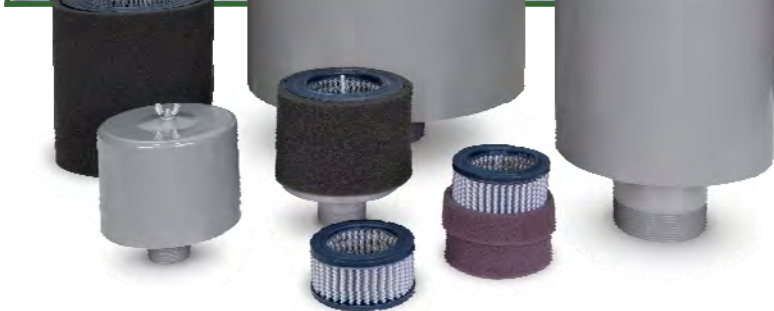


Inlet Filter Assemblies

Technical Data	pg. 3-2
Compact Inlet Filters	
F Series 1/2" BSPT - DN150 Flg, 17 - 1870 m ³ /h	pg. 3-4
Big Boy Inlet Filters	
F Series: DN200 - DN300 Flg, 3060 - 7990 m ³ /h	pg. 3-6
Large Airflow Inlet Filters	
Sumo Class Series, up to 13600 m ³ /h	pg. 3-7
Multibarrel Series, up to 42500 m ³ /h	pg. 3-7
Exposed Inlet Filters:	
FT Series: 1/4" BSPT - DN150 Flg, 12 - 7990 m ³ /h	pg. 3-8
Extreme Duty Filtration	
Spinmeister™ SM Series	pg. 3-10
Pop Up Style Pressure Drop Gauge	pg. 3-12



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
- Power Plants
- Centralized Air Intakes
- Inquires Encouraged

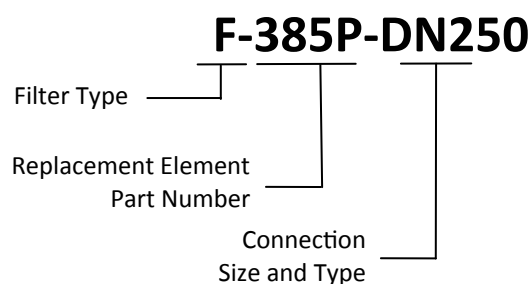
Identification

All Solberg products should have an identification label/nameplate that gives the following information:

Assembly Model #

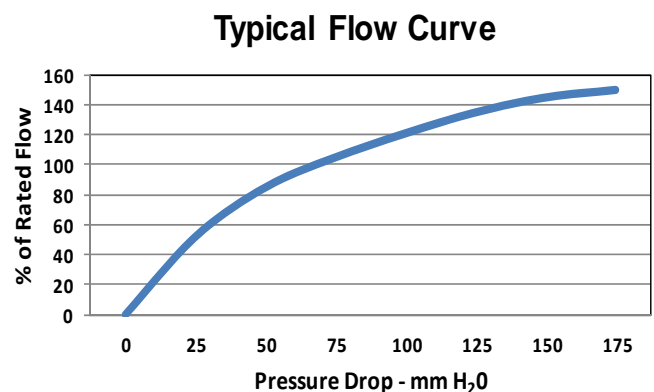
Replacement Element #

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 a “F” design filter with a “385” element, “P” prefilter and DN250 flange connection size.



Typical Flow Curve

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



Choosing the Best Filter for your Equipment

A. Connection & Airflow known:

1. Select appropriate **BSPT Outlet or FLG Outlet** and check **Assembly m³/h Rating**. Compare with your required airflow. *Note: Assembly m³/h ratings are based on 30m/sec or 6,000 FPM for a given connection size to achieve low pressure drop performance. When required flow exceeds Assembly m³/h rating, the pressure drop through the outlet connection will increase. In such cases select by element flow rating.*
2. Go to "C. Selecting Elements"

B. Connection size is unknown or flexible:

Go to "C. Selecting Elements"

C. Selecting Elements: Element selection is based on application duty Standard media are:

Polyester: all purpose; withstands pulses, moistures & oily air

Paper: mostly dry, smooth flow applications

When required flow rating (m³/h) matches connection size:

1. Multiple elements are offered to be selected by Duty (See Duty Descriptions below)
2. Match element with anticipated Duty

D. When required flow rating (m³/h) exceeds assembly flow rating or connection size is unknown:

1. Match required flow rating with **Element Flow Rating**
2. Review application by Duty and upsize accordingly
3. Choose connection size

Application Duty Descriptions: Regular maintenance checks and proper servicing is required. Actual performance is influenced by the Application Duty:

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.

