



Natural Gas  
for Vehicles

REFUELING INSTRUCTIONS  
STOP ENGINE  
NO SMOKING  
FLAMMABLE GAS

1. Ensure the vehicle system is turned off.
2. Make the location of the emergency shut down valve.
3. Remove the refueling nozzle from the nozzle and return it to the vehicle regulator. Turn the nozzle to OFF (FILL) position. Turn the nozzle to ON (FILL) position. Turn the nozzle to OFF (FILL) position.
4. If the emergency shut down valve is not controlled by a card reader, insert your card and follow the card reader instructions.
5. If the emergency shut down valve is not controlled by a card reader, insert your card and follow the card reader instructions.
6. If the emergency shut down valve is not controlled by a card reader, insert your card and follow the card reader instructions.
7. Turn the pump handle and return the refueling nozzle to the vehicle.
8. Lower the pump handle and return the refueling nozzle to the vehicle.

# High Pressure and Alternative Fuel Filtration

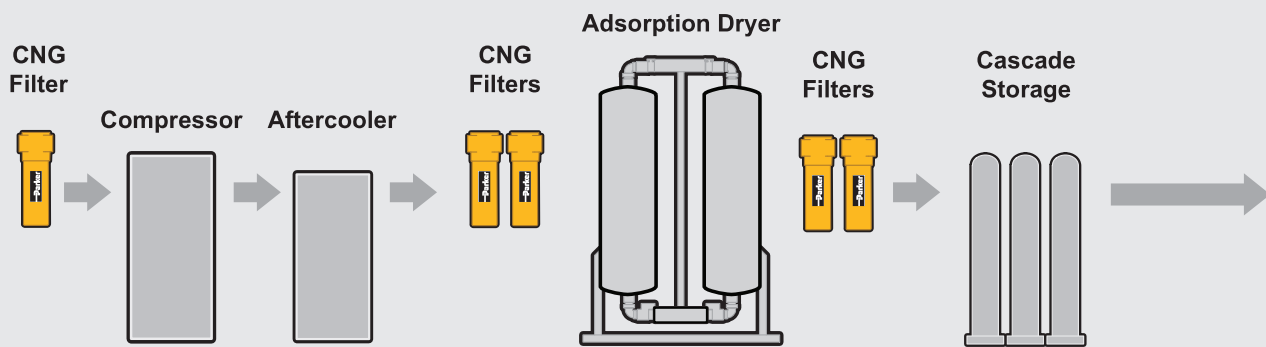


ENGINEERING YOUR SUCCESS.









## 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 air or gas at a high pressure, or using a continuous flow, you can count on Finite to protect your equipment from contamination. Finite's proven high pressure filtration solutions will safeguard the toughest jobs.



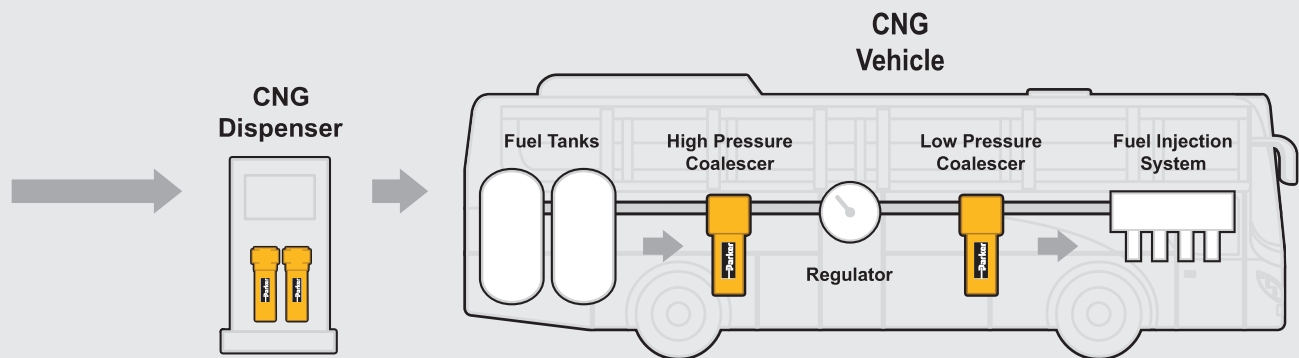
# Alternative Vehicles Need High Pressure Filtration

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 78 for more detailed information on this application.



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.

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.

3

## Choose your filtration grade and efficiency

Are you searching for a specific micron rating or efficiency rating? If so, page 79 provides a complete breakdown of Finite's filter media grades and their performance specifications.

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.

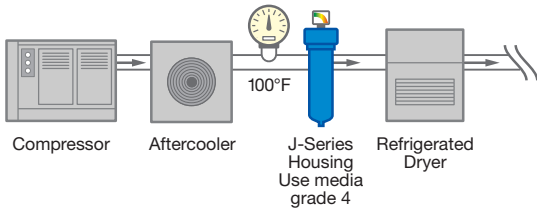
5

## Use flow charts to determine filter size

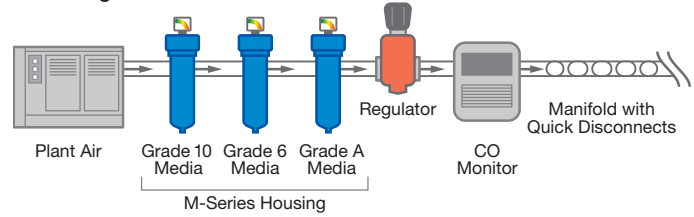
Flows are provided for each high pressure filter series. Flows are listed at various operating pressures. Filters are available with flows up to 6500 SCFM and pressure ratings up to 6000 PSIG.

# Applications

## Source Air



## Breathing Air



## High Pressure Breathing Air

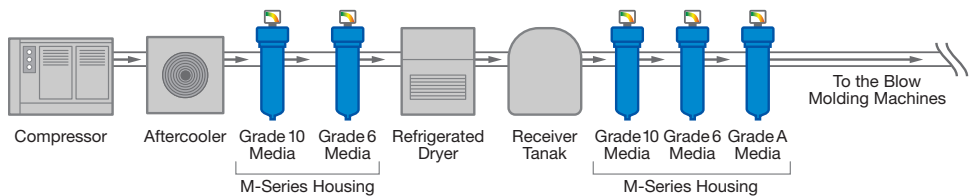
The filtration of compressed air is critical to ensure that it meets stringent air quality requirements for use in breathing air applications as set forth by North American agencies such as the Occupational Health and Safety Administration (OSHA) and Canadian Standards Association (CSA). Breathing air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

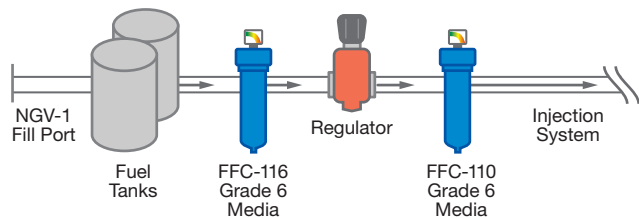
## PET Blow Molding

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



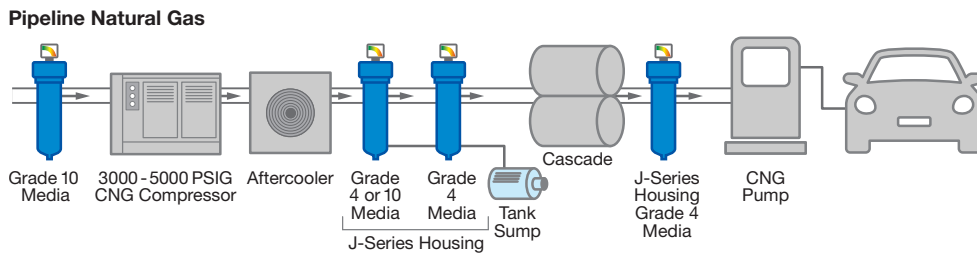
## Onboard CNG Vehicles



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.

## 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.



### 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

## Parker Finite Filtration for CNG Compressor, Dispensing, and Dual Fuel Applications

### Specifications

Model	Max. Pressure	Port Sizes NPT	Max. Temp.	Min. Temp.	Certifications	Threads	Material	Plating
<b>H-Series</b>	500 PSIG	1/4" - 3"	N/A	-20°F	CRN	NPT	Aluminum	Chromate
<b>SN8S- Series</b>	700 PSIG	2"	N/A	-20°F	N/A	NPT	316 SS	None
<b>M-Series</b>	800 PSIG	1/4" - 1", 2"	N/A	-20°F	N/A	NPT	Aluminum	Chromate
<b>CJ-Series</b>	2550 PSIG	1/4" - 2"	+350°F	-40°F	CRN	NPT or SAE	SR Iron	Electroless Nickel
<b>J-Series</b>	5000 PSIG	1/4" - 2"	+350°F	-40°F	N/A	NPT or SAE	SR Iron	Electroless Nickel
<b>ZJ-Series</b>	6000 PSIG	1", 1-1/2", 2"	+350°F	-40°F	CRN	SAE	Steel	Electroless Nickel



# 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.

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.



