Energy Efficient Compressed Air Filters

Pure-Aire filters protect the investment in your plant equipment, improve your product quality and reduce your energy costs. Pure-Aire provides the highest level of filtration available. Filters are available from 20 to 2,120 scfm, 15 to 290 psig, exceeding ISO 8573.1 quality classes.

PCF, PCR Particulate Pre-Filters

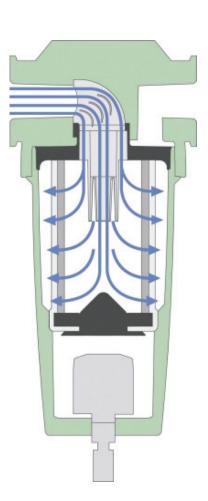
High-efficiency pre-filters (after-filters) remove particles to 1 micron, including coalesced lubricants and water droplets. Maximum remaining aerosol content is 0.5 ppm @ 70°F.

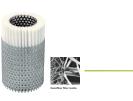
PCH High Efficiency Coalescing Filter

High-efficiency, coalescing pre-filters remove particles down to 0.01 micron, including water and oil aerosols, providing a maximum remaining oil aerosol content of 0.01 ppm @ 70°F.

PCC Odor and Taste Removal

Activated carbon filters remove lubricant and hydrocarbon odors. Remaining vapor content is less than 0.003 ppm (excluding methane). A PCC filter should always be preceded by a PCH high efficiency grade filter.





Deep Bed Pleating

Deep bed pleating provides 4.5 x more filter media than an ordinary element. A larger filtration area means lower flow velocities, increased dirt holding capacity, lower energy costs and a compact filter element. Graded density further improves filter life and overall performance.



Oleophopic nanofibre filter media repels oil and water to reduce pressure drop and minimize energy costs.



Aerospace Turning Vanes

Turning vanes effectively direct air flow into the filter element – enabling the entire filter element to be utilized.



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Old Filtration Technology

Conventional compressed air filters consume energy overcoming pressure drop. The pressure drop increases throughout the year and can consume more energy than the element is worth. Most manufacturers recommend a filter element changeout between 7 psi to 10 psi differential. This equates to a massive 5% extra in compressor energy costs. It also reduces the pressure available to your production equipment, air tools, etc.

Specifications

CFM	Capacity @	Inlet/Outlet		Weight			
GEIM	100 psig	Connection	А	В	С	D	(lb.)
20	21	3/8"	3.0	7.2	6.0	4.0	.9
40	42	1/2"	3.8	9.3	7.9	4.0	2.2
65	64	3/4"	3.8	9.3	7.9	4.0	2.2
125	127	1"	5.1	10.8	9.2	4.0	4.9
235	233	1-1/2"	5.1	14.3	12.7	4.0	5.7
340	339	1-1/2"	6.7	17.0	15.1	4.0	10.0
465	466	2"	6.7	20.6	18.7	4.0	11.6
700	699	2"	6.7	20.6	18.7	4.0	11.6
910	911	3"	8.1	25.3	22.9	4.0	22.0
1315	1314	3"	8.1	32.8	30.4	4.0	26.4
2120	2119	4"	16.5	46.2	43.1	4.0	98.0

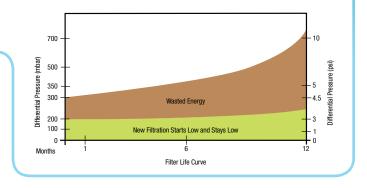
Note: the PCC grade filter will not remove CO/CO₂ or other toxic gases or fumes

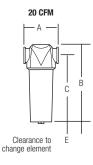
	SCF	SCH	SCC	SCR
Maximum operating pressure - with autodrain (psig)	232	232	232	232
Maximum operating pressure - with manual drain (psig)	290	290	290	290
Maximum operating temperature - with autodrain	176⁰F	176⁰F	176ºF	176ºF
Maximum operating temperature - with manual drain	212ºF	212ºF	212ºF	212ºF
Minimum operating temperature	35⁰F	35⁰F	35⁰F	35⁰F

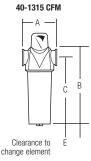
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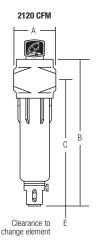
New Filtration Technology

Pure-Aire compressed air filters use very little energy as they have very low resistance to air flow due to their pleated design. Advancements such as deep bed pleating, aerospace turn vanes and oleophopic coating have led to a high performance filter element with low initial energy costs. Differential pressure starts low and stays low throughout the life of the filter element.









Pressure Correction	Factor															
Line Pressure psig	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor	0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.25	1.31	1.36	1.41	1.46	1.51
Line Pressure barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction Factor	0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.25	1.31	1.36	1.41	1.46	1.51