Element Maintenance

Solberg elements should be cleaned or replaced, once the pressure drop reaches 37-50 mbar above the initial pressure drop of the installation.

The decision to clean the element rather than replace it is left to the discretion of the operator. 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 37 mbar.

Once the element has been cleaned, if the pressure drop exceeds 50 mbar at start-up; it must 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.

Compact Inlet Filters

F Series 1/2" - DN150 BSPT, Flange



Features

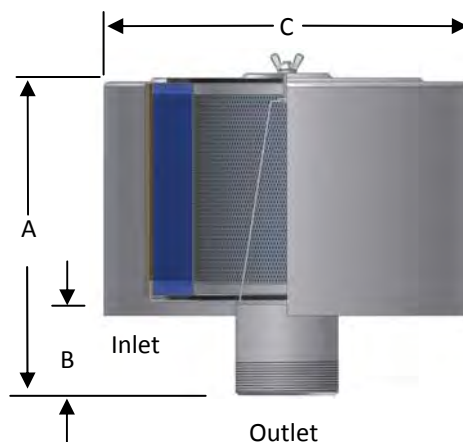
- Fully drawn weatherhood - no welds to rust or vibrate apart
- Low entry velocity air gap between base and cover
- Heavy gauge base with low pressure drop outlet pipe and center bracket design
- Durable carbon steel construction with baked enamel finish & powder coated weatherhood

Technical Specifications

- Temp (continuous): min -26°C (-15°F)
max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

- 1/8" tap holes (only available for 3" & larger connections)
- Pressure drop indicator (See page 3-12)
- Various media for different environments
- Stainless steel construction
- Epoxy coated finish
- Special connections



Outlet Connections

Outlet Size	Outlet Type	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
			Polyester	Paper	A	B	C		Polyester	Paper	
1/2"	MPT	17	F-15-050	F-14-050	102	38	152	0.68	15	14	60
3/4"	MPT	43	F-15-075	F-14-075	102	38	152	0.77	15	14	60
1"	MPT	60	F-15-100	F-14-100	102	38	152	0.86	15	14	60
1"	MPT	94	F-19P-100	F-18P-100	168	41	152	1.4	19P	18P	170
1 1/4"	BSPT	119	F-19P-126	F-18P-126	168	41	152	1.4	19P	18P	170
1 1/2"	BSPT	145	F-19P-151	F-18P-151	168	41	152	1.4	19P	18P	170
2"	BSPT	230	F-31P-201	F-30P-201	184	57	197	2	31P	30P	332
2"	BSPT	230	F-231P-201	F-230P-201	311	57	254	5	231P	230P	510
2 1/2"	BSPT	332	F-31-251	F-30-251	191	64	197	2	31	30	332
2 1/2"	BSPT	332	F-231P-251	F-230P-251	318	64	254	6	231P	230P	510
3"	BSPT	510	F-231P-301	F-230P-301	330	76	254	6	231P	230P	510
3"	BSPT	510	F-235P-301	F-234P-301	330	76	254	7	235P	234P	970
3"	BSPT	510	F-275P-301	F-274P-301	330	76	406	11	275P	274P	1870
4"	BSPT	885	F-235P-401	F-234P-401	356	102	254	7	235P	234P	970
4"	BSPT	885	F-275P-401	F-274P-401	356	102	406	12	275P	274P	1870
5"	BSPT	1360	F-245P-501	F-244P-501	356	102	406	10	245P	244P	1500
5"	BSPT	1360	F-275P-501	F-274P-501	356	102	406	12	275P	274P	1870
6"	BSPT	1870	F-275P-601	F-274P-601	381	127	406	13	275P	274P	1870

See Filter Assembly Technical Data section for sizing guidelines.

