> </div>	<p>Particulate filters in the J-Series flow from the inside of the element to the outside. Particles collect in the element, while the clean air exits through the outlet port.</p> <div style="text-align: center;">  <p><b>Type 3P</b></p> <p>This 3 micron absolute rated pleated element is made of cellulose. (1)(2)</p> </div>

**Notes:**

- 1 Each element is retained internally and externally with galvanized carbon steel perforated metal. Not shown in some photos above.
- 2 Top and bottom end caps are made of glass filled nylon to ensure durability.

## Media Grades and Specifications:

Finite media grades determine the filtration m. Capture efficiencies are available up to 99.995%. Micron ratings range from 0.01 to 3 micron. The columns on the right note both the wet and dry pressure drops.

Grade Designation	Media Type	Removes...	Coalescing Efficiency	Max. Oil Carryover ppm <sup>1</sup>	Micron Rating (µm)	Pressure Drop Media Dry (PSID)	Additional Pressure Drop Media Wet <sup>2</sup> (PSID)
4C	Coalescing	Liquid from Gas	99.995%	0.003	0.01	1.25	3-4
7CP	Coalescing	Liquid from Gas	99.5%	0.09	0.5	0.25	0.5-0.7
10C	Coalescing	Liquid from Gas	95%	0.85	1.0	0.5	0.5
WS	Bulk Separator	Bulk Liquid from Gas	99+ <sup>3</sup>	N.A.	100	<0.25	<0.25
3P	Particulate	Solids from Gas	N.A.	N.A.	3.0	0.25	N.A.
A	Adsorber	Vapor from Gas	99+ <sup>4</sup>	N.A.	3.0	1.0	N.A.

<sup>1</sup>Tested per ISO 12500-1 at 40 ppm inlet.

<sup>2</sup>Add dry + wet columns for total pressure drop.

<sup>3</sup>Bulk liquid removal efficiency..

<sup>4</sup>Oil vapor removal efficiency is given for A media.

## High Pressure (HP) Filter Applications:

Application:	Media Grade and Type:
Test Air for HP Hydraulics	10C / 7CP
Inter-stage HP Compressor	WS / 10C
CNG Compressor Outlet	10C → 4C
CNG Storage Cascades	10C → 4C
CNG Dispensers	10C → 4C
Breathing Air / SCUBA	10C → 4C → A
High Pressure "Ultra Pure Air"	10C → 4C → 4C → A
Bulk Liquid contamination	WS → 7CP → 4C
Bulk Solid Contamination	3P → 7CP → 4C
HP Air / Gas Dryer Protection	10C / 7CP → 4C → Dryer → 7CP / 3P
Food Applications / Odor Removal	10C / 7CP → 4C → A

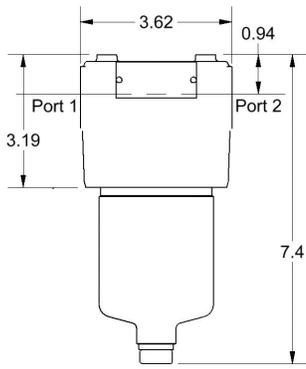


## Flow Rates (SCFM):

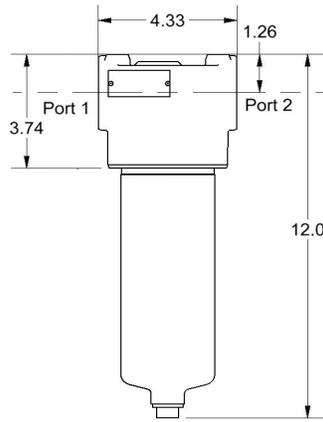
Choose Filter Size to find the corresponding flow rates.