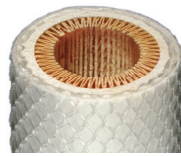
## Coalescing Elements (removal of liquids and particulate)



### Media Type C

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.

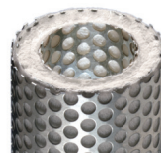
**For use with:** FFC-110 (800 PSIG), FFC-110L (800 PSIG), SN8S (500 PSIG), M-Series (800 PSIG), A5R/A1R (1000 PSIG), SM-Series (1200 PSIG), FFC-112 (3600 PSIG), FFC-112 SAE (3600 PSIG) FFC-113 (3600 PSIG), J-Series (5000 PSIG), S5R/S1R (5000 PSIG), FFC-116 (5000 PSIG), SJ-Series (6000 PSIG)



### Media Type H

Coalescing element similar to type "C," however no rigid retainer is used. Typically used in applications with low or constant flow rates.

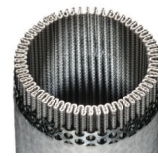
**For use with:** A5R/A1R (1000 PSIG), SM-Series (1200 PSIG), S5R/S1R (5000 PSIG)



### Media Type Q

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.

**For use with:** M-Series (800 PSIG), SM-Series (1200 PSIG)



### Media Type 7CVP

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.

**For use with:** SN8S (500 PSIG), M-Series (800 PSIG)



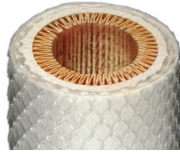
## Particulate Removal Element (removal of solids)



### Media Type 3P

Pleated cellulose particulate removal element. Includes molded elastomeric end seals (3PU). Some models offer the option of metal end caps and fluorocarbon gaskets.

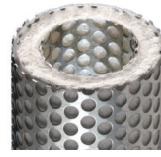
**For use with:** SN8S (500 PSIG), M-Series (800 PSIG), SM-Series (1200 PSIG), J-Series (5000 PSIG), SJ-Series (6000 PSIG)



### Media Type G

Particulate removal element constructed of the same fiber matrix as type "C", but with no rigid retainer or drain layer.

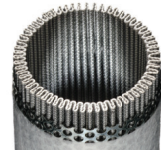
**For use with:** A5R/A1R (1000 PSIG), SM-Series (1200 PSIG), S5R/S1R (5000 PSIG), S1IL (5000 PSIG)



### Media Type F

Particulate removal element like "G" tube, except fluorocarbon saturant replaces epoxy.

**For use with:** A5R/A1R (1000 PSIG), SM-Series (1200 PSIG), S5R/S1R (5000 PSIG), S1IL (5000 PSIG)



### Media Type T

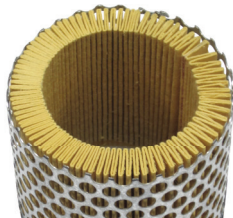
Particulate removal element like "G" tube, except high temperature fluorocarbon saturant replaces epoxy.

**For use with:** A5R/A1R (1000 PSIG), SM-Series (1200 PSIG), S5R/S1R (5000 PSIG), S1IL (5000 PSIG)



## Water Separator

(removal of bulk liquids)



### Media Type 100WS

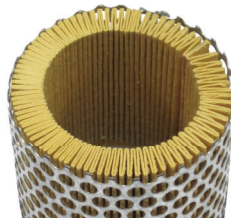
This all stainless steel element has two metal retainers with rolled mesh screen in between. This cleanable element combines liquid droplets and aerosols, separating the liquids from the gas stream in systems with high liquid loads.

**For use with:** SN8S (500 PSIG), M-Series (800 PSIG), J-Series (5000 PSIG), SJ-Series (6000 PSIG)



## Liquid Propane Element

(removal of particulates)



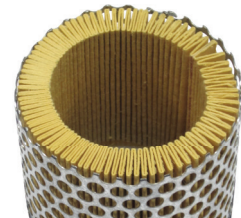
### Media Type LPG

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.



## Adsorption Element

(removal of odors)



### Media Type A

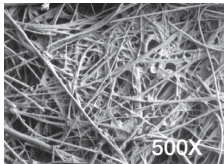
Hydrocarbon vapor removal element. Ultrafine grained, highly concentrated, activated carbon sheet media. Includes molded elastomeric end seals (AU). Some models offer the option of metal end caps and fluorocarbon gaskets. Maximum hydrocarbon inlet concentration .5 to 2 PPM.

**For use with:** SN8S (500 PSIG), M-Series (800 PSIG), SM-Series (1200 PSIG), J-Series (5000 PSIG), SJ-Series (6000 PSIG)



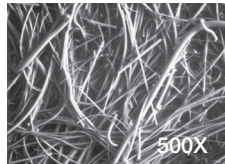


### Media Grades



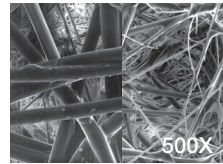
#### Grade 4

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



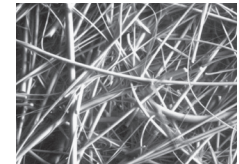
#### Grade 6

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.



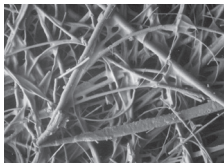
#### Grade 7CVP

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.



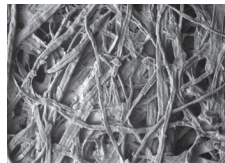
#### Grade 8

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



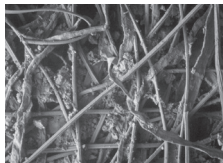
#### Grade 10

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.



#### Grade 3P

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



#### Grade A





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





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.

### Parker Finite Media Specifications

Media Grade	Coalescing Efficiency 0.3 to 0.6 Micron Particles	Max. 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

## High Efficiency Coalescing Filters



Parker Finite filters are used everyday in food grade applications.

## Why Filter Compressed Air?

Product rejects and increased maintenance expenses can occur due to poor air quality.

Submicronic contaminants in compressed air systems plug orifices of sensitive pneumatic instrumentation, wear out seals, erode system components, reduce the absorptive capacity of desiccant air/gas dehydrators, foul heat transfer surfaces, reduce air tool efficiency, and damage finished products. The results include product rejects, lost production time and increased maintenance expense. For example, trace amounts of submicronic oil can cause serious fish eye blemishing in automotive finishing operations. Water left in air lines can freeze during exposure to cold temperatures, blocking flow or rupturing pipes. Compressor lubricant not captured in a coalescing filter will eventually collect in pneumatic components, causing premature component repair or replacement. Environmental concerns will be raised if oily, compressed air is continually discharged into the atmosphere through a pneumatic muffler.

### Why Use Finite Filters?

#### Element formation

Our special UNI-CAST formed elements provide lower pressure drop and less frequent change-outs, saving you time and money.

#### We meet your needs

Parker offers a variety of filter elements to meet your application requirements.

#### Technical support

We are committed to providing unmatched technical support to all of our customers.

#### Short lead times

Our LEAN manufacturing capability assures that you will have the right filter product at the right time. Popular products are shipped in three days.

### Finite's H-Series Offers:

- Optional indicators, gauges and drains
- Temperatures to 450°F (232°C)
- Pressures to 500 PSIG (34 bar)
- Connection sizes from 1/4" to 3" NPT, BSPP & BSPT
- Flows from 10 to 1660 SCFM (17-2822 m<sup>3</sup>/hr)
- CRN approved in all Canadian Provinces





# Sources of Contamination

Compressed air and gas lines typically contain water, oil and particulate contamination.

**The contaminants of greatest concern in precision compressed air systems are water, oil and solids.**

Water vapor is present in all compressed air and it becomes greatly concentrated by the compression process. While air dryer systems can be used effectively to remove water from compressed air, they will not remove the second major liquid contaminant – oil. Most oil comes from compressor lubrication carry-over, but even the air produced by oil-free compressors has hydrocarbon contamination brought into the system through the intake. The third contaminant is solid matter including dirt, rust and scale. Solid particulates, combined with aerosols of water and oil, can clog and shorten the life of air system components and can foul processes.

## H-Series Applications

### Coalescing (Oil Removal)

- Air dryer pre-filter
- Paint spray booths
- Breathing air
- Tool protection
- Air valve protection
- Air cylinder protection
- Natural gas filtration
- Technical gas filtration

### Interceptor (Particulate Removal)

- Desiccant dryer after-filter
- Pre-filter for coalescer
- Systems with high concentrations of solid contaminant
- Particulate protection for non-lubricated systems

### Adsorber (Vapor Removal)

- Odor removal
- Breathing air
- Food packaging equipment
- High purity laboratory gases
- Hydrocarbon vapor removal

## 4 Steps to Clean, Dry Compressed Air and Gas:



Determine your application, media grade, media type and end seal material



Choose your housing and replacement elements



Choose your accessories



How to Order

**Note:** See pages 17-18 for application and system schematics



# Step 1. Determine Your Application, Media Grade, Media Type and End Seal

Find your (or similar) application from the descriptions below, from the basic application circuits on the previous page, or consult one of our application engineers. Determine media grade, media type and end seal required. If your application requires a coalescing element, use the information listed below. For other media types, please see the following pages.

