



**GHN Series
Filtration Products**

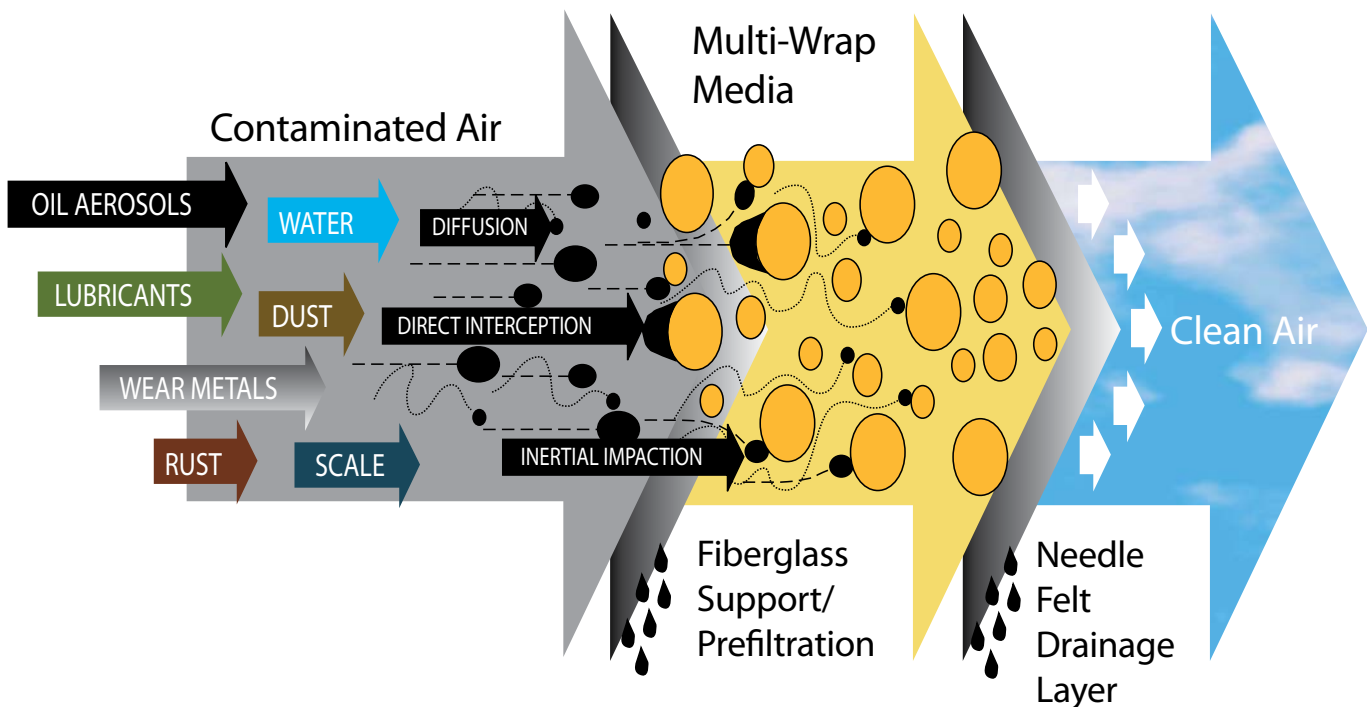
Why is Filtration Required

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 compressor's 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 affecting 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
Colloidal Silica Particles	Oil Vapors		Human Hair
		Coal Dust	
Viruses		Bacteria	
	Tobacco Smoke		Pollen
0.01	0.1	1.0	10
			100
			1000

Micrometers = Microns = μm

Principals of Filtration



Filtration Grades & Specifications

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

High Efficiency Coalescing Filtration Grade - H

- High Quality Compressed Air Filtration
- Particle Removal Down to 0.01 Micron
 - Max. Oil Carryover 0.008 PPM w/w
 - Clean Dry Pressure Drop 1.4 PSID
- Oil Saturated Pressure Drop 3.0 PSID
 - ISO 8573 (Class 1)

