



Protect Your Process

The Streamline™ In-Line Filter/Strainer

PD 66372 US1 2002-05

Application

Available in long and short models, Streamline™ filters and strainers provide versatile, cost-effective filtration. Designed for maximum application flexibility, the Streamline housing accepts a wide range of disposable filter and reusable strainer media. They are ideal for use in the dairy, food, beverage, meat and poultry, cosmetics, and pharmaceutical industries.

Working Principle

The Streamline™ filters and strainers are designed to promote product quality and sanitation, while protecting processing equipment such as homogenizers, meters, spray nozzles, needle valves, and pumps.

Standard Design

One of the industry's most enduring product designs, the Streamline™ offers an efficient free-flow design, corrosion-resistant 316L stainless steel, sanitary design, and lightweight construction. The Streamline is available in two lengths to provide optimum filtration area for the application. Approved for use in USDA meat and poultry inspected plants, the Streamline™ is furnished with a single screen for straining large particles or with a backup tube and over screen with small perforations for removing finer particles.

Model SMS Strainers or FMS filters feature convenient side-entry and a pullout top (similar to Mainstream® design) for easy servicing without removal from the process line.



The Streamline™ In-Line Filter/Strainer



Filtration

Streamline filters can be furnished with any one of seven filtering media, down to 38 microns, including nonwoven rayon, cotton cheesecloth, nylon mesh and woven nylon.



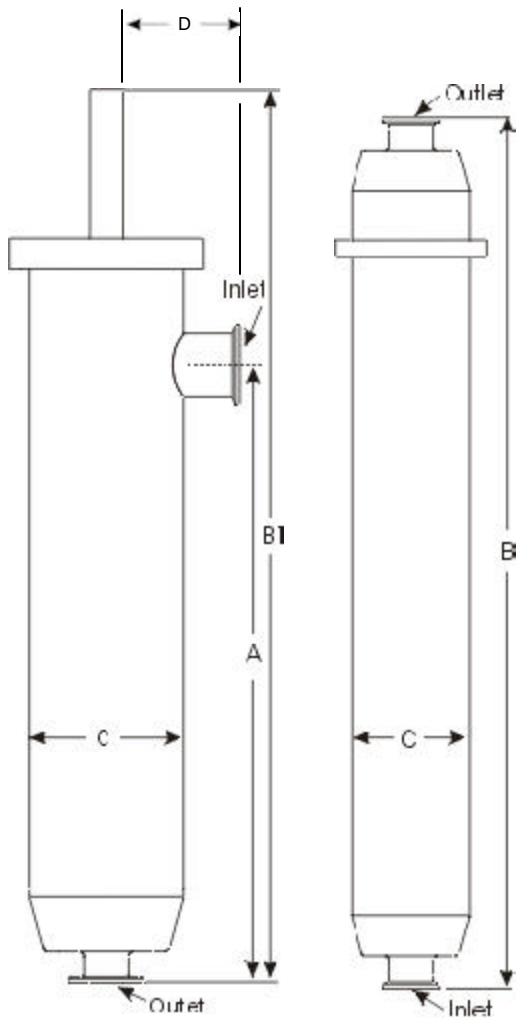
Fine or Medium Strainer

Complete with a backup tube and overscreen with small perforations or wire mesh for removing finer particles (73 to 1130 microns).



Coarse Strainer

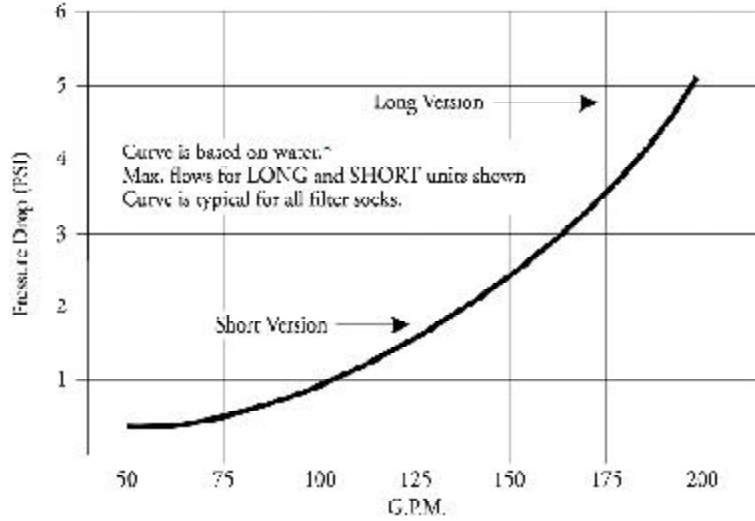
Furnished with a single perforated screen for straining large particles.