## Coalescing Elements (removal of liquids and particulate)

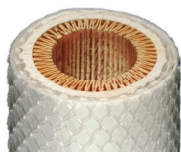


**Media Type C or I**

**Available in grades:** 4, 6, 8, 10  
**Air flow:** Inside to outside

This coalescing element is made with our special UNI-CAST construction. Composed of an epoxy saturated borosilicate glass micro-fiber media, this media is used in applications requiring the removal of liquid and particulate contamination. The outer synthetic fabric layer allows for swift removal of coalesced liquids.

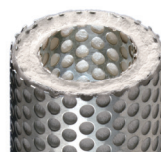
Media type I is constructed similarly to the C media but also includes an inner retainer intended for additional strength where reverse flow is likely.



**Media Type Q**

**Available in grades:** 4, 6, 8, 10  
**Air flow:** Inside to outside

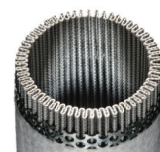
This coalescing element is composed of an epoxy saturated, borosilicate glass micro-fiber media, and is also made with our special UNI-CAST construction. This media type has a built-in pleated cellulose pre-filter as the inner layer. As with the C and I media types, the outer synthetic fabric layer aids in the swift and efficient removal of coalesced liquids.



**Media Type D**

**Available in grades:** 4, 6, 8, 10  
**Air flow:** Inside to outside

Media type D elements are composed of a micro-glass coalescer, utilize a special high temperature UNI-CAST formulation, but are surrounded by inner and outer diameter metal retainers. These metal retainers, coupled with a glass drain layer, make this an extremely robust element designed to remove both solid and liquid contaminants at elevated temperatures.



**Media Type 7CVP, 7DVP, or ME**

**Available in:** 1¼" NPT port size housings and larger  
**Air flow:** Inside to outside

Parker Finite's 7CVP media type consists of two filter layers between metal retainers. The outer layer removes aerosols while the inner layer traps solid particles, protecting and extending the life of the outer layer. 7CVP elements are used in bulk liquid coalescing applications or when relatively high efficiency and low pressure drop are required. A special 7DVP media is constructed the same way, however it allows for higher temperature applications.

Parker's ME media type are mist eliminator elements that are constructed similarly to the 7CVP, but offer even higher filtration efficiency for more critical compressed air quality demands.

### Choose a filter grade for media types C, I, Q, or D

#### Grade 4

Parker's media grade 4 is typically chosen when an extremely high coalescing efficiency is required. Its 99.995% rating is the best available and is ideal for use as a final filter in applications with elevated operating pressures (up to 500 PSIG), or when removing liquid contaminants from gases lighter than compressed air.

#### Grade 6 (Standard)

Grade 6 filters 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 in a variety of industrial applications. Grade 6 is an excellent choice as a pre-filter for regenerative desiccant air dryers, as it prevents oil or varnish from coating the desiccant.

#### Grade 8

Grade 8 filters combine high efficiency (98.5%) with high flow rate and long element life. A separate pre-filter is not required for "normal to light" particulate loading. A grade 8 element is often chosen as protection for refrigerated air dryers. This element allows the dryer to maintain efficiency by preventing the coating of copper coils with the build-up of oil or varnish.

#### Grade 10

Grade 10 filters are used as pre-filters for grades 6 or 8 to remove gross amounts of liquid aerosols or tenacious aerosols. Grade 10 is often referred to as a coarse coalescer, or pre-coalescer. A grade 10 in a media type D filter element is recommended as an after-filter for heat regenerated desiccant type air dryers as its one micron rating is ideal for collecting air dryer desiccant fines before they pass downstream.



## Water Separator

(removal of bulk liquids)



### Media Type 100WS

**Air Flow:** Inside to outside

This rolled stainless steel mesh element has ID and OD metal retainers with rolled stainless steel mesh in between. It is an extremely robust design. With a nominal rating of 100 micron, this media is used for the reduction and elimination of excess liquids in gas streams. It also would be a good choice as a pre-filter for coalescing grades 6 and 10 when extreme volumes of liquid contaminants are present.



## Particulate Removal Element

(removal of solids)



### Media Type 3P

**Air Flow:** Outside to inside

Parker's 3P pleated cellulose element removes solid contaminants, with a 3 micron absolute rating. Because this element is designed to flow from its outside to the inside, it has a strong inner retainer that gives this element added strength. 3P particulate "Interceptor" elements are used where very high dirt loading is expected but a relatively fine pore structure is required. It is also used as a pre-filter to a coalescing filter in systems where a lot of solid contamination exists.



## Adsorption Element

(removal of odors)







### Media Type A

**Air Flow:** Outside to inside

This hydrocarbon vapor removal element consists of an ultra-fine grained, highly concentrated, activated carbon sheet media. Because these elements are designed to flow from the outside to their inside, they have a strong inner retainer giving this element added strength. This media type is used to remove hydrocarbon vapor and is often used to remove the smell or taste of compressor lube oil from breathing air. Maximum hydrocarbon inlet concentration .5 to 2 PPM.

## Parker Finite Media Specifications

Media Grade	Coalescing Efficiency 0.3 to 0.6 Micron Particles	Max. 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.

## End Seals Available

End Seals	Available on Media Type	Max temp of Element with End seal	
No end seals — Element is self sealing. Standard on filters with 1/4" to 1" connection sizes.	C	175°F (79°C)	
<b>U:</b> Molded Urethane, Standard on all filters with 1-1/4" to 3" connection sizes.	C	175°F (79°C)	
	I	175°F (79°C)	
	Q	175°F (79°C)	
	3P	175°F (79°C)	
	100WS	175°F (79°C)	
<b>S:</b> Molded silicone rubber end seals used for high temperature elements up to 450°F (232°C).	A	175°F (79°C)	
	C	175°F (79°C)	
	Q	175°F (79°C)	
	D	450°F (232°C)	
	3P	350°F (177°C)	
<b>V:</b> Fluorocarbon gaskets bonded to metal end caps. <b>Note:</b> V option is only available on 1 1/4" NPT and larger. Standard on all 7CVP, 7DVP, and ME media.	C	350°F (177°C)	
	D	450°F (232°C)	
	ME	175°F (79°C)	
	7CVP	175°F (79°C)	
	7DVP	400°F (204°C)	
	100WS	450°F (232°C)	
	3P	350°F (177°C)	
	A	175°F (79°C)	





## Step 2. Determine Your Housing

Find your desired flow rate under the appropriate media grade column. For pressures other than 100 PSIG or temperatures other than 70°F, please see Alternate Housing Selection Chart, Step 2a, on following page.

**Note:** The housing assembly part numbers below have a NPT connection. For BSPP, insert F in place of N. For BSPT, insert T in place of N.

### Housing Selection Chart

Rated Flows: SCFM @ 100 PSIG (m<sup>3</sup>/hr @ 7 bar). For other pressures, please see Step 2a on following page.

Housing Assembly	Port Size	Grade 4 Coalescer	Grade 6 Coalescer (Standard)	Grade 7CVP Coalescer (or ME Media)	Grade 8 Coalescer	Grade 10 Coalescer	Grade 3PU Particulate Removal	Grade 100WS Water Separator	Grade A Adsorber
HN1S	1/4"	11 (19)	15 (26)	N/A	20 (34)	25 (43)	25 (43)	50 (85)	15 (26)
HN15S	3/8"	15 (26)	20 (34)	N/A	27 (46)	33 (56)	33 (56)	66 (112)	20 (34)
HN2S	1/2"	19 (32)	25 (43)	N/A	34 (58)	42 (71)	42 (71)	83 (141)	25 (43)
HN1L	1/4"	23 (39)	30 (51)	N/A	41 (68)	50 (85)	50 (85)	50 (85)	30 (51)
HN15L	3/8"	30 (51)	40 (68)	N/A	55 (94)	66 (112)	66 (112)	66 (112)	40 (68)
HN2L	1/2"	38 (65)	50 (85)	N/A	68 (116)	83 (141)	83 (141)	83 (141)	50 (85)
HN3S	3/4"	61 (104)	80 (136)	N/A	109 (185)	133 (226)	133 (226)	133 (226)	80 (136)
HN4S	1"	76 (129)	100 (170)	N/A	136 (231)	166 (282)	166 (282)	232 (394)	100 (170)
HN4L	1"	106 (180)	140 (238)	N/A	191 (325)	232 (394)	232 (394)	232 (394)	140 (238)
HN5S	1 1/4"	190 (323)	250 (425)	415 (706)	330 (461)	415 (706)	415 (706)	415 (706)	250 (425)
HN6S	1 1/2"	260 (442)	350 (595)	600 (1020)	465 (791)	600 (1020)	600 (1020)	600 (1020)	350 (595)
HN8E	2"	260 (442)	350 (595)	600 (1020)	465 (791)	600 (1020)	600 (1020)	600 (1020)	350 (595)
HN8S	2"	340 (578)	450 (765)	750 (1275)	600 (1020)	750 (1275)	750 (1275)	750 (1275)	450 (765)
HN8L	2"	470 (799)	625 (1063)	1035 (1760)	830 (1411)	1035 (1760)	1035 (1760)	1035 (1760)	625 (1063)
HN0L	2 1/2"	600 (1020)	800 (1360)	1330 (2261)	1060 (1802)	1330 (2261)	1330 (2261)	1330 (2261)	800 (1360)
HN12L	3"	750 (1275)	1000 (1700)	1660 (2822)	1330 (2261)	1660 (2822)	1660 (2822)	1660 (2822)	1000 (1700)

### Replacement Element Part Numbers

\*Insert selected media grade 4, 6, 8, 10.

