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Mainstream[®] and Streamline[®] Filter/Strainer

All Models

Service & Installation Manual

CONTENTS

Thank you for purchasing an Alfa Laval Product!

This manual contains disassembly and assembly instructions, maintenance procedures, troubleshooting, and a complete parts list for all Mainstream® and Streamline® baskets and filters.

READ THIS MANUAL carefully to learn how to service these filters and strainers. Failure to do so could result in personal injury or equipment damage.

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SAFETY


IMPORTANT SAFETY INFORMATION


Safety is very important!

DO NOT attempt to modify any Alfa Laval product. To do so could create unsafe conditions and void all warranties. **DO NOT place any Alfa Laval product in an application where general product service ratings are exceeded.**

The following DANGER, WARNING, AND CAUTION signs and their meanings are used within these instructions.

	<p style="text-align: center;">⚠ DANGER</p> <p>Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. The word Danger is used in the most extreme cases.</p>
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	<p style="text-align: center;">⚠ WARNING</p> <p>Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. May also be used to alert against an unsafe operating or maintenance practice.</p>
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	<p style="text-align: center;">⚠ CAUTION</p> <p>Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</p>
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INTRODUCTION

GENERAL INFORMATION

DESCRIPTION

Both Streamline and Mainstream Filters and Strainers are perfect solutions for continuous processing operations.

Mainstream filters and strainers are suitable for vertical mounting using an optional stand, wall mount brackets, or other external means. The Streamline filters and strainers are suitable for horizontal or vertical mounting, directly into the pipe work.

Both Streamline and Mainstream filters and strainers can use a twin setup. A twin filter or strainer setup consists of two complete units mounted onto a single stand. Directional valves at the inlet and outlet ports allow one unit to operate while the filter media in the other unit is being changed or cleaned.

Both Mainstream and Streamline filters and strainers are available in long or short models, with standard construction of stainless steel. All Mainstream models have side-entry ports. Streamline models have ports either at both ends (model SM or FM), or with a side inlet, bottom discharge configuration (model SMS or FMS).

NOTE: Cleaning - All internal components of a filter or strainer must be removed for manual cleaning.

Warning: Reverse flow or back flushing through either type filter or strainer can result to damage to the internal components.

FILTER VERSUS STRAINER (MAINSTREAM EXAMPLE USED)

When used as a filter, the unit contains a basket with a disposable bag that allows you to remove undesirable particles from a liquid or gas (down to 0.5 microns).

A strainer contains a perforated stainless steel basket, v-shaped wire basket, or wire mesh basket that allows you to remove larger particles (from 73 microns and higher) from the process stream.

FILTER/STRAINER OPTIONS

Mainstream

- SEF** Mainstream Filter: allows filtering from 0.5 micron to 800 micron using a filter bag.
- SES** Mainstream Strainer: allows medium or fine straining with either a perforated metal basket (0.033 or 0.062 diameter perforations) or a wire mesh basket with 20, 40, 60, 80, 100, 150, or 200 mesh. Suited for straining particles down to 73 micron.
- SEB** Mainstream Strainer Basket: allows course straining of large particles and foreign matter using large perforations (0.5, 0.25, 0.125, and 0.09375 diameter).
- SEBHVW** Mainstream Strainer Basket: allows for fine straining using a v-shaped (Vee-Wire®) basket with wire gaps of 0.005, 0.0075, 0.010, 0.015, 0.020, 0.025, 0.030, and 0.035.
- Note: Minimum rating per 3A standard for Vee-Wire applications is 125 microns (0.005 gap.) Vee-Wire is a registered trademark of U.S. Filter.
- 3A does not approve the use of wire mesh baskets or over screens.

Streamline

- SM/FM** Streamline in-line filter or strainer: allows you to strain or filter using either an overscreen or a filter sock. Suited for coarse to medium straining ¼" to 200 mesh, or filtering 765 to 38 micron.
- SMS/FMS** Streamline in-line filter or strainer: allows you to strain or filter using either an overscreen or a filter sock. Suited for coarse to medium straining ¼" to 200 mesh, or filtering 765 to 38 micron.

INSTALLATION

UNPACKING

The Streamline filter/strainer comes completely assembled, and ready to install. The Mainstream filter/strainer must be assembled.

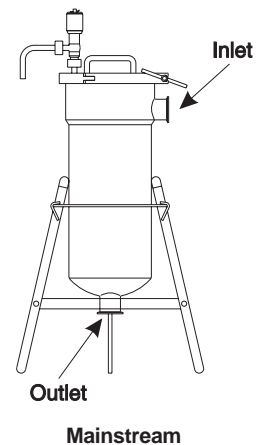
When you unpack the Mainstream filter or strainer, remove the special packing inside the unit.

For both the Mainstream and Streamline units, check for damage that could have occurred during shipping. Report any damage to the carrier.

PIPELINE INSTALLATION

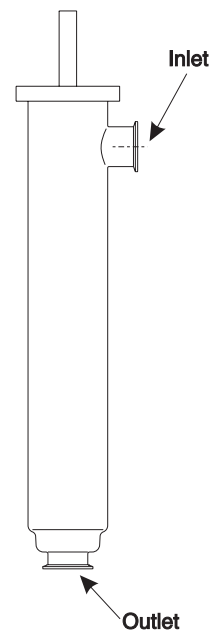
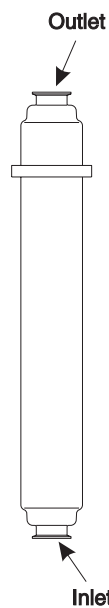
MAINSTREAM

Unless otherwise specified, all Mainstream units operate in a vertical position. Flow translates from the side inlet to the discharge on the bottom.



STREAMLINE

All Streamline models can operate in any position. Flow for the standard Streamline versions translates from the inlet on the body to the discharge on the outlet assembly. Flow for the side inlet unit translates from the inlet on the side of the body to the discharge at the bottom of the body.



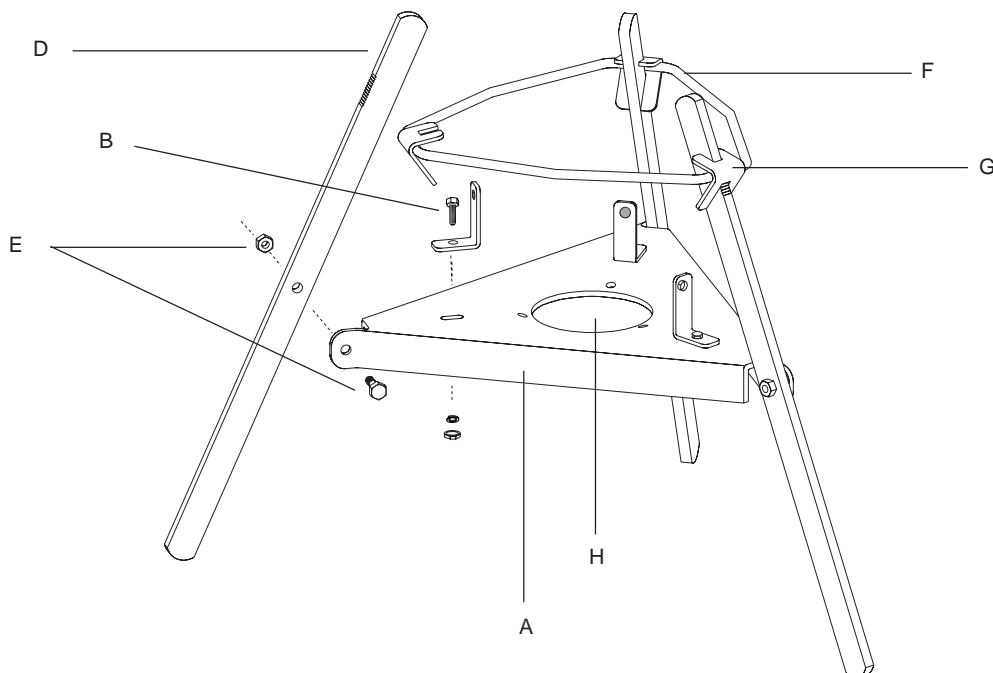
INSTALLATION

ASSEMBLING THE MAINSTREAM STAND

1. Remove the triangular base (A) and three right angle adjustable brackets (B) from the packing.
2. Assemble one bracket bolt combination (B) into each of the three slotted base holes with the washer on the underside of the base and the flat face of the rubber cushion toward the base center. Adjust the three brackets* to the widest opening for the housing, and partially tighten nuts but do not secure nuts until the housing is placed in stand.

*Note: Slotted holes allow for adjustment so that housing top surface can be level when assembly is placed on uneven floor.

3. Attach the three legs (D) to the triangular base (A) with the plastic or rubber caps upright and notched leg surface to the outside. Partially tighten the legs, but do not secure bolts (E) until the housing is placed in the stand.
4. Take the retainer ring (F) and orient the three tab slot openings (G) with the three slots so that the tabs (longer tab slot is down) are located between the notches and plastic/rubber cushion. This will allow the three legs to be opened greater than the diameter of the housing. The leg notches provide friction to hold legs securely against the housing during process operations. The retainer ring assembly anchors the legs in place.
5. Place stand assembly in a location that Filter/Strainer housing is to be installed.
6. Lower the housing through the stand retaining ring (F), so that the outlet port fits into the stand base hole (H). (Adjustable brackets should be wide enough so that no interference occurs between the legs and the housing.)
7. Adjust the angle of the brackets (B) to contact housing, and partially secure in place.
8. Press the tops of the 3 legs (D) on the stand inward so that they rest against the housing. Secure the inlet and outlet process lines to housing. (See *Pipeline Installation*.)
9. Lock the retaining ring (F) onto the grooves of the legs (D). Gently use a rubber hammer to secure the ring onto the grooves.
10. Tighten the adjustable brackets (B) and leg bolts (E).



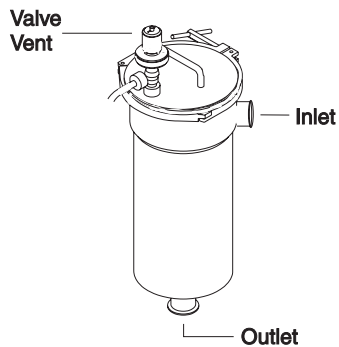
OPERATION

STARTING THE SYSTEM

Important: When installing new non-woven (felt) filter media, recirculate the process fluid through the filter. This will capture loose fibers before they go down stream.

MAINSTREAM

Ensure that the correct port is used for the inlet. (See figure below.)



Starting the Filter System

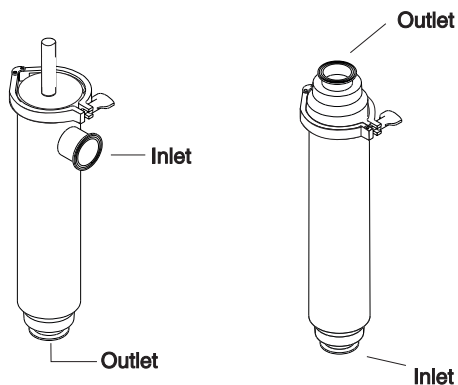
Open the vent valve slightly. Gradually fill the vessel by opening the inlet valve slowly. Close the vent valve when liquid emerges. Do not exceed a 10 psi differential across the bag.

