## Stamped Steel Filter Silencers

### FS Series ¼” - 1”

#### Features
- High grade filter element with integrated gasket seal
- Fully drawn weatherhood
- Tubular silencing design: tube maximizes attenuation and air flow while minimizing pressure drop
- Corrosive resistant black powder coat carbon steel
- Ability to mount vertically and horizontally

#### Technical Specifications
- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20” H2O over initial Δ P
- Polyester: 99%+ removal efficiency standard to 10 micron
- Paper: 99%+ removal efficiency standard to 2 micron
- Pressure drop graphs available upon request

#### Options
- Various media for different environments
- Straight through configuration
- Various nonstandard finishes and connection styles

### Options

<table>
<thead>
<tr>
<th>MPT Outlet</th>
<th>Assembly SCFM Rating</th>
<th>Assembly Part Number Polyester</th>
<th>Paper</th>
<th>Dimensions - inches</th>
<th>Suggested Service Ht. inches</th>
<th>No. of Silencing Tubes</th>
<th>Approx. Weight lbs</th>
<th>Replacement Element Part No. Polyester</th>
<th>Paper</th>
<th>Element SCFM Rating</th>
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<tbody>
<tr>
<td>¼”</td>
<td>4</td>
<td>FS-05-025</td>
<td>FS-04-025</td>
<td>2 ⅜ ⅝ ⅝</td>
<td>1 1</td>
<td>0.25</td>
<td>05™ 04™</td>
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<td>⅜”</td>
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<td>FS-05-038</td>
<td>FS-04-038</td>
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<td>FS-07-038</td>
<td>FS-06-038</td>
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<td>2 1</td>
<td>0.50</td>
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<td>FS-07-050</td>
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<td>FS-10-075</td>
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</tbody>
</table>

See Filter Silencer Technical Data for sizing guidelines.
Stampeded Steel Filter Silencers

FS Series ½” - 6”

Features

■ Fully drawn weatherhood
■ Tubular silencing design - tubes are positioned to maximize attenuation and air flow while minimizing pressure drop
■ Corrosive resistant gray powder coat carbon steel

Technical Specifications

■ Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
■ Filter change out differential: 15-20” H₂O over initial Δ P
■ Pressure drop graphs available upon request
■ Polyester: 99%+ removal efficiency standard to 5 micron
■ Paper: 99%+ removal efficiency standard to 2 micron

Options

■ Tap holes available
■ Pressure drop indicator
■ Various media for different environments
■ Stainless steel construction
■ Various nonstandard finishes and connection styles
■ Side Access Silencer Filters (LQB Series) for space restricted enclosures (select models)

ATEX Available

Rev: FS .5-6-US1020K

Sales/Service: 630.773.1363
sales@solbergmfg.com
### FS Series ½” - 6”

#### Assembly Part Number & Dimensions

<table>
<thead>
<tr>
<th>MPT Outlet</th>
<th>Assembly SCFM Rating</th>
<th>Assembly Part Number</th>
<th>Dimensions - inches</th>
<th>Suggested Service ht.</th>
<th>No. of Silencing Tubes</th>
<th>Approx. Weight lbs.</th>
<th>Replacement Element Part No.</th>
<th>Element SCFM Rating</th>
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<tbody>
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<td>10</td>
<td>FS-15-050</td>
<td>Polyester Paper</td>
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<tr>
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<td>FS-31P-250</td>
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<td>A: 7 ½ B: 2 ½ C: 10</td>
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<td>8</td>
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<td>231P™ 230P™</td>
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<td>A: 12 ¼ B: 2 ¾ C: 12 ¼</td>
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<tr>
<td>4½”</td>
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<td>FS-275P-400</td>
<td>Polyester Paper</td>
<td>A: 14 4 B: 16 C: 10</td>
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<tr>
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<table>
<thead>
<tr>
<th>Pattern</th>
<th>Dimensions - inches</th>
<th>No. of Holes</th>
<th>Flange Thickness</th>
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<tbody>
<tr>
<td>O.D.</td>
<td>B.C.</td>
<td>B.H.</td>
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<tr>
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<td>5”</td>
<td>10</td>
<td>8 ½</td>
<td>0.88</td>
</tr>
<tr>
<td>6”</td>
<td>11</td>
<td>9 ½</td>
<td>0.88</td>
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</table>