Housing Assembly	Coalescer	Coalescer w/inner retainer	High Temperature	Coalescer w/built-in pre-filter	ME Mist Eliminator	7CVP Pleated Coalescer	3PU Particulate Removal	100WS Water Separator	AU Adsorber
HN1S	*C10-025	*IU10-025	*DS10-025	*QU10-025	N/A	N/A	3PU10-025	100WSU10-025	AU10-025
HN15S	*C10-025	*IU10-025	*DS10-025	*QU10-025	N/A	N/A	3PU10-025	100WSU10-025	AU10-025
HN2S	*C10-025	*IU10-025	*DS10-025	*QU10-025	N/A	N/A	3PU10-025	100WSU10-025	AU10-025
HN1L	*C10-050	*IU10-050	*DS10-050	*QU10-050	N/A	N/A	3PU10-050	100WSU10-025	AU10-050
HN15L	*C10-050	*IU10-050	*DS10-050	*QU10-050	N/A	N/A	3PU10-050	100WSU10-025	AU10-050
HN2L	*C10-050	*IU10-050	*DS10-050	*QU10-050	N/A	N/A	3PU10-050	100WSU10-025	AU10-050
HN3S	*C15-060	*IU15-060	*DS15-060	*QU15-060	N/A	N/A	3PU15-060	100WSU15-060	AU15-060
HN4S	*C15-060	*IU15-060	*DS15-060	*QU15-060	N/A	N/A	3PU15-060	100WSU15-060	AU15-060
HN4L	*C15-095	*IU15-095	*DS15-095	*QU15-095	N/A	N/A	3PU15-095	100WSU15-060	AU15-095
HN5S	*CU25-130	*CU25-130	*DS25-130	*QU25-130	ME25-130	7CVP25-130	3PU25-130	100WS25-130	AU25-130
HN6S	*CU25-130	*CU25-130	*DS25-130	*QU25-130	ME25-130	7CVP25-130	3PU25-130	100WS25-130	AU25-130
HN8E	*CU25-130	*CU25-130	*DS25-130	*QU25-130	ME25-130	7CVP25-130	3PU25-130	100WS25-130	AU25-130
HN8S	*CU25-187	*CU25-187	*DS25-187	*QU25-187	ME25-187	7CVP25-187	3PU25-187	100WS25-187	AU25-187
HN8L	*CU25-235	*CU25-235	*DS25-235	*QU25-235	ME25-235	7CVP25-235	3PU25-235	100WS25-235	AU25-235
HN0L	*CU35-280	*CU35-280	*DS35-280	*QU35-280	ME35-280	7CVP35-280	3PU35-280	100WS35-280	AU35-280
HN12L	*CU35-280	*CU35-280	*DS35-280	*QU35-280	ME35-280	7CVP35-280	3PU35-280	100WS35-280	AU35-280



## Step 2a. Alternate Housing Selection Chart

Use this step for applications with technical gases or for applications that do not have standard conditions (100 PSIG and 70°F).

### Converting Actual Application Conditions to Standardized Conditions

Because the required size of a filter is affected not only by flow, but also by operating pressure and operating temperature, it is necessary to convert those actual conditions to standardized conditions (100 PSIG and 70°F). The calculated adjusted flow rate can then be used to choose the appropriate filter in the chart on the previous page. When using the chart, choose the closest flow rate from the appropriate media grade column.



**Air**  
1.0 gravity



**Ammonia**  
0.58 gravity



**Argon**  
1.37 gravity



**Carbon Dioxide**  
1.52 gravity



**Carbon Monoxide**  
0.96 gravity



**Chlorine**  
2.48 gravity



**Ethane**  
1.04 gravity



**Ethylene**  
0.97 gravity



**Helium**  
0.13 gravity



**Hexane**  
2.73 gravity



**Hydrogen**  
0.06 gravity



**Methane**  
0.55 gravity



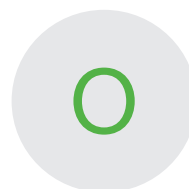
**Natural Gas**  
0.66 gravity



**Neon**  
0.69 gravity



**Nitrogen**  
0.96 gravity



**Oxygen**  
1.18 gravity



**Pentane**  
2.47 gravity



**Propane**  
1.56 gravity

**Note:** Take the square root of your specific gravity. If this is for a compressed air application, skip this step because the specific gravity of air equals one. Please see chart to the left for specific gravities.

Refer to this chart if you do not know the specific gravity of the gas you are filtering.

## Equation for Adjusted Flow Rate

Flow Rate	Pressure	Temperature	Specific Gravity	Adjusted Flow Rate
Actual System Flow Rate (SCFM)	$\frac{(\text{System Pressure (PSIG)} + 14.7 \text{ PSIG})}{(100 \text{ PSIG} + 14.7 \text{ PSIG})}$	$\frac{70^\circ\text{F} + 460^\circ\text{F (System Temp. } ^\circ\text{F} + 460^\circ\text{F)}}{70^\circ\text{F} + 460^\circ\text{F}}$	$\sqrt{\text{(See chart above)}}$	$= \frac{\text{SCFM}}{(\text{@ } 100 \text{ PSIG, and } 70^\circ\text{F})}$

### Example

Your compressed air application requires a Media Grade 6 Coalescer Filter. The actual flow rate is 136 SCFM, an actual pressure of 150 PSIG, and an actual temperature of 100°F.

$$136 \text{ SCFM} \times \frac{(100 \text{ PSIG} + 14.7 \text{ PSIG})}{(150 \text{ PSIG} + 14.7 \text{ PSIG})} \times \frac{(100^\circ\text{F} + 460^\circ\text{F})}{70^\circ\text{F} + 460^\circ\text{F}} \times 1 = 100 \text{ SCFM}$$

Return to the Housing Selection Chart on the previous page. Using the given information and the result from the above equation, you will look for the “Grade 6C” column heading. In this column you will find that the correct housing assembly for a 100 SCFM flow rate would be the HN4S model.



## Step 3. Accessories

Choose your accessories. Please consult Parker Finite when choosing pre-installed accessories for gases other than air.

### Pre-installed Accessories

Accessory Designator	Accessory Type	Maximum Pressure	Maximum Temperature
A	Auto Drain	250 PSIG (17 bar)	175°F (79°C)
D	DPI Indicator	250 PSIG (17 bar)	175°F (79°C)
G	DPG Gauge	500 PSIG (34 bar)	175°F (79°C)
J	High Temp	250 PSIG (17 bar)	450°F (232°C)
N	No Accessories	500 PSIG (34 bar)	175°F (79°C)
P	DP Ports (1/8" NPT gauge ports)	500 PSIG (34 bar)	175°F (79°C)
V	Fluorocarbon O-rings	500 PSIG (34 bar)	175°F (79°C)
W	Auto Drain and DPI Indicator	250 PSIG (17 bar)	175°F (79°C)
X	Auto Drain and DP Ports	250 PSIG (17 bar)	175°F (79°C)
Y	Auto Drain and DPG Gauge	250 PSIG (17 bar)	175°F (79°C)

### Replacement Accessories



#### DPG-15 Differential Pressure Gauge

Designator	Y	G
Temperature	175°F (79°C)	175°F (79°C)
Pressure	250 PSIG (17 Bar)	500 PSIG (17 Bar)
Port Size	N/A	N/A



#### DPI Indicator

Designator	D, W
Temperature	175°F (79°C)
Pressure	250 PSIG (17 Bar)
Port Size	N/A



#### AD-12 Auto Drain Valve

Designator	A, W, X, Y
Temperature	175°F (79°C)
Pressure	250 PSIG (34 Bar)
Port Size	N/A

**Note:** Auto drains require a minimum operating pressure of 10 PSIG to seal.

### Other Compatible Drain Accessories



	TV-50 Timed Drain Valve	ZLD-013 Zero Loss Drain	VS-50 Visual Sump Drain (not shown: standard bowl guard)	MS-50 Metal Sump Drain (External)
Temperature	210°F (99°C)	140°F (60°C)	125°F (52°C)	175°F (79°C)
Pressure	300 PSIG (20 Bar)	232 PSIG (16 Bar)	150 PSIG (10 Bar)	250 PSIG (17 Bar)
Port Size	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT

**Note:** The accessories above are compatible with this product line, however, they are sold separately. Other timed drain valves can be found in the Air Line Filtration Accessories section.