Starting the Strainer System

Open the vent valve slightly. Gradually fill the vessel by opening the inlet valve slowly. Close the vent valve when liquid emerges.

STREAMLINE

Ensure that you are using the proper inlet. (See figures below.)



MAINTENANCE

MAINSTREAM FILTER/STRAINER - DISASSEMBLY



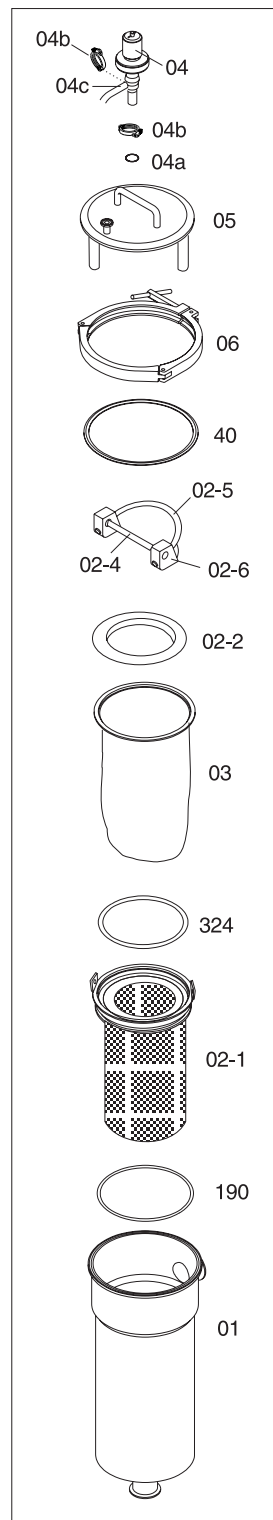
WARNING

Warning - Before disassembling any Mainstream filter or strainer, make certain that the system is not under pressure and that the system is drained of all liquids. Release pressure inside filter or strainer by opening the relief valve *before* disassembling.

Note: The cover of new Mainstream filters/strainers have three legs on the cover that rest on the screen ring assembly of the SEF, the support assembly of the SES or the basket of the SEB/SEBHVW. Older models do not have legs on the cover.

MAINSTREAM SEF

1. Open the air relief valve to relieve all pressure inside the filter.
2. Remove the clamp (06) and lift off the filter cover (05).
3. Remove the cover gasket (40) and inspect for damage or wear.
4. Lift the screen ring assembly (02-1) from the filter body (01) using the cam pin (02-4) as a handle. Do not use the cam handle (02-5) to remove the assembly.
5. Disassemble the screen ring assembly handle:
 - a. Force/deflect the cam handle (02-5) up from the retaining ring (04) toward center of the screen ring assembly (02-1).
 - b. Push one end of the cam pin (02-4) through the cam locks (02-6) until the cam locks, pin, and handle (02-5) are free of each other.
6. Remove the retaining ring (04), and remove the filter bag (03) from the basket and replace as necessary.
7. Remove the o-ring (324) from the inside diameter of the screen ring assembly and inspect for damage and wear.
8. Remove the o-ring (190) from the outside diameter of the screen ring assembly and inspect for damage and wear.



Mainstream Filter Type SEF

MAINTENANCE

MAINSTREAM FILTER/STRAINER - DISASSEMBLY (CONT.)

MAINSTREAM SES

1. Open the air relief valve (04) to relieve all pressure inside the strainer.
2. Remove the clamp (06) and lift off the strainer cover (05).
3. Remove the cover gasket (40) and inspect for damage or wear.
4. Lift the strainer ring support assembly (03) and strainer ring assembly (02) out of the strainer body (01) using the support assembly handle. Then remove the handle.

Note: The support assembly may stick to the housing due to product residue. In this case use a rubber mallet to jar the support assembly loose before attempting to lift it out of the strainer body.

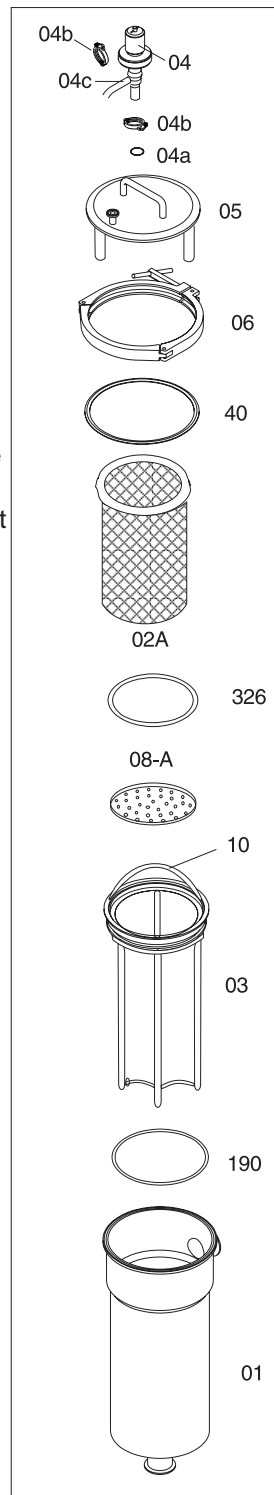
5. Grasp the upper lip of the strainer ring assembly (02), and lift it out of the strainer ring support assembly (03).
6. Remove the support plate (08 or 08A) from the strainer ring support assembly (03).
7. Remove the o-ring (326) from the strainer ring assembly, and inspect for damage or wear.
8. Remove the o-ring (190) from the strainer ring support assembly, and inspect for damage or wear.

MAINSTREAM SEB AND SEBHVW

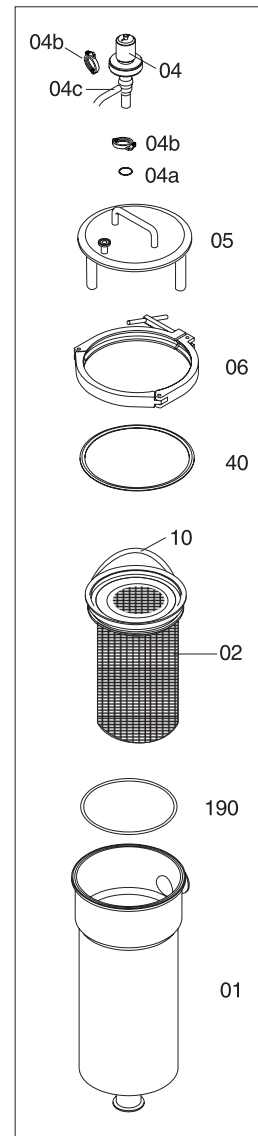
1. Open the air relief valve to relieve all pressure inside the strainer.
2. Remove the clamp (06) and lift off the strainer cover (05).
3. Remove the cover gasket (40) and inspect for damage or wear.
4. Using the handle at the top of the strainer ring assembly (02), lift the assembly out of the strainer body (01).

Note: The assembly may stick to the strainer body due to product residue. In this case use a soft rubber mallet to jar the screen loose before attempting to lift it out of the support assembly.

5. Remove the o-ring (190) from the strainer ring assembly (02), and inspect for damage or wear.



**Mainstream Strainer
Type SES**
(perforated screen shown)



**Mainstream Strainer
Type SEB**
(see Parts list
for exploded view
of SEBHVW)

MAINTENANCE

MAINSTREAM FILTER/STRAINER - REASSEMBLY

Note: The cover of new Mainstream filters/strainers have three legs on the cover that rest on the screen ring assembly of the SEF, the support assembly of the SES or the basket of the SEB/SEBHVW. Older models do not have legs on the cover.

MAINSTREAM SEF

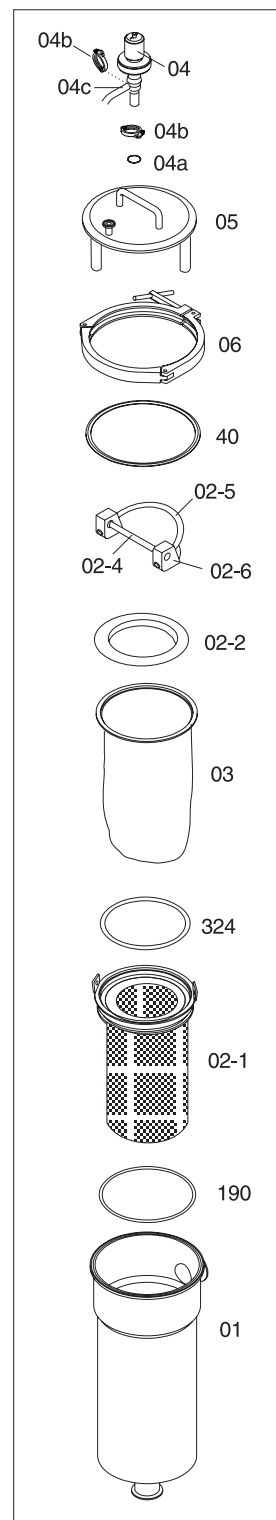
1. Lubricate the o-ring (190) that seals the filter body (01) with a food grade silicone spray and place it on the outside diameter of the screen ring assembly (02-1).
2. Place the screen ring assembly o-ring (324) on the inside diameter of the assembly.
3. Insert the filter media (03) inside the screen ring assembly (02-1), pressing against the sides and bottom of the bag to ensure that the bag is smooth against the sides and bottom of the assembly. The filter bag should rest on top of the screen ring assembly o-ring (324).
4. Assemble the screen ring assembly handle:
 - a. Align the cam locks (02-6) with the notch on the handle (02-5) and the holes in the support ring.
 - b. Slide the cam pin (02-4) through the cam locks (02-6) until each end of the pin rests in the holes in the tabs on the screen ring assembly (02-1) ring.
 - c. Insert the retaining ring (04), (tapered rim downward), and fold the handle (02-5) to the locked position.
5. Using the cam pin (02-4) as a handle, lift the screen ring assembly (02-1) into the filter body (01), ensuring that it is snugly seated in the bottom of the body.

Note: The rim of the screen ring assembly should rest just below the inside diameter of the inlet port when properly assembled.

6. Place the gasket (40) and cover (05) on the top of the body (01).

Note: The cover of new Mainstream filters/strainers have three legs on the cover that rest on the screen ring assembly. Older models do not have legs on the cover.

7. Attach and tighten the clamp (06).



Mainstream Filter
Type SEF

MAINTENANCE

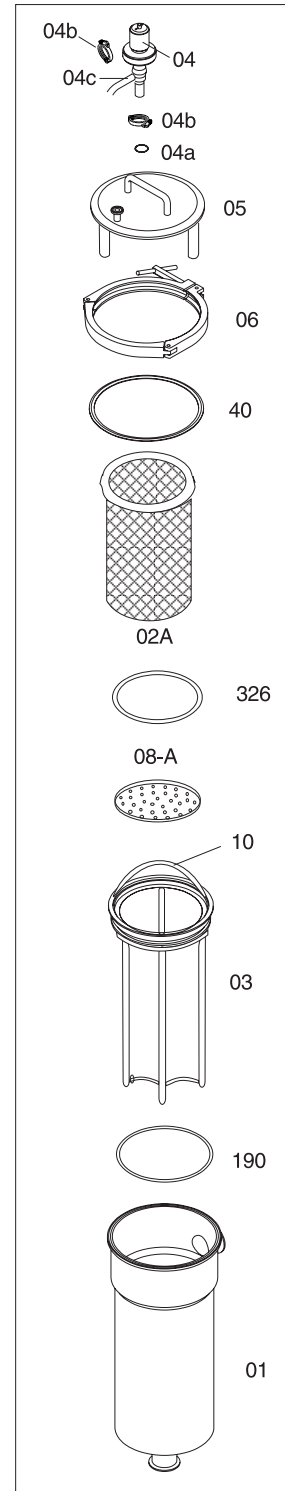
MAINSTREAM FILTER/STRAINER - REASSEMBLY (CONT.)