See Filter Silencer Technical Data for sizing guidelines.
Technical Data

Inlet Filter Silencers, Silencers

Applications & Equipment
- Industrial & Severe Duty
- Blowers - Side Channel & P.D.
- Breathers
- Fuel Cells
- Piston Compressors
- Screw Compressors
- Centrifugal Compressors
- Hydraulic Breathers – fine filtration
- Engines
- Fans
- Vacuum Pumps & Systems
- Construction\Contractor Industry
- Medical
- Pneumatic Conveying
- Waste Water Aeration
- Sparging
- Factory Air
- Vacuum Vent Breathers
- Cement Processing
- Power Plants
- Centralized Air Intakes

Identification
Standard Solberg assemblies should have an identification label/nameplate that gives the following information:
- Assembly Model #
- Replacement Element #
The part number designates the filter type, the element configuration and housing connection size. For example, the following part number identifies the filter as being an “FS” design filter with a “275” element, “P” prefilter and 3” MPT connection size.

FS-275P-300

Connection Size and Type
Replacement Element Part Number
Filter Type

Typical Noise Attenuation
See chart for typical noise attenuation for filter silencers. It may vary due to the wide range of applications, installations, and machines.

Typical Noise Attenuation
Choosing the Best Filter for Your Equipment

A. When the connection & airflow is known:
   1. Select the appropriate connection style. (i.e.: MPT, Flange, NPSC, etc.)
      a. Verify assembly SCFM (flow) rating. Compare with your required airflow.
         (Note: Assembly flow ratings are based on 6,000 FPM or 30m/sec for a given connection size to achieve low pressure drop performance. When required flow exceeds assembly flow rating, the pressure drop through the outlet connection will increase. In such cases select by element SCFM (flow) rating.)
      b. Verify that the flow rating matches connection size; skip to “C. Selecting Elements”.

B. When the connection size is unknown, flexible, or the required flow rating exceeds assembly flow rating:
   1. Match required flow rating with the element flow rating.
   2. Choose related connection size.

C. Selecting Elements: The filter performance is influenced by the actual application duty and the equipment it is installed on. Regular maintenance checks and proper servicing is required.

   Application Duty Descriptions:
   Industrial Duty: clean workshop or clean outdoor environment - small element sizing is sufficient.
   Severe Duty: dirty workshop, wastewater – medium to large element is recommended.
   Extreme Duty: cement, steel making, plastics or dusty material conveying – largest element sizing is recommended.
   1. Select media required by your application. Options include:
      a. Standard media
         1. Polyester: all purpose; withstands pulses, moisture, and oily air
         2. Paper: mostly dry, smooth flow applications
      b. Special Media: for a variety of micron levels and media types, see the “Filter Media Specifications” in the Replacement Element Section or contact Solberg.
   2. Select element size by matching the element with the anticipated duty and upsize accordingly.

Filter Assembly Maintenance

Request the appropriate maintenance manual for more in-depth information from your Solberg representative or on our website www.solbergmfg.com.

Element Maintenance

Solberg elements should be replaced once the pressure drop reaches 15-20” H2O above the initial pressure drop of the installation. Cleaning the element is also an option.

Solberg recommends replacing dirty elements for optimal performance. Any damage which results from by-pass or additional pressure drop created by element cleaning is the sole responsibility of the operator.

Note: The overall performance of a filter element is altered once cleaned. The initial pressure drop after subsequent cleanings will be greater than the original, clean pressure drop of the element. After each cleaning, the pressure drop will continue to increase. Under all circumstances, the initial pressure drop of the element needs to be maintained at less than 15” H2O.

If the pressure drop exceeds 20” H2O at start-up; it should be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the manufacturer’s recommended maximum pressure drop for their specific equipment.