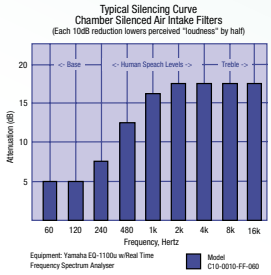
Chamber Silenced Air Intake Filters

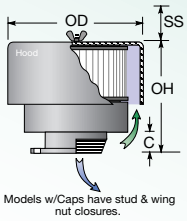
Series C10 - Enameled Steel w/Hood • Series C12 - 304 Stainless Steel w/Hood
Series C50 - Enameled Steel w/o Hood • Series C52 - 304 Stainless Steel w/o Hood

FLTR Purple Engineering

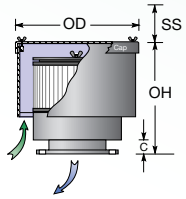
- **Air Flows to 20,000 CFM**
- **C10 & C50 Enameled Steel Construction**
- **C12 & C52 304 Stainless Steel**
- **Optional Access Handles**
- **304SS Throat Safety Cages Std.**
- **Connection Sizes from ½" to 24"**



Series C10 & C12 Air Intake Filters add a sound attenuation chamber to the design of the B10 & B12. Two sound absorption cylinders combine with a single side baffle and a synthetic acoustical pack to reduce undesirable sound escaping from the equipments air inlet. The



Models w/Caps have stud & wing nut closures.





Series C10 w/hood, C50 w/o hood, and a C10 with "AF" angle flanged connection selection. Access Handles Standard on Models with OD 12" and greater.

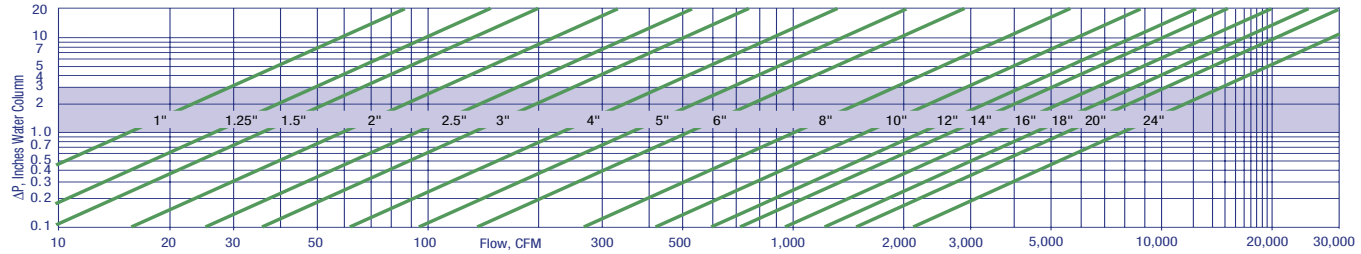
Consult us for use with reciprocating compressors.

C _ _ - 0010 - FF - 060 ***Sparks Filter Catalog Numbers.**

- **Connection Size:** Std. outlets allow for min. ΔP. Smaller connections will reduce flow. Change the last three digits, ie: 6" = 060, 22" = 220, 3 1/2" = 035, etc.
- **Connection Type:** MPT = Male NPT, FF = Std Plate Flange, others available.
- **Model Designation:** See Housing Table.
- **Series Designation:** Enter 2 Digits following the "C" of the model number, see below:
  - C10 for enameled steel w/ weather hood
  - C12 for 304 stainless steel w/weather hood
  - C50 for enameled steel w/top plate only (indoor use)
  - C52 for 304 stainless steel w/top plate only (indoor use).

Housing Model No. *	Typical Flow CFM	Std. Outlet Size	Std. Outlet Type	Cover Style	Approx. Dimens, in. OH	OD	C	Serv. Space	Wgt. lbs.	Select One Filter Element* Economy 10µ	Classic 10µ	High Eff. 4µ	Super 2µ
C _ _ -0003-MT-005	10	½""	M	Hood	10"	6⅝"	2"	5"	6	321-2181K5	321-2081K5	321-2081K7	321-2081K51
C _ _ -0003-MT-007	15	¾""	M	Hood	10"	6⅝"	2"	5"	6	321-2181K5	321-2081K5	321-2081K7	321-2081K51
C _ _ -0003-MT-010	25	1"	M	Hood	10"	6⅝"	2"	5"	6	321-2181K5	321-2081K5	321-2081K7	321-2081K51
C _ _ -0005-MT-012	40	1¼""	M	Hood	10"	6⅝"	2"	5"	6	321-2182K5	321-2082K5	321-2082K7	321-2082K51
C _ _ -0005-MT-015	55	1½""	M	Hood	10"	6⅝"	2"	5"	6	321-2182K5	321-2082K5	321-2082K7	321-2082K51
C _ _ -0006-MT-020	90	2"	M	Hood	14"	6⅝"	2"	8"	10	321-2183K5	321-2083K5	321-2083K7	321-2083K51
C _ _ -0007-MT-030	200	3"	M	Hood	19"	10¾"	3"	11"	45	321-2184K5	321-2084K5	321-2084K7	321-2196K51
C _ _ -0008-MT-040	350	4"	M	Hood	19"	12¾"	3"	11"	60	321-2185K5	321-2085K5	321-2085K7	321-2197K51
C _ _ -0009-FF-050	550	5"	Flg	Hood	29"	16"	4"	11"	75	321-2186K5	321-2086K5	321-2086K7	321-2198K51
C _ _ -0010-FF-060	800	6"	Flg	Hood	29"	16"	4"	16"	80	321-2187K5	321-2087K5	321-2087K7	321-2199K51
C _ _ -0011-FF-080	1500	8"	Flg	Hood	29"	20"	4"	16"	130	321-2188K5	321-2088K5	321-2088K7	321-2200K51
C _ _ -0012-FF-100	2400	10"	Flg	Cap	33"	24"	6"	16"	210	321-2189K5	321-2089K5	321-2089K7	321-2201K51
C _ _ -0013-FF-120	3400	12"	Flg	Cap	43"	26"	6"	21"	340	321-2190K5	321-2090K5	321-2090K7	321-2202K51
C _ _ -0014-FF-140	4100	14"	Flg	Cap	43"	28"	6"	21"	450	321-2191K5	321-2091K5	321-2091K7	321-2203K51
C _ _ -0015-FF-160	5400	16"	Flg	Cap	43"	32"	6"	21"	550	321-2192K5	321-2092K5	321-2092K7	321-2204K51
C _ _ -0016-FF-180	7000	18"	Flg	Cap	46"	36"	6"	25"	750	321-2193K5	321-2093K5	321-2093K7	321-2205K51
C _ _ -0017-FF-200	8500	20"	Flg	Cap	48"	36"	6"	25"	800	321-2194K5	321-2094K5	321-2094K7	321-2206K51
C _ _ -0018-FF-240	12,000	24"	Flg	Cap	48'	44"	6"	25"	900	321-2195K5	321-2095K5	321-2095K7	321-2207K51