MAINSTREAMSES

1. Lubricate the o-ring (190) that seals the strainer body (01) with a food grade silicone spray and place on the outside diameter of the strainer ring support assembly (03).
2. Place the strainer ring support assembly (03) inside the strainer body (01) so that it rests snugly on the bottom of the body.
3. If you are using a wire mesh strainer, place the strainer support plate (08) inside the strainer support with the rim facing downward.

If you are using a perforated strainer, place the strainer support plate (08A) inside the strainer support with the rim facing upward.

4. Lubricate the o-ring (326) that seals the strainer ring assembly (02) with a food grade lubricant (L-1011B) and place it on the outside diameter of the strainer ring assembly (02).
5. Place the strainer ring assembly (02) inside the strainer ring support assembly (03) so that the bottom strainer ring assembly rests snugly on the strainer support plate (08 or 08A).
6. Place the handle on the strainer ring support assembly (02) by compressing the handle and sliding the ends into the two holes on the assembly. Once the handle is attached, lay it flat against the strainer support ring assembly.
7. Place the gasket (40) and cover (05) on the top of the strainer body (01).
8. Attach and tighten the clamp (06).



**Mainstream Strainer
Type SES**
(perforated screen shown)

MAINTENANCE

MAINSTREAM FILTER/STRAINER - REASSEMBLY (CONT.)

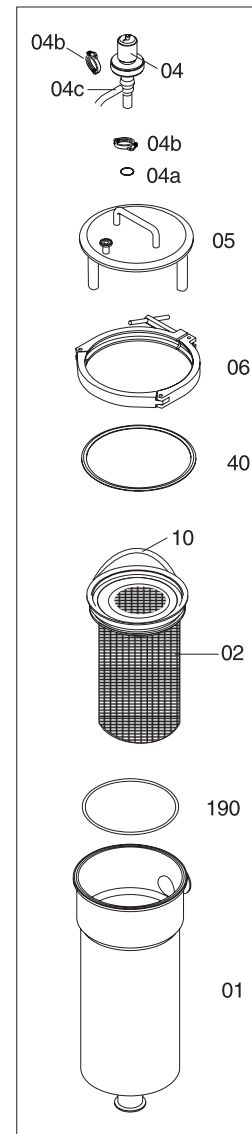
MAINSTREAM SEB/SEBHVW

1. Lubricate the o-ring (190) that seals the strainer body (01) with a food grade silicone spray and place it on the outside diameter of the strainer ring assembly (02).

2. Place the strainer ring assembly (02) inside the body (01) so that the support ring on the assembly rests snugly against the lip inside the body.

Note: Fold the basket handle down over the support ring assembly.

3. Place the gasket (40) and cover (05) on the top of the strainer body (01).
4. Attach and tighten the clamp (06).



Mainstream Strainer
Type SEB
*(see Parts list
for exploded view
of SEBHVW)*

MAINTENANCE

STREAMLINE BASKET FILTER/STRAINER - DISASSEMBLY



⚠ WARNING

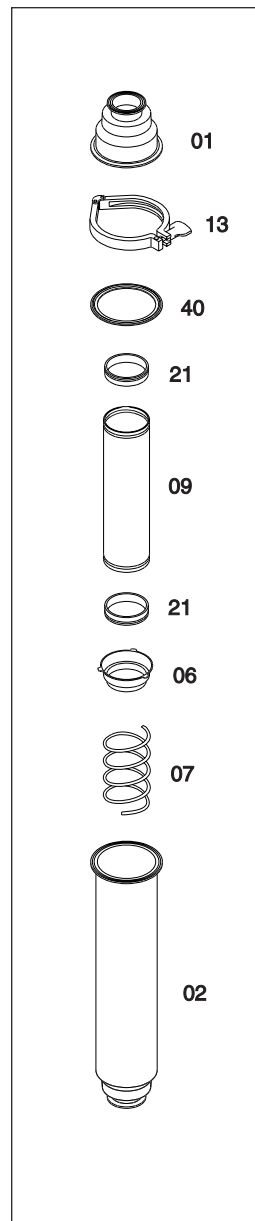
Warning - Make certain that the strainer system is not under pressure and that the system is drained of all liquids before removing any Streamline strainer from pipe work.

MODEL SM/FM

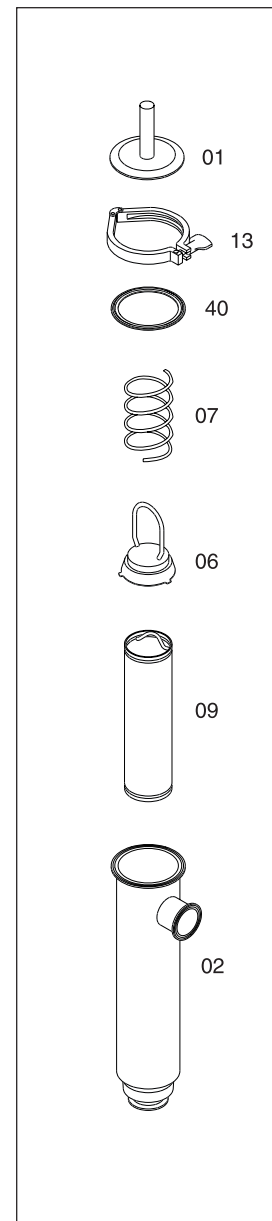
1. Remove the clamp (13) and lift off the outlet assembly (01).
Note: Apply pressure to the outlet assembly when you remove the clamp, as the strainer/filter spring will force the outlet assembly away from the body when the clamp is removed.
2. Remove the gasket (40) and inspect it for damage or wear.
3. Remove the back up tube (09) with filter sock or overscreen, spring (07), and distributor cap (06).
4. Change the filter sock or overscreen if necessary. Refer to *Changing the Filter Media* later in this manual for details.

MODEL SMS/FMS

1. Remove the clamp (13) and lift off the cap (01).
Note: Apply pressure to the cap when you remove the clamp, as the strainer/filter spring will force the cap away from the body when the clamp is removed.
2. Remove the gasket (40) and inspect it for damage or wear.
3. Remove the spring (07), distributor cap (06), and back up tube (09).
4. Change the filter sock or overscreen if necessary. Refer to *Changing the Filter Media* later in this manual for details.



Streamline Strainer
Type FM



Streamline Strainer
Type SMS

MAINTENANCE

STREAMLINE BASKET FILTER/STRAINER - REASSEMBLY

MODEL SM/FM

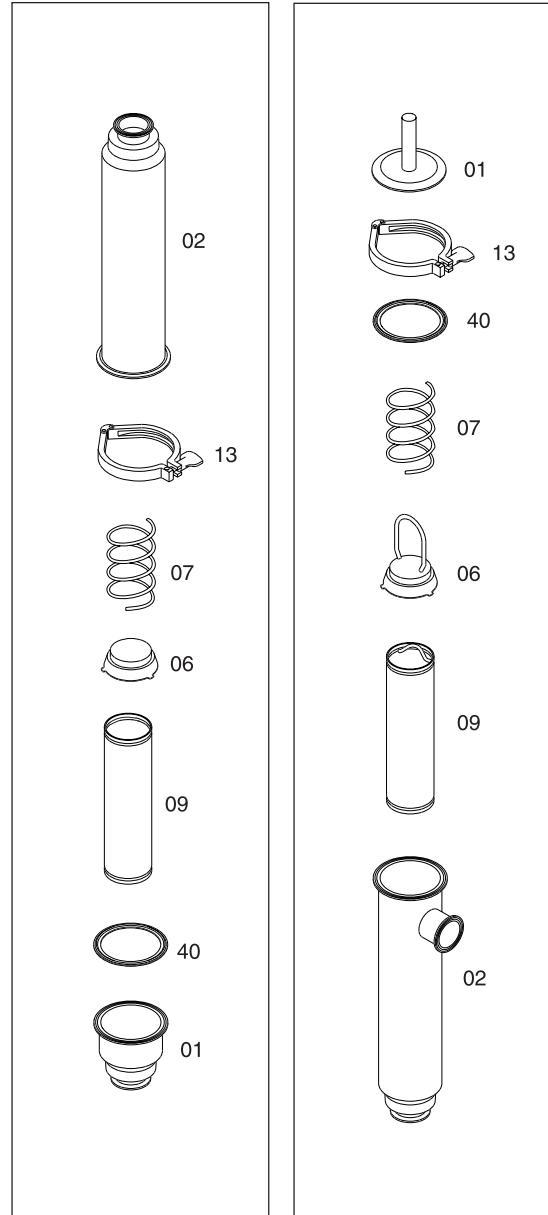
1. Ensure that the filter media is in place on the back up tube (09). Refer to *Changing the Filter Media*, later in this manual.
2. Place the gasket (40) on the outlet assembly (01).
3. Place the back up tube (09) in the outlet assembly (01).
4. Press the distributor cap (06) onto the back up tube (09).
5. Press the spring (07) onto the outside diameter of the distributor cap.
6. Press the filter body (02) over the entire assembly and compress it to the outlet assembly (01).
7. Attach and tighten the clamp (13).

MODEL SMS/FMS

1. Ensure that the filter media is in place on the back up tube (09). Refer to *Changing the Filter Media*, later in this manual.
2. Insert the back up tube (09) inside the body (02) ensuring that the bottom of the back up tube is seated firmly against the bottom of the body.
3. Insert the distributor cap (06) inside the body (02) ensuring that the cap is seated firmly against the top of the back up tube (09).

Note: The opening on the handle of the distributor cap should be facing the opening of the inlet port so that the port is not blocked.

4. Insert the spring (07) inside the body (02) ensuring that the spring is seated firmly against the ridge on the distributor cap (06).
5. Place the gasket (40) on the body (02).
6. Compress the cap (06) onto the body (02), and attach and tighten the clamp (13).



Streamline:
Model SM

Streamline:
Model SMS

MAINTENANCE

CHANGING THE FILTER MEDIA

MAINSTREAM SEF



WARNING

Warning - Make certain that the strainer system is not under pressure and that the system is drained of all liquids. Release pressure inside filter/strainer by opening the relief valve *before* replacing the bag.

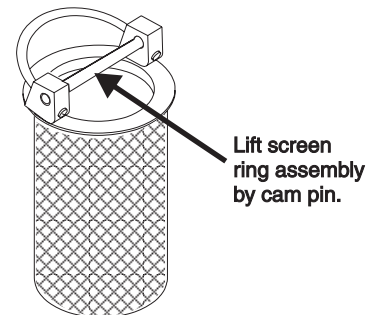
Important: When installing a filter bag, remove the tag and save it. The tag will help you identify your filter type when reordering.

