

Technical Data

Inlet Filter Silencers, Silencers

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

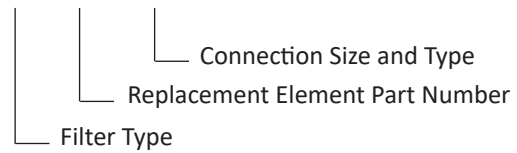
Identification

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

- Assembly Model #
- Replacement Element #

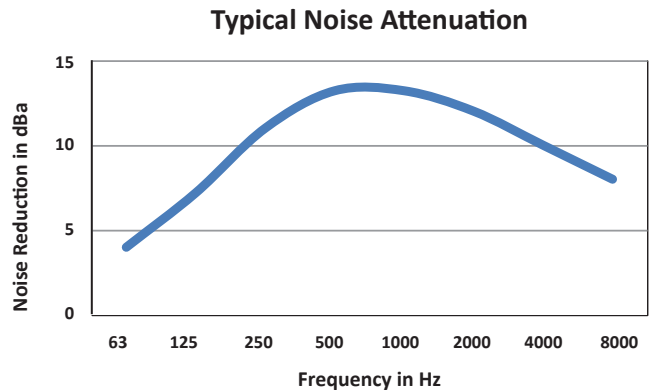
The part number designates the filter type, the element configuration and housing connection size. For example, the following part number identifies the filter as being an “FS” design filter with a “275™” element, “P” prefilter and 3” MPT connection size.

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.



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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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Enhanced Filter Silencers for Blowers

QB Series 2" - 3" and 2G Series 3" - 12"

Features

- Fully drawn carbon steel weatherhood (3" to 6" connections only)
- Multiple silencing features to reduce and deaden sound
 - Tubular Silencing: tubes placed to maximize attenuation
 - Quiet Band Support: with "Quiet band" technology, utilizes sound suppression in the design of the housing
- Internal Silencer: center silencer tube (2G Series)
- 1/8" tap hole standard
- Low pressure drop housing design
- 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
- 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

- Pressure drop indicator
- Various media for different environments
- Stainless steel construction
- Various non-standard finishes and connection styles
- Side Access Filter Silencers (LQB Series) available for space restricted enclosures (select models)

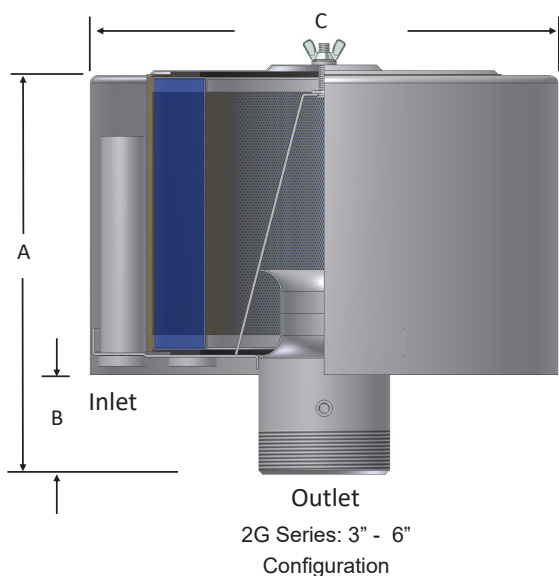


Threaded Assembly

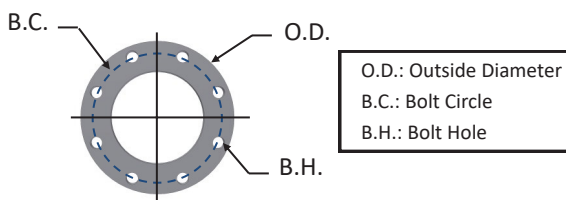


Flanged Assembly

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125/150# Pattern Flange	Dimensions - inches			No. of Holes	Flange Thickness inches
	O.D.	B.C.	B.H.		
4"	9	7 ½	¾	8	0.5
5"	10	8 ½	7/8	8	0.5
6"	11	9 ½	7/8	8	0.5
8"	13 ½	11 ¾	7/8	8	0.5
10"	16	14 ¼	1	12	0.5
12"	19	17	1	12	0.5



QB Series

MPT Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight lbs.	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
2"	135	QB-231P-200	QB-230P-200	11 7/8	2 3/8	10 1/4	10	5	15	231P™	230P™	300
2. 1/2"	195	QB-231P-250	QB-230P-250	12	2 5/8	10 1/4	10	9	16	231P™	230P™	300
3"	300	QB-231P-300	QB-230P-300	13	3 1/8	10 1/4	10	9	16	231P™	230P™	300

2G Series

MPT Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight lbs.	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
3"	300	2G-275P-300	2G-274P-300	13	3	16	10	9	38	275P™	274P™	1100
4"	520	2G-275P-400	2G-274P-400	14	4	16	10	9	39	275P™	274P™	1100
5"	800	2G-275P-500	2G-274P-500	14	4	16	10	14	41	275P™	274P™	1100
6"	1100	2G-275P-600	2G-274P-600	15	5	16	10	18	42	275P™	274P™	1100

Flange Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches			Suggested Service ht. inches	No. of Silencing Tubes	Approx. Weight lbs.	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C				Polyester	Paper	
4"	520	2G-275P-400F	2G-274P-400F	14	4	16	10	9	44	275P™	274P™	1100
5"	800	2G-275P-500F	2G-274P-500F	14	4	16	10	14	46	275P™	274P™	1100
6"	1100	2G-275P-600F	2G-274P-600F	15	5	16	10	18	47	275P™	274P™	1100
8"	1600	2G-377P-800F	2G-376P-800F	23 9/16	6 5/8	21 7/8	15	12	125	377P™	376P™	1825
8"	1800	2G-385P-800F	2G-384P-800F	24	6	28 5/16	15	12	130	385P™	384P™	3295
8"	1800	2G-485P-800F	2G-484P-800F	31 ½	6	28 5/16	22	12	142	485P™	484P™	4705
10"	3300	2G-385P-1000F	2G-384P-1000F	23 ½	6	28 5/16	15	16	135	385P™	384P™	3300
10"	3300	2G-485P-1000F	2G-484P-1000F	31 ½	6	28 5/16	22	16	148	485P™	484P™	4705
12"	4700	2G-485P-1200F	2G-484P-1200F	31 7/16	6	28 5/16	22	24	160	485P™	484P™	4705
12"	4700	2G-685P-1200F	2G-384P(2)-1200F	38 ½	6	28 5/16	29	24	180	685P™	384P™(2)	6600

See Filter Silencer 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.



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