

Classic Air Intake Filters & Tank Vents

Series B10 - Enameled Carbon Steel w/Weather Hoods

Series B12 - 304 Stainless Steel w/Weather Hoods



For more information contact :
SparksFilters 585-624-4500
585-624-5300 fax

E-Mail: Sales@sparksfilters.com

- Intake Air Flows to 20,000 CFM
- Exceptionally Low ΔP Design
- 304SS Throat Safety Cages Std.
- Rugged Enameled Steel Construction

Series B10 & B12 air intake filters provide superior protection for compressors, blowers, turbines, engines, and other air handling equipment. They are fabricated from heavy gauge enameled steel. Series B12 corrosion resistant weather hoods reject rain and snow in coastal environments. They are also well suited for service in food processing installations serving pneumatic blowers. Any of the 20 standard models can be modified at your request to more exactly fit your needs.

• Connection Sizes from 1/2" to 24"

Male NPT (MT) or flat face flanges (FF) are std. Flanges match diameter & drilling for 150# ANSI standard. Specify optional right angle base (AF) for side mounts, female NPT (FT), bevel (BV) or plain cut (PE) stub necks where you wish to weld in place. Increased or decreased connections are also optionally available on any model.

• Choice of Filter Elements

These textile media filter elements are unsurpassed for low ΔP, high dirt holding capacity and exceptional efficiency. Unlike paper media they cannot rip or tear. These elements have no catastrophic mode of failure. They handle moisture, vibration, poor handling, and rugged service with ease. They stop airborne particulates and other contaminants before they can sneak into a compressor, blower, or turbine to do abrasion or varnish damage. The table below shows the favorite 10μ standard filter element. In addition, we offer a wide range of alternative filter elements that can serve your specific needs if a finer micron retention, or specific operating conditions exist.

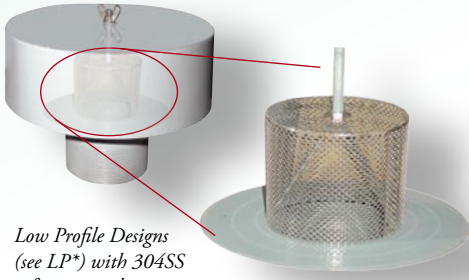


See <http://www.sparksfilters.com> for more options.

Consult us for use with reciprocating compressors.

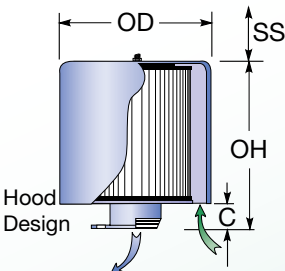


Cap style cover std in OD of 20" and larger. Access handles are standard on models with OD of 12" and larger.

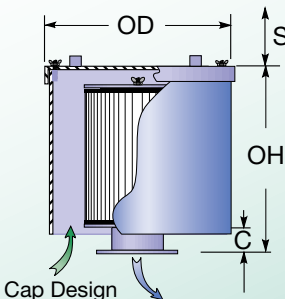


Low Profile Designs (see LP*) with 304SS safety screen shown.

Safety screen is std. on all B10 models. Filter element is not shown in this illustration.



Rugged one piece 11 gauge enameled steel weather hoods, or cap assemblies on larger sizes resist damage from abuse common in industrial locations.



Alternate connection styles are readily available.