Dimension tolerance ± 6 mm

Note: MPT threaded housings are interchangeable with BSPT up to 1".

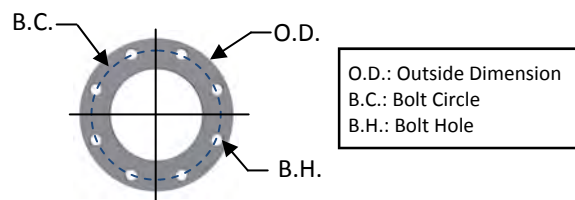
PN10 Pattern Flange Outlet Connections

Flange Outlet	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
		Polyester	Paper	A	B	C		Polyester	Paper	
DN80	510	F-275P-DN80	F-274P-DN80	330	76	406	10	275P	274P	1870
DN100	885	F-235P-DN100	F-234P-DN100	356	102	254	9	235P	234P	970
DN100	885	F-275P-DN100	F-274P-DN100	356	102	406	14	275P	274P	1870
DN125	1360	F-245P-DN125	F-244P-DN125	356	102	406	12	245P	244P	1500
DN125	1360	F-275P-DN125	F-274P-DN125	356	102	406	14	275P	274P	1870
DN150	1870	F-275P-DN150	F-274P-DN150	381	127	406	15	275P	274P	1870

See Filter Assembly Technical Data section for sizing guidelines.

Dimension tolerance ± 6 mm

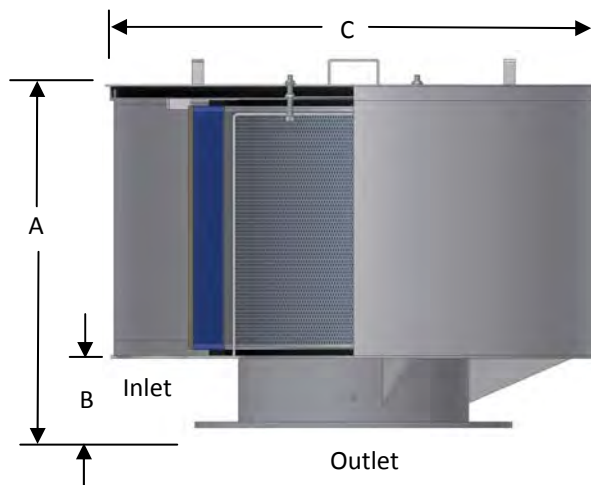
PN10 Pattern Flange	Dimensions - mm			No. of Holes	Thickness Flg mm
	O.D.	B.C.	B.H.		
DN 80	200	160	18	8	20
DN100	220	180	18	8	20
DN125	250	210	18	8	22
DN150	285	240	22	8	22



Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Big Boy Inlet Filters

F Series DN200 – DN300 Flange



Features

- Heavy gauge base with low pressure drop outlet pipe and center bracket design
- Durable carbon steel construction with baked enamel finish & powder coated weatherhood
- Low entry velocity air gap between base and cover

Technical Specifications

- Temp (continuous): min -26°C (-15°F) max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

- 1/8" tap holes
- Pressure drop indicator (See page 3-12)
- Various media for different environments
- Stainless steel construction
- Epoxy coated finish
- Special connections

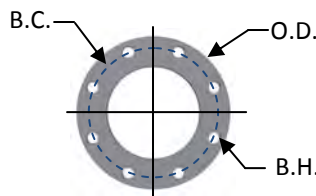
PN10 Pattern Flange Outlet Connections

Flange Outlet	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
		Polyester	Paper	A	B	C		Polyester	Paper	
DN200	3060	F-377P-DN200	F-376P-DN200	584	152	572	31	377P	376P	3105
DN200	3060	F-385P-DN200	F-384P-DN200	584	152	724	56	385P	384P	5605
DN250	5610	F-385P-DN250	F-384P-DN250	584	152	724	59	385P	384P	5610
DN250	5610	F-485P-DN250	F-484P-DN250	787	152	724	64	485P	484P	8000
DN300	7990	F-485P-DN300	F-484P-DN300	787	152	724	70	485P	484P	8000
DN300	7990	F-685P-DN300	F-384P(2)-DN300	965	152	724	79	685P	384P(2)	11220

See Filter Assembly Technical Data section for sizing guidelines.