Model	Port	Filter Type	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
J_1A	1/4" or SAE-4	4C, A	15	135	200	265	330	395	460	525	590	655
		7CP, 10C, 3P, WS	30	265	395	525	660	790	920	1050	1180	1310
J_2A	1/2" or SAE-8	4C, A	25	220	330	440	550	655	765	875	985	1095
		7CP, 10C, 3P, WS	50	440	660	880	1095	1315	1530	1750	1970	2185
J_2B	1/2" or SAE-8	4C, A	35	310	460	615	765	920	1070	1225	1380	1530
		7CP, 10C, 3P, WS	80	710	1055	1405	1755	2105	2450	2800	3150	3500
J_3B	3/4" or SAE-12	4C, A	60	530	790	1055	1315	1575	1840	2100	2360	2525
		7CP, 10C, 3P, WS	130	1150	1715	2285	2850	3415	3985	4550	5115	5685
J_4C	1" or SAE-16	4C, A	90	795	1190	1580	1975	2365	2760	3150	3540	3935
		7CP, 10C, 3P, WS	200	1770	2640	3515	4385	5255	6130	7000	7870	8745
J_6D	1-1/2" or SAE-24	4C, A	180	1590	2375	3160	3945	4730	5515	6300	7085	7870
		7CP, 10C, 3P, WS	400	3540	5280	7025	8770	10515	12255	14000	15745	17490
J_8E	2" or SAE-32	4C, A	275	2435	3630	4830	6030	7230	8425	9625	10825	12025
		7CP, 10C, 3P, WS	600	5310	7925	10540	13155	15770	18385	21000	23615	26230

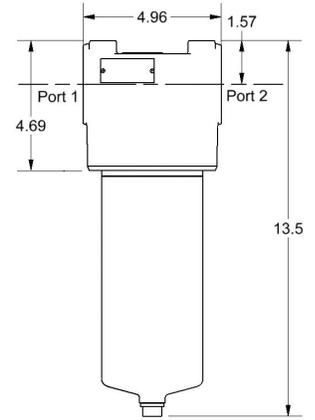
**Note:** These rates are based on compressed air flow. For CNG, these flows can be multiplied by a factor of 1.2.



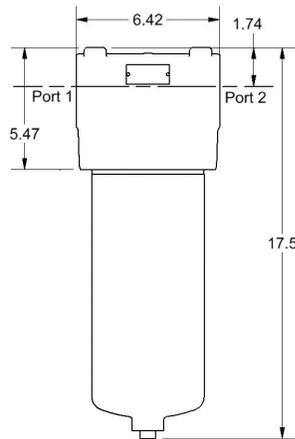
**J\_A Series**



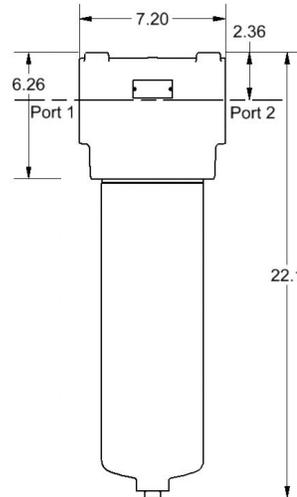
**J\_B Series**



**J\_C Series**



**J\_D Series**



**J\_E Series**

## Specifications:

Model	J_1A	J_2A	J_2B	J_3B	J_4C	J_6D	J_8E
Port Size (N=NPT)	1/4" NPT	1/2" NPT	1/2" NPT	3/4" NPT	1" NPT	1-1/2" NPT	2" NPT
Port Size (S=SAE)	SAE-4	SAE-8	SAE-8	SAE-12	SAE-16	SAE-24	SAE-32
Max. Pressure	5000 PSIG						
Max. Temperature <sup>1</sup>	350°F						
Head	SG Iron*						
Bowl	Steel						
Seals	Fluorocarbon						
Backing Ring	Nitrile						
Sump Volume	50 mL	50 mL	180 mL	180 mL	230 mL	500 mL	500 mL
Weight	9.0 lbs	9.0 lbs	13.0 lbs	13.0 lbs	21.0 lbs	45.0 lbs	67.0 lbs
Port to Port	3.62"	3.62"	4.33"	4.33"	4.96"	6.42"	7.2"
Height	7.4"	7.4"	12.0"	12.0"	13.5"	17.5"	22.1"
Clearance	2.0"	2.0"	2.25"	2.25"	2.25"	3.0"	3.0"
Drain Port	SAE-6						
Socket / Bowl Removal	1-1/16" HEX	1-1/2" HEX	1-1/2" HEX				
Head / Bowl Torque	15-20 ft-lbs	15-20 ft-lbs	25-30 ft-lbs	25-30 ft-lbs	25-30 ft-lbs	60-70 ft-lbs	60-70 ft-lbs

**Note:** SG Iron is an abbreviation for Spheroidal Graphite Cast Iron.

## High Pressure Drains and Gauge:

Model Number	Description
JDK5000H	Horizontal Drain Kit 5000 psig
JDK5000V	Vertical Drain Kit 5000 psig
BDPI-25	Differential Pressure Gauge and Bracket



## How to Order:

Use the steps below to build your own part number. For any permutation not mentioned below, please consult factory at 1-800-343-4048.

