

# Protect Your Process

## The Streamline™ In-Line Filter/Strainer

### 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 five filtering media, down to 40 microns, including polyester, cotton cheesecloth and nylon mesh.



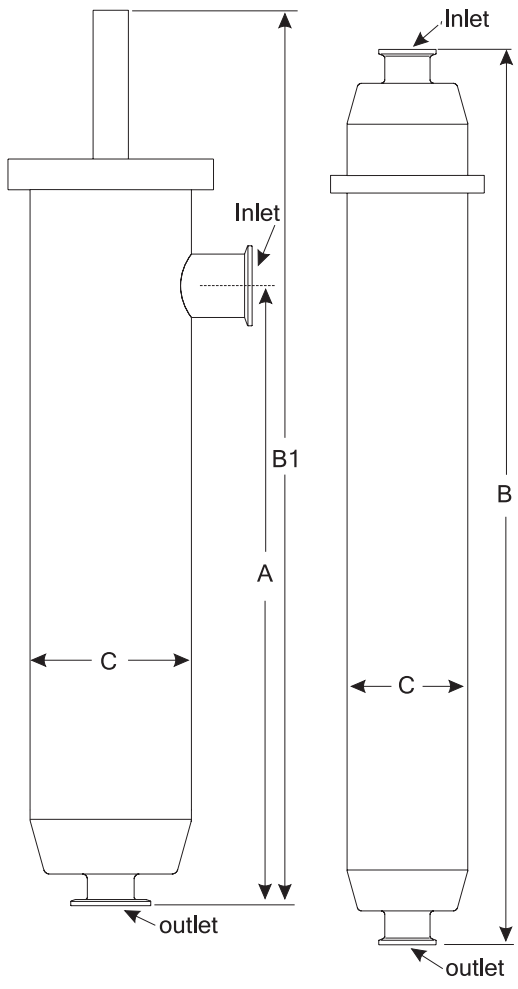
### Fine or Medium Strainer

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.

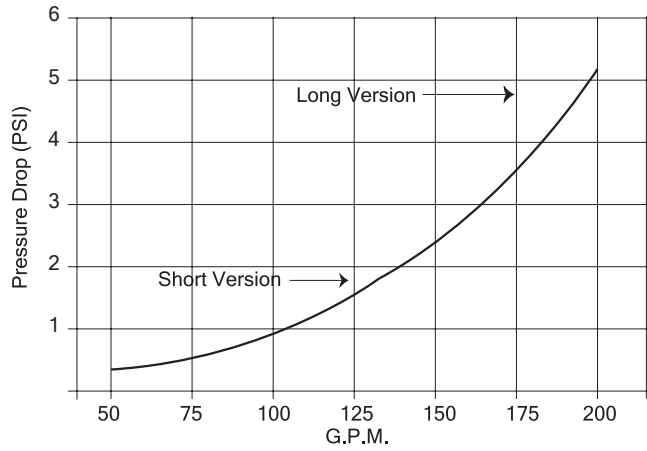


Side-Entry Streamline

Standard Streamline

Filter Pressure Drop Curves.

Streamline Filters Model 1 and 2



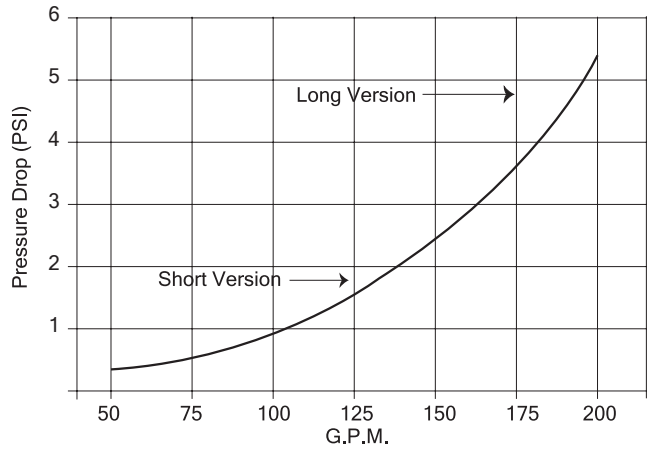
Curve is based on water.\*.