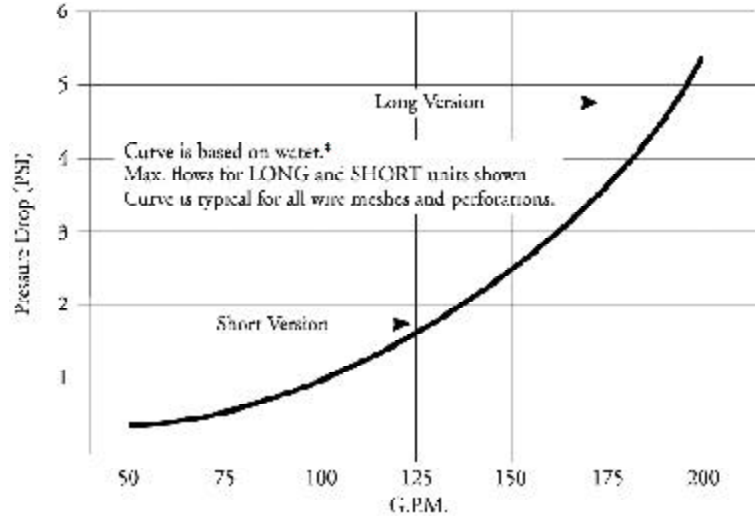
Side-Entry Streamline

Standard Streamline

Filter Pressure Drop Curves
Streamline Filters Model 1 and 2



Strainer Pressure Drop Curves
Streamline Strainers Model 1 and 2



* Contact Alfa Laval for sizing of non-water applications.

Streamline Dimensions (inches)

Connection Size		Tri-Clamp® Connections				Outer Assembly Diameter (in.) C	Effective Filter Area (ft. ²)
		Length (in.) A	Length (in.) B	Length (in.) B ₁	Length (in.) D		
Short	1	15 ³ / ₈	15 ³ / ₄	22 ¹ / ₄	3 ¹ / ₂	4	0.65
	1½	15 ³ / ₈	15 ³ / ₄	22 ¹ / ₄	3 ¹ / ₂	4	0.65
	2	15 ³ / ₈	15 ³ / ₄	22 ¹ / ₄	3 ¹ / ₂	4	0.65
	2½	15 ³ / ₈	15 ³ / ₄	22 ¹ / ₄	5	4½	0.75
	3	15 ³ / ₈	15 ³ / ₄	22 ¹ / ₄	5	4½	0.75
Long	1½	35	35 ³ / ₈	41 ⁷ / ₈	3 ¹ / ₂	4	1.95
	2	35	35 ³ / ₈	41 ⁷ / ₈	3 ¹ / ₂	4	1.95
	2½	35	35 ³ / ₈	41 ⁷ / ₈	5	4½	2.25
	3	35	35 ³ / ₈	41 ⁷ / ₈	5	4½	2.25

Replacement Strainer Selection

Perforated Metal Strainer Single Screens						Perforated Metal Over Screens					
Screen Part No.	Port Connections	Gauge	Hole Diameter (in.)	Holes Per Square Inch	Percent of Open Area	Screen Part No.	Gauge	Hole Diameter (in.)	Micron Rating	Holes Per Square Inch	Percent of Open Area
09G*	1, 1 1/2, 2	14	1/4 / .250	9	58	44A	26	.033	838	236	20
	2 1/2, 3	12	1/4 / .250	9	58	44B	26	.050	1270	132	26
09D	1, 1 1/2, 2	16	3/32 / .093	47	33	44C	26	.062	1590	97	30
09E	1, 1 1/2, 2	14	1/8 / .125	33	40	44U**	26	.040	1015	179	23
	2 1/2, 3	12	1/8 / .125	33	40						
09V	2 1/2, 3	16	3/16 / .187	18	51						

* Note: All strainers using over screens require a backup tube — the recommended type G screen will be furnished as standard backup tube in all Alfa Laval filters and strainers.

** Available only in long units.

Wire Cloth Mesh Over Screens

Screen Part No.	Square Mesh Size	Space Between Wires (in.)	Micron Rating	Percent of Open Area
44R	16	0.045	1130	50.7
44P	20	0.034	864	46.2
44T	30	0.021	533	40.8
44J	40	0.015	381	36.0
44N	50	0.011	279	30.3
44F	60	0.009	229	30.3
44L	80	0.007	178	31.4
44K	100	0.006	140	30.3
44H	120	0.005	117	30.7
44M	150	0.004	104	37.4

Replacement Filter Media Schedule

Media	Micron Rating*	Description
30A	38	Non-woven rayon (glued seam)
30B	513	Woven knapped cotten flannel
30C	300	Cheese cloth, single thickness cotton
30D	765	Nylon, 26/29 mesh, rectangular opening, (.025" x .030")
30E	40-42	Non-woven rayon
30F	<40	Non-woven rayon
30G	420	Woven nylon, 40 mesh

* Estimated

Materials

Product wetted steel parts	AISI type 316/316L Stainless Steel
Other steel parts	AISI type 304 Stainless Steel
Finish	32 μ -inch (0.8mm) Ra on product contact surfaces
Product wetted seals	Buna, SFY (fluorelastomer)

Technical data

Pressure range	300 PSI at 70°F 180 PSI at 210°F
Maximum Differential Pressure	Single strainer - 50PSI Overscreen - 25 PSI Filter - 15 PSI
Temperature range	250°F max (with fluorelastomer gaskets)

Ordering

Please state the following when ordering:

- Filter or strainer
- In-line or side-inlet
- Long or short unit
- Connection size
- Filter or strainer choice



Streamline units with filters or perforated metal strainers are authorized to carry the 3A symbol.