

Application

The F41 Air Intake Filter is recommended for use on the intakes of centrifugal compressors, fans, blowers, engines and turbines where dust-free process air requirements are highly critical. When used on the inlets of compressors, engines and blowers, an appropriate silencer must be installed between the air moving device and the filter.

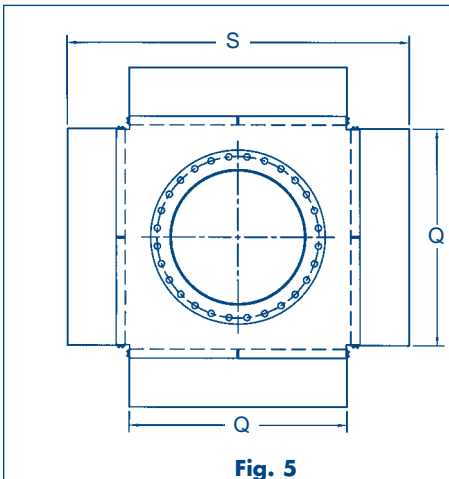
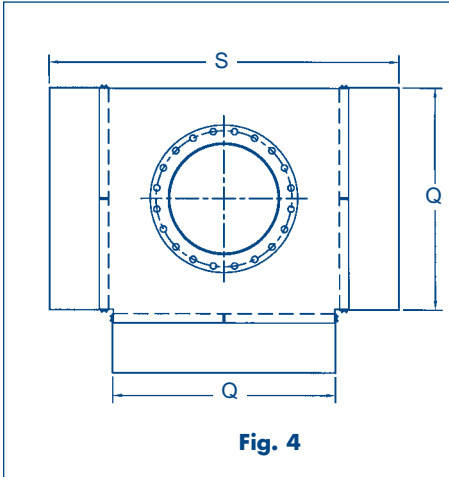
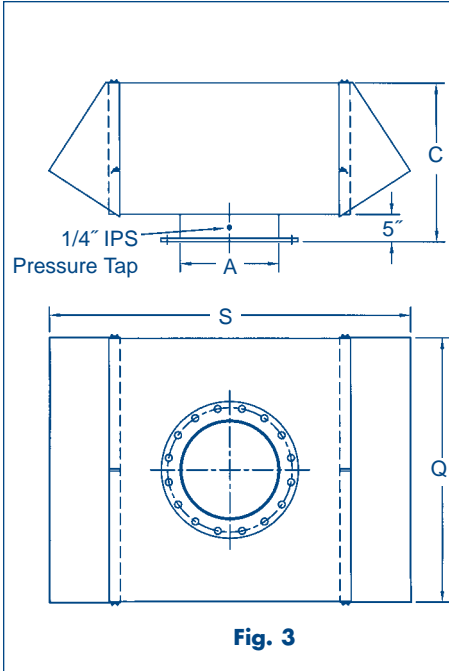
Design

The F41 Series employs a three-stage filtering system which consists of a Type F3 primary, a Type F4 intermediate and a Type F5 final filter. The rigid housing is designed to accept 24" x 24" filter elements, wherein the final filter contains a fluid seal to prevent bypass. The internal design provides a safeguard to prevent small size foreign objects from entering the air intake passageway when filters are removed. The minimum efficiency of the final filter is not less than 99.97% (by DOP test method) on 0.3 microns and above. Field tests indicate final filters need to be changed once every 18 to 24 months if the primary and intermediate filters are properly serviced. Special designs are available upon request.

Construction

Welded sheet and plate steel construction. Metal joints are sealed to prevent dirt and air from bypassing the filter element. All surfaces are prime coated, followed with a final coat of machinery enamel. Flanges are drilled to match 125 lb. American Standard Flanges. Weatherhoods are included. Special finishes, or materials, are available at extra cost.

For selection of filter elements and method of determining pressure drop — SEE PAGES 2 and 3.



Model	Total Filter Element (CFM)	Outlet Nozzle Velocity (FPM)	Fig.	A	Q	C	S	Wt. Lbs.	No. of 24" x 24" Filter Elements		
									F3	F4	F5
F41-81	2,500	7,198	1	8	24	29	46 ⁷ / ₈	315	1	1	1
F41-101	2,500	4,565	1	10	24	29	46 ⁷ / ₈	320	1	1	1
F41-121	2,500	3,183	1	12	24	29	46 ⁷ / ₈	335	1	1	1
F41-122	5,000	6,365	2	12	24	29	69 ³ / ₄	455	2	2	2
F41-142	5,000	4,940	2	14	24	29	69 ³ / ₄	465	2	2	2
F41-162	5,000	3,755	2	16	24	29	81 ³ / ₄	515	2	2	2
F41-184	10,000	5,900	3	18	48	29	81 ³ / ₄	875	4	4	4
F41-204	10,000	4,760	3	20	48	29	81 ³ / ₄	895	4	4	4
F41-244	10,000	3,280	3	24	48	29	81 ³ / ₄	915	4	4	4
F41-246	15,000	4,920	4	24	48	29	102 ³ / ₄	1180	6	6	6
F41-306	15,000	3,135	4	30	48	29	102 ³ / ₄	1215	6	6	6
F41-308	20,000	4,180	5	30	48	29	102 ³ / ₄	1415	8	8	8
F41-368	20,000	2,920	5	36	48	29	102 ³ / ₄	1505	8	8	8