# Step 4. How to Order

Use the steps below to build your own part number.

For any permutation not mentioned below, please consult factory.

## Step 2 or 2a

## Step 1

## Step 3

H	N	12	L	6	C	U	G
Series Name	Port Type	Port (Connection) Size	Bowl	Element Grade	Element Type	End Seal	Accessory Designator for pre-installed accessories
H	F - BSPP N - NPT	1 - 1/4" 15 - 3/8" 2 - 1/2" 3 - 3/4" 4 - 1" 5 - 1 1/4" 6 - 1 1/2" 8 - 2" 0 - 2 1/2" 12 - 3"	S - Standard L - Long E - Economy (short bowl)*	4 6 8 10	C	Blank = No end seal, Standard on 1/4" to 1" connection sizes U = Urethane, Standard on 1 1/4" to 3" connection sizes S = Molded Silicone Rubber V = Fluorocarbon gasket with metal end caps, Available 1 1/4" to 3" connections only	A - Auto Drain D - DPI Indicator G - DPG Gauge J - High Temperature (up to 450°F) N - No Accessories P - 1/8" Differential (3/4" & up) Sensing Ports V - Fluorocarbon O-rings W - A + D X - A + P (3/4" & up) Y - A + G Note: For maximum pressures and temperatures related to Accessories, please see chart on previous page.
	S - SAE* *SAE-32 2" connection only	8 - SAE-32	<p>Note: Bowl length is determined by the flow rate required. Housing Selection Chart, for flow rates.</p> <p>Note: Economy bowl is only available on 2" connection size.</p> <p>Note: Grades are available on element type C, Q, and D. For 7CVP, 7DVP, ME, 3P, 100WS and A, leave this blank.</p>				
						Q	U = Urethane, Standard all connection sizes S = Molded Silicone Rubber
						D	S = Molded Silicone Rubber, Standard on all connection sizes V = Fluorocarbon gasket with metal end caps, Available in 1 1/4" to 3" connection sizes only
					7CVP 7DVP ME	Blank =	Fluorocarbon gasket with metal end caps, Standard on all 7CVP, 7DVP, and ME elements; elements available in 1 1/4" to 3" connections only
					3P	U = Urethane, Standard all connection sizes S = Molded Silicone Rubber V = Fluorocarbon gasket with metal end caps, Available 1 1/4" to 3" connections only	
					100WS	U = Urethane, Standard on 1/4" to 1" connection sizes Blank =	Fluorocarbon gasket with metal end caps, Standard on 100WS elements 1 1/4" to 3" connections only
					A	U = Urethane, Standard on all connection sizes V = Molded Silicone Rubber	





## Examples on How to Order:

### 1 HN12L-6CUY

#### What am I ordering?

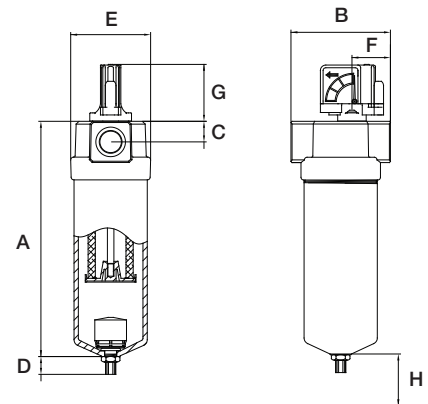
An H-Series, with a 3" NPT connection, long bowl, standard grade 6 coalescing element with urethane end seals, an auto drain and a standard DPG gauge.

# H-Series Drawings, Dimensions & Specifications

## 1/4" to 1" Port Size Housing Specifications

<b>Max. Pressure</b>	500 psig (34 bar)
<b>Safety Factor</b>	Maximum operating to burst 4:1
<b>Max. Temp.</b>	175°F (79°C) with option to 450°F (232°C)
<b>Seals</b>	Nitrile Standard/Fluorocarbon optional
<b>Materials</b>	Aluminum - 380 Die cast heads; 6061 Drawn bowls
<b>Coatings</b>	Chromated heads and bowls; Powder painted exterior
<b>Design</b>	In-line threaded bowl to head

**Note:** Manual Drain Port is 1/8" NPT when tee valve is removed from drain bushing.



Model	A	B	C	D	E	F	G	H*	Sump (ml)	Weight
<b>H_1S</b>	6.80 (172)	3.12 (79)	.63 (16)	.79 (20)	2.98 (76)	1.56 (39.5)	2.6 (66)	2.99 (76)	150	1.49 (.68)
<b>H_15S</b>	6.80 (172)	3.12 (79)	.63 (16)	.79 (20)	2.98 (76)	1.56 (39.5)	2.6 (66)	2.99 (76)	150	1.47 (.66)
<b>H_2S</b>	6.80 (172)	3.12 (79)	.63 (16)	.79 (20)	2.98 (76)	1.56 (39.5)	2.6 (66)	2.99 (76)	150	1.44 (.65)
<b>H_1L</b>	9.19 (233)	3.12 (79)	.63 (16)	.79 (20)	2.98 (76)	1.56 (39.5)	2.6 (66)	5.51 (140)	140	1.89 (.86)
<b>H_15L</b>	9.19 (233)	3.12 (79)	.63 (16)	.79 (20)	2.98 (76)	1.56 (39.5)	2.6 (66)	5.51 (140)	140	1.87 (.85)
<b>H_2L</b>	9.19 (233)	3.12 (79)	.63 (16)	.79 (20)	2.98 (76)	1.56 (39.5)	2.6 (66)	5.51 (140)	140	1.85 (.84)
<b>H_3S</b>	10.86 (276)	4.65 (118)	.96 (24)	.79 (20)	3.68 (93.5)	1.73 (44)	2.6 (66)	6.5 (165)	270	3.56 (1.61)
<b>H_4S</b>	10.86 (276)	4.65 (118)	.96 (24)	.79 (20)	3.68 (93.5)	1.73 (44)	2.6 (66)	6.5 (165)	270	3.29 (1.49)
<b>H_4L</b>	14.36 (365)	4.65 (118)	.96 (24)	.79 (20)	3.68 (93.5)	1.73 (44)	2.6 (66)	10.00 (254)	270	4.11 (1.86)

**Special Note:** Dimensions are in inches (millimeters); weight is in pounds (kilograms). \*Clearance required to remove bowl.

## 2 HN15L-8CA What am I ordering?

An H-Series, with a 3/8" NPT connection, long bowl, grade 8 coalescing element without end seals and an auto drain.

## 3 HN8S-7CVPG What am I ordering?

An H-Series, with a 2" NPT connection, standard bowl, a 7CVP coalescing element, with the standard fluorocarbon end seals and standard DPG gauge.

## 4 HN8E-10DVJ What am I ordering?

An H-Series, with a 2" NPT connection, economy short bowl, grade 10 high-temp coalescing element, with the standard fluorocarbon end seals and "J" as an accessory. This high temperature option converts all materials to be capable of handling temperatures of 450°F.

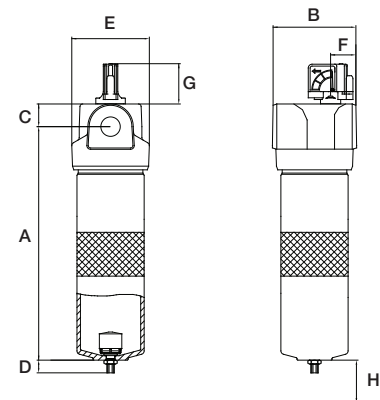
## 5 HN2S-AUN What am I ordering?

An H-Series, with a 1/2" NPT connection, short bowl, adsorber element, with the standard urethane end seals and no accessories.

### 1 1/4" to 3" Port Size Housing Specifications

<b>Max. Pressure</b>	500 psig (34 bar)
<b>Safety Factor</b>	Maximum operating to burst 4:1
<b>Max. Temp.</b>	175°F (79°C) with option to 450°F (232°C)
<b>Seals</b>	Nitrile Standard/Fluorocarbon optional
<b>Materials</b>	Aluminum - 356 Sand cast heads; 6061 Drawn bowls
<b>Coatings</b>	Chromated heads and bowls; Powder painted exterior
<b>Design</b>	In-line threaded bowl to head

**Note:** Manual Drain Port is 1/8" NPT when tee valve is removed from drain bushing.



Model	A	B	C	D	E	F	G	H*	Sump (ml)	Weight
<b>H_5S</b>	18.23 (463)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.6 (66)	13.50 (343)	440	12.11 (5.49)
<b>H_6S</b>	18.23 (463)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.6 (66)	13.50 (343)	440	11.97 (5.43)
<b>H_8E</b>	18.23 (463)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.6 (66)	13.50 (343)	440	11.97 (5.43)
<b>H_8S</b>	24.23 (617)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.6 (66)	19.25 (489)	530	14.00 (6.35)
<b>H_8L</b>	29.23 (742)	6.0 (152)	1.65 (42)	.83 (21)	5.67 (144)	1.85 (47)	2.6 (66)	24.02 (610)	620	15.99 (7.25)
<b>H_0L</b>	35.70 (907)	8.0 (203)	2.4 (61)	.83 (21)	7.24 (184)	2.36 (60)	2.6 (66)	28.50 (724)	880	35.00 (15.87)
<b>H_12L</b>	35.70 (907)	8.0 (203)	2.4 (61)	.83 (21)	7.24 (184)	2.36 (60)	2.6 (66)	28.50 (724)	880	34.14 (15.48)

**Special Note:** Dimensions are in inches (millimeters); weight is in pounds (kilograms). \*Clearance required to remove bowl.