Max. flows for LONG and SHORT units shown.

Curve is typical for all filter socks.

Strainer Pressure Drop Curves.

Streamline Strainers Model 1 and 2



Curve is based on water.\*.

Max. flows for LONG and SHORT units shown.

Curve is typical for all wire meshes and perforations.

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

Streamline Dimensions (inches)

| Connection Size |    | Tri-Clamp® Connections |                   |                    |                   | Outer Assembly Diameter (in.) | Effective Filter Area (ft. <sup>2</sup> ) |
|-----------------|----|------------------------|-------------------|--------------------|-------------------|-------------------------------|---|
|                 |    | Length (in.)<br>A      | Length (in.)<br>B | Length (in.)<br>B1 | Length (in.)<br>D |                               |   |
| Short           | 1  | 15 <sup>3/8</sup>      | 15 <sup>3/4</sup> | 22 <sup>1/4</sup>  | 3 <sup>1/2</sup>  | 4                             | 0.65                                      |
|                 | 1½ | 15 <sup>3/8</sup>      | 15 <sup>3/4</sup> | 22 <sup>1/4</sup>  | 3 <sup>1/2</sup>  | 4                             | 0.65                                      |
|                 | 2  | 15 <sup>3/8</sup>      | 15 <sup>3/4</sup> | 22 <sup>1/4</sup>  | 3 <sup>1/2</sup>  | 4                             | 0.65                                      |
|                 | 2½ | 15 <sup>3/8</sup>      | 15 <sup>3/4</sup> | 22 <sup>1/4</sup>  | 5                 | 4½                            | 0.75                                      |
|                 | 3  | 15 <sup>3/8</sup>      | 15 <sup>3/4</sup> | 22 <sup>1/4</sup>  | 5                 | 4½                            | 0.75                                      |
| Long            | 1½ | 35                     | 35 <sup>3/8</sup> | 41 <sup>7/8</sup>  | 3 <sup>1/2</sup>  | 4                             | 1.95                                      |
|                 | 2  | 35                     | 35 <sup>3/8</sup> | 41 <sup>7/8</sup>  | 3 <sup>1/2</sup>  | 4                             | 1.95                                      |
|                 | 2½ | 35                     | 35 <sup>3/8</sup> | 41 <sup>7/8</sup>  | 5                 | 4½                            | 2.25                                      |
|                 | 3  | 35                     | 35 <sup>3/8</sup> | 41 <sup>7/8</sup>  | 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         | 12    | 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                     | 0.045         | 50.7                 |
| 44P             | 20               | 0.034                     | 0.034         | 46.2                 |
| 44T             | 30               | 0.021                     | 0.021         | 40.8                 |
| 44J             | 40               | 0.015                     | 0.015         | 36.0                 |
| 44N             | 50               | 0.011                     | 0.011         | 30.3                 |
| 44F             | 60               | 0.009                     | 0.009         | 30.3                 |
| 44L             | 80               | 0.007                     | 0.007         | 31.4                 |
| 44K             | 100              | 0.006                     | 0.006         | 30.3                 |
| 44H             | 120              | 0.005                     | 0.005         | 30.7                 |
| 44M             | 150              | 0.004                     | 0.004         | 37.4                 |
| 44S             | 200              | 0.029                     | 73            | 33.6                 |

Replacement Filter Media Schedule

| Media | Micron Rating* | Description   |
|-------|----------------|---|
| 30B   | 513            | Woven knapped cotten flannel                            |
| 30C   | 300            | Cheese cloth, single thickness cotton                   |
| 30D   | 765            | Nylon, 26/29 mesh, rectangular opening, (.025" x .030") |
| 30G   | 420            | Nylon, 40 mesh  |
| 30H   | 40             | Polyester (sewn seam)                                   |

\* 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<br>180 PSI at 210°F                               |
| Maximum Differential Pressure . . . . . | .Single strainer - 50PSI<br>Overscreen - 25 PSI<br>Filter - 15 PSI |
| Temperature range . . . . .             | .250°F max (with fluorelastomer gaskets)                           |

**Ordering**

Please state the following when ordering:

- Filter of 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.