

CBF/CBFI SERIES

Compact Blower Inlet Filter-Silencer

INLET FILTER-SILENCERS FOR POSITIVE DISPLACEMENT BLOWERS

Benefits ...

Filter and silencer combined in one unit. The CBF and CBFI have the acoustic capabilities of the Universal Silencer RIS series and the filtration performance of CC series filters.

Reduced cost, overall package size, weight, storage space, freight cost and damage.

Approximately 1/3 the size of conventional blower silencer, with the added benefit of excellent, high-efficiency filtration.

Reduced overall package noise without further acoustic treatment.

Versatile—Suitable for inlet applications in confined areas, outdoor or indoor, without compromising acoustic or pressure drop performance.

Design Advantages ...

For conditions up to 15 PSIG.

Special internals and pack material provide excellent broadband noise attenuation.

Standard connections, plain nominal pipe ends.

Flanged or threaded connections available.

Eliminates two connections from the conventional filter and silencer configuration.

Availability ...

Sizes 2" through 12" —delivery from stock.

Larger sizes, special connections, and mounting hardware available for fast delivery.



The CBF can be used in place of a Universal RIS silencer and CCF filter, as shown above. This unit comes with a weatherhood for outdoor use.

The CBFI model is available for indoor use. The filter restriction gauge is optional for both the CBF and CBFI.

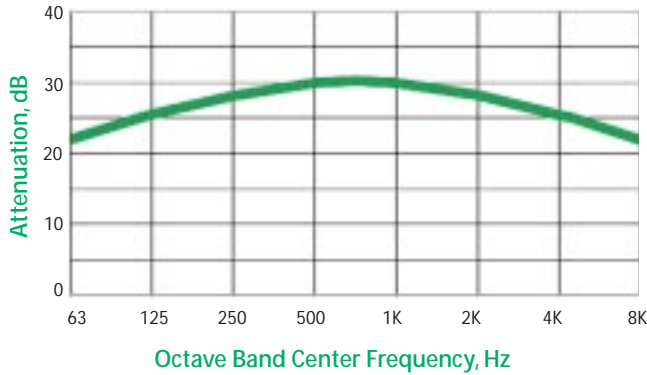


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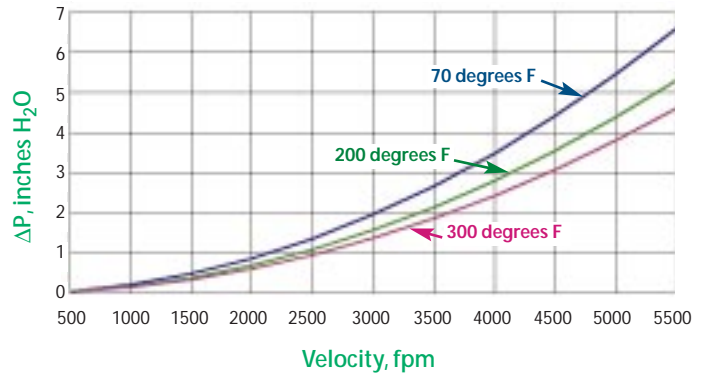
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TYPICAL ATTENUATION CURVE