Dimension tolerance ± 6 mm

PN10 Pattern Flange	Dimensions - mm			No. of Holes	Thickness Flg. mm
	O.D.	B.C.	B.H.		
DN200	340	295	22	8	24
DN250	395	350	22	12	26
DN300	445	400	22	12	26



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

Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Sumo Class Filter Assemblies

Features

- Single barrel filter design allows for large airflows in space restricted work areas
- Low entry velocity air gap between base and cover
- Low pressure drop housing construction
- Please contact Solberg for model offering and availability



Technical Specifications

- Designed for airflows up to 13600 m³/h
- Temp (continuous): min -26°C (-15°F) max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

- 1/8" tap holes
- Pressure drop indicator
- Various media for different environments
- Stainless steel construction
- Epoxy coated finish

Multibarrel Filter Assemblies

Features

- Designed for large airflow applications
- Cartridge style elements provide:
 - Increased reliability-better positive seal than panel filters
 - Added efficiency with maximum surface area
- Low entry velocity air gap between base and cover
- Multiple configurations allows for a variety of environments
- Durable carbon steel construction with baked enamel finish
- Please contact Solberg for model offering and availability.



Technical Specifications

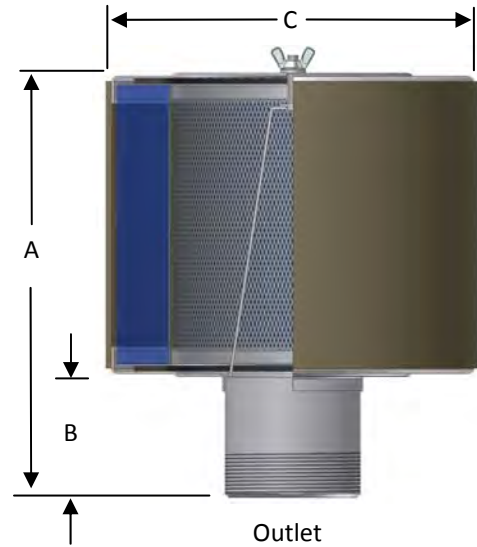
- Designed for airflows up to 42500 m³/h
- Temp (continuous): min -26°C (-15°F) max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

- Multiple manifold configurations
- Pressure drop indicator
- Support stands
- Stainless steel construction
- Epoxy coated finish

Exposed Inlet Filters

FT Series 1/4" - DN300 BSPT, Flange



Configuration
1/2" BSPT to DN150 Flange

Features

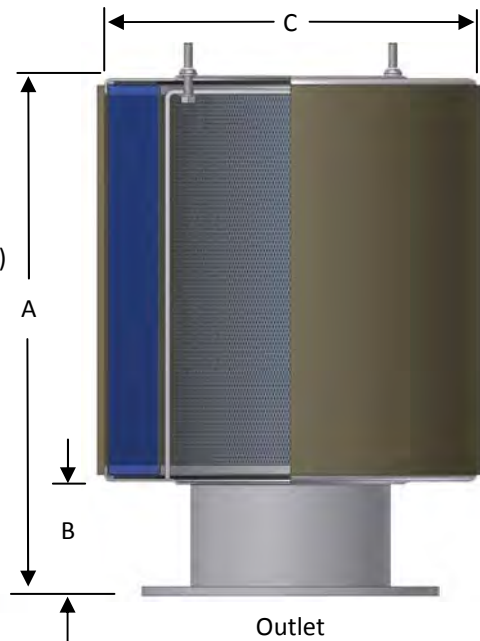
- Exposed element for optimal air flow & low restriction
- Heavy gauge base with low pressure drop outlet pipe and center bracket design
- Durable carbon steel construction with baked enamel finish

Technical Specifications

- Temp (continuous): min -26°C (-15°F) max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Pressure drop graphs available upon request
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

- 1/8" tap holes available for 3" & larger connections
- Pressure drop indicator (See page 3-12)
- Various media for different environments
- Stainless steel construction
- Epoxy coated finish
- Special connections