# 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.



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
<b>SN8S</b>	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

**SN8S X 1**

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
<b>MN1S</b>	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)
<b>MN1L</b>	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)
<b>MN15S</b>	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)
<b>MN15L</b>	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)
<b>MN2S</b>	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)
<b>MN2L</b>	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)
<b>MN3S</b>	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)
<b>MN4S</b>	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)
<b>MN4L</b>	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)
<b>MN8S</b>	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)



<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
M	N - NPT	1 - 1/4"	S - Standard	4 6 8 10	<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)
		15 - 3/8"	(Long) Note: L is not available for 3/4" and 2" port size housings	4 6 8 10	<b>Q</b> (Coalescer with built-in pre-filter)	2" port size: <b>V</b> (Fluorocarbon)	<b>G</b> (Gauge)
		2 - 1/2"		Leave blank	<b>100WS</b>	<b>U</b> (Urethane) Standard on all sizes	 <p>Option <b>(G)</b> is a great way to monitor pressure drop and determine when to replace the filter element.</p>
		3 - 3/4"		Leave blank	<b>7CVP</b> (only available on 2" port)	1/4" - 1" port size: <b>U</b> (Urethane)	
		4 - 1"		Leave blank	<b>3P</b> (Pleated Cellulose) Particulate element	For 2" leave blank (standard fluorocarbon end seals)	
		8 - 2"		Leave blank	<b>A</b> (Adsorber)	1/4" - 1" port size: <b>U</b> (Urethane) 2" port size: <b>V</b> (Fluorocarbon)	

\*SAE -32  
 2" connection only

8  
(SAE -32)

**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

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

## Examples

3PU10-025, 6CU10-025

Element Box quantity depends on media type selected.



## Replacement Element Part Numbers

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

Filter Housing	Media Grade	100 PSIG	250 PSIG	500 PSIG	800 PSIG
<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
<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

## How to Order

**1** Determine the housing you have by choosing from the “Housing” column on the chart.

**2** Determine the element type and grade you need. \*Insert grades 4,6,8, or 10 for C, CU, CV, or QU.

**3** Determine the corresponding element size by choosing from the “Element Size” column on the chart.

**4** Combine “Element Grade and Type” designation with “Element Size” to get element part number.

Filter Housing	Media Grade	100 PSIG	250 PSIG	500 PSIG	800 PSIG
<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

Filter Housing	Media Grade	100 PSIG	250 PSIG	500 PSIG	800 PSIG
<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 65 for more information.



Compressed Natural Gas Dispensing



Urban CNG-Powered Vehicles

## J-Series & ZJ-Series 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.

Parker 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.

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.

These 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.

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 and ZJ-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.

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.



## 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



## ZJ-Series Compressed Natural Gas Filters

- CNG, alternative fuel, high-pressure gases and air filters.
- Pressures to 6000 PSIG.
- Coalescing, particulate and adsorption filter elements available.
- Carbon Steel, Electroless Nickel Plate.
- Temperatures to -40°C/F
- CRN Registered.



## Filter Element Features

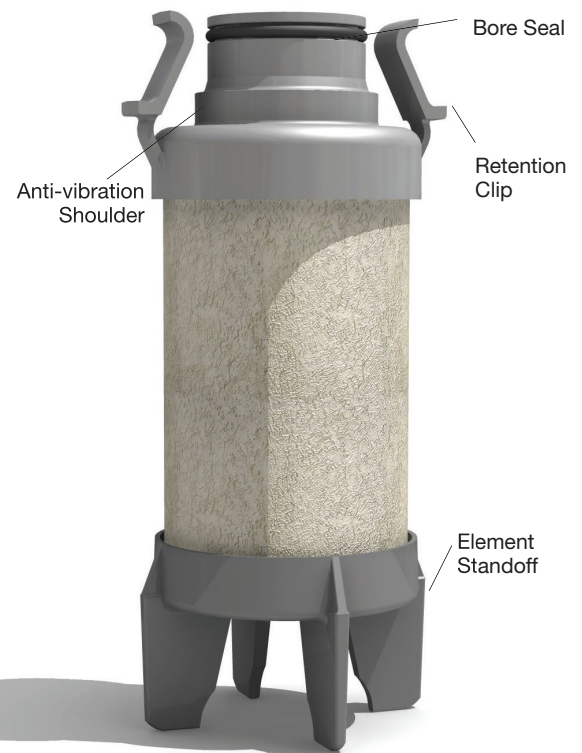
Parker Finite offers six filter media grades ensuring that we have the correct media choice for nearly any application requirement.

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 / ZJDK6000H or ZJDK6000V high pressure drain kits which allow the safe removal of liquid contamination at system pressures.

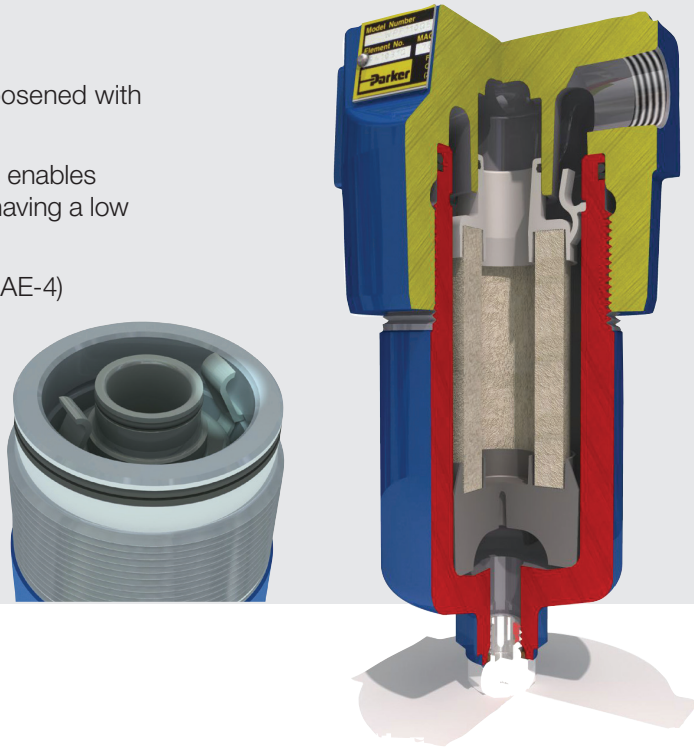
## High Pressure (HP) Filter Applications:

### 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

- 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.
- For the ZJ-Series, differential pressure ports (SAE-4) are included in filter heads to monitor the system during operation.



## 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)
<b>4C</b>	Coalescing	Liquid from Gas	99.995%	0.003	0.01	1.25	3-4
<b>7CP</b>	Coalescing	Liquid from Gas	99.5%	0.09	0.5	0.25	0.5-0.7
<b>10C</b>	Coalescing	Liquid from Gas	95%	0.85	1.0	0.5	0.5
<b>WS</b>	Bulk Separator	Bulk Liquid from Gas	99+% <sup>3</sup>	N.A.	100	<0.25	<0.25
<b>3P</b>	Particulate	Solids from Gas	N.A.	N.A.	3.0	0.25	N.A.
<b>A</b>	Adsorber	Vapor from Gas	99+% <sup>4</sup>	.003	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.



# Element Types and Media Grade Options



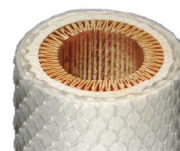
## Coalescing Elements (removal of liquids and particulate)

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.



### Media Type C

The Finite UNI-CAST coalescing elements are made of epoxy saturated borosilicate glass microfiber and includes a polyester drain layer. (1)(2)



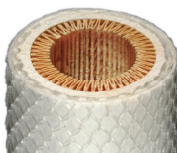
### Media Type 7CP

This pleated coalescer is made of fluorocarbon saturated borosilicate glass microfiber and includes a polyester drain layer. (1)(2)



## Water Separator

(removal of bulk liquids)



In this element, the gas or liquid flows from the inside of the element to the outside.

### Media Type WS

The Finite water separator element is composed of wrapped stainless steel mesh. (1)(2)



## Particulate Removal Element

(removal of solids)



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.

### Media Type 3P

This 3 micron absolute rated pleated element is made of cellulose. (1)(2)



## Adsorption Element

(removal of odors)



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.

