

# **Compact Discharge Filter Silencer**

## EFS Series 3/8"- 1", NW16 - NW25

#### **Features**

- Compact design combines both filtration efficiency and noise reduction
- Integrated inlet diffuser optimizes sound attenuation
- Multi-stage noise reducing features including final stage sound absorbent insert
- Tubular silencing design tube is positioned to maximize attenuation and air flow while minimizing pressure drop
- Patented high grade element with built-in Butterfly gasket seal which creates positive seal between housing hemispheres and a new seal with each element
- Seamless drawn housings
- Corrosive resistant black powder coat carbon steel
- Ability to mount vertically, horizontally

#### **Technical Specifications**

- Polyester: 99%+ removal efficiency to 25 micron
- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)

#### Options

- Over pressure relief valve
- Zinc clear plated finish
- HEPA filter media (99.97% efficient @ 0.3 microns)
- Custom inlet connections to match pump discharge
- Straight-through versions to remote pipe exhaust

Inlet/Outlet		Assembly SCFM	Assembly	Dimensions - inches			Suggested Service ht.	Approx. Weight	Replacement Element
Size	Туре	Rating	Part Number	Α	В	С	inches	lbs	Part No.
3/8"	MPT	2.1	EFS-05-038/1	2 3⁄4	5/8	2 1/2	1	0.50	05
1⁄2″	MPT	9	EFS-07-050/1	3 3⁄4	7⁄8	3 1⁄4	2	0.75	07
NW16	ISO Flg	9	EFS-07-NW16/1	3 3⁄4	7⁄8	3 1/4	2	0.75	07
NW25	ISO Flg	11	EFS-07-NW25/1	3 3⁄4	7⁄8	3 1⁄4	2	0.75	07
1″	MPT	24	EFS-11-100/2	4 1/2	7⁄8	3 1⁄4	2	1.25	11
NW25	ISO Flg	24	EFS-11-NW25/2	4 1/2	7⁄8	4 1/8	2	1.25	11

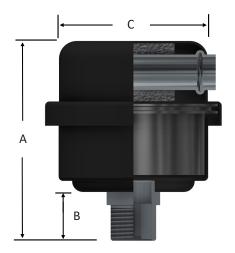


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www.solbergmfg.com

All model offerings and design parameters are subject to change without prior notice. Contact your representative or Solberg for the most current information.







## **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

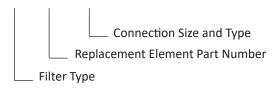
#### Identification

Standard Solberg assemblies should have an identification label/nameplate that gives the following information:

- Assembly Model #
- Replacement Element #

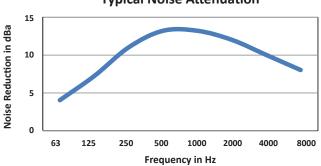
The part number designates the filter type, the element configuration and housing connection size. For example, the following part number identifies the filter as being an "FS" design filter with a "275" element, "P" prefilter and 3" MPT connection size.

#### FS-275P-300



#### **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** 

Rev: IFSTD-US1904K

## Inlet Filter Silencers, Silencers

#### 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.)

2. check 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.)

3. when required 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'' H<sub>2</sub>O 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  $15'' H_2O$ .

If the pressure drop exceeds  $20^{\prime\prime}$  H<sub>2</sub>O 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.



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