Housing Model Number	Typical CFM	Standard Outlet		Cover Style	Approximate Dimensions in Inches				Approx Wgt Lbs.	Element Number
		Size	Type		OH	OD	C	Service Space		
B10-0400-MT-005	12	1/2"	Male NPT	Hood	6 1/2"	4"	2"	4 1/4"	1.3	321-3419K5
B10-0400-MT-007	18	3/4"	Male NPT	Hood	6 1/2"	4"	2"	4 1/4"	1.3	321-3419K5
B10-0400-MT-010	25	1"	Male NPT	Hood	6 1/2"	4"	2"	4 1/4"	1.3	321-3419K5
LP* B10-0416-MT-005	12	1/2"	Male NPT	Hood	4 1/2"	6 1/4"	2"	2 1/4"	1.3	321-3420K5
LP* B10-0416-MT-007	18	3/4"	Male NPT	Hood	4 1/2"	6 1/4"	2"	2 1/4"	1.3	321-3420K5
LP* B10-0416-MT-010	25	1"	Male NPT	Hood	4 1/2"	6 1/4"	2"	2 1/4"	1.3	321-3420K5
B10-0401-MT-012	40	1 1/4"	Male NPT	Hood	6 1/2"	4 1/2"	2"	4 1/4"	2.5	321-3421K5
LP* B10-0417-MT-012	40	1 1/4"	Male NPT	Hood	4 1/2"	6 1/4"	2"	2 1/4"	2.5	321-3422K5
B10-0402-MT-015	65	1 1/4"	Male NPT	Hood	6 1/2"	5 1/2"	2"	4 1/4"	2.5	321-3423K5
LP* B10-0418-MT-015	65	1 1/2"	Male NPT	Hood	4 1/2"	7 1/2"	2"	2 1/4"	2.5	321-3424K5
B10-0403-MT-020	90	2"	Male NPT	Hood	8 1/2"	6"	2"	6 1/4"	3.8	321-3425K5
LP* B10-0419-MT-020	90	2"	Male NPT	Hood	6 1/8"	8"	2"	4"	3.8	321-3426K5
B10-0404-MT-030	200	3"	Male NPT	Hood	11 1/2"	8 1/4"	3"	8 1/4"	3.8	321-3427K5
LP* B10-0420-MT-030	200	3"	Male NPT	Hood	8 1/8"	10 1/2"	3"	5"	3.8	321-3428K5
B10-0405-MT-040	350	4"	Male NPT	Hood	11 1/2"	10"	3"	8 1/4"	17.5	321-3429K5
LP* B10-0421-MT-040	350	4"	Male NPT	Hood	8 1/8"	12 3/4"	3"	5"	17.5	321-3430K5
B10-0406-MT-050	800	5"	Male NPT	Hood	16 1/2"	12 3/4"	4"	12 1/4"	22.5	321-3431K5
B10-0406-FF-050	800	5"	Plate Flg	Hood	16 1/2"	12 3/4"	4"	12 1/4"	22.5	321-3431K5
LP* B10-0422-MT-050	800	5"	Male NPT	Hood	11 1/4"	15"	3"	8 1/4"	18.8	321-3432K5
LP* B10-0422-FF-050	800	5"	Plate Flg	Hood	11 1/4"	15"	3"	8 1/4"	18.8	321-3432K5
B10-0407-MT-060	950	6"	Male NPT	Hood	16 1/2"	14 1/2"	4"	8 1/4"	22.5	321-3433K5
B10-0407-FF-060	950	6"	Plate Flg	Hood	16 1/2"	14 1/2"	4"	12 1/4"	22.5	321-3433K5
LP* B10-0423-MT-060	950	6"	Plate Flg	Hood	11 1/4"	16 3/4"	3"	8 1/4"	18.8	321-3434K5
LP* B10-0423-FF-060	950	6"	Plate Flg	Hood	11 1/4"	16 3/4"	3"	8 1/4"	18.8	321-3434K5
B10-0408-FF-080	1800	8"	Plate Flg	Hood	16 1/2"	18"	4"	8 1/4"	43.8	321-3410K5
B10-0409-FF-100	3000	10"	Plate Flg	Cap	27 1/2"	21"	6"	18 1/4"	75.0	321-3411K5
B10-0410-FF-120	3500	12"	Plate Flg	Cap	27 1/2"	24"	6"	18 1/2"	125.0	321-3412K5
B10-0411-FF-140	4800	14"	Plate Flg	Cap	33 1/2"	26"	6"	24 1/2"	137.5	321-3413K5
B10-0412-FF-160	6000	16"	Plate Flg	Cap	33 1/2"	29"	6"	24 1/2"	187.5	321-3414K5
B10-0413-FF-180	7000	18"	Plate Flg	Cap	33 1/2"	32 1/2"	6"	24 1/2"	218.8	321-3415K5
B10-0414-FF-200	10000	20"	Plate Flg	Cap	33 1/2"	36"	6"	24 1/2"	337.5	321-3416K5
B10-0415-FF-240	13000	24"	Plate Flg	Cap	33 1/2"	42"	6"	24 1/2"	412.5	321-3417K5