PRESSURE DROP



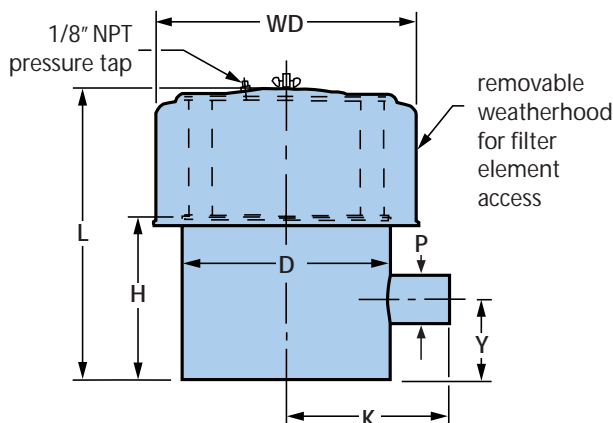
MODELS, DIMENSIONS, WEIGHTS & ELEMENTS

P (nom.)	CBF/CBFI					CBF			CBFI			ELEMENT PART NO.				
	D	H	Y	K	CFM CAP	MODEL	WD	L	WT.	MODEL	B	L ₁	WT.	PAPER	FELT	WIRE
2	8.00	8.00	4.00	7.00	120	CBF-2	10	13.25	20	CBFI-2	6.5	12.75	20	(2)81-0471	(2)81-1203	(2)81-1036
2.5	8.00	9.50	4.75	7.00	175	CBF-2.5	10	14.75	25	CBFI-2.5	6.5	14.25	25	(2)81-0471	(2)81-1203	(2)81-1036
3	12.00	10.50	5.25	9.00	275	CBF-3	16	17.00	50	CBFI-3	10.0	16.50	50	81-1063	81-1205	81-1038
4	12.00	15.00	7.50	9.00	500	CBF-4	16	21.25	60	CBFI-4	10.0	20.75	60	81-1063	81-1205	81-1038
5	16.00	17.00	8.50	11.00	750	CBF-5	20	26.00	85	CBFI-5	12.0	25.25	85	81-0475	81-1207	81-1040
6	16.00	23.00	11.50	11.00	1100	CBF-6	20	32.00	100	CBFI-6	12.0	31.25	100	81-0475	81-1207	81-1040
8	24.00	27.50	13.75	15.50	2200	CBF-8	30	39.00	200	CBFI-8	12.0	39.25	185	81-1163	81-1209	81-1200
10	30.00	35.50	17.75	18.50	3000	CBF-10	36	46.50	305	CBFI-10	18.0	45.75	295	81-1163	81-1209	81-1200
12	34.00	39.50	19.75	20.50	4300	CBF-12	40	54.50	385	CBFI-12	24.0	53.75	370	81-1164	81-1210	81-1201

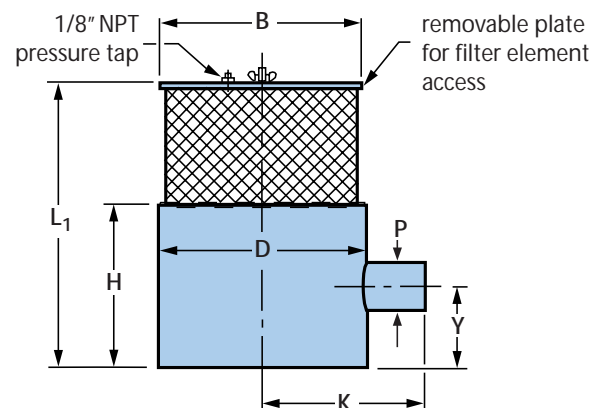
NOTES:

1. Non-ASME Code construction suitable for 15" Hg vacuum.
2. Weights are approximate and do not include the weight of the filter element.

CBF SERIES (OUTDOOR USE)



CBFI SERIES (INDOOR USE)



NOTES:

1. L and L₁ dimensions are plus or minus 0.50 inch.
2. Finish: Blue enamel (88-1085).

Three types of filter elements are available in Universal's cartridge type filters and filter silencers. The pleated paper elements provide the highest efficiency and are considered standard. However, for less demanding service, pleated felt and wire mesh elements are available. The three types of elements are completely interchangeable and will fit either of the two series of filter housings (CBF, CBF1).

Pleated Paper Element

SPECIFICATIONS:

- High-quality industrial grade filter paper—pleated and oven-cured during production.
- Oven-cured plastisol end caps with molded sealing beads (larger sizes have metal end caps and closed-cell rubber gaskets).
- Media efficiency: 99.5% on 2 microns; 97% on 1 micron.

SERVICE INSTRUCTIONS:

Because of the low cost of the paper element, it is generally treated as a consumable and replaced when dirty. However, depending upon customer preference, the paper element may be cleaned and reused.