1. Open the air relief valve to relieve all pressure inside the filter. Make certain the filtration system is drained of all liquid. Residual can result in the bag floating and not seating properly.
2. Remove the filter cover, and lift the screen ring assembly from the housing using the cam pin as a handle. (Do not use the filter strainer handle to remove the basket assembly.)
3. Raise the assembly handle upward toward the center of the assembly to unlock the handle.
4. Remove the filter media retainer ring that secures the basket filter bag onto the o-ring.
5. Withdraw the filter bag from the basket and discard.

Note: Where ID filter tags are used (fine filtration bags), remove the tag and set aside. The lot number on this tag can be an important piece of information.

For basket filter bags that are nearly filled, it may be necessary to disassemble the cam lock assembly in order to remove the filled bag. (Refer to Mainstream Filter/Strainer Disassembly earlier in this manual for more information on disassembly the cam lock assembly.)

6. Insert a new bag into the basket, contouring the bag against the basket, making sure it fits smoothly against the sides and bottom of the basket.
7. Reinstall the o-ring, cam lock assembly (if necessary), and retainer ring, and lock bag in place. (See the *Mainstream Filter/Strainer - Reassembly* section for details.)
8. Install the screen ring assembly into the housing.
9. Close the cover, and replace and tighten the clamp.

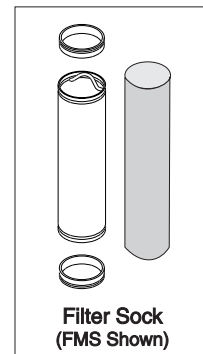
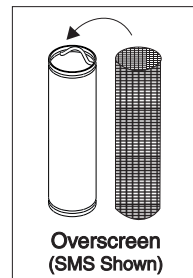


MAINTENANCE

STREAMLINE MODELS FM/SM AND FMS/SMS

Important: When installing a filter sock or overscreen, save the original packaging. This will help you identify your filter media type when reordering.

1. Relieve all pressure inside the system and make certain the filtration system is drained of all liquid.
2. Remove the outlet assembly (for model FM or SM) or the filter/strainer cap (for model FMS or SMS).
3. Remove the spring, distributor cap, and back up tube from the body.
4. If you are using an overscreen, slide the overscreen off of the backup tube, clean it or replace it, and go to Step 8.
5. If you are using a filter sock, remove the retaining rings on both ends of the backup tube, and slide the sock off of the tube.
6. Insert a new sock over the back up tube and tuck the ends of the filter bag over both ends of the tube. Then insert the retaining rings inside each end of the tube to hold the bag in place.
7. Replace the back up tube, distributor, and spring inside the housing. (For detailed information, refer to *Streamline Filter/Strainer - Reassembly* earlier in this manual.)
8. Compress the outlet assembly (for model FM) or the cap (model FMS) onto the body, and attach and tighten the clamp.



TROUBLESHOOTING

TROUBLESHOOTING GUIDELINES

The Troubleshooting section chart below applies to problems which may arise during filter or strainer operation. Contact Alfa Laval if assistance is required.

Problem	Probable Cause	Remedy
SM: Split in overscreen along length	Pump pulsation is causing the screen to stretch and fold along the length and cause fatigue and failure.	Dampen pulsation, or use a different type of pump.
SM: Blown out screen	Backflushing through the screen. On fine wire mesh screens, the screen is wrapped around the O.D. of the back up tube, which provides support for the designed direction of flow. No such support exists to protect the screen in a reverse flow pattern. Even a momentary reverse flow spike can lead to this problem.	Protect the system from backflush by installing check valves or relief lines.
SM: Holes in screen FM: Torn filter	Differential pressure too high.	Stop and clean screen, or change media at 10 psi ΔP .
SEF: Bag blown through	Either the filter bag is not contoured to the support basket, or a momentary backflow has pushed the bag away from the support basket.	See Filter Bag Replacement for proper installation instructions. Install backflow prevention devices or pressure relief devices as appropriate.
SES: Screen folded or crushed	Backflushing through the screen. On fine wire mesh screens, a coarser screen wrapped around the O.D. of the fine screen provides support for the designed direction of flow. No such support exists to protect the screen in a reverse flow pattern. Even a momentary reverse flow spike can lead to this problem.	Protect the system from backflush by installing check valves or relief lines.
SES: Bottom of screen has damaged wire mesh or is blown out	Support plate not installed or installed incorrectly. On the finer wire mesh screens, the support plate at the immediate exterior of the bottom of the basket provides a solid support against differential pressure due to clogging. In some cases, the plate is not installed or installed upside down, allowing the screen to fatigue under strain and ultimately give way to pressure.	Install support plate correctly as described under <i>Mainstream Filter/Strainer Reassembly</i> earlier in this manual.
SES: Screen ring support assembly is difficult to remove from housing.	Dried product, especially sticky sugar type solutions, can cause the o-ring seal to bind on the housing.	Grasp the strainer assembly handle and twist the assembly in the housing to break the o-ring free. Then lift the assembly out of the housing.

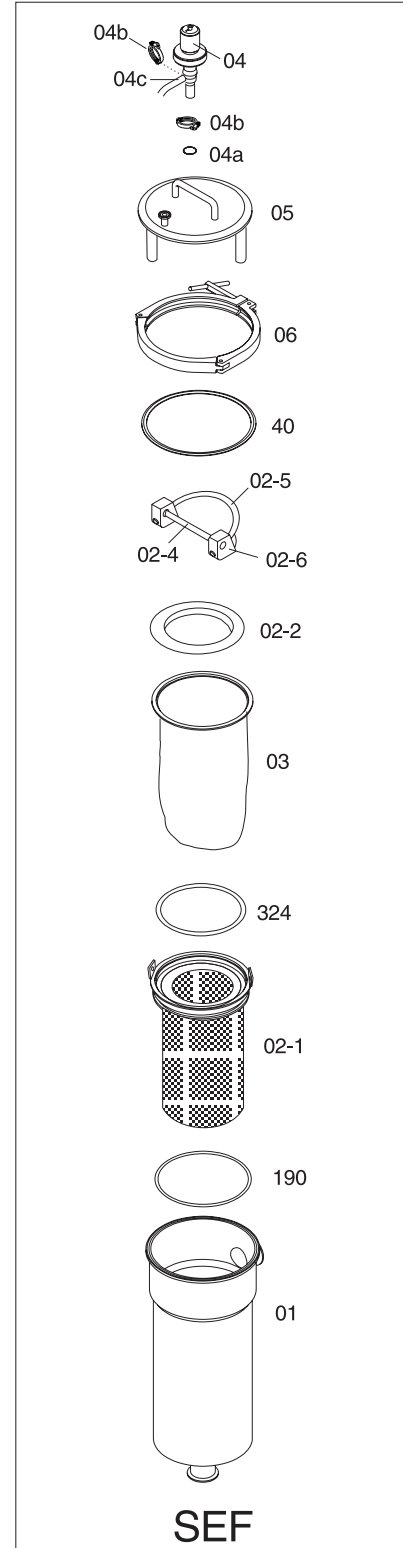
PARTS LIST

MAINSTREAM - REPLACEMENT PARTS

Filter / Strainer part numbers listed are basic guidelines. Contact Alfa Laval for accurate part numbers and descriptions.

Mainstream (SEF)

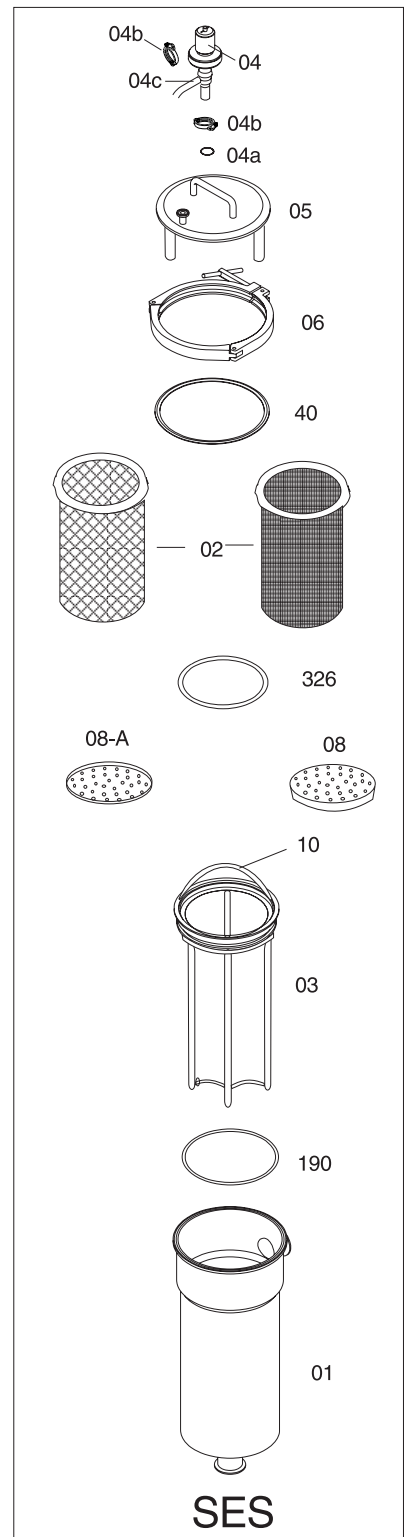
Key No.	Description	Part Number
01	Filter Body, long (2", 50.8mm) unpolished	SES2-2-01-316-I
01	Filter Body, short (2", 50.8mm) unpolished	SES1-2-01-316-I
01	Filter Body, long (2", 50.8mm) polished	SES2-2-01-316-P
01	Filter Body, short (2", 50.8mm) unpolished	SES1-2-01-316-P
01	Filter Body, long (3", 76.2mm) unpolished	SES2-3-01-316-I
01	Filter Body, short (3", 76.2mm) unpolished	SES1-3-01-316-I
01	Filter Body, long (3", 76.2mm) polished	SES2-3-01-316-P
01	Filter Body, short (3", 76.2mm) polished	SES1-3-01-316-P
01	Filter Body, long (4", 101.6mm) unpolished	SES2-4-01-316-I
01	Filter Body, short (4", 101.6mm) unpolished	SES1-4-01-316-I
01	Filter Body, long (4", 101.6mm) polished	SES2-4-01-316-P
01	Filter Body, short (4", 101.6mm) polished	SES1-4-01-316-P
02-1	Screen Ring Assembly (short body)	SEF1-2-02-1-316L
02-1	Screen Ring Assembly (long body)	SEF2-2-02-1-316L
02-2	Retainer Ring	SEF-2-04-316L
02-4	Cam Pin	SEF-2-02-4-316L
02-5	Cam Handle	SEF-2-02-5-316L
02-6	Cam Lock (UHMW) (2 required)	SEF-2-02-6
02-6	Cam Lock (Alum. Bronze) (2 required)	SEF-2-02-6-B
03	Filter Media	See Filter Media Replacements.
04	Relief Valve (UHMW handle)	660-10M-40-HN-½x½-C-316L
04	Relief Valve (Alum. Bronze handle)	660-10M-40-BR-½x½-C-316L
04a	Relief Valve Gasket (Buna)	42-MP-U-½
04a	Relief Valve Gasket (SFY)	42-MP-SFY-½
04a	Relief Valve Gasket (EPDM)	42-MP-E-½
04b	Relief Valve Clamp	13MHHS-¾-S
04c	Elbow Fitting	TL2CM-½-316L-PD
05	End Cap Assembly (2" or 3" housing)	SEB/FR-2-05-4.078-316L-FINISH
05a	End Cap Assembly (4" housing)	SEB/FR-2-05-5.062-316L-FINISH
06	Filter Clamp	SES-2-06A-S
40	Cover Gasket (Buna)	40MVF-U-8
40	Cover Gasket (SFY)	40MVF-SFY-8
40	Cover Gasket (EPDM)	40MVF-E-8
190	O-Ring, Buna (O.D.)	17-190-U
190	O-Ring, SFY (O.D.)	17-190-SFY
190	O-Ring, EPDM (O.D.)	17-190-E
324	O-Ring, Buna (I.D.)	17-324-U
324	O-Ring, SFY (I.D.)	17-324-SFY
324	O-Ring, EPDM (I.D.)	17-324-E