ΔP vs. Flow: Series A, B, C, and D



Use the chart above to access the init. 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 init ΔP does not increase, the specific filtration resistance of the airborne contaminates 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.

For more information:

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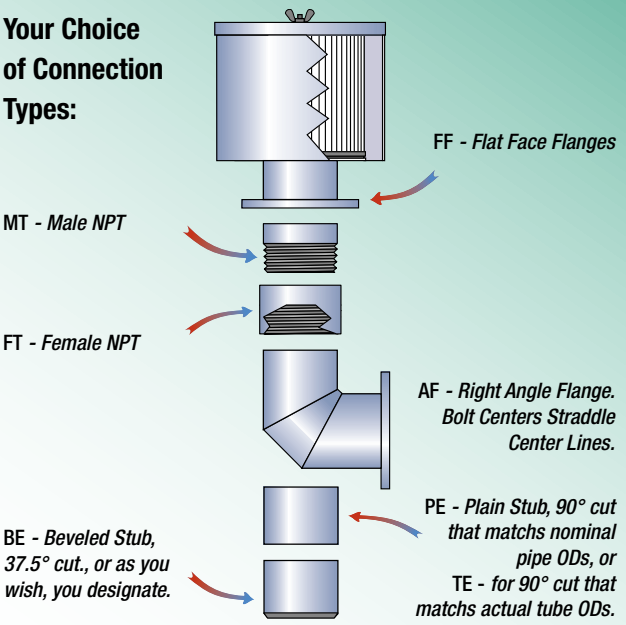
Air Intake Filter Choices

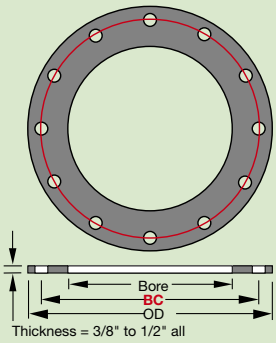
Model Considerations, Air Flow Sizing, Connection Style Choices, Plate Flange Sizing

FLTR Purple Engineering

Filters 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.

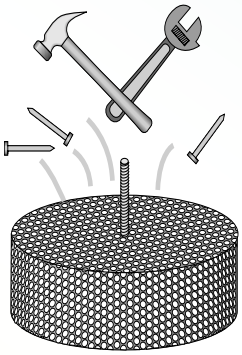
Your Choice of Connection Types:





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

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 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.

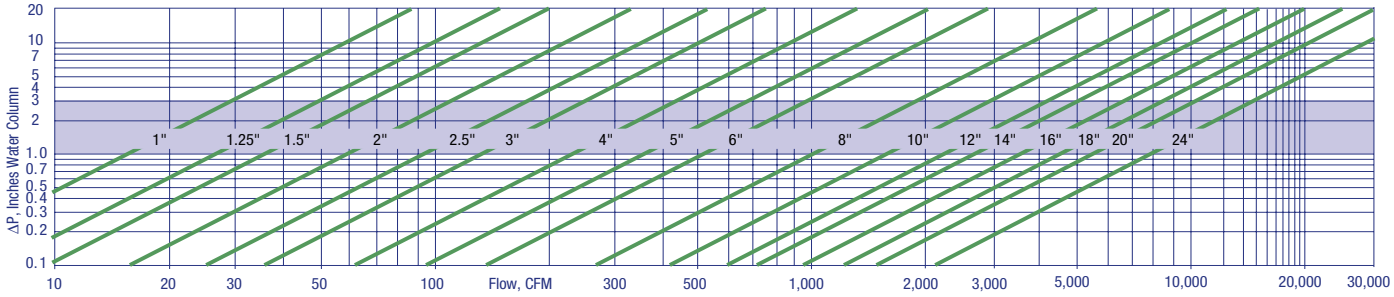


A 304SS throat safety cage sits beyond the filter element on all but economy housings. This exceptional feature ensures that the handle or pen you drop during change out doesn't fall into the process equipment downstream! And because it's 304SS, it's maintenance free.



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



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