

Technical Data

Inlet Filter Assemblies

Applications & Equipment

- Industrial & Severe Duty
- Blowers - Side Channel & Roots (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

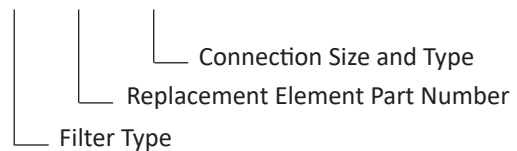
Identification

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

- Assembly Model #
- Replacement Element #

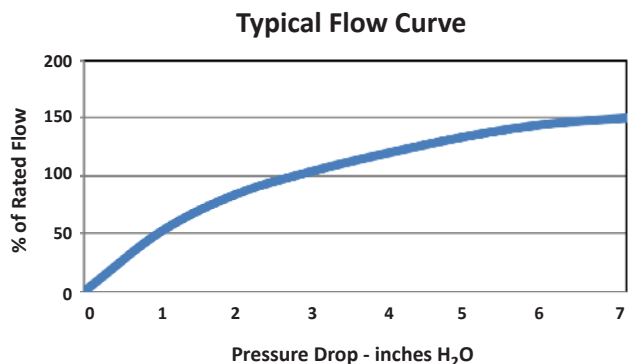
The part number designates the filter type, the element configuration and housing connection size. For example, the following part number identifies the filter as being an “F” design filter with a “385™” element, “P” prefilter and 10” flange connection size.

F-385P-1000F



Typical Flow Curve

See chart for the typical flow curve for inlet filtration housing comparing the percentage of rated flow with typical pressure drop.



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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.

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Extreme Duty Filters

SpinMeister[®] SM Series 1/2" - 12"

Overview

Intake air is drawn through the angled louver plates which direct the air to turn the rotor. The centrifugal force separates the contaminants from the airstream, throwing them to the outer perimeter of the cover, expelling them through the discharge port. Cleaner air is drawn to the lower chamber and filtered by a 99% efficient pleated element.

Benefits

- Extreme duty filtration for high dust environments
- Significantly increases life of filter element
- Cost effective

Features

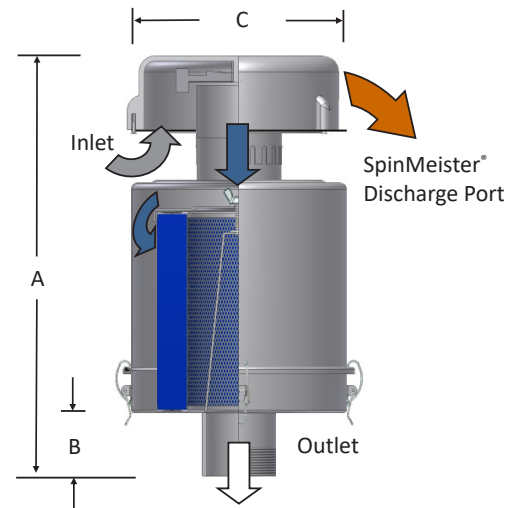
- SpinMeister[®] made of molded fiber filled composite material
- All small compact filters with seamless housings
- Corrosive resistant gray powder coat carbon steel

Technical Specifications

- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20" H₂O over initial ΔP
- Polyester: 99%+ removal efficiency to 5 micron
- Paper: 99%+ removal efficiency to 2 micron
- SpinMeister[®] Precleaner: 85% efficiency to 15 micron

Options

- Tap holes available
- SpinMeister[®] available in polished aluminum
- Selected housings available in stainless steel
- Modify to meet specific application



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Configuration A



Configuration B



Configuration C



Configuration D

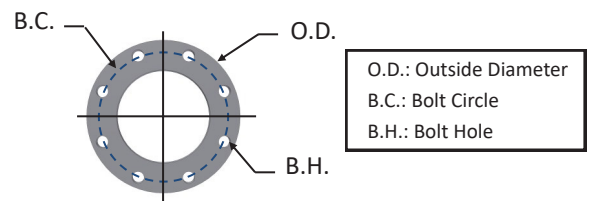
Configuration A		Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	Approx. Weight lbs.	Replacement Element Part No.		Element SCFM Rating
Outlet Size	Type		Polyester	Paper	A	B	C			Polyester	Paper	
1/2"	MPT	30	SM1.5-11-050	SM1.5-10-050	6 1/16	7/8	4 7/8	2	1.5	11™	10™	35
3/4"	MPT	30	SM1.5-11-075	SM1.5-10-075	7 1/4	1 1/4	4 7/8	2	1.5	11™	10™	35
1 1/2"	MPT	35	SM2-11-050	SM2-10-050	7 3/8	7/8	4 7/8	2	2	11™	10™	35
3/4"	MPT	35	SM2-11-075	SM2-10-075	8 1/2	1 1/4	5	2	2	11™	10™	35
1"	MPT	35	SM2-11-100	SM2-10-100	8 1/2	1 1/4	5	2	2	11™	10™	35

Configuration B												
1"	MPT	75	SM2-19P-100	SM2-18P-100	11 13/16	1	6 7/8	5	3.7	19P®	18P™	100
1 1/4"	MPT	75	SM2-19P-125	SM2-18P-125	11 13/16	2	6 7/8	5	3.7	19P®	18P™	100
1 1/2"	MPT	85	SM2-19P-150	SM2-18P-150	11 13/16	2	7 1/2	5	3.7	19P®	18P™	100
2"	MPT	100	SM2-19P-200	SM2-18P-200	12 5/16	2 1/2	7 1/2	5	4	19P®	18P™	100
2 1/2"	MPT	100	SM2-19P-250	SM2-18P-250	12 13/16	3	7 1/2	5	4	19P®	18P™	100

Configuration C												
3"	MPT	250	SM3-235P-300	SM3-234P-300	20 7/16	3	11	10	31	235P™	234P™	570
3"	MPT	300	SM4-235P-300	SM4-234P-300	19 1/2	3	11	10	32	235P™	234P™	570
4"	MPT	250	SM3-235P-400	SM3-234P-400	21 7/16	4	11	10	32	235P™	234P™	570
4"	MPT	400	SM4-235P-400	SM4-234P-400	20 1/2	4	11	10	33	235P™	234P™	570
4"	FLG	250	SM3-235P-400F	SM3-234P-400F	19 13/16	3	11	10	35	235P™	234P™	570
4"	FLG	400	SM4-235P-400F	SM4-234P-400F	20 1/2	4	11	10	36	235P™	234P™	570

Configuration D												
6"	FLG	1100	SM62-377P-600F	SM62-376P-600F	40	5	25 1/4	15	100	377P™	376P™	1825
8"	FLG	1800	SM62-377P-800F	SM62-376P-800F	41 1/8	6	25 1/4	15	103	377P™	376P™	1825
10"	FLG	2700	SM63-385P-1000F	SM63-384P-1000F	40 13/16	6	28 7/8	15	138	385P™	384P™	3295
12"	FLG	2700	SM63-485P-1200F	SM63-484P-1200F	40 13/16	6	28 7/8	22	163	485P™	484P™	4705

125/150# Pattern Flange	Dimensions - inches			No. of Holes	Flange Thickness inches
	O.D.	B.C.	B.H.		
4"	9	7 1/2	3/4	8	0.5
5"	10	8 1/2	7/8	8	0.5
6"	11	9 1/2	7/8	8	0.5
8"	13 1/2	11 3/4	7/8	8	0.5
10"	16	14 1/4	1	12	0.5
12"	19	17	1	12	0.5



See Filter Assembly Technical Data for sizing guidelines.

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