Note: LP denotes our Low Profile style housings. See typ. ΔP vs. Flow at chart on facing page >>



Air Intake Filter Choices

Model Considerations, Air Flow Sizing, Connection Style Choices, Plate Flange Sizing

For more information contact :

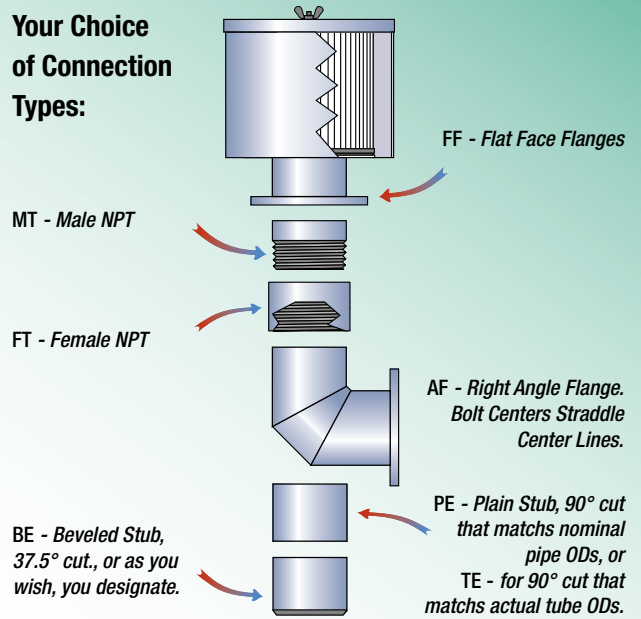
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Sparksfilters are available in a wide selection of inlet and outlet sizes and configurations in both enamel finished carbon steel, 304SS, and 316SS. Atmospheric air intake series B10, B12, and B70 with weather hoods can be mounted directly, or piped from a roof top installation to equipment below. In sheltered installations, hoodless air intake series B50 and B52 with exposed filter elements make inspection or pre-filter cleaning a breeze. To silence excess noise at the equipment's inlet, chamber silenced series C10 & C12, or tube silenced series D10 & D12 can cut noise in half. In-line filters E20, E22, & Side Arm Housings F20, & F22 permit installation anywhere between the inlet source and equipment being served. They're perfect for indoor placement with exterior draws, eliminating the need to climb onto the roof. Models with bolt seal closures serve internal pressures to 5 psid (opt. greater) in air or gas services. The H20, H22 exhaust series can stop most mist and smoke in its tracks, without the ΔP penalty loss of older designs. Their revolutionary radial fin reverse flow design makes it happen. An exclusive removable 304SS perforated steel safety cage guards the housing's throat to eliminate the heart attacks when you drop your hat or the wing nut during change out of the filter element. This cage has been sized with excess open area to avoid pressure loss. If you've ever searched for the wing nut when changing the air filter on your auto, you know first hand just how important a throat guard can be. Standard models have male NPT (MT) or flat face flange (FF) connections. Flanges match the diameter & drilling for 150# ANSI standard. Select optional right angle base (AF) for side mounts, female NPT (FT), bevel (BV) or square cut stub necks (PE) where you wish to weld in place. The right angle connection permits exterior wall mounts with gravity still working on your side to ensure an enduring element seal. For situations where you absolutely positively must go truly on edge, we can provide units for horizontal mount with special interior element side mount support assemblies. Increased or decreased connection sizes are also available on any model. Consult us for other material options.