PARTS LIST

Mainstream (SES)

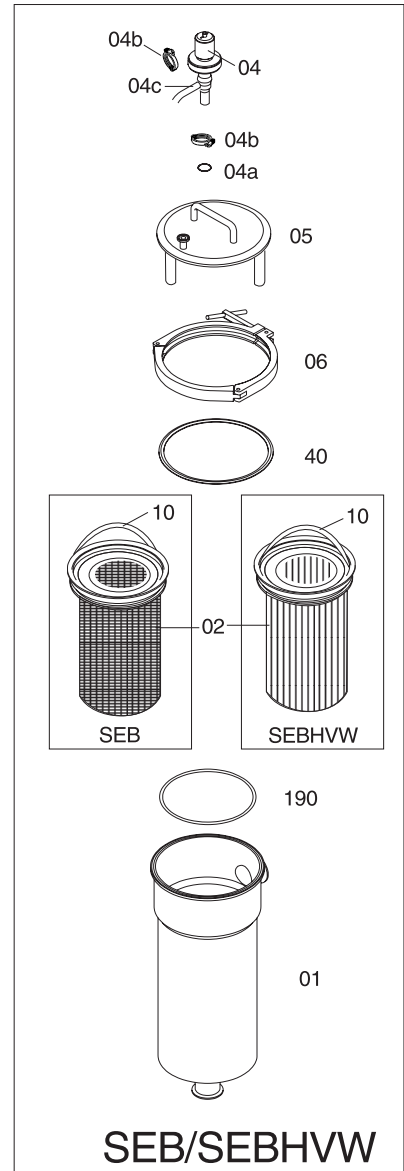
Key No.	Description	Part Number
01	Filter Body, long (2", 50.8mm) unpolished	SES2-2-01-316-I
01	Filter Body, short (2", 50.8mm) unpolished	SES1-2-01-316-I
01	Filter Body, long (2", 50.8mm) polished	SES2-2-01-316-P
01	Filter Body, short (2", 50.8mm) unpolished	SES1-2-01-316-P
01	Filter Body, long (3", 76.2mm) unpolished	SES2-3-01-316-I
01	Filter Body, short (3", 76.2mm) unpolished	SES1-3-01-316-I
01	Filter Body, long (3", 76.2mm) polished	SES2-3-01-316-P
01	Filter Body, short (3", 76.2mm) polished	SES1-3-01-316-P
01	Filter Body, long (4", 101.6mm) unpolished	SES2-4-01-316-I
01	Filter Body, short (4", 101.6mm) unpolished	SES1-4-01-316-I
01	Filter Body, long (4", 101.6mm) polished	SES2-4-01-316-P
01	Filter Body, short (4", 101.6mm) polished	SES1-4-01-316-P
02	Strainer Ring Assembly	Refer to Mainstream Media Options
3	Strainer Ring Support Assembly (Short body)	SES1-2-03A-316
03	Strainer Ring Support Assembly (Long body)	SES2-2-03A-316
04	Relief Valve (UHMW handle)	660-10M-40-HN-½x½-C-316L
04	Relief Valve (Alum. Bronze handle)	660-10M-40-BR-½x½-C-316L
04a	Relief Valve Gasket (Buna)	42-MP-U-½
04a	Relief Valve Gasket (SFY)	42-MP-SFY-½
04a	Relief Valve Gasket (EPDM)	42-MP-E-½
04b	Relief Valve Clamp	13MHHS-¾-S
05	End Cap Assembly (2" or 3" housing)	SEB/FR-2-05-4.078-316L-FINISH
05a	End Cap Assembly (4" housing)	SEB/FR-2-05-5.062-316L-FINISH
06	Strainer Clamp	SES-2-06A-S
08	Strainer Support Plate for Wire Mesh	SES-2-08-316
08A	Strainer Support Plate for Perforated Metal	SES-2-08A-316
10	Removable Handle	SES-2-10B-316
40	Cover Gasket (Buna)	40MVF-U-8
40	Cover Gasket (SFY)	40MVF-SFY-8
40	Cover Gasket (EPDM)	40MVF-E-8
190	O-Ring, Buna (O.D.)	17-190-U
190	O-Ring, SFY (O.D.)	17-190-SFY
190	O-Ring, EPDM (O.D.)	17-190-E
326	O-Ring, Buna (I.D.)	17-326-U
326	O-Ring, SFY (I.D.)	17-326-SFY
326	O-Ring, EPDM (I.D.)	17-326-E



PARTS LIST

Mainstream (SEB/SEBHVW)

Key No.	Description	Part Number
01	Filter Body, long (2", 50.8mm) unpolished	SES2-2-01-316-I
01	Filter Body, short (2", 50.8mm) unpolished	SES1-2-01-316-I
01	Filter Body, long (2", 50.8mm) polished	SES2-2-01-316-P
01	Filter Body, short (2", 50.8mm) unpolished	SES1-2-01-316-P
01	Filter Body, long (3", 76.2mm) unpolished	SES2-3-01-316-I
01	Filter Body, short (3", 76.2mm) unpolished	SES1-3-01-316-I
01	Filter Body, long (3", 76.2mm) polished	SES2-3-01-316-P
01	Filter Body, short (3", 76.2mm) polished	SES1-3-01-316-P
01	Filter Body, long (4", 101.6mm) unpolished	SES2-4-01-316-I
01	Filter Body, short (4", 101.6mm) unpolished	SES1-4-01-316-I
01	Filter Body, long (4", 101.6mm) polished	SES2-4-01-316-P
01	Filter Body, short (4", 101.6mm) polished	SES1-4-01-316-P
02	Strainer Ring Assembly	Refer to Mainstream Media Options
04	Relief Valve (UHMW handle)	660-10M-40HN-½x½-C-316L
04	Relief Valve (Alum. Bronze handle)	660-10M-40BR-½x½-C-316L
04a	Relief Valve Gasket (Buna)	42MP-U-½
04a	Relief Valve Gasket (SFY)	42MP-SFY-½
04a	Relief Valve Gasket (EPDM)	42MP-E-½
04b	Relief Valve Clamp	13MHHS-¾-S
04c	Elbow Fitting	TL2CM-½-316L-PD
05	End Cap Assembly (2" o 3" housing)	SEB/FR-2-05-4.078-316L-FINISH
05a	End Cap Assembly (4" housing)	SEB/FR-2-05-5.062-316L-FINISH
06	Strainer Clamp	SES-2-06A-S
10	Handle	SES-2-10A-316
40	Cover Gasket (Buna)	40MVF-U-8
40	Cover Gasket (SFY)	40MVF-SFY-8
40	Cover Gasket (EPDM)	40MVF-E-8
190	O-Ring, Buna (O.D.)	17-324-U
190	O-Ring, SFY (O.D.)	17-324-SFY
190	O-Ring, EPDM (O.D.)	17-324-E



PARTS LIST

STREAMLINE - REPLACEMENT PARTS

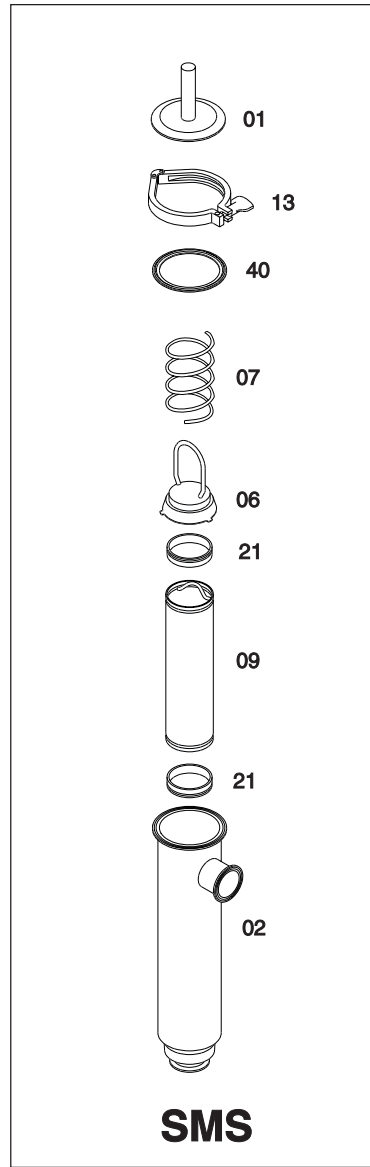
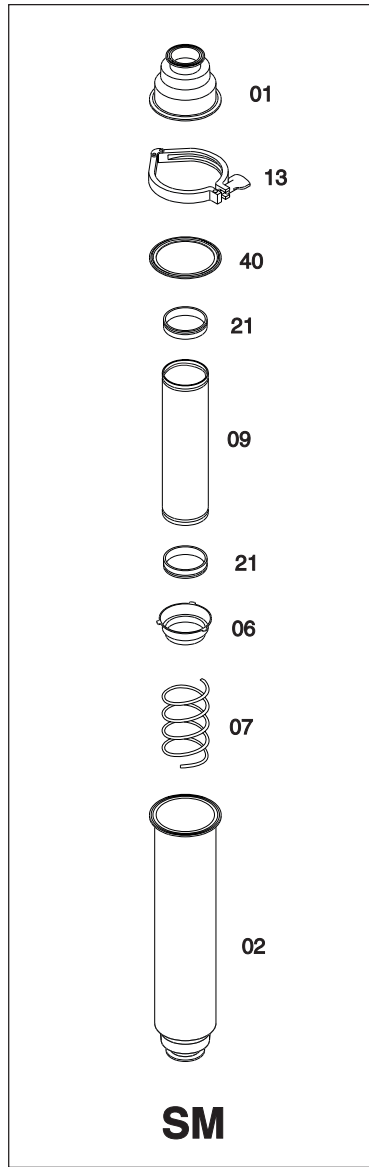
ORDERING INFORMATION

The exploded view and parts key facilitate ordering repair parts from Tri-Clover. All parts for Mainstream Filter/Strainers are keyed to the parts list.