<b>J</b>	<b>N</b>	<b>2</b>	<b>A</b>	—	<b>4C</b>	<b>N</b>
Series Name	Port	Port Size	Housing Size		Media Grade	Accessories
J	N – NPT	1 (1/4")	A	—	4C	N = None Available
		2 (1/2")	A		10C	
		2 (1/2")	B		7CP	
		3 (3/4")	B		WS	
		4 (1")	C		3P	
		6 (1-1/2")	D		A	
		8 (2")	E			
		S – SAE	1 (SAE-4)		A	
			2 (SAE-8)		A	
	2 (SAE-8)		B			
	3 (SAE-12)		B			
	4 (SAE-16)		C			
	8 (SAE-32)		E			

Examples: JN2A-4CN, JS6D-WSN, JN3B-3PN



## Replacement Element Part Numbers:

<b>4C</b>	<b>J</b>	<b>A</b>	<b>K</b>
Media Grade	Series Name	Housing Size	Port
4C	J	A	K
10C		B	
7CP		C	
WS		D	
3P		E	
A			

Examples: 4CJAK, WSJDK, 3PJBK

**Note:** Replacement element supplied with replacement head/ bowl seals and lubricant.

# S5R & S1R Filters

5000 PSIG Pressure Filters

Measuring only four inches in height, these filters are ideal for bypass gas sampling applications. The drain port (plugged) connection size matches the inlet/outlet connection size. The corrosion resistant materials used for this model lend themselves to extreme operating environments.



\*specify part number S5R for 1/8" NPT connections or S1R for 1/4" NPT connections.

## Specifications:

Model Number	Port Size NPT	Max. Pressure	Max.Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
S5R, S1R	1/8", 1/4"	5000 PSIG (345 bar)	400°F (T) 350°F (G, C) 275°F (F)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluorocarbon	0.25 oz (7.4 ml)	1.16 lbs (0.53 kg)	4.0" (101.6 mm)	1.75" (50.8 mm)

## Flow Rates (SCFM):

Model	Media Grade	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
S5R, S1R	4	6.4	56	85	112	140	168	196	224	252	280
	6	8.4	74	111	148	184	221	257	294	331	368
	8	9.2	82	121	162	202	242	282	322	362	402
	10	10	90	132	176	219	263	306	350	394	438

## How to Order:

<b>S</b>	<b>1</b>	<b>R</b>	—	<b>6</b>	<b>C</b>	<b>04-023</b>
Series Name	Port Size NPT			Media Grade	Media Type	Element Size
S	5 (1/8") 1 (1/4")	R		4 6 8 10	G T F H C	04-023

**Example:** S1R-6T04-023

**Mounting bracket available:** MBS-1

## How to Order Replacement Elements:

Elements available:

- \_G04-023 X 10
- \_T04-023 X 10
- \_F04-023 X 10
- \_H04-023 X 10
- \_C04-023 X 10

\_ insert grade: 4, 6, 8, 10

For more information on element selection, please see 60-61. Elements are sold in Box quantities of 10.

# S1IL Filter

## 5000 PSIG Pressure Filter

Finite's S1IL particulate filter is typically applied in bottled gas applications or for sample preparation on gas analyzing equipment. It does not have a drain port and should only be used when little or no liquid contamination is expected. Though small in size, the S1IL is perfect for applications with elevated pressures or corrosive atmospheres and offers the availability of a high temperature element. Three high efficiency particulate elements are available for temperatures rated up to 400°F.



### Specifications:

Model	Port Size NPT	Max. Pressure	Max. Temp. for Each Element Type	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
S1IL	1/4"	5000 PSIG (345 bar)	400°F (T) 350°F (G) 275°F (F)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluorocarbon	N/A	0.75 lbs (0.34 kg)	3.10" (78.74 mm)	1.25" (31.75 mm)

### Flow Rates (SCFM):

Model	Media Grade	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
S1IL	4	3.6	32	48	63	79	95	110	126	142	158
	6	4.7	42	62	83	103	124	144	165	185	206
	8	5.2	46	69	91	114	137	159	182	205	228
	10	5.7	51	75	100	125	150	175	200	224	249

### How to Order:

<b>S1IL</b> Series Name	—	<b>6</b> Media Grade	<b>C</b> Media Type	<b>04-013</b> Element Size
S1IL		4 6 8 10	T G F	04-013

Example: S1IL-8G04-013

### How to Order Replacement Elements:

Elements available:    \_ insert grade: 4, 6, 8, 10  
 \_T04-013 X 10  
 \_G04-013 X 10  
 \_F04-013 X 10

For more information on element selection, please see pages 6-7. Elements are sold in Box quantities of 10.