Your Choice of Connection Types:

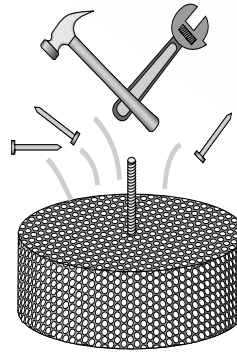


See <http://www.sparksfilters.com> for more options.

Flange	Bore	OD	BC	Hole Bore	# Holes
3	3.5	7.5	6	0.75	4
4	4.5		7.5	0.75	8
5	5.6	10	8.5	0.875	8
6	6.7	11	9.5	0.875	8
8	8.7	13.5	11.75	0.875	8
10	10.88	16	14.25	1	12
12	12.88	19	17	1	12
14	14.1	21	18.75	1.125	12
16	16.1	23.5	21.25	1.125	16
18	18.1	25	22.75	1.25	16
20	20.2	27.5	25	1.25	20
24	24.2	3	29.5	1.375	20

Thickness = 3/8" to 1/2" all

Data above will assist in matching the flange connection of any existing filter housing(s) in need of replacement. Sparks™ flanges match the diameter & drilling for 150# ANSI standard. Since it is not practical to measure the Bore of an installed unit, wrestle with your not very flexible metal tape to measure a 90° arc (1/4 of the circle, see red line) over the bolts of your existing flange. Multiply by 4. Count the bolts. Compare with the chart above. **Do Not** rely upon the more easily measured flange OD for flange sizing as it can vary between suppliers.

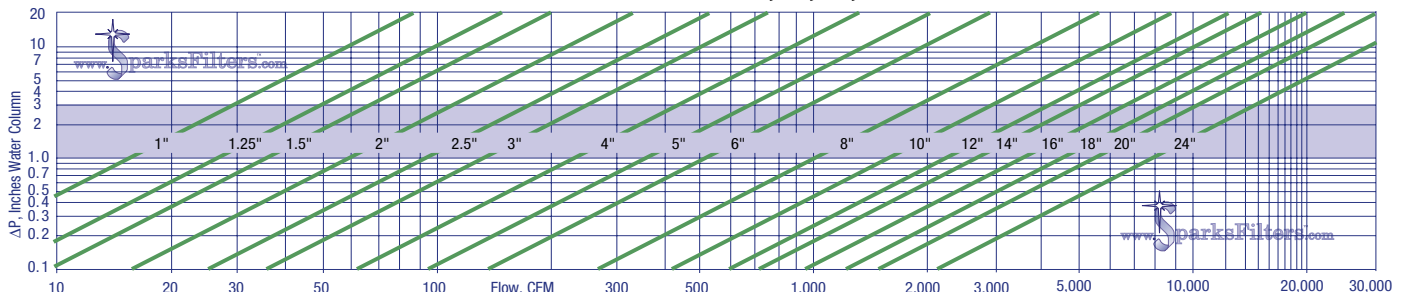


A 304SS throat safety cage sits beyond the filter element on all but economy housings. This exceptional feature ensures that the handle or pen you drop during change out doesn't fall into the process equipment downstream! And because it's 304SS, it's maintenance free.



Wing nuts and sealing washer for easy access. Another small detail that eliminates your need to hunt around for a wrench in order to take a quick look at the filter element.

ΔP vs. Flow: Series A, B, C, and D



Use the chart above to access the initial ΔP vs. flow for series A, B, C, & D air intakes. Be aware that the maximum practical flow through a filter housing, like other piping, is limited primarily by the cross sectional area of the connection. Compare the connection size shown

below with the desired flow. It is prudent to select a connection having a value that is central to the shaded area. While engines and reciprocating compressors can tolerate inlet air restrictions to 20" W.C., lesser blowers or fans may require element service at 5" W.C. While the initial ΔP does not

increase, the specific filtration resistance of the airborne contaminants in your location ultimately dictate element life. High performance textile elements routinely serve for periods from 3 mos. to 2 yrs., with 1 yr. being common.