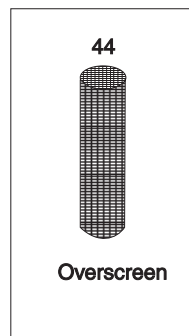
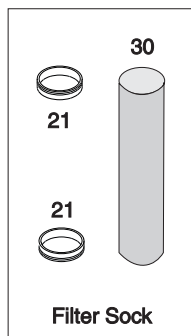
Streamline (FM or SM)		1" (25.4mm)	1½" (38.1mm)	2" (50.8mm)	2½" (63.5mm)	3" (76.2mm)
Key No.	Description	Part Number	Part Number	Part Number	Part Number	Part Number
01	Outlet Assembly	FM1-1-01-316L	FM1-1½-01-316L	FM1-2-01B-316L	FM1-2½-01-316L	FM1-3-01-316L
02	Body (short body)	FM1-1-02A-316L	FM1-1½-02A-316L	FM1-2-02A-316L	FM1-2½-02A-316L	FM1-3-02A-316L
02	Body (long body)	--	FM2-1½-02A-316L	FM2-2-02A-316L	FM2-2½-02A-316L	FM2-3-02A-316L
06	Distributor Cap	F1-1-06-316L	F1-1-06-316L	F1-1-06-316L	F1-2½-06-316L	F1-2½-06-316L
07	Spring	F1-1-07A-316L	F1-1-07A-316L	F1-1-07A-316L	F1-2½-07A-316L	F1-2½-07A-316L
09	Back Up Tube (short body)	F1-1-09-X*	F1-1-09-X*	F1-1-09-X*	F1-2½-09-X*	F1-2½-09-X*
09	Back Up Tube (long body)	--	F2-1-09-X*	F2-1-09-X*	F2-2½-09-X*	F2-2½-09-X*
13	Clamp	13MHHM-4-S	13MHHM-4-S	13MHHM-4-S	13MHHVM-4-S	13MHHVM-4-S
21	Retainer Ring (FM only)	F1-1-21-Mat'l	F1-1-21-Mat'l	F1-1-21-Mat'l	F1-2½-21-Mat'l	F1-2½-21-Mat'l
40	Gasket (Buna)	40MP-U-4	40MP-U-4	40MP-U-4	40MP-U-4	40MP-U-4
40	Gasket (SFY)	40MP-SFY-4	40MP-SFY-4	40MP-SFY-4	40MP-SFY-4	40MP-SFY-4
40	Gasket (EPDM)	40MP-E-4	40MP-E-4	40MP-E-4	40MP-E-4	40MP-E-4
Streamline (FMS or SMS)		1" (25.4mm)	1½" (38.1mm)	2" (50.8mm)	2½" (63.5mm)	3" (76.2mm)
Key No.	Description	Part Number	Part Number	Part Number	Part Number	Part Number
01	Cap	FMS1½-03-316L	FMS1½-03-316L	FMS1½-03-316L	FMS2½-03-316L	FMS2½-03-316L
02	Body (short body)	FMS1-1-02-316L	FMS1-1½-02-316L	FMS1-2-02-316L	FMS1-2½-02-316L	FM1-3-02-316L
02	Body (long body)	--	FMS2-1½-02-316L	FMS2-2-02-316L	FMS2-2½-02-316L	FMS2-3-02-316L
06	Distributor Cap	FS-1½-06-316L	FS-1½-06-316L	FS-1½-06-316L	FS1-2½-06-316L	FS1-2½-06-316L
07	Spring	FS-1½-07-316L	FS-1½-07-316L	FS-1½-07-316L	FS1-2½-07-316L	FS1-2½-07-316L
09	Back Up Tube (short body)	FS1-1½-09-X*	FS1-1½-09-X*	FS1-1½-09-X*	FS1-2½-09-X*	FS1-2½-09-X*
09	Back Up Tube (long body)	--	FS2-1½-09-X*	FS2-1½-09-X*	FS2-2½-09-X*	FS2-2½-09-X*
13	Clamp	13MHHM-4-S	13MHHM-4-S	13MHHM-4-S	13MHHVM-4-S	13MHHVM-4-S
21	Retainer Ring (FMS only)	F1-1-21-Mat'l	F1-1-21-Mat'l	F1-1-21-Mat'l	F1-2½-21-Mat'l	F1-2½-21-Mat'l
40	Gasket (Buna)	40MP-U-4	40MP-U-4	40MP-U-4	40MP-U-4	40MP-U-4
40	Gasket (SFY)	40MP-SFY-4	40MP-SFY-4	40MP-SFY-4	40MP-SFY-4	40MP-SFY-4
40	Gasket (EPDM)	40MP-E-4	40MP-E-4	40MP-E-4	40MP-E-4	40MP-E-4

* Specify code G, D, E, or V. Note: All strainers using overscreens and filters utilize the type G Back Up tube. Not all codes are available for all sizes.

PARTS LIST



Filter Media



PARTS LIST

MAINSTREAM MEDIA OPTIONS

Mainstream Strainer Media (SES)

Code	Description	Part Number
A	Short Body, Perforateed Metal, 0.033 dia/24 ga., Micron Rating 838, Open Area 20.0 %	SES1-2-02A-A-316L
A	Long Body, Perforateed Metal, 0.033 dia/24 ga., Micron Rating 838, Open Area 20.0 %	SES2-2-02A-A-316L
C	Short Body, Perforateed Metal, 0.062 dia/22 ga., Micron Rating 1590, Open Area 30.0 %	SES1-2-02A-C-316L
C	Long Body, Perforateed Metal, 0.062 dia/22 ga., Micron Rating 1590, Open Area 30.0 %	SES2-2-02A-C-316L
B	Short Body, Perforateed Metal, 0.05 dia/22 ga., Micron Rating 1270, Open Area 22.5 %	SES1-2-02A-B-316L
B	Long Body, Perforateed Metal, 0.05 dia/22 ga., Micron Rating 1270, Open Area 22.5 %	SES2-2-02A-B-316L
U	Short Body, Perforateed Metal, 0.04 dia/22 ga., Micron Rating 1015, Open Area 22.0 %	SES1-2-02A-U-316L
U	Long Body, Perforateed Metal, 0.04 dia/22 ga., Micron Rating 1015, Open Area 22.0 %	SES2-2-02A-U-316L
P	Short Body, Wire Mesh, Sq. Mesh Size 20, Space btw Wire 0.034", Micron Rating 864, Open Area 46.2	SES1-2-02-P-316L
P	Long Body, Wire Mesh, Sq. Mesh Size 20, Space btw Wire 0.034", Micron Rating 864, Open Area 46.2	SES2-2-02-P-316L
J	Short Body, Wire Mesh, Sq. Mesh Size 40, Space btw Wire 0.015", Micron Rating 381, Open Area 36.0	SES1-2-02-J-316L
J	Long Body, Wire Mesh, Sq. Mesh Size 40, Space btw Wire 0.015", Micron Rating 381, Open Area 36.0	SES2-2-02-J-316L
F	Short Body, Wire Mesh, Sq. Mesh Size 60, Space btw Wire 0.009", Micron Rating 229, Open Area 30.3	SES1-2-02-F-316L
F	Long Body, Wire Mesh, Sq. Mesh Size 60, Space btw Wire 0.009", Micron Rating 229, Open Area 30.3	SES2-2-02-F-316L
L	Short Body, Wire Mesh, Sq. Mesh Size 80, Space btw Wire 0.007", Micron Rating 178, Open Area 31.4	SES1-2-02-L-316L
L	Long Body, Wire Mesh, Sq. Mesh Size 80, Space btw Wire 0.007", Micron Rating 178, Open Area 31.4	SES2-2-02-L-316L
K	Short Body, Wire Mesh, Sq. Mesh Size 100, Space btw Wire 0.006", Micron Rating 140, Open Area 30.3	SES1-2-02-K-316L
K	Long Body, Wire Mesh, Sq. Mesh Size 100, Space btw Wire 0.006", Micron Rating 140, Open Area 30.3	SES2-2-02-K-316L
M	Short Body, Wire Mesh, Sq. Mesh Size 150, Space btw Wire 0.004", Micron Rating 104, Open Area 37.4	SES1-2-02-M-316L
M	Long Body, Wire Mesh, Sq. Mesh Size 150, Space btw Wire 0.004", Micron Rating 104, Open Area 37.4	SES2-2-02-M-316L
S	Short Body, Wire Mesh, Sq. Mesh Size 200, Space btw Wire 0.004", Micron Rating 73, Open Area 33.6	SES1-2-02-S-316L
S	Long Body, Wire Mesh, Sq. Mesh Size 200, Space btw Wire 0.003", Micron Rating 73, Open Area 33.6	SES2-2-02-S-316L

Other sizes available upon request.

Mainstream (SEF) Filter - Code A

Description	Short Body Part Number	Long Body Part Number
Polypropylene, Micron Size 1.0	SEF-03-1.0-PPR-01-A	SEF-03-1.0-PPR-02-A
Polypropylene, Micron Size 2.5	SEF-03-2.5-PPR-01-A	SEF-03-2.5-PPR-02-A
Polypropylene, Micron Size 5.0	SEF-03-5.0-PPR-01-A	SEF-03-5.0-PPR-02-A
Polypropylene, Micron Size 10.0	SEF-03-10.0-PPR-01-A	SEF-03-10.0-PPR-02-A
Polypropylene, Micron Size 25.0	SEF-03-25.0-PPR-01-A	SEF-03-25.0-PPR-02-A

PARTS LIST

MAINSTREAM MEDIA OPTIONS

Mainstream (SEF) Filter - Code B

Description	Short Body Part Number	Long Body Part Number
Polypropylene, Micron Size 177.0	SEF-03-177.0-PPR-01-B	SEF-03-177.0-PPR-02-B
Polyester, Micron Size 180.0	SEF-03-180.0-PES-01-B	SEF-03-180.0-PES-02-B
Polyester, Micron Size 200.0	SEF-03-200.0-PES-01-B	SEF-03-200.0-PES-02-B
Nylon, Micron Size 210.0	SEF-03-210.0-NYL-01-B	SEF-03-210.0-NYL-02-B
Polypropylene, Micron Size 210.0	SEF-03-210.0-PPR-01-B	SEF-03-210.0-PPR-02-B
Nylon, Micron Size 250.0	SEF-03-250.0-NYL-01-B	SEF-03-250.0-NYL-02-B
Polyester, Micron Size 250.0	SEF-03-250.0-PES-01-B	SEF-03-250.0-PES-02-B
Polypropylene, Micron Size 250.0	SEF-03-250.0-PPR-01-B	SEF-03-250.0-PPR-02-B
Polypropylene, Micron Size 297.0	SEF-03-297.0-PPR-01-B	SEF-03-297.0-PPR-02-B
Nylon, Micron Size 300.0	SEF-03-300.0-NYL-01-B	SEF-03-300.0-NYL-02-B
Polyester, Micron Size 300.0	SEF-03-300.0-PES-01-B	SEF-03-300.0-PES-02-B
Nylon, Micron Size 420.0	SEF-03-420.0-NYL-01-B	SEF-03-420.0-NYL-02-B
Polyester, Micron Size 420.0	SEF-03-420.0-PES-01-B	SEF-03-420.0-PES-02-B
Polypropylene, Micron Size 420.0	SEF-03-420.0-PPR-01-B	SEF-03-420.0-PPR-02-B
Nylon, Micron Size 500.0	SEF-03-500.0-NYL-01-B	SEF-03-500.0-NYL-02-B
Polyester, Micron Size 500.0	SEF-03-500.0-PES-01-B	SEF-03-500.0-PES-02-B
Polypropylene, Micron Size 500.0	SEF-03-500.0-PPR-01-B	SEF-03-500.0-PPR-02-B
Nylon, Micron Size 590.0	SEF-03-590.0-NYL-01-B	SEF-03-590.0-NYL-02-B
Polyester, Micron Size 590.0	SEF-03-590.0-PES-01-B	SEF-03-590.0-PES-02-B
Polypropylene, Micron Size 590.0	SEF-03-590.0-PPR-01-B	SEF-03-590.0-PPR-02-B
Nylon, Micron Size 840.0	SEF-03-840.0-NYL-01-B	SEF-03-840.0-NYL-02-B
Polyester, Micron Size 840.0	SEF-03-840.0-PES-01-B	SEF-03-840.0-PES-02-B
Polypropylene, Micron Size 840.0	SEF-03-840.0-PPR-01-B	SEF-03-840.0-PPR-02-B