Water Cleaning:

Rap gently to dislodge accumulated dirt, soak thoroughly approximately 15 minutes in warm water and mild detergent. Rinse thoroughly under low-pressure water. Air dry—do not dry with compressed air.

Compressed Air Cleaning:

Carefully direct compressed air (100 PSI maximum) through dry element, opposite normal direction of flow.

After cleaning, inspect carefully for holes or cracks. If damaged, replace element.

OIL-FREE ADHESIVE

FOR WIRE MESH ELEMENTS

This is an oil-free product developed for use on viscous impingement type filters. It is a substitute for applications that do not permit oil wetting of the filter elements, such as oil-free compressors. Universal Oil Free Filter Adhesive is available in 16-ounce aerosol spray cans, packaged 6 cans per carton. Order by part number 81-0323.

Pleated Felt Element

SPECIFICATIONS:

- Durable polyester felt media—pleated.
- Oven-cured plastisol end caps with molded sealing beads (larger sizes have metal end caps with closed cell rubber gaskets).
- Media efficiency: 99% on 10 microns.

SERVICE INSTRUCTIONS:

Pleated felt elements may be cleaned and reused. Follow cleaning instructions given for paper elements.

Wire Mesh Element

SPECIFICATIONS:

- Galvanized wire-mesh media—corrugated construction.
- Larger sizes have metal end caps.
- For best efficiency, wire mesh elements must be treated with oil or oil-free adhesive.
- May be cleaned and reused indefinitely.
- Wire mesh elements are considered "roughing" filters and are not recommended for applications that require efficient filtration of fine particles.

Approximate efficiency: 93% on 10 microns (with oil or adhesive treatment).

SERVICE INSTRUCTIONS:

For best efficiency, wire mesh elements must be treated when new and after each cleaning with oil-free adhesive. Spray the element on both sides with Universal Oil-Free Adhesive, P/N 81-0323, following the directions on the container. For oil treatment, dip the element in SAE 30-50 motor oil and drain thoroughly before using. To clean wire mesh elements, wash in solvent or warm water and detergent in a container large enough for complete immersion of element. Rinse completely, drain, and either air dry or use compressed air. After cleaning and drying, re-treat the element with oil-free adhesive or oil as described.

FILTER RESTRICTION GAUGE

Universal's Filter Restriction Gauge provides a convenient, accurate means of monitoring filter pressure drop as the filter element becomes increasingly loaded with dirt. Cartridge Filters and Filter Silencers are standard with threaded connections for direct mounting of the gauge. See Product Bulletin No. 81-1234 for a complete description.

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Our corporate headquarters are located in Stoughton, Wisconsin, just southeast of Madison, the state capital. This new building houses administration, sales, and engineering departments. Manufacturing facilities are in Muscoda, 75 miles west of Stoughton, and Montello, 70 miles north.

Our products have been used to protect, quiet, and optimize the performance of industrial equipment for 50 years. We maintain a fully equipped facility for testing filters and silencers under actual operating conditions. We are an ISO 9001 registered firm and ASME Code certified.

*Keeping
industrial equipment
clean and quiet.*

Contact us for more information about our complete line of industrial silencers and air filter/filter silencers:

- CB compact blower silencers, catalog 255-A
- High-pressure vents and blowdowns, bulletin 88-0062
- Vent silencer specification sheet, form 88-0063
- Air filters and filter silencers, catalog 241-A
- Cartridge air filters and filter silencers, catalog 242-B
- Reciprocating engines, catalog 246-A
- Rotary positive blowers, catalog 244-D
- Axial fans, catalog 249-D
- Compressors, information provided by application
- Vacuum pumps, catalog 222-B
- Industrial fans, catalog 249-A
- Steam ejectors, pressure reduction valves, and other special applications
- Gas turbines, catalog B-249-A
- Acousti-Tube™ Silencers, catalog 260
- Acousti-Tube™ Silencer Series, technical bulletin 94-1315
- Uni-Pulse™ inlet filter systems, catalog 250



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