Configuration
DN200 Flange and Larger



Outlet Connections

Outlet Size	Outlet Type	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
			Polyester	Paper	A	B	C		Polyester	Paper	
1/4"	MPT	12	MIN025	----	76	19	44	0.23	----	----	----
3/8"	MPT	12	MIN038	----	76	19	44	0.23	----	----	----
1/2"	MPT	17	FT-15-050	FT-14-050	102	38	114	0.54	15	14	60
3/4"	MPT	43	FT-15-075	FT-14-075	102	38	114	0.59	15	14	60
1"	MPT	60	FT-15-100	FT-14-100	102	38	114	0.63	15	14	60
1"	MPT	94	FT-19P-100	FT-18P-100	168	41	114	0.81	19P	18P	170
1-1/4"	BSPT	119	FT-19P-126	FT-18P-126	168	41	114	0.81	19P	18P	170
1-1/2"	BSPT	145	FT-19P-151	FT-18P-151	168	41	114	0.90	19P	18P	170
2"	BSPT	230	FT-31P-201	FT-30P-201	184	57	152	1.35	31P	30P	332
2"	BSPT	230	FT-231P-201	FT-230P-201	318	57	152	3	231P	230P	332
2-1/2"	BSPT	332	FT-31P-251	FT-30P-251	191	64	152	2	31P	30P	332
2-1/2"	BSPT	332	FT-231P-251	FT-230P-251	324	64	152	3	231P	230P	510
3"	BSPT	510	FT-231P-301	FT-230P-301	330	76	152	4	230P	230P	510
3"	BSPT	510	FT-235P-301	FT-234P-301	330	76	203	6	235P	234P	970
3"	BSPT	510	FT-275P-301	FT-274P-301	330	76	305	10	275P	274P	1870
4"	BSPT	885	FT-235P-401	FT-234P-401	356	102	203	8	235P	234P	970
4"	BSPT	885	FT-275P-401	FT-274P-401	356	102	305	11	275P	274P	1870
5"	BSPT	1360	FT-275P-501	FT-274P-501	356	102	305	11	275P	274P	1870
6"	BSPT	1870	FT-275P-601	FT-274P-601	381	127	305	12	275P	274P	1870

See Filter Assembly Technical Data section for sizing guidelines.

Dimension tolerance ± 6 mm

Note: MPT threaded housings are interchangeable with BSPT up to 1".

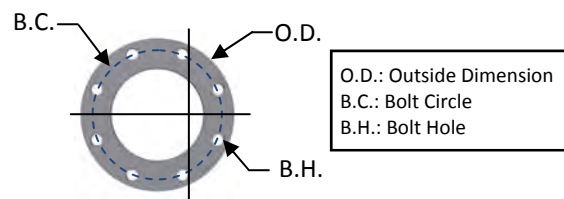
PN10 Pattern Flange Outlet Connections

Flange Outlet	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
		Polyester	Paper	A	B	C		Polyester	Paper	
DN80	510	FT-235P-DN80	FT-234P-DN80	330	76	203	6	235P	234P	970
DN80	510	FT-275P-DN80	FT-274P-DN80	330	76	305	10	275P	274P	1870
DN100	885	FT-235P-DN100	FT-234P-DN100	356	102	203	7	235P	234P	970
DN100	885	FT-275P-DN100	FT-274P-DN100	356	102	305	11	275P	274P	1870
DN125	1360	FT-275P-DN125	FT-274P-DN125	356	102	305	13	275P	274P	1870
DN150	1870	FT-275P-DN150	FT-274P-DN150	381	127	305	14	275P	274P	1870
DN200	3060	FT-377P-DN200	FT-376P-DN200	584	152	375	29	377P	376P	3105
DN200	3060	FT-385P-DN200	FT-384P-DN200	584	152	502	32	385P	384P	5605
DN250	5610	FT-385P-DN250	FT-384P-DN250	584	152	502	36	385P	384P	5610
DN250	5610	FT-685P-DN250	FT-384P(2)-DN250	965	152	502	43	685P	384P(2)	11220
DN300	7990	FT-485P-DN300	FT-484P-DN300	787	152	502	41	485P	484P	8000
DN300	7990	FT-685P-DN300	FT-384P(2)-DN300	965	152	502	45	685P	384P(2)	11220

See Filter Assembly Technical Data section for sizing guidelines.

