6000 PSIG Pressure Filters

SJ-Series



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

Specifications:

| | Port | | | Materials of Construction | | | | | | Dimensions | | Replace- |
|-----------------|----------------------------|---------------------------|--|----------------------------|----------------------------|----------------------------|-------------------|---------------------|-----------------------|-------------------|------------------|-------------------------|
| Model Number | Size (NPT or SAE) | Max. Pressure | Max. Temp. for each Element Type | Head | Internals | Bowl | Seals | Sump Capacity | Weight | Length | Width | ment Element Size |
| SJN*S, SJS*S | 1/2"-1" | 6000 PSIG (414 bar) | 175°F (Grade A) 350°F (All other grades) | 316L Stainless Steel | 316L Stainless Steel | 316L Stainless Steel | Fluoro- carbon | 2.1 oz. (61 ml) | 14 lbs. (6.4 kgs.) | 8.26" (210mm) | 4.00" (102mm) | 11-036 |
| SJN*L, SJS*L | 1/2"-1" | 6000 PSIG (414 bar) | 175°F (Grade A) 350°F (All other grades) | 316L Stainless Steel | 316L Stainless Steel | 316L Stainless Steel | Fluoro- carbon | 7.8 oz. (230 ml) | 18 lbs. (8.2 kgs.) | 11.97" (304mm) | 4.00" (102mm) | 11-036 |
| SJN*H, SJS*H | 1/2"-1" | 6000 PSIG (414 bar) | 175°F (Grade A) 350°F (All other grades) | 316L Stainless Steel | 316L Stainless Steel | 316L Stainless Steel | Fluoro- carbon | 2.1 oz. (61 ml) | 17 lbs. (7.7 kgs.) | 11.97" (304mm) | 4.00" (102mm) | 11-072 |

^{*}insert port size: 2 = 1/2", 3 = 3/4" and 4 = 1"

How to Order:

| Series Name | Port Type | Port Size | Bowl | | Element Grade | Element Construction | Accessories |
|----------------|----------------|-----------------|----------------------------|---|------------------|-----------------------------|---------------------------|
| SJ | N (NPT) | 2 (1/2") | S (Standard) | - | 4C | WC (metal retainers, | N (No Accessories) |
| | S (SAE) | 3 (3/4") | | | 10C | bonded on end caps with | |
| | | 4 (1") | L (Long bowl, short | | 3P | positive o-ring seal.) | |
| | | | element, extra sump) | | A | | Examples: SJN25 |
| | | | | | 100WS | Leave blank | SJS3L |
| | | | H (High Flow: Long | | | | |
| | | | bowl, long element) | | | | |

How to Order Replacement Elements:

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

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

- 1. Determine the housing you have by choosing from the "Housing" column on the chart. "Insert port size. See How to Order above for more info on port sizes.
- 2. Determine the "Element Grade and Type" you need. See pages 68-69 for more detail on grade selection.
- 3. Determine the corresponding element size by choosing from the "Element Size" column on the chart.
- 4. Combine "Element Grade and Type" , "Element Size" and then add Box quantity to the end. Box quantities are all X 4, except 100WS which is X 1. Example: 4CWC11-036 X 4 or 100WS11-072 X 1.





Use a high pressure drain kit with Finite's SJ-Series... see page 88!

Flow Rates (SCFM):

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

Note: _insert port type. See How to Order on page 86 for more information.



Accessories

High Pressure Drain Kits

Product Overview

igh pressure compressed gas systems oftentimes contain Excessive amounts of liquid aerosols. This liquid can best be removed by utilizing Finite's J-Series or SJ-Series coalescing filters. A Grade 10 filter followed by a Grade 4 filter will remove greater than 99.995% of the liquid water and/or oil carryover from the compressed gas system. This liquid can now be safely removed with Finite's NEW High Pressure Drains (JDK and SJDK Series)! These drains are fully-assembled and are constructed of 316 Stainless Steel. They include two needle valves, fittings, and a pipe reservoir.

The JDK Series is rated for 5000 PSIG and connects directly to the bottom of the J-Series filter housings. The SJDK Series is rated for 6000 PSIG and connects directly to the bottom of the SJ-Series housing. These High Pressure Drains are offered in both vertical and horizontal orientations. The vertical orientation is ideal for applications in which there is adequate bowl removal clearance, while the horizontal orientation is ideal for applications with limited bowl removal clearance.

Operation

Finite's new High Pressure Drains allow the user to safely remove condensate from a high pressure compressed gas system. Proper operation of the drain involves keeping the first needle valve open and the second needle valve closed. The liquid that is coalesced from the filter will empty into the drain's high pressure reservoir and fill the internal volume with liquid.

When it is time to expel the liquid from the drain kit (usually on a preventative maintenance schedule), the top needle valve should be closed to shut off system pressure. The bottom needle valve should then be opened SLOWLY since the liquid will discharge rapidly from the drain. This procedure should be repeated until all of the liquid has been removed from the filter bowl and drain reservoir.

All liquid should be collected and disposed of in accordance with local regulations.

JDK5000V/ SJDK6000V



Finite's drain kits can be used in many high pressure

air or gas system. They can also be used to hook up directly to Finite's J-Series (pages 80-82) or Finite's SJ-Series (pages 86-87).

A direct connection





Finite's J-Series

Finite's SJ-Series

| Part Number | Description | Inlet | Outlet | Max Pressure | Max Temp. |
|----------------|-------------------------------|--------|----------|------------------------|-----------------|
| JDK5000V | Vertical J-Series Drain | SAE-6 | 1/4" NPT | 5000 PSIG (345 bar) | 100°F (38°C) |
| JDK5000H | Horizontal J-Series Drain | SAE-6 | 1/4" NPT | 5000 PSIG (345 bar) | 100°F (38°C) |
| SJDK6000V | Vertical SJ-Series Drain | SAE-4* | 1/4" NPT | 6000 PSIG (414 bar) | 100°F (38°C) |
| SJDK6000H | Horizontal SJ-Series Drain | SAE-4* | 1/4" NPT | 6000 PSIG (414 bar) | 100°F (38°C) |

*The SAE-4 fitting can be removed to adapt to 1/4" NPT.



ADS-50

304 Stainless Steel Automatic Drain Trap



Specifications:

| Max Temperature: | 450°F (232°C) |
|------------------|---------------------------|
| Max Pressure: | 250 PSIG (17 bar) |
| Connections: | 1/2" NPT inlet and outlet |

Specifications:

TD-50

| Max Temperature: | 150°F (66°C) |
|------------------|---------------------------|
| Max Pressure: | 600 PSIG (42 bar) |
| Connections: | 1/2" NPT inlet and outlet |

TV-25-700

Timed Drain Valve



Specifications:

| Max. Temperature: | 210°F (99°C) |
|-------------------|-------------------|
| Max. Pressure: | 700 PSIG (48 bar) |
| Connections: | 1/4" NPT |

DPI-25

Differential Pressure Gauge

Adjustable Timed Drain Valve



DPG-15HPDifferential Pressure Gauge



Other options available:

Specifications:

Max. Temperature:

Max. Pressure: Connections:

- BDPI-25 (DPI-25 with mounting brackets)
- DPS-25 (DPI-25 with SPST reed switch included)

200°F (88°C)

1/4" NPT

5000 PSIG (340 bar)

• BDPS-25 (DPS-25 with mounting brackets)

Specifications:

| Max. Temperature: | 200°F (93°C) |
|-------------------|--|
| Max. Pressure: | 800 PSIG (55 bar) |
| Connections: | Holes on M-Series housing must be predrilled |

