

# 5000 PSIG Pressure Filters

## J-Series

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.



Finite's J-Series is designed to filter contaminants such as rust and pipe scale, compressor lube 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 multiple stage compression of the gas, but also in the storage and delivery of the gas to CNG powered vehicles.

Finite's varied media choices remove up to 99.995% of both solid and liquid aerosols, and contaminants as small as 0.2 microns in size. Additionally, cartridges are available with either silica gel or molecular sieve, these desiccants adsorb water vapor, drying the high pressure air or gas. 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 that 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 5000 psig. Four housing sizes and two thread styles (NPT or SAE) are available with connections ranging from ½" to 1 ½"; temperatures up to 350°F, and flows up to 20,000 SCFM at 5000 PSIG.

### Specifications:

Model Number	Port Size	Max. Pressure	Max. Temp. for each Element Type	Materials of Construction			Seals	Sump Capacity	Weight	Dimensions	
				Head	Internals	Bowl				Length	Width
J2SD	SAE-8*	5000 PSIG (345 bar)	350°F (C, 3P, 100WS) 175°F (A)	Ductile Cast Iron	Aluminum	Carbon Steel	Fluoro-carbon	2.0 oz. (60 ml)	9.2 lbs. (4.2 kgs.)	8.1" (205.7mm)	3.7" (94.0mm)
J2SL	SAE-8*	5000 PSIG (345 bar)	350°F (C, 3P, 100WS) 175°F (A)	Ductile Cast Iron	Aluminum	Carbon Steel	Fluoro-carbon	7.4 oz. (220 ml)	13.1 lbs. (5.9 kgs.)	12.0" (304.8mm)	3.7" (94.0mm)
J4SF/ J4NF	SAE-16/ 1" NPT	5000 PSIG (345 bar)	350°F (C, 3P, 100WS) 175°F (A) 130°F (10J)	Nodular Cast Iron	Aluminum	Nodular Cast Iron	Fluoro-carbon	7.1 oz. (210 ml)	22.1 lbs. (10.0 kgs.)	13.5" (342.9mm)	4.6" (116.8mm)
J6SH/ J6NH	SAE-24/ 1 ½" NPT	5000 PSIG (345 bar)	350°F (C, 3P, 100WS) 175°F (A) 130°F (10J)	Nodular Cast Iron	Aluminum	Carbon Steel	Fluoro-carbon	21.5 oz. (636 ml)	52.3 lbs. (23.7 kgs.)	21.1" (535.9mm)	6.5" (165.1mm)

\*Note: Adapter bushings provided for ½" NPT female pipe connections.

## How to Order:

Series Name	Port Size	Port Type	Bowl	-	Element Grade	Element Construction	Element Size
<b>J</b>	<b>2</b> (1/2")	<b>S</b> (SAE-8) Note: 1/2" NPT adapter bushings included.	<b>D</b> (Standard) <b>L</b> (Extra Sump)	-	<b>4C</b>	<b>WC</b> (metal retainers, bonded on end caps with positive o-ring seal)	<b>11-035</b> (J2) <b>15-070</b> (J4) <b>23-130</b> (J6)
					<b>10C</b>		
	<b>3P</b> <b>A</b>	Leave blank	<b>100WS</b>				
	<b>4</b> (1")	<b>N</b> (NPT) <b>S</b> (SAE-16)	<b>F</b> (Standard)		<b>10J</b> (Available on 1" and 1 1/2" port only)	<b>WM</b> (desiccant dryer with molecular sieve)  <b>WA</b> (desiccant dryer with activated aluminum)	
	<b>6</b> (1 1/2")	<b>N</b> (NPT) <b>S</b> (SAE-24)	<b>H</b> (Standard)				

Examples: J2SL-10CWC11-035  
J4NF-4CWC15-070  
J6SH-3PWC23-130

## How to Order Replacement Elements:

1. Determine the housing you have by choosing from the "Housing" column on the chart.
2. Determine the "Element Grade and Type" you need. See page 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 "Box Quantity" get part number.

Example: 4CWC15-070 X 2 or 3PWC23-130 X 1

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

Housing	Element Grade and Type	Element Size	X	Box Quantity
J2SD, J2SL	4CWC, 10CWC, 3PWC, AWC, 100WS	11-035		4
J4NF, J4SF	4CWC, 10CWC, 3PWC, AWC, 100WS, 10JWM, 10JWA	15-070		2
J6NH, J6SH	4CWC, 10CWC, 3PWC, AWC, 100WS, 10JWM, 10JWA	23-130		1

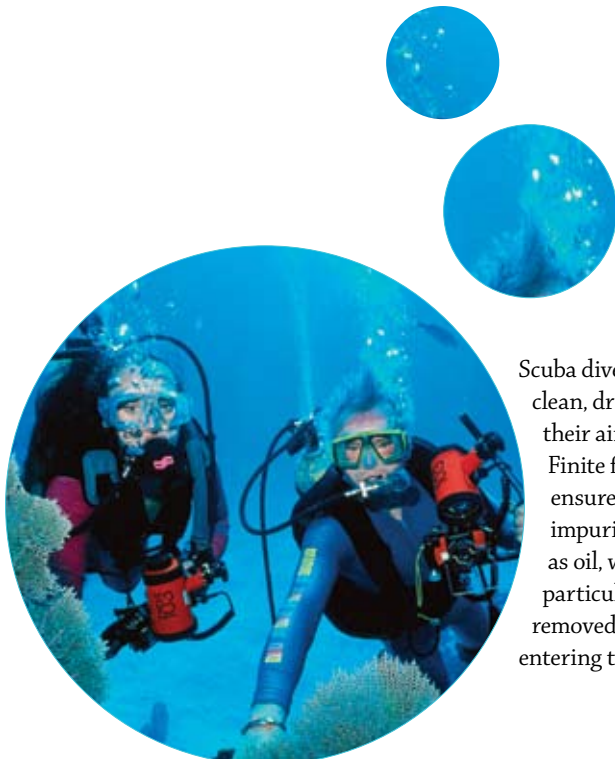
Use a high pressure drain kit with Finite's J-Series... see page 26!