# FFC-116 Series Filter

5000 PSIG Pressure Filter

This stainless steel filter is commonly used to filter oil, water, and particulate from lower flow CNG systems and onboard CNG vehicles. CNG powered commuter vehicles, rely on FFC-116 filters to protect against harmful contaminants that can foul fuel injector systems. Both solid and liquid contaminants can enter the system from various sources. Its small size allows for installation versatility and ease of servicing. The 316 stainless steel construction resists corrosion. Its 5000 PSIG design enables it to be used on the high pressure side of a CNG system, protecting both the regulator and the fuel injectors. The sump capacity is 0.25 oz (7.4 cc) for fluid contaminants, which can be drained through a plugged 1/4" NPT drain port.



## Specifications:

Model	Port Size NPT	Max. Pressure	Max. Temp.	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
FFC-116	1/4"	5000 PSIG (345 bar)	350°F (177°C)	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	Fluorocarbon	0.25 oz (7.4 ml)	1.16 lbs (0.53 kg)	4.0" (101.6 mm)	1.75" (44.5 mm)

## Flow Rates (SCFM):

Model	Media Grade	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
FFC-116	6	8.4	74	111	148	184	221	257	294	331	368
	10	10	90	132	176	219	263	306	350	394	438

## How to Order:

<b>FFC-116</b>	—	<b>6</b>
Series Name		Media Grade
FFC-116		6 10

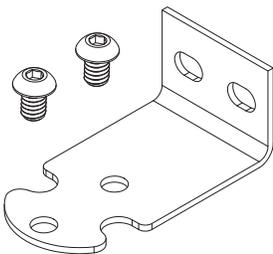
Example: FFC-116-6

## Replacement Elements:

Model	Media Grade 6	Media Grade 10
All FFC-116 models	CLS116-6 x 10	CLS116-10 x 10

## Mounting Bracket Kit: MBS-1

Kit includes bracket and 2 cap screws.



# SJ-Series Filters

## 6000 PSIG Pressure Filter

This robust, stainless steel filter is rated for working pressures up to 6000 PSIG, which makes this the filter of choice for extremely demanding applications. The SJ-series comes in a variety of port sizes and types, reducing the need for extra piping or the use of adapters in your application. The ¼" drain port allows the user to drain all oil from the assembly prior to servicing, eliminating possible cross contamination and leaving a cleaner environment. Use this filter for your offshore applications, water fogging, caustic washdowns (food processing) or on high pressure test stands. A wide variety of filter element media grades and styles means that your application needs will be efficiently met.



### Specifications:

Model	Port Size (NPT or SAE)	Max. Pressure	Max. Temp. for each Element Type	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
SJN*S, SJS*S	1/2" thru 1"	6000 PSIG (414 bar)	175°F (Grade A) 350°F (All other grades)	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel	Fluorocarbon	2.1 oz (61 ml)	14 lbs (6.4 kg)	8.26" (210 mm)	4.00" (102 mm)
SJN*L, SJS*L	1/2" thru 1"	6000 PSIG (414 bar)	175°F (Grade A) 350°F (All other grades)	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel	Fluorocarbon	7.8 oz (230 ml)	18 lbs (8.2 kg)	11.97" (304 mm)	4.00" (102 mm)
SJN*H, SJS*H	1/2" thru 1"	6000 PSIG (414 bar)	175°F (Grade A) 350°F (All other grades)	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel	Fluorocarbon	2.1 oz (61 ml)	17 lbs (7.7 kg)	11.97" (304 mm)	4.00" (102 mm)

\*insert port size: 2 =1/2", 3=3/4" and 4=1"

### How to Order:

<b>SJ</b>	<b>N</b>	<b>2</b>	<b>S</b>	—			<b>4C</b>	<b>WC</b>	<b>N</b>
Series Name	Port Type	Port Size	Bowl	Media Grade	Element Construction	Accessories			
SJ	N (NPT)	2 (1/2") 3 (3/4") 4 (1")	S (Standard)  L (Long bowl, short element, extra sump)  H (High Flow: Long bowl, long element)	4C 10C 3P A	WC (metal retainers, bonded on end caps with positive o-ring seal.)	N (No Accessories)			

Examples: SJN2S-4CWCN, SJS3L-3PWCN

### How to Order Replacement Elements:

Housings are sold with one element. Build your own replacement element with the chart below.

