

Miniature Filter Silencers

FS Series 1/4" - 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

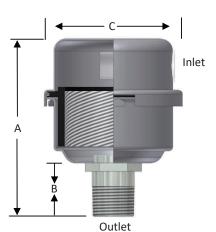
Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial ∆ 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





MPT	Assembly SCFM	Assembly Part Number		Dimensions - inches			Suggested	No. of Silencing	Approx. Weight lbs	Replacement Element Part No.		Element
Outlet	Rating	Polyester	Paper	A	В	С	Service Ht. inches	Tubes	lbs	Polyester Paper		SCFM Rating
1/4"	4	FS-05-025	FS-04-025	2 3/4	11/16	2 ½	1	1	0.25	05	04	8
3/8"	8	FS-05-038	FS-04-038	2 3/4	11/16	2 ½	1	1	0.25	05	04	8
3/8"	8	FS-07-038	FS-06-038	3 %16	11/16	3 1/4	2	1	0.50	07	06	12
1/2"	8	FS-05-050	FS-04-050	3	7/8	2 ½	1	1	0.25	05	04	8
1/2"	12	FS-07-050	FS-06-050	3 3/4	7/8	3 1/4	2	1	0.50	07	06	12
1/2"	12	FS-11-050	FS-10-050	4 3/16	7/8	4 1/4	2	1	1	11	10	35
3/4"	12	FS-07-075	FS-06-075	4 1/8	1 1/4	3 1/4	2	1	0.50	07	06	12
3/4"	25	FS-11-075	FS-10-075	4 ½	1 1/4	4 3/16	2	1	1	11	10	35
1"	35	FS-11-100	FS-10-100	4 ½	1 1/4	4 3/16	2	1	1	11	10	35

See Filter Silencer Technical Data for sizing guidelines.

Rev: FS .25-US1905K



Compact Filter Silencers

FS Series 1/2" - 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 △ P
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options



ATEX Available

- 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)



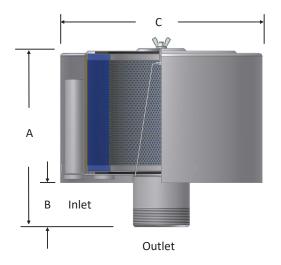
Threaded Outlet Assembly

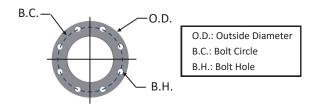


Flange Outlet Assembly

Rev: FS .5-6-US1903K

FS Series 1/2" - 6"





125/150# Pattern	Dime	ensions - in	ches	No. of	Elango	
Flange	O.D.	B.C.	в.н.	Holes	Flange Thickness	
4"	9	7 ½	0.75	8	0.5	
5"	10	8 ½	0.88	8	0.5	
6"	11	9 ½	0.88	8	0.5	

MPT	Assembly Assembly Part Number SCFM		Part Number	Dime	nsions - ir	nches	Suggested Service ht.	No. of Silencing	Approx. Weight	Replace Element		Element SCFM
Outlet	Rating	Polyester	Paper	Α	В	С	inches	Tubes	lbs.	Polyester	Paper	Rating
1/2"	10	FS-15-050	FS-14-050	3 1/16	1	6	3	1	2	15	14	35
3/4"	25	FS-15-075	FS-14-075	4	1 1/4	6	3	2	2	15	14	35
1"	35	FS-15-100	FS-14-100	4	1 1/16	6	3	3	2	15	14	35
1"	55	FS-19P-100	FS-18P-100	6 3/8	1 1/16	6	5	3	3	19P	18P	100
1 1/4"	70	FS-19P-125	FS-18P-125	6 3/4	1 1/8	6	5	5	3	19P	18P	100
1 ½"	85	FS-19P-150	FS-18P-150	6 3/4	1 1/8	6	5	5	4	19P	18P	100
2"	135	FS-31P-200	FS-30P-200	7 ½	2 1/4	10	5	5	8	31P	30P	195
2"	135	FS-231P-200	FS-230P-200	12	2 3/8	10	10	5	14	231P	230P	300
2 ½"	195	FS-31P-250	FS-30P-250	7 ½	2 ½	10	5	5	8	31P	30P	195
2 ½"	195	FS-231P-250	FS-230P-250	12 3/8	2 1/8	10	10	9	15	231P	230P	300
3"	300	FS-231P-300	FS-230P-300	12 3/4	3 1/8	10 1/4	10	9	15	231P	230P	300
3"	300	FS(12)-235P-300	FS(12)-234P-300	12 1/8	2 11/16	12 1/4	10	3	29	235P	234P	570
3"	300	FS-275P-300	FS-274P-300	13	3	16	10	9	33	275P	274P	1100
4"	520	FS(12)-235P-400	FS(12)-234P-400	13 %	3 ¹ / ₁₆	12 1/4	10	6	29	235P	234P	570
4"	520	FS-275P-400	FS-274P-400	14	4	16	10	9	34	275P	274P	1100
5"	800	FS-245P-500	FS-244P-500	14	4 1/8	16	10	14	33	245P	244P	880
5"	800	FS-275P-500	FS-274P-500	14	4 1/8	16	10	14	36	275P	274P	1100
6"	1100	FS-275P-600	FS-274P-600	15	5 1/8	16	10	18	38	275P	274P	1100