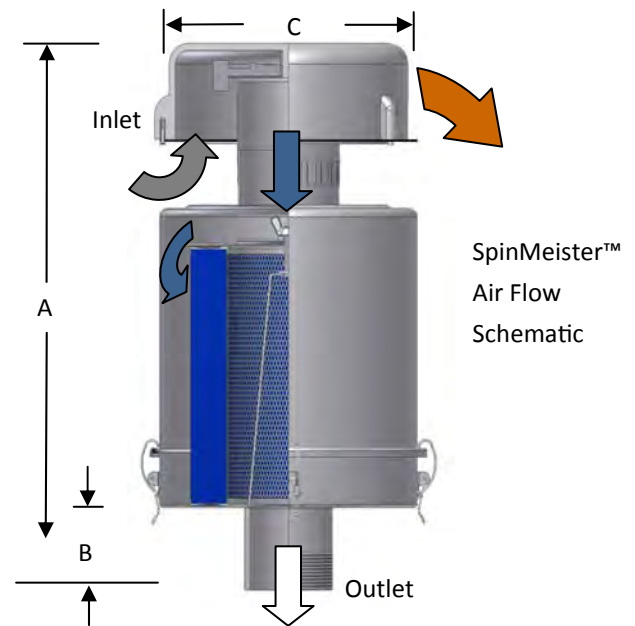
Dimension tolerance ± 6 mm

PN10 Pattern Flange	Dimensions - mm			No. of Holes	Thickness Flg mm
	O.D.	B.C.	B.H.		
DN 80	200	160	18	8	20
DN100	220	180	18	8	20
DN125	250	210	18	8	22
DN150	285	240	22	8	22
DN200	340	295	22	8	24
DN250	395	350	22	12	26
DN300	445	400	22	12	26



Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.

Extreme Duty Filtration SM Series Spinmeister™



Operating Principle

Intake air is drawn through the angled louver plates which direct 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 the lower chamber and is filtered by a 99% efficient pleated element.

Features

- SpinMeister™ made of durable molded fiber filled composite material
- Filter housing with heavy gauge base with low pressure drop bracket and outlet pipe design
- Durable carbon steel housing construction
- All small compact filters with seamless drawn housing

Options

- 1/8" taps for pressure drop indicators
- SpinMeisters™ available in polished aluminum
- Selected housings available in stainless steel
- Modify to meet specific application

Benefits

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

Technical Specifications

- Temp (continuous): min -26°C (-15°F) max 104°C (220°F)
- Filter change out differential: 37-50 mbar over initial ΔP
- Polyester: 99%+ removal efficiency to 5 micron
- Paper: 99%+ removal efficiency to 2 micron
- SpinMeister Precleaner: 85% efficiency to 15 micron



Config. A



Config. B



Config. C



Config. D

Configuration A

Outlet Size	Outlet Type	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
			Polyester	Paper	A	B	C		Polyester	Paper	
1/2"	BSPT	51	SM1.5-11-050	SM1.5-10-050	187	22	105	0,7	11	10	59
3/4"	BSPT	51	SM1.5-11-075	SM1.5-10-075	197	32	105	0,7	11	10	59
1/2"	BSPT	68	SM2-11-050	SM2-10-050	187	22	105	0,9	11	10	59
3/4"	BSPT	68	SM2-11-075	SM2-10-075	197	32	105	0,9	11	10	59
1"	BSPT	68	SM2-11-100	SM2-10-100	197	32	105	0,9	11	10	59

Configuration B

Outlet Size	Outlet Type	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
			Polyester	Paper	A	B	C		Polyester	Paper	
1-1/2"	BSPT	145	SM2-19P-151	SM2-18P-151	273	41	178	1,7	19P	18P	170
2"	BSPT	170	SM2-19P-201	SM2-18P-201	289	57	178	1,8	19P	18P	170
2-1/2"	BSPT	187	SM2-19P-251	SM2-18P-251	295	64	178	1,8	19P	18P	170