### Media Type A

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)

#### Notes:

<sup>1</sup> Each element is retained internally and externally with galvanized carbon steel perforated metal. Not shown in some photos above.

<sup>2</sup> Top and bottom end caps are made of glass filled nylon to ensure durability.

# Flow Rates (SCFM)

Choose Filter Size to find the corresponding flow rates.

## J-Series

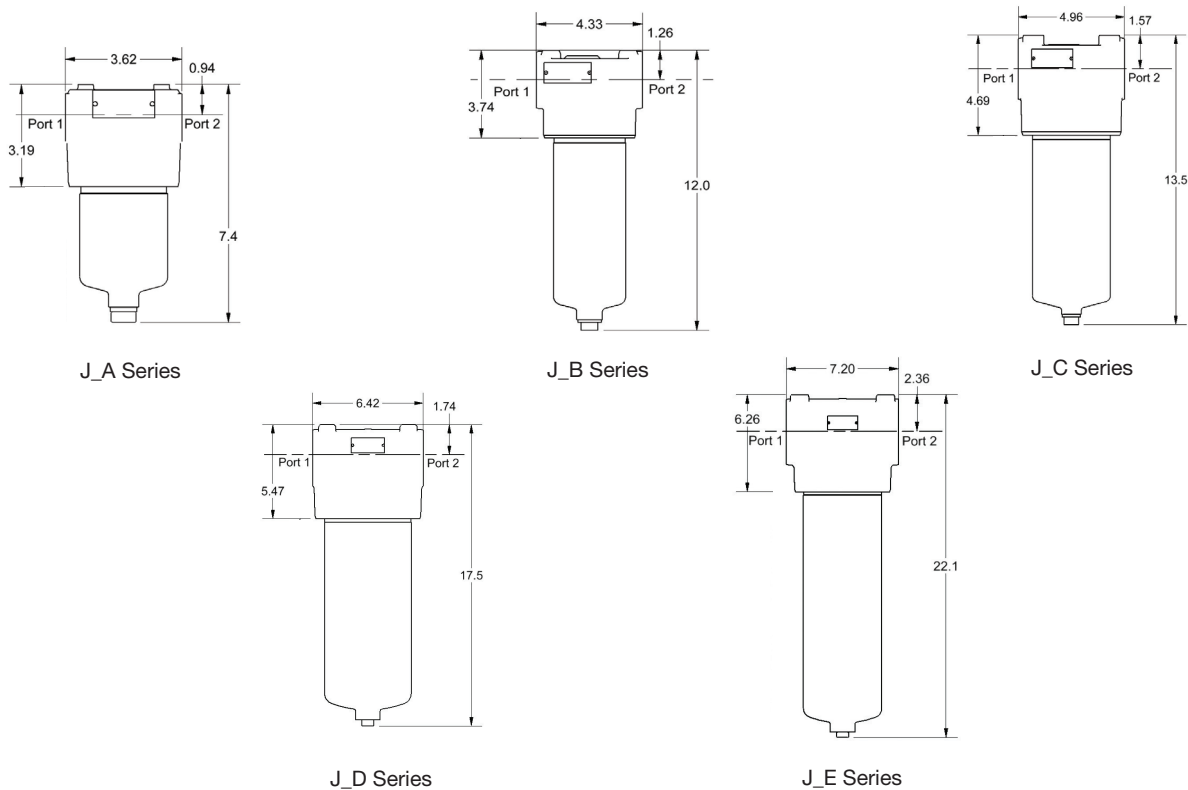
Model	Port	Filter Type	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
J_1A	1/4" or SAE-4	4C, A	15	135	200	265	330	395	460	525	590	655
		7CP, 10C, 3P, WS	30	265	395	525	660	790	920	1050	1180	1310
J_2A	1/2" or SAE-8	4C, A	25	220	330	440	550	655	765	875	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

## ZJ-Series

Model	Port	Filter Type	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
ZJS3C ZJN3C	3/4" or SAE-12	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
ZJS4C ZJN4C	1" or SAE-16	4C, A	90	795	1190	1580	1975	2365	2760	3150	3540	3935
		7CP, 10C, 3P, WS	200	1770	260	3515	4385	5255	6130	7000	7870	8745
ZJS4D ZJN4D	1" or SAE-16	4C, A	135	1190	1780	2370	2920	3445	4135	4725	5310	5900
		7CP, 10C, 3P, WS	250	2230	3330	4425	5525	6625	7725	8820	9920	11020
ZJS6D ZJN6D	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
ZJS4E ZJN4E	1" or SAE-16	4C, A	185	1630	2430	3230	4040	4845	5645	6450	7250	8050
		7CP, 10C, 3P, WS	450	3980	5940	7905	9865	11820	13790	15750	17700	19670
ZJS8E ZJN8E	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:** All rates are based on compressed air flow. For CNG, these flows can be multiplied by a factor of 1.2.

# Specifications



## J-Series

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	5000 PSIG	5000 PSIG	5000 PSIG	5000 PSIG	5000 PSIG	5000 PSIG
Max. Temperature <sup>1</sup>	350°F	350°F	350°F	350°F	350°F	350°F	350°F
Head	SG Iron*	SG Iron*	SG Iron*	SG Iron*	SG Iron*	SG Iron*	SG Iron*
Bowl	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Seals	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon
Backing Ring	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile	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	SAE-6	SAE-6	SAE-6	SAE-6	SAE-6	SAE-6
Socket/Bowl Removal	1-1/16" HEX	1-1/16" HEX	1-1/16" HEX	1-1/16" HEX	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.

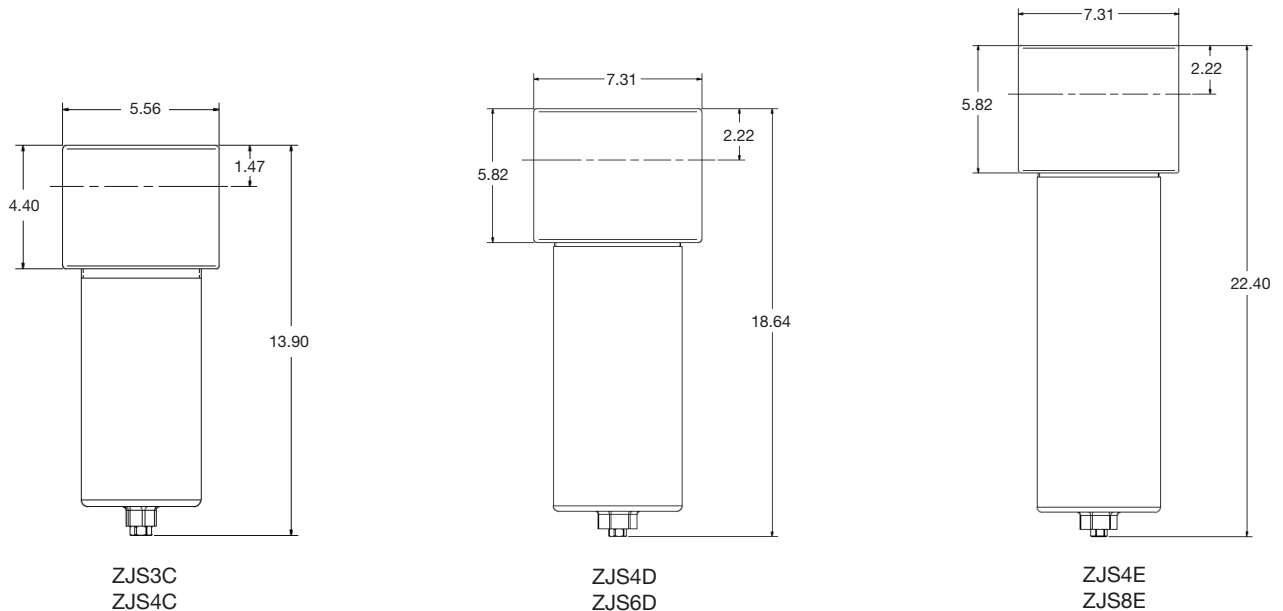


## ZJ-Series

Model	ZJS3C	ZJS4C	ZJS4D	ZJS6D	ZJS4E	ZJS8E
Port Size (S=SAE)	SAE-12	SAE-16	SAE-16	SAE-24	SAE-16	SAE-32
Max. Pressure	6000 PSIG	6000 PSIG	6000 PSIG	6000 PSIG	6000 PSIG	6000 PSIG
Max. Temperature	350°F	350°F	350°F	350°F	350°F	350°F
Min. Temperature	-40° F/C	-40° F/C	-40° F/C	-40° F/C	-40° F/C	-40° F/C
Certifications <sup>2</sup>	CRN	CRN	CRN	CRN	CRN	CRN
Head	Steel	Steel	Steel	Steel	Steel	Steel
Bowl	Steel	Steel	Steel	Steel	Steel	Steel
Seals <sup>1</sup>	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon
Plating on Head/Bowl	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated	Nickel Plated
Backing Ring <sup>1</sup>	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon	Fluorocarbon
Sump Volume	230 mL	230 mL	500 mL	500 mL	500 mL	500 mL
Weight	50.0 lbs	50.0 lbs	100.0 lbs	100.0 lbs	120.0 lbs	120.0 lbs
Port to Port	5.56"	5.56"	7.31"	7.31"	7.31"	7.31"
Height	13.9"	13.9"	18.64"	18.64"	22.40"	22.40"
Clearance	3.0"	3.0"	3.0"	3.0"	3.0"	3.0"
Differential Pressure Ports	SAE-4	SAE-4	SAE-4	SAE-4	SAE-4	SAE-4
Drain Port	SAE-6	SAE-6	SAE-6	SAE-6	SAE-6	SAE-6
Socket/Bowl Removal	1" HEX	1" HEX	1" HEX	1-1/12" HEX	1-1/12" HEX	1-1/2" HEX
Head/Bowl Torque	25-30 ft-lbs	25-30 ft-lbs	60-70 ft-lbs	60-70 ft-lbs	60-70 ft-lbs	60-70 ft-lbs

### Notes:

- 1 Explosive decompression resistant compound to ISO 23936-2 and Total GS EP PVV142.
- 2 CRN All Provinces, 6,000 psig, -40°F/°C and +350°F/176.66°C.