Flange	Assembly SCFM	Assembly Part Number		Dimensions - inches		Suggested Service ht.	No. of Silencing	Approx. Weight	Replace Element		Element SCFM	
Outlet	Rating	Polyester	Paper	Α	В	С	inches	Tubes	lbs.	Polyester	Paper	Rating
4"	520	FS(12)-235P-400F	FS(12)-234P-400F	13 1/8	3 ¹ / ₁₆	12 1/4	10	6	32	235P	234P	570
4"	520	FS-275P-400F	FS-274P-400F	14	4	16	10	9	39	275P	274P	1100
5"	800	FS-245P-500F	FS-244P-500F	14	4 1/8	16	10	14	38	245P	244P	880
5"	800	FS-275P-500F	FS-274P-500F	14	4 1/8	16	10	14	41	275P	274P	1100
6"	1100	FS-275P-600F	FS-274P-600F	15	5 1/8	16	10	18	42	275P	274P	1100

See Filter Silencer Technical Data for sizing guidelines.





Big Boy Filter Silencers

FS Series 6" - 14"

Features

- Tubular silencing design tubes are positioned to maximize attenuation and air flow while minimizing pressure drop
- Corrosive resistant gray powder coat carbon steel
- Low pressure drop center bracket & outlet pipe design

Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial △ 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)

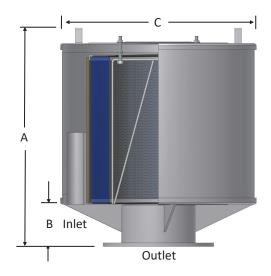
Sumo Class Features

- Single barrel filter design allows for large airflows in space restricted work areas
- 16" to 24" flange connections available
- Designed for airflows up to 8000 SCFM



Rev: FS 6-14-US1903K

FS Series 6" - 14"



Flange	Assembly Assembly Part Number SCFM		Dimensions - inches		Suggested Service ht.	No. of Silencing	Approx. Weight	Replaceme Part		Element SCFM		
Outlet	Rating	Polyester	Paper	Α	В	С	inches	Tubes	lbs	Polyester	Paper	Rating
6"	1100	FS-377P-600F	FS-376P-600F	22 11/16	5 1/4	21 1/8	15	6	95	377P	376P	1825
8"	1800	FS-377P-800F	FS-376P-800F	23 ½	6	21 %	15	12	105	377P	376P	1825
8"	1800	FS-385P-800F	FS-384P-800F	24	6	28 1/16	15	12	125	385P	384P	3295
10"	3300	FS-385P-1000F	FS-384P-1000F	23 ½	6	28 1/16	15	16	130	385P	384P	3295
10"	3300	FS-485P-1000F	FS-484P-1000F	31 ½	6	28 1/16	22	16	143	485P	484P	4705
12"	4700	FS-485P-1200F	FS-484P-1200F	31 ½	6	28 1/16	22	24	155	485P	484P	4705
12"	4700	FS-685P-1200F	FS-384P(2)-1200F	38 ½	6	28 1/16	29	24	175	685P	384P (2)	6600
14"	6000	FS-485P(2)-1400F	FS-484P(2)-1400F	53 5/16	6	28 1/16	22	18	245	485P (2)	484P (2)	9410

Flange	Assembly SCFM	Assembly I	Dime	nsions - ir	nches	Suggested Service ht.	Replacement Element Part No.		
Outlet	Rating	Polyester	Paper	Α	В	С	inches	Polyester	Paper
18"	5500	FS-391-1800F	FS-390-1800F	23 ½	6	44	15	391	390
18"	8000	FS-491-1800F	FS-490-1800F	30 ½	6	44	22	491	490
20"	8000	FS-491-2000F	FS-490-2000F	30 ½	6	44	22	491	490
24"	8000	FS-491-2400F	FS-490-2400F	30 ½	6	44	22	491	490

125/150# Pattern	Dim	ensions - ir	ıches	No. of	Flores	
Flange	O.D.	B.C.	B.H.	Holes	Flange Thickness	
6"	11	9 1/2	0.88	8	0.5	
8"	13 ½	11 ¾	0.88	8	0.5	
10"	16	14 1/4	1	12	0.5	
12"	19	17	1	12	0.5	
14"	21	18 ¾	1 1/8	12	0.5	
18"	25	22 3/4	1 1/4	16	0.5	
20"	27 ½	25	1 1/4	20	0.5	
24"	32	29 ½	1 3/8	20	1.18	



O.D.: Outside Diameter B.C.: Bolt Circle B.H.: Bolt Hole

See Filter Silencer Technical Data section 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:

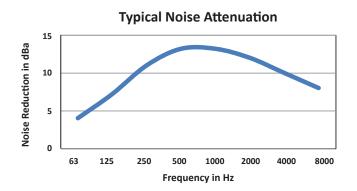
- Assembly Model #
- Replacement Element #

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.



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.



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_2O 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.