Housing	Element Grade and Type	Element Size
SJN*S, SJS*S, SJN*L, SJS*L	4CWC, 10CWC, 3PWC, AWC, 100WS	11-036
SJN*H, SJS*H	4CWC, 10CWC, 3PWC, AWC, 100WS	11-072

**Note:** Replacement element supplied with o-ring and lubricant.

1. Determine the housing you have by choosing from the "Housing" column on the chart. \*Insert port size. See How to Order above for more info on port sizes.
2. Determine the "Element Grade and Type" you need. See pages 6-7 for more detail on grade selection.
3. Determine the corresponding element size by choosing from the "Element Size" column on the chart.
4. Combine "Element Grade and Type", "Element Size" and then add Box quantity to the end. Box quantities are all X 4, except 100WS which is X 1. Example: 4CWC11-036 X 4 or 100WS11-072 X 1.

## Flow Rates (SCFM):

Filter Housing Model	Media Grade	100 PSIG	250 PSIG	500 PSIG	750 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4500 PSIG	5000 PSIG	5500 PSIG	6000 PSIG
SJN_S	4C	25	58	112	167	221	330	439	548	657	766	984	1093	1202	1311
	10C	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	3P	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	A	33	76	148	220	292	436	580	723	867	1011	1299	1443	1587	1731
	100	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
SJS_S	4C	25	58	112	167	221	330	439	548	657	766	984	1093	1202	1311
	10C	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	3P	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	A	33	76	148	220	292	436	580	723	867	1011	1299	1443	1587	1731
	100	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
SJN_L	4C	25	58	112	167	221	330	439	548	657	766	984	1093	1202	1311
	10C	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	3P	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	A	33	76	148	220	292	436	580	723	867	1011	1299	1443	1587	1731
	100	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
SJS_L	4C	25	58	112	167	221	330	439	548	657	766	984	1093	1202	1311
	10C	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	3P	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
	A	33	76	148	220	292	436	580	723	867	1011	1299	1443	1587	1731
	100	55	127	247	367	487	726	966	1206	1446	1685	2165	2405	2644	2884
SJN_H	4C	62	143	278	413	548	819	1089	1359	1630	1900	2440	2711	2981	3252
	10C	136	314	610	907	1203	1796	2389	2982	3575	4167	5353	5946	6539	7133
	3P	136	314	610	907	1203	1796	2389	2982	3575	4167	5353	5946	6539	7133
	A	82	189	368	547	725	1083	1440	1798	2155	2513	3228	3585	3943	4301
	100	136	314	610	907	1203	1796	2389	2982	3575	4167	5353	5946	6539	7133
SJS_H	4C	62	143	278	413	548	819	1089	1359	1630	1900	2440	2711	2981	3252
	10C	136	314	610	907	1203	1796	2389	2982	3575	4167	5353	5946	6539	7133
	3P	136	314	610	907	1203	1796	2389	2982	3575	4167	5353	5946	6539	7133
	A	82	189	368	547	725	1083	1440	1798	2155	2513	3228	3585	3943	4301
	100	136	314	610	907	1203	1796	2389	2982	3575	4167	5353	5946	6539	7133

Note: \_insert port type. See How to Order on page 32 for more information.