# 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.

## J-Series

J	N	2	A	—	4C	N
Series Name	Port	Port Size	Housing Size		Media Grade	Accessories
J	<b>N</b> – NPT	1 (1/4")	A		4C	<b>N</b> = 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			
	<b>S</b> – SAE	1 (SAE-4)	A			
		2 (SAE-8)	A			
		2 (SAE-8)	B			
		3 (SAE-12)	B			
		4 (SAE-16)	C			
		6 (SAE-24)	D			
		8 (SAE-32)	E			



JDK5000V



JDK5000H

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

## Replacement Element Part Numbers

4C	J	A	K
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.

## 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

## ZJ-Series

ZJDK6000V



ZJ	S	6	D	—	4C	N
Series Name	Port	Port Size	Housing Size		Media Grade	Accessories
ZJ	S – SAE	3 (SAE-12)	C		4C	N = None Available
		4 (SAE-16)	C		10C	
		4 (SAE-16)	D		7CP	
		6 (SAE-24)	D		WS	
		8 (SAE-32)	E		3P	
					A	

Examples: ZJS4C-4CN, ZJS6D-WSN, ZJS8E-4CN



ZJDK6000H

## Replacement Element Part Numbers

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

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

## High Pressure Drains

Model Number	Description
ZJDK6000H	Horizontal Drain Kit 6000 psig
ZJDK6000V	Vertical Drain Kit 6000 psig



# LPGD-200 Disposable Liquid Propane Filters

## 500 PSIG Pressure Filters

Parker Finite's LPGD-200 Series is used onboard propane powered vehicles to prevent contaminants in the fuel tank from getting into the engine, protecting critical engine components like fuel injectors. The filter is rated for 500 psig. The LPGD-200 filter series removes submicronic contaminants rated to either 5 micron or 1 micron depending on the protection requirements. Its small size allows for versatile installation and easy servicing. Each housing is black powder painted for long-term corrosion protection. It is supplied with 1/2" SAE flare connections on both the inlet and outlet fittings making for easy installation.



## Specifications

Model Number	Port Size (NPT)	Max. Pressure	Max. Temp.	Materials of Construction		Seals	Sump Capacity	Weight	Dimensions	
				Body	Element				Length	Width
LPGD-200	1/2" SAE Flare	500 PSIG (34 bar)	250°F (79°C)	Painted Carbon Steel, Copper	Micro-glass pleated coalescer	Fluorocarbon	5.1 oz (150 ml)	1.4 lbs (0.64 kg)	6.53" (165.9 mm)	2.62" (66.5 mm)

## How to Order

<b>LPGD-200</b> Series Name	<b>05</b> Element Micron
LPGD-200	01 (1 micron)
	05 (5 micron)

## Flow Rates (SCFM)

Filter Housing Model Number	Micron Rating	Rated Flow
LPGD-200-01	1	1.0 GPM/0.6 PSID 1.5 GPM/1.0 PSID
LPGD-200-05	5	4 GPM/3.6 PSID 10 GPM/8.9 PSID



## LPGR-200 Replaceable Liquid Propane Filters

### 800 PSIG Pressure Filters

The new LPGR-200 Series Replaceable Filter Element Housing can be used on-board propane-powered vehicles including: shuttle buses, delivery trucks, and vans as well as lift trucks and turf maintenance vehicles.



This new filter series offers a replaceable filter element. This means that the housing itself no longer needs to be discarded. Simply, remove the bowl, replace the element and O-ring, and secure the head and bowl back together.

This unique housing is designed to prevent contaminants that have settled in liquid propane tanks and fuel lines from reaching critical engine components. The LPGR-200 contains a high efficient 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. The black anodized lightweight aluminum housing is designed for long term corrosion protection. The SAE-8 port connections allow for leak-free, quick, and easy installation.

### Features and Benefits:

- On-board liquid propane filter
- 1 micron & 5 micron rated elements available
- 800 psig/55 barg maximum operating pressure
- 250°F/121°C maximum operating temperature
- Compact lightweight aluminum housing
- Black anodized for long term corrosion resistance
- Replaceable element
- SAE-8 port connections
- Pleated element construction
  - ensures longer filter life

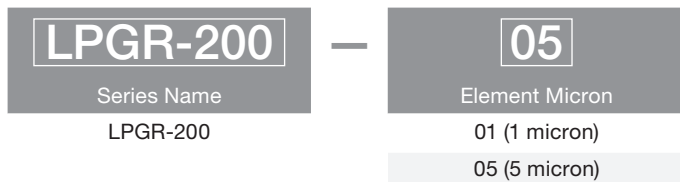
## Specifications

Model	Port Size	Max. Pressure	Max. Temp.	Materials of Construction			Weight	Dimensions	
				Head	Bowl	Seals		Length	Width
LPGR-200-01	SAE-8	800 PSIG (55 barg)	250°F (121°C)	Anodized Aluminum	Fluorocarbon	1.5 lbs (0.7 kg)	4.80" (122.0 mm)	3.06" (77.8 mm)	
LPGR-200-05									

## Flow Rates (GPM)

Filter Housing Model Number	Coalescing Efficiency	Flow Rate
LPGR-200-01	1 micron	1.0 GPM/0.6 PSID/1.5 GPM/1.0 PSID
LPGR-200-05	5 micron	4.0 GPM/3.6 PSID/10 GPM/8.9 PSID

## How to Order



Examples: LPGR-200-01, LPGR-200-05

## Replacement Element Kit Available

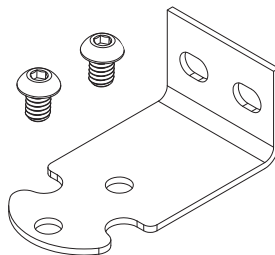
Filter Housing Model Number	Element 1.0 Micron	Element 5.0 Micron
LPGR-200-01	LPG200-01K	-
LPGR-200-05	-	LPG200-05K

Includes: Element, head-to-bowl O-ring, and lubricant.

## Mounting Bracket Kit

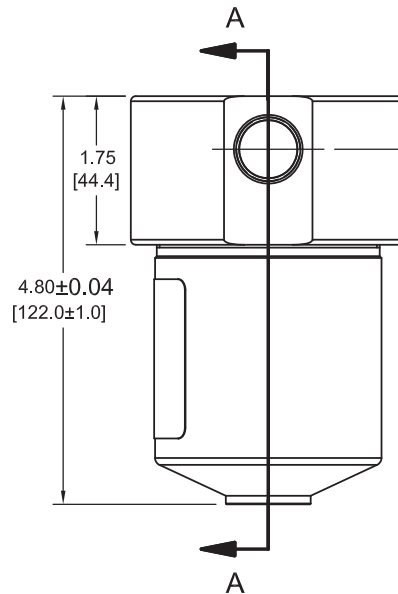
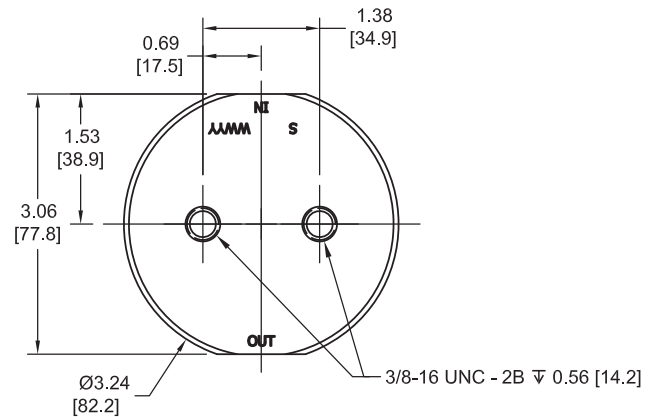
### MBS-1

Kit includes bracket and 2 cap screws.



## Certification

ECE-R110







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