For J-Series Flow Rates ... see next page!

# J-Series (5000 PSIG) Flow Rates (SCFM):

Filter Housing Model	Media Grade	100 PSIG	1000 PSIG	1500 PSIG	2000 PSIG	2500 PSIG	3000 PSIG	3500 PSIG	4000 PSIG	4500 PSIG	5000 PSIG
J2SD/J2SL	4C	30	265	400	527	658	800	919	1050	1200	1333
	10C	60	531	800	1054	1315	1600	1839	2100	2400	2667
	3P	60	531	800	1054	1315	1600	1839	2100	2400	2667
	A	30	265	400	527	658	800	919	1050	1200	1333
	100WS	60	531	800	1054	1315	1600	1839	2100	2400	2667
J4SF/J4NF	4C	75	663	1000	1317	1644	2000	2298	2625	3000	3333
	10C	150	1327	2000	2635	3289	4000	4596	5250	6000	6667
	3P	150	1327	2000	2635	3289	4000	4596	5250	6000	6667
	A	75	663	1000	1317	1644	2000	2298	2625	3000	3333
	100WS	150	1327	2000	2635	3289	4000	4596	5250	6000	6667
	10JWM	150	1327	2000	2635	3289	4000	4596	5250	6000	6667
	10JWA	150	1327	2000	2635	3289	4000	4596	5250	6000	6667
J6SH/J6NH	4C	225	1990	3000	3952	4933	6000	6895	7875	9000	10000
	10C	450	3981	6000	7904	9866	12000	13789	15751	18000	20000
	3P	450	3981	6000	7904	9866	12000	13789	15751	18000	20000
	A	225	1990	3000	3952	4933	6000	6895	7875	9000	10000
	100WS	450	3981	6000	7904	9866	6000	13789	15751	6000	6667
	10JWM	450	3981	6000	7904	9866	6000	13789	15751	6000	6667
	10JWA	450	3981	6000	7904	9866	6000	13789	15751	6000	6667



Scuba divers rely on clean, dry air to fill their air tanks. Finite filters ensure that any impurities, such as oil, water or particulate are removed before entering the tanks.

# 5000 PSIG Pressure Filters

## S\*R

These robust, corrosion resistant filters are ideal for ultrafine filtration of specialty gases.



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. for each Element Type	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	Fluoro-carbon	0.25 oz. (7.4 ml)	1.16 lbs. (0.53 kgs.)	4.0" (101.6mm)	1.75" (50.8mm)

### Flow Rates (SCFM):

Filter Housing 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:

Port Size NPT	Media Grade	Media Type	Element Size
S 5 (1/8")	4	G	04-023
1 (1/4")	6	T	
	8	F	
	10	H	
		C	

Example: S1R-6T04-023

Mounting bracket available: MBS-1

### How to Order Replacement Elements:

Elements available:     \_ insert grade: 4, 6, 8, 10  
 \_G04-023 X 10     For more information on  
 \_T04-023 X 10     element selection, please see  
 \_F04-023 X 10     pages 6-7.  
 \_H04-023 X 10  
 \_C04-023 X 10

# 5000 PSIG Pressure Filters

## S1IL

The S1IL is often used on specialty gas analyzers or to remove particulate contamination from bottled gases.



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 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
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	Fluoro-carbon	None	0.75 lbs. (0.34 kgs.)	3.10" (78.74mm)	1.25" (31.75mm)

### Flow Rates (SCFM):

Filter Housing 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:

	Media Grade	Media Type	Element Size
S	4	T	04-013
1	6	G	
I	8	F	
L	10		
-			

Example: S1IL-8G04-013

### How to Order

#### Replacement Elements:

Elements available:  
 \*T04-013 X 10  
 \*G04-013 X 10  
 \*F04-013 X 10

\* insert grade: 4, 6, 8, 10  
 For more information on element selection, please see pages 6-7.  
 Elements are sold in box quantities of 10.

# FFC-116

Many CNG powered commuter vehicles, such as shuttle buses, taxis or vans, rely on FFC-116 filters to protect contaminants from fouling fuel injector systems. Both solid and liquid contaminants can enter the system from various sources.



This stainless steel filter is commonly used to filter oil, water and particulate from lower flow CNG systems and onboard CNG vehicles. 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 Number	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	Fluoro-carbon	0.25 oz. (7.4 ml)	1.16 lbs. (0.53 kgs.)	4.0" (101.6mm)	1.75" (44.5mm)

## Flow Rates (SCFM):

Filter Housing 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:

How to Order:								Element Grade
F	F	C	-	1	1	6	-	6 10

Example: FFC-116-6

## Replacement Elements Available:

Filter Housing Model	Media Grade 6	Media Grade 10
FFC-116	CLS116-6 X 10	CLS116-10 X 10

Note: X 10 in the part number denotes how many elements are sold in a box.

Mounting bracket available: MBS-1