## High Pressure Drains and Gauge:

Model Number	Description
JDK5000H	Horizontal Drain Kit 5000 psig
JDK5000V	Vertical Drain Kit 5000 psig
BDPI-25	Differential Pressure Gauge and Bracket



# Notes

# Notes

# Worldwide Filtration Manufacturing Locations

## North America

### Compressed Air Treatment

#### Industrial Gas Filtration and Generation Division

Lancaster, NY  
716 686 6400  
[www.parker.com/igfg](http://www.parker.com/igfg)

Haverhill, MA  
978 858 0505  
[www.parker.com/igfg](http://www.parker.com/igfg)

### Engine Filtration

#### Racor

Modesto, CA  
209 521 7860  
[www.parker.com/racor](http://www.parker.com/racor)

Holly Springs, MS  
662 252 2656  
[www.parker.com/racor](http://www.parker.com/racor)

### Hydraulic Filtration

#### Hydraulic & Fuel Filtration

Metamora, OH  
419 644 4311  
[www.parker.com/hydraulicfilter](http://www.parker.com/hydraulicfilter)

Laval, QC Canada  
450 629 9594  
[www.parkerfarr.com](http://www.parkerfarr.com)

Velcon  
Colorado Springs, CO  
719 531 5855  
[www.velcon.com](http://www.velcon.com)

### Process Filtration

#### domnick hunter Process Filtration SciLog

Oxnard, CA  
805 604 3400  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

### Water Purification

#### Village Marine, Sea Recovery, Horizon Reverse Osmosis

Carson, CA  
310 637 3400  
[www.parker.com/watermakers](http://www.parker.com/watermakers)

## Europe

### Compressed Air Treatment

#### domnick hunter Filtration & Separation

Gateshead, England  
+44 (0) 191 402 9000  
[www.parker.com/dhfn](http://www.parker.com/dhfn)

#### Parker Gas Separations

Etten-Leur, Netherlands  
+31 76 508 5300  
[www.parker.com/dhfn](http://www.parker.com/dhfn)

#### Hiross Airtek

Essen, Germany  
+49 2054 9340  
[www.parker.com/hzfd](http://www.parker.com/hzfd)

Padova, Italy  
+39 049 9712 111  
[www.parker.com/hzfd](http://www.parker.com/hzfd)

### Engine Filtration & Water Purification

#### Racor

Dewsbury, England  
+44 (0) 1924 487 000  
[www.parker.com/rfde](http://www.parker.com/rfde)

#### Racor Research & Development

Stuttgart, Germany  
+49 (0)711 7071 290-10

### Hydraulic Filtration

#### Hydraulic Filter

Arnhem, Holland  
+31 26 3760376  
[www.parker.com/hfde](http://www.parker.com/hfde)

Ujala, Finland  
+358 20 753 2500

#### Condition Monitoring Parker Kittiwake

West Sussex, England  
+44 (0) 1903 731 470  
[www.kittiwake.com](http://www.kittiwake.com)

### Process Filtration

#### domnick hunter Process Filtration Parker Twin Filter BV

Birtley, England  
+44 (0) 191 410 5121  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

## Asia Pacific

### Australia

Castle Hill, Australia  
+61 2 9634 7777  
[www.parker.com/australia](http://www.parker.com/australia)

### China

Shanghai, China  
+86 21 5031 2525  
[www.parker.com/china](http://www.parker.com/china)

### India

Chennai, India  
+91 22 4391 0700  
[www.parker.com/india](http://www.parker.com/india)

### Parker Fowler

Bangalore, India  
+91 80 2783 6794  
[www.johnfowlerindia.com](http://www.johnfowlerindia.com)

### Japan

Tokyo, Japan  
+81 45 870 1522  
[www.parker.com/japan](http://www.parker.com/japan)

### Korea

Hwaseon-City  
+82 31 359 0852  
[www.parker.com/korea](http://www.parker.com/korea)

### Singapore

Jurong Town, Singapore  
+65 6887 6300  
[www.parker.com/singapore](http://www.parker.com/singapore)

### Thailand

Bangkok, Thailand  
+66 2186 7000  
[www.parker.com/thailand](http://www.parker.com/thailand)

## Latin America

### Parker Comercio Ltda. Filtration Division

Sao Paulo, Brazil  
+55 12 4009 3500  
[www.parker.com/br](http://www.parker.com/br)

### Pan American Division

Miami, FL  
305 470 8800  
[www.parker.com/panam](http://www.parker.com/panam)

## Africa

Aeroporto Kempton Park, South Africa  
+27 11 9610700  
[www.parker.com/africa](http://www.parker.com/africa)



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**Industrial Gas Filtration and Generation Division**  
4087 Walden Avenue  
Lancaster, NY 14086  
phone 800 343 4048  
[www.parker.com/igfg](http://www.parker.com/igfg)



State of California ONLY  
**WARNING:** Proposition 65  
The products described herein can expose you to chemicals known to the State of California to cause cancer or reproductive harm.  
For more information: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)