PARTS LIST

MAINSTREAM MEDIA OPTIONS

Mainstream (SEF) Filter - Code C

Description	Short Body Part Number	Long Body Part Number
Polypropylene, Micron Size 1.0	SEF-03-1.0-PPR-01-C	SEF-03-1.0-PPR-02-C
Polypropylene, Micron Size 3.0	SEF-03-3.0-PPR-01-C	SEF-03-3.0-PPR-02-C
Nylon-Nomex*, Micron Size 5.0	SEF-03-5.0-NOM-01-C	SEF-03-5.0-NOM-02-C
Nylon Monofillement, Micron Size 5.0	SEF-03-5.0-NMO-01-C	SEF-03-5.0-NMO-02-C
Polypropylene, Micron Size 5.0	SEF-03-5.0-PPR-01-C	SEF-03-5.0-PPR-02-C
Nylon-Nomex*, Micron Size 10.0	SEF-03-10.0-NOM-01-C	SEF-03-10.0-NOM-02-C
Nylon Monofillement, Micron Size 10.0	SEF-03-10.0-NMO-01-C	SEF-03-10.0-NMO-02-C
Polypropylene, Micron Size 10.0	SEF-03-10.0-PPR-01-C	SEF-03-10.0-PPR-02-C
Nylon-Nomex*, Micron Size 25.0	SEF-03-25.0-NOM-01-C	SEF-03-25.0-NOM-02-C
Nylon Monofillement, Micron Size 25.0	SEF-03-25.0-NMO-01-C	SEF-03-25.0-NMO-02-C
Polypropylene, Micron Size 25.0	SEF-03-25.0-PPR-01-C	SEF-03-25.0-PPR-02-C
Nylon-Nomex*, Micron Size 50.0	SEF-03-50.0-NOM-01-C	SEF-03-50.0-NOM-02-C
Polypropylene, Micron Size 50.0	SEF-03-50.0-PPR-01-C	SEF-03-50.0-PPR-02-C
Nylon Monofillement, Micron Size 55.0	SEF-03-55.0-NMO-01-C	SEF-03-55.0-NMO-02-C
Polyester, Micron Size 75.0	SEF-03-75.0-PES-01-C	SEF-03-75.0-PES-02-C
Polyester, Micron Size 100.0	SEF-03-100.0-PES-01-C	SEF-03-100.0-PES-02-C
Nylon-Nomex*, Micron Size 100.0	SEF-03-100.0-NOM-01-C	SEF-03-100.0-NOM-02-C
Polypropylene, Micron Size 100.0	SEF-03-100.0-PPR-01-C	SEF-03-100.0-PPR-02-C
Polyester, Micron Size 125.0	SEF-03-125.0-PES-01-C	SEF-03-125.0-PES-02-C
Polyester, Micron Size 150.0	SEF-03-150.0-PES-01-C	SEF-03-150.0-PES-02-C
Polyester, Micron Size 175.0	SEF-03-175.0-PES-01-C	SEF-03-175.0-PES-02-C
Polyester, Micron Size 200.0	SEF-03-200.0-PES-01-C	SEF-03-200.0-PES-02-C
Polypropylene, Micron Size 200.0	SEF-03-200.0-PPR-01-C	SEF-03-200.0-PPR-02-C
Polypropylene, Micron Size 300.0	SEF-03-300.0-PPR-01-C	SEF-03-300.0-PPR-02-C
Polyester, Micron Size 400.0	SEF-03-400.0-PES-01-C	SEF-03-400.0-PES-02-C
Polypropylene, Micron Size 600.0	SEF-03-600.0-PPR-01-C	SEF-03-600.0-PPR-02-C

Mainstream (SEF) Filter - Code D

Description	Short Body Part Number	Long Body Part Number
Polypropylene, Micron Size 50.0	SEF-03-50.0-PPR-01-D	SEF-03-50.0-PPR-02-D
Cotton, Micron Size 300.0	SEF-03-300.0-COT-01-D	SEF-03-300.0-COT-02-D

Mainstream (SEF) Filter - Code E

Description	Short Body Part Number	Long Body Part Number
Polypropylene, Micron Size 10.0	SEF-03-10.0-PPR-01-B	SEF-03-10.0-PPR-02-E
Polypropylene, Micron Size 25.0	SEF-03-25.0-PPR-01-B	SEF-03-25.0-PPR-02-E

* Nomex is a registered trademark of Dupont.

PARTS LIST

MAINSTREAM MEDIA OPTIONS

Mainstream (SEF) Filter - Code F

Description	Short Body Part Number	Long Body Part Number
Polyester, Micron Size 0.5	SEF-03-0.5-PES-01-C	SEF-03-0.5-PES-02-C
Polyester, Micron Size 1.0	SEF-03-1.0-PES-01-C	SEF-03-1.0-PES-02-C
Rayon, Micron Size 1.0	SEF-03-1.0-RAY-01-C	SEF-03-1.0-RAY-02-C
Polyester, Micron Size 3.0	SEF-03-3.0-PES-01-C	SEF-03-3.0-PES-02-C
Polypropylene, Micron Size 3.0	SEF-03-3.0-PPR-01-C	SEF-03-3.0-PPR-02-C
Polyester, Micron Size 5.0	SEF-03-5.0-PES-01-C	SEF-03-5.0-PES-02-C
Rayon, Micron Size 5.0	SEF-03-5.0-RAY-01-C	SEF-03-5.0-RAY-02-C
Rayon, Micron Size 10.0	SEF-03-10.0-RAY-01-C	SEF-03-10.0-RAY-02-C
Polyester, Micron Size 15.0	SEF-03-15.0-PES-01-C	SEF-03-15.0-PES-02-C
Rayon, Micron Size 15.0	SEF-03-15.0-RAY-01-C	SEF-03-15.0-RAY-02-C
Polyester, Micron Size 25.0	SEF-03-25.0-PES-01-C	SEF-03-25.0-PES-02-C
Rayon, Micron Size 25.0	SEF-03-25.0-RAY-01-C	SEF-03-25.0-RAY-02-C
Nylon Monofillement, Micron Size 45.0	SEF-03-45.0-NMO-01-C	SEF-03-45.0-NMO-02-C
Polyester, Micron Size 50.0	SEF-03-50.0-PES-01-C	SEF-03-50.0-PES-02-C
Polypropylene, Micron Size 50.0	SEF-03-50.0-PPR-01-C	SEF-03-50.0-PPR-02-C
Rayon, Micron Size 50.0	SEF-03-50.0-R-01-C	SEF-03-50.0-RAY-02-C
Nylon Monofillement, Micron Size 55.0	SEF-03-55.0-NMO-01-C	SEF-03-55.0-NMO-02-C
Nylon Monofillement, Micron Size 65.0	SEF-03-65.0-NMO-01-C	SEF-03-65.0-NMO-02-C
Nylon Monofillement, Micron Size 75.0	SEF-03-75.0-NMO-01-C	SEF-03-75.0-NMO-02-C
Polyester, Micron Size 75.0	SEF-03-75.0-PES-01-C	SEF-03-75.0-PES-02-C
Nylon Monofillement, Micron Size 80.0	SEF-03-80.0-NMO-01-C	SEF-03-80.0-NMO-02-C
Nylon Monofillement, Micron Size 100.0	SEF-03-100.0-NMO-01-C	SEF-03-100.0-NMO-02-C
Polyester, Micron Size 100.0	SEF-03-100.0-PES-01-C	SEF-03-100.0-PES-02-C
Polypropylene, Micron Size 100.0	SEF-03-100.0-PPR-01-C	SEF-03-100.0-PPR-02-C
Rayon, Micron Size 100.0	SEF-03-100.0-RAY-01-C	SEF-03-100.0-RAY-02-C
Nylon Monofillement, Micron Size 125.0	SEF-03-125.0-NMO-01-C	SEF-03-125.0-NMO-02-C
Nylon Monofillement, Micron Size 150.0	SEF-03-150.0-NMO-01-C	SEF-03-150.0-NMO-02-C
Nylon Monofillement, Micron Size 175.0	SEF-03-175.0-NMO-01-C	SEF-03-175.0-NMO-02-C
Nylon Monofillement, Micron Size 200.0	SEF-03-200.0-NMO-01-C	SEF-03-200.0-NMO-02-C
Polyester, Micron Size 200.0	SEF-03-200.0-PES-01-C	SEF-03-200.0-PES-02-C
Nylon Monofillement, Micron Size 250.0	SEF-03-250.0-NMO-01-C	SEF-03-250.0-NMO-02-C
Nylon Monofillement, Micron Size 300.0	SEF-03-300.0-NMO-01-C	SEF-03-300.0-NMO-02-C
Nylon Monofillement, Micron Size 400.0	SEF-03-400.0-NMO-01-C	SEF-03-400.0-NMO-02-C
Nylon Monofillement, Micron Size 600.0	SEF-03-600.0-NMO-01-C	SEF-03-600.0-NMO-02-C
Nylon Monofillement, Micron Size 800.0	SEF-03-800.0-NMO-01-C	SEF-03-800.0-NMO-02-C

PARTS LIST

MAINSTREAM MEDIA OPTIONS

Mainstream Filter Media (SEB)

Code	Description	Part Number Short Body	Part Number Long Body
G	0.250 dia./18 ga., % of open area 58.0	SEB1-2-02A-G-316L	SEB2-2-02A-G-316L
E	0.125 dia./18 ga., % of open area 58.0	SEB1-2-02A-E-316L	SEB2-2-02A-E-316L
W	0.500 dia./18 ga., % of open area 58.0	SEB1-2-02A-W-316L	SEB2-2-02A-W-316L
D	0.09375 dia./18 ga., % of open area 58.0	SEB1-2-02A-D-316L	SEB2-2-02A-D-316L

Mainstream Filter Media (SEBHVW)

Code	Description	Part Number Short Body	Part Number Long Body
A	Space btw 0.005, Pressure Differential, 100, Micron Equivalent 127	SEBHVW1-02-A-316L	SEBHVW2-02-A-316L
B	Space btw 0.0075, Pressure Differential, 100, Micron Equivalent 190	SEBHVW1-02-B-316L	SEBHVW2-02-B-316L
C	Space btw 0.010, Pressure Differential, 85, Micron Equivalent 254	SEBHVW1-02-C-316L	SEBHVW2-02-C-316L
D	Space btw 0.015, Pressure Differential, 85, Micron Equivalent 381	SEBHVW1-02-D-316L	SEBHVW2-02-D-316L
E	Space btw 0.020, Pressure Differential, 70, Micron Equivalent 508	SEBHVW1-02-E-316L	SEBHVW2-02-E-316L
F	Space btw 0.025, Pressure Differential, 70, Micron Equivalent 635	SEBHVW1-02-F-316L	SEBHVW2-02-F-316L
G	Space btw 0.030, Pressure Differential, 55, Micron Equivalent 762	SEBHVW1-02-G-316L	SEBHVW2-02-G-316L
H	Space btw 0.035, Pressure Differential, 55, Micron Equivalent 889	SEBHVW1-02-H-316L	SEBHVW2-02-H-316L

