

GREAT LAKES AIR



ADSORBER

CING 0.01 MICRON

PARTICULATE

GRADE COALESCING

GRADE COALESCING

INTERNAL DRAINS

ADSORBER

PARTICULATE

UTILITY GRADE

HIGH EFFICIENCY GRADE COALESCING

**GF Series
Filtration Products**

Why is Compressed Air Filtration Required?

In one cubic foot of atmospheric air, there are millions of particles that are potentially harmful to your machines and equipment. These particles are primarily made up of dust, bacteria, viruses, smoke, fumes, hydrocarbons, water, oil and other contaminants derived from human and industrial activities. Roughly 80% of the contaminants are so small that they will easily pass through your compressors intake filter. When this air is drawn into the compressor intake and compressed to 100 PSIG the concentration of contamination is increased eight fold. The concentrated contaminants will easily find their way into your process lines, causing frequent and expensive downtime of your pneumatic equipment or adversely affect the quality of your products. The incorporation of filtration into your compressed air system will produce benefits in both productivity and product quality.

Molecular Particle Range	Macro Molecular Particle Range	Micro Particle Range	Macro Particle Range
Carbon		Milled Flour	
	Paint Pigment	Water Mist	Beach Sand
Collodial Silica Particles	Oil Vapors		Human Hair
		Coal Dust	
Viruses		Bacteria	
	Tobacco Smoke		Pollen
0.01	0.1	1.0	10
			100
			1000
Micrometers = Microns = μ m			

Clever Housing & Element Design that is Exceptionally Efficient

Bi-directional aluminum differential pressure gauge, which is standard on Coalescing & Particulate housings with 3/4" to 3" NPT connections.

The Activated Carbon filters do not produce differential pressure therefore no gauge is required.

Aluminum housing with powder coated interior and exterior.

Automatic float drain with manual override



All GF series filter elements utilize a pleated media design to increase surface area. The higher surface area decreases pressure drop and extends the elements contaminant holding capacity.

Inner and outer stainless steel element retainer.

Machined aluminum end caps to ensure a positive element to housing seal.

Model Number Nomenclature

Series		Connection		Bowl Length		Accessories		Element Grade	
XX		XX		X		X or XX or XXX		X	
GF	Inline T-Type	02	1/2"	1	Short	M	Manual Drain	H	High Efficiency Coalescing
		03	3/4"	2	Middle	G	Delta Pressure Gauge	U	Utility Grade Coalescing
		04	1"	3	Long				
		06	1-1/2"			A	Auto Float Drain	P	Particulate
		08	2"						
		10	2-1/2"						
		12	3"					V	Activated Carbon Adsorber

Filtration Grades & Specifications

Great Lakes Air has developed a comprehensive range of filter grades to meet the requirements of compressed air and gas applications.



Utility Grade Coalescing

- General Compressed Air Filtration
 - 99.999% Efficiency
- Particle Removal Down to 0.1 Micron
 - Max. Oil Carryover 0.4 PPM w/w
 - Nominal Pressure Drop 0.75 PSID
 - ISO 8573 (Class 2)

High Efficiency Coalescing

- High Quality Compressed Air Filtration
 - 99.9999% Efficiency
- Particle Removal Down to 0.01 Micron
 - Max. Oil Carryover 0.008 PPM w/w
 - Nominal Pressure Drop 1.2 PSID
 - ISO 8573 (Class 1)



Carbon Adsorption Filtration

- High purity extended surface area activated carbon removes hydrocarbon mist and vapor.
- Max. Oil Carryover 0.002 PPM w/w
- Nominal Pressure Drop 1.2 PSID



Particulate Filtration

- Particulate removal or coalescing prefiltration
 - 99.99% efficiency
- Particle removal down to 1 micron
- Nominal pressure drop 0.5 PSID
ISO 8573 (Class 3)

Specifications & Dimensions

High Efficiency Coalescing Model #	Utility Coalescing Model #	Particulate Model #	Activated Carbon Model #	In/Out Conn.	Capacity In SCFM @		Dimensions			
					100 PSIG	125 PSIG	A	B	C	D
GF-021A-H	GF-021A-U	GF-021M-P	GF-021M-V	1/2	25	29	3.4	6.9	0.8	2.4
GF-022A-H	GF-022A-U	GF-022M-P	GF-022M-V	1/2	35	41	3.4	8.2	0.8	3
GF-023A-H	GF-023A-U	GF-023M-P	GF-023M-V	1/2	47	55	3.4	8.2	0.8	3.5
GF-031GA-H	GF-031GA-U	GF-031GM-P	GF-031M-V	3/4	70	82	3.4	11	0.8	3.5
GF-041GA-H	GF-041GA-U	GF-041GM-P	GF-041M-V	1	116	136	5.1	12.4	1.7	5.3
GF-061GA-H	GF-061GA-U	GF-061GM-P	GF-061M-V	1-1/2	201	236	5.1	16.3	1.7	9.3
GF-062GA-H	GF-062GA-U	GF-062GM-P	GF-062M-V	1-1/2	318	374	5.1	20.2	1.7	13.2
GF-063GA-H	GF-063GA-U	GF-063GM-P	GF-063M-V	1-1/2	470	553	5.1	28.1	1.7	20.7
GF-081GA-H	GF-081GA-U	GF-081GM-P	GF-081M-V	2	616	724	6.5	32.4	1.9	20.5
GF-101GA-H	GF-101GA-U	GF-101GM-P	GF-101M-V	2-1/2	923	1085	6.5	42.2	1.9	30.3
GF-121GA-H	GF-121GA-U	GF-121GM-P	GF-121M-V	3	1324	1557	9.8	41.4	3	24
GF-122GA-H	GF-122GA-U	GF-122GM-P	GF-122M-V	3	1645	1935	9.8	47.3	3	30

Notes:

Capacity is in SCFM @ Specified Pressure & 100°F
 Dimensions are in inches
 Dimension "D" is minimum bowl removal clearance
 Connections are in NPT

GF Series Housing Specifications:

Maximum Pressure: 235 PSIG
 Maximum Temperature: 140°F
 Housing Material: Aluminum
 Port Connection: NPT Standard
 Seals: Nitrile



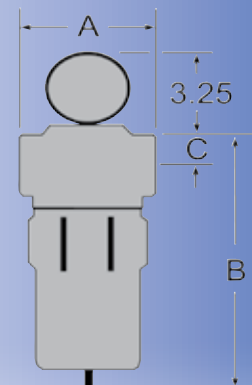
Semi Autodrain



Internal Autodrain w/ Manual Override



External Autodrain GF-081 & Larger



Other Products from Great Lakes Air Products



**GRF Series Non Cycling
Type Air Dryer**



**GTX Series Cycling
Type Air Dryer**



**Regenerative Type
Desiccant Air Dryers**



**Nitrogen
Generators**



**Condensate
Drain Systems**

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