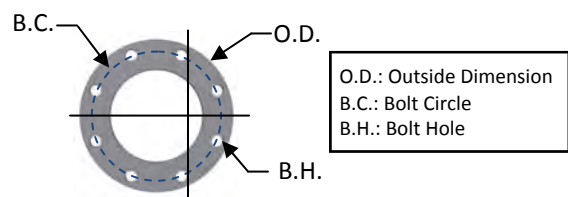
Configuration C

Outlet Size	Outlet Type	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
			Polyester	Paper	A	B	C		Polyester	Paper	
4"	BSPT	425	SM3-235P-401	SM3-234P-401	502	102	279	14	235P	234P	968
4"	BSPT	680	SM4-235P-401	SM4-234P-401	524	102	279	15	235P	234P	968
4"	FLG	425	SM3-235P-DN100	SM3-234P-DN100	502	102	279	16	235P	234P	968
4"	FLG	680	SM4-235P-DN100	SM4-234P-DN100	524	102	279	16	235P	234P	968

Configuration D

Outlet Size	Outlet Type	Assembly m ³ /h Rating	Assembly Part Number		Dimensions - mm			Approx. Weight kg	Replacement Element Part No.		Element m ³ /h Rating
			Polyester	Paper	A	B	C		Polyester	Paper	
6"	FLG	1360	SM62-377P-DN125	SM62-376P-DN125	775	127	572	40	377P	376P	3100
8"	FLG	3060	SM62-377P-DN200	SM62-376P-DN200	800	152	572	46	377P	376P	3100
10"	FLG	4590	SM63-385P-DN250	SM63-384P-DN250	775	152	724	62	385P	384P	5598
12"	FLG	4590	SM63-485P-DN300	SM63-484P-DN300	953	152	724	73	485P	484P	7993

PN10 Pattern Flange	Dimensions - mm			No. of Holes	Thickness Flg mm
	O.D.	B.C.	B.H.		
DN100	220	180	18	8	20
DN125	250	210	18	8	22
DN150	285	240	22	8	22
DN200	340	295	22	8	24
DN250	395	350	22	12	26
DN300	445	400	22	12	26



Note: Model offerings and design parameters may change without notice. See www.solbergmfg.com for most current offering.



SOLBERG® Pop Up Style Pressure Drop Gauge Inlet Filter Assemblies

Benefits

- Monitors Filter Continuously
- Easy Filter Maintenance
- Filter Element Life Maximized
- Downtime Reduced
- Graduated Restriction Readings

Features & Specifications

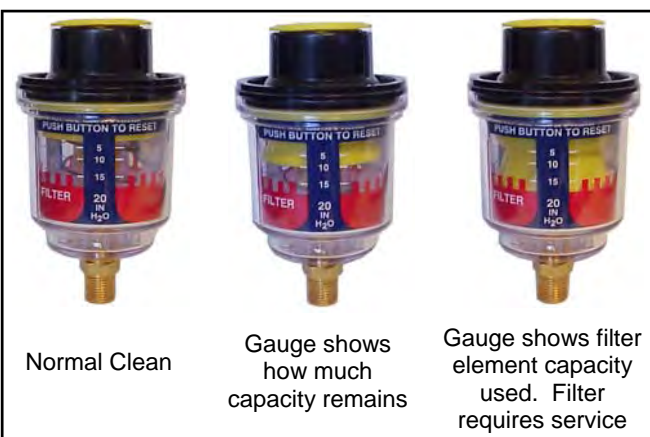
Our Pop Up style pressure drop gauge shows the amount of filter element restriction and how much life the element has left. This is a convenient and inexpensive solution to receiving the maximum usage from every element.

The yellow indicator in the filter monitor gauge drops as the dirt accumulates on the filter element. The element is ready for change out or servicing when the yellow indicator reaches the red zone. This allows you to determine the condition of the filter element even after the equipment has been shut down.

The element should be serviced or replaced at the maximum noted pressure drop or at the manufacturer's recommended level.

Use on all Solberg inlet filter silencer and inlet filters. Add an 1/8" tap hole on either the weatherhood or pipe. See mounting photo for placement.

Gauge Status:



Note: The monitor gauge has a 1/8" connection. It is mounted either on the weatherhood or on the outlet pipe depending on the filter assembly.



Filter Gauge shows both mm & inches ratings

BSPT Outlet	Pressure Drop Rating - mm	Part Number
1/8"	500	VG-020-013
1/8"	750	VG-030-013