PARTS LIST

STREAMLINE MEDIA OPTIONS

Streamline Filter Media

Code	Description	Part Number
A	Short Body (1", 1½", 2") Filter, non-woven rayon, Micron Rating 38*	F1-1-30-A
A	Short Body (2½", 3") Filter, non-woven rayon, Micron Rating 38*	F1-2½-30-A
A	Long Body (1½", 2") Filter, non-woven rayon, Micron Rating 38*	F2-1½-30-A
A	Long Body (2½", 3") Filter, non-woven rayon, Micron Rating 38*	F2-2½-30-A
B	Short Body (1", 1½", 2") Filter, woven knapped cotton flannel, Micron Rating 513*	F1-1-30-B
B	Short Body (2½", 3") Filter, woven knapped cotton flannel, Micron Rating 513*	F1-2½-30-B
B	Long Body (1½", 2") Filter, woven knapped cotton flannel, Micron Rating 513*	F2-1½-30-B
B	Long Body (2½", 3") Filter, woven knapped cotton flannel, Micron Rating 513*	F2-2½-30-B
C	Short Body (1", 1½", 2") Filter, cheese cloth single thickness cotton, Micron Rating 300*	F1-1-30-C
C	Short Body (2½", 3") Filter, cheese cloth single thickness cotton, Micron Rating 300*	F1-2½-30-C
C	Long Body (1½", 2") Filter, cheese cloth single thickness cotton, Micron Rating 300*	F2-1½-30-C
C	Long Body (2½", 3") Filter, cheese cloth single thickness cotton, Micron Rating 300*	F2-2½-30-C
D	Short Body (1", 1½", 2") Filter, nylon 26/29 mesh, rectangular opening, Micron Rating 765*	F1-1-30-D
D	Short Body (2½", 3") Filter, nylon 26/29 mesh, rectangular opening, Micron Rating 765*	F1-2½-30-D
D	Long Body (1½", 2") Filter, nylon 26/29 mesh, rectangular opening, Micron Rating 765*	F2-1½-30-D
D	Long Body (2½", 3") Filter, nylon 26/29 mesh, rectangular opening, Micron Rating 765*	F2-2½-30-D
E	Short Body (1", 1½", 2") Filter, non-woven rayon, Micron Rating 40-42*	F1-1-30-E
E	Short Body (2½", 3") Filter, non-woven rayon, Micron Rating 40-42*	F1-2½-30-E
E	Long Body (1½", 2") Filter, non-woven rayon, Micron Rating 40-42*	F2-1½-30-E
E	Long Body (2½", 3") Filter, non-woven rayon, Micron Rating 40-42*	F2-2½-30-E
F	Short Body (1", 1½", 2") Filter, non-woven rayon, Micron Rating <40*	F1-1-30-F
F	Short Body (2½", 3") Filter, non-woven rayon, Micron Rating <40*	F1-2½-30-F
F	Long Body (1½", 2") Filter, non-woven rayon, Micron Rating <40*	F2-1½-30-F
F	Long Body (2½", 3") Filter, non-woven rayon, Micron Rating <40*	F2-2½-30-F
G	Short Body (1", 1½", 2") Filter, woven rayon, 40 mesh, Micron Rating 420*	F1-1-30-G
G	Short Body (2½", 3") Filter, woven rayon, 40 mesh, Micron Rating 420*	F1-2½-30-G
G	Long Body (1½", 2") Filter, woven rayon, 40 mesh, Micron Rating 420*	F2-1½-30-G
G	Long Body (2½", 3") Filter, woven rayon, 40 mesh, Micron Rating 420*	F2-2½-30-G

* Micron Ratings are estimated.

PARTS LIST

STREAMLINE MEDIA OPTIONS

Streamline Overscreens

Code	Description	Part Number
R	(1", 1½", 2") Short Body, Square Mesh size 16, Space Btw Wire 0.045", Micron Rating 1130, Open Area 50.7%	F1-1-44-R
R	(2½", 3") Short Body, Square Mesh size 16, Space Btw Wire 0.045", Micron Rating 1130, Open Area 50.7%	F1-2½-44-R
R	(1½", 2") Long Body, Square Mesh size 16, Space Btw Wire 0.045", Micron Rating 1130, Open Area 50.7%	F2-1½-44-R
R	(2½", 3") Long Body, Square Mesh size 16, Space Btw Wire 0.045", Micron Rating 1130, Open Area 50.7%	F2-2½-44-R
P	(1", 1½", 2") Short Body, Square Mesh size 20, Space Btw Wire 0.034", Micron Rating 864, Open Area 46.2%	F1-1-44-P
P	(2½", 3") Short Body, Square Mesh size 20, Space Btw Wire 0.034", Micron Rating 864, Open Area 46.2%	F1-2½-44-P
P	(1½", 2") Long Body, Square Mesh size 20, Space Btw Wire 0.034", Micron Rating 864, Open Area 46.2%	F2-1½-44-P
P	(2½", 3") Long Body, Square Mesh size 20, Space Btw Wire 0.034", Micron Rating 864, Open Area 46.2%	F2-2½-44-P
T	(1", 1½", 2") Short Body, Square Mesh size 30, Space Btw Wire 0.021", Micron Rating 533, Open Area 40.8%	F1-1-44-T
T	(2½", 3") Short Body, Square Mesh size 30, Space Btw Wire 0.021", Micron Rating 533, Open Area 40.8%	F1-2½-44-T
T	(1½", 2") Long Body, Square Mesh size 30, Space Btw Wire 0.021", Micron Rating 533, Open Area 40.8%	F2-1½-44-T
T	(2½", 3") Long Body, Square Mesh size 30, Space Btw Wire 0.021", Micron Rating 533, Open Area 40.8%	F2-2½-44-T
J	(1", 1½", 2") Short Body, Square Mesh size 40, Space Btw Wire 0.015", Micron Rating 381, Open Area 36.0%	F1-1-44-J
J	(2½", 3") Short Body, Square Mesh size 40, Space Btw Wire 0.015", Micron Rating 381, Open Area 36.0%	F1-2½-44-J
J	(1½", 2") Long Body, Square Mesh size 40, Space Btw Wire 0.015", Micron Rating 381, Open Area 36.0%	F2-1½-44-J
J	(2½", 3") Long Body, Square Mesh size 40, Space Btw Wire 0.015", Micron Rating 381, Open Area 36.0%	F2-2½-44-J
N	(1", 1½", 2") Short Body, Square Mesh size 50, Space Btw Wire 0.011", Micron Rating 279, Open Area 30.3%	F1-1-44-N
N	(2½", 3") Short Body, Square Mesh size 50, Space Btw Wire 0.011", Micron Rating 279, Open Area 30.3%	F1-2½-44-N
N	(1½", 2") Long Body, Square Mesh size 50, Space Btw Wire 0.011", Micron Rating 279, Open Area 30.3%	F2-1½-44-N
N	(2½", 3") Long Body, Square Mesh size 50, Space Btw Wire 0.011", Micron Rating 279, Open Area 30.3%	F2-2½-44-N
F	(1", 1½", 2") Short Body, Square Mesh size 60, Space Btw Wire 0.009", Micron Rating 229, Open Area 30.3%	F1-1-44-F
F	(2½", 3") Short Body, Square Mesh size 60, Space Btw Wire 0.009", Micron Rating 229, Open Area 30.3%	F1-2½-44-F
F	(1½", 2") Long Body, Square Mesh size 60, Space Btw Wire 0.009", Micron Rating 229, Open Area 30.3%	F2-1½-44-F
F	(2½", 3") Long Body, Square Mesh size 60, Space Btw Wire 0.009", Micron Rating 229, Open Area 30.3%	F2-2½-44-F
L	(1", 1½", 2") Short Body, Square Mesh size 80, Space Btw Wire 0.007", Micron Rating 178, Open Area 31.4%	F1-1-44-L
L	(2½", 3") Short Body, Square Mesh size 80, Space Btw Wire 0.007", Micron Rating 178, Open Area 31.4%	F1-2½-44-L
L	(1½", 2") Long Body, Square Mesh size 80, Space Btw Wire 0.007", Micron Rating 178, Open Area 31.4%	F2-1½-44-L
L	(2½", 3") Long Body, Square Mesh size 80, Space Btw Wire 0.007", Micron Rating 178, Open Area 31.4%	F2-2½-44-L
K	(1", 1½", 2") Short Body, Square Mesh size 100, Space Btw Wire 0.006", Micron Rating 140, Open Area 30.3%	F1-1-44-K
K	(2½", 3") Short Body, Square Mesh size 100, Space Btw Wire 0.006", Micron Rating 140, Open Area 30.3%	F1-2½-44-K
K	(1½", 2") Long Body, Square Mesh size 100, Space Btw Wire 0.006", Micron Rating 140, Open Area 30.3%	F2-1½-44-K
K	(2½", 3") Long Body, Square Mesh size 100, Space Btw Wire 0.006", Micron Rating 140, Open Area 30.3%	F2-2½-44-K
H	(1", 1½", 2") Short Body, Square Mesh size 120, Space Btw Wire 0.005", Micron Rating 117, Open Area 30.7%	F1-1-44-H
H	(2½", 3") Short Body, Square Mesh size 120, Space Btw Wire 0.005", Micron Rating 117, Open Area 30.7%	F1-2½-44-H
H	(1½", 2") Long Body, Square Mesh size 120, Space Btw Wire 0.005", Micron Rating 117, Open Area 30.7%	F2-1½-44-H
H	(2½", 3") Long Body, Square Mesh size 120, Space Btw Wire 0.005", Micron Rating 117, Open Area 30.7%	F2-2½-44-H
M	(1", 1½", 2") Short Body, Square Mesh size 150, Space Btw Wire 0.004", Micron Rating 104, Open Area 37.4%	F1-1-44-M
M	(2½", 3") Short Body, Square Mesh size 150, Space Btw Wire 0.004", Micron Rating 104, Open Area 37.4%	F1-2½-44-M
M	(1½", 2") Long Body, Square Mesh size 150, Space Btw Wire 0.004", Micron Rating 104, Open Area 37.4%	F2-1½-44-M
M	(2½", 3") Long Body, Square Mesh size 150, Space Btw Wire 0.004", Micron Rating 104, Open Area 37.4%	F2-2½-44-M

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Prices and all terms and conditions of sale are established in current price sheets and are subject to change without notice. No assignment of the purchaser's rights may be made without consent of Alfa Laval Inc.

Each item is warranted to be free from manufacturing defects for a period of one (1) year from the date of shipment, providing it has been used as recommended and in accordance with recognized piping practice, and providing it has not been worn out due to severe service, such as encountered under extremely corrosive or abrasive conditions.

This warranty is expressly in lieu of any other warranties, express or implied, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose.

All claims must be in writing and must be mailed or delivered by purchaser within thirty (30) days after purchaser learns of the facts upon which such claim is based. Any claim not made in writing and within the time period specified above shall be deemed waived.

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