Utility Coalescing Filtration Grade - PC

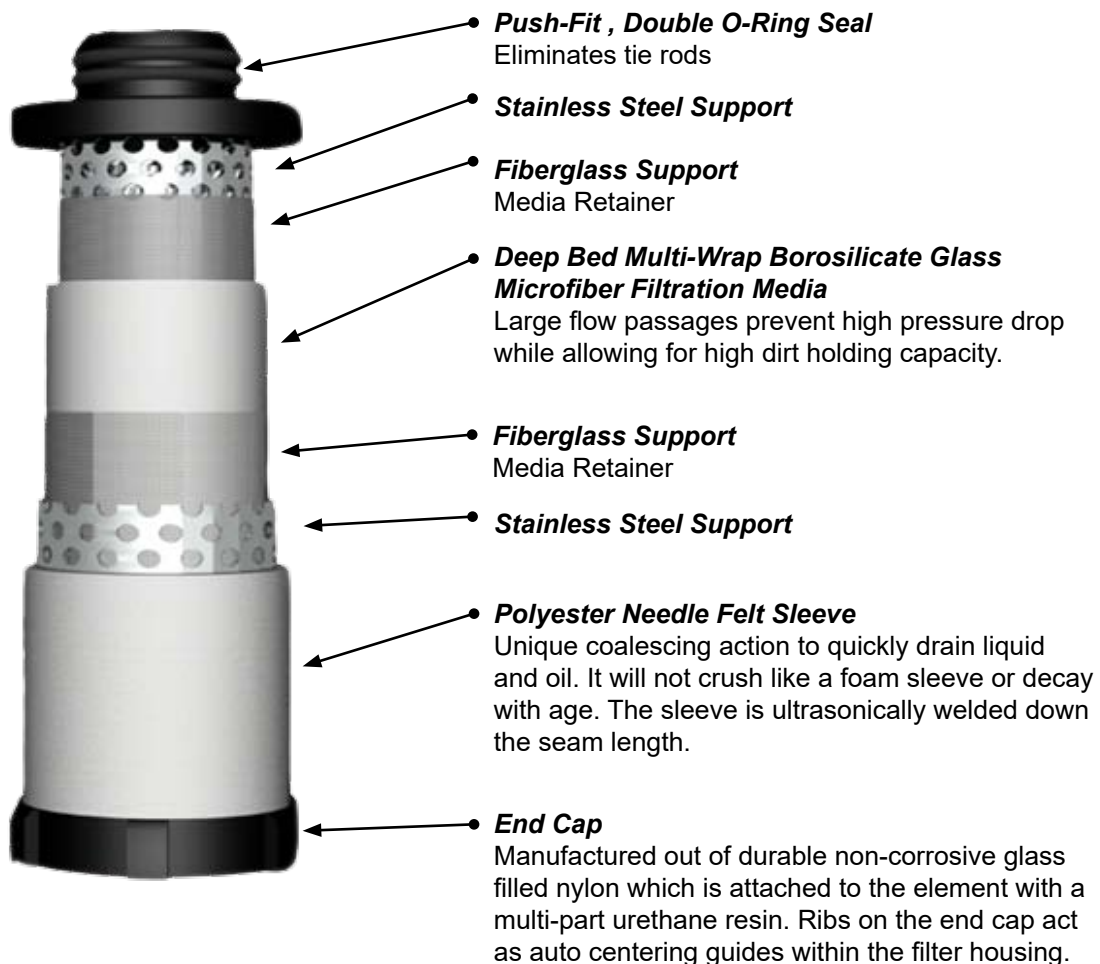
- General Compressed Air Filtration
- Particle Removal Down to 0.1 Micron
 - Max. Oil Carryover 0.09 PPM w/w
 - Clean Dry Pressure Drop 1.0 PSID
- Oil Saturated Pressure Drop 2.0 PSID
 - ISO 8573 (Class 2)

Carbon Adsorption Filtration Grade - V

- High purity extended surface area activated carbon removes hydrocarbon mist and vapor.
- Max. Oil Carryover 0.003 PPM w/w
- Nominal Pressure Drop 1.0 PSID

Particulate Filtration Grade - PP

- Particulate Removal
- Particle removal down to 1 Micron
- Clean Dry Pressure Drop 1.0 PSID
 - Outside / In Element Flow
 - ISO 8573 (Class 3)



Cleaver & Efficient Housing Design



Delta Pressure Gauge

Standard on models
GHN-80 through GHN-1650

Heavy Aluminum Construction

Casting is 100% leak free
QC tested @ 300 PSI & 250°F

Modular or NPT Connection

Multiple filters can be bolted together with
an O-Ring seal. This simplifies installation
and reduces mounting space requirements

Annular Seal and Captive O-Ring

This seal between head and bowl prevents
leaks and simplifies bowl replacement

Internal & External Coating

Electrophoretic paint finish followed
by a tough exterior coating
polyester powder coating

Internal Ribs

Secures element in place and forms
a dead-air zone to prevent
condensate re-entrainment

Large Capacity Condensate Sump

Threaded Bottom Port

External access to drain

Hexagon on Bottom

Assists with bowl removal

GHN Series Housing Specifications:

Maximum Pressure (Manual Drain):	300 PSIG
Maximum Pressure (Auto Drain):	232 PSIG
Maximum Temperature: (Manual Drain)	248°F
Maximum Temperature: (Auto Drain)	176°F
Housing Material:	Aluminum Alloy
Port Connection:	NPT Standard
Seals:	Nitrile

Features Benefits & Options



Differential Indicator

Dual sided, allowing view in multiple mounting configurations. The Indicator uses a three magnet system. This, combined with a purpose molded rolling diaphragm, ensures high accuracy, low hysteresis, no pressure behind the gauge face, and no cross contamination.

Optional:

GHN-0020 - GHN-0070

Standard:

GHN-0080 - GHN-1650



External Drain Access

Eliminates the need to access the internals of the filter to perform regular drain maintenance. Once depressurized the automatic internal float simply unscrews through the bottom of the bowl.



O-Ring Face Bolted Connection

Multiple filters can be bolted together with an O-Ring seal. This simplifies installation and reduces mounting space requirements. Close connection kits include O-Ring and bolting hardware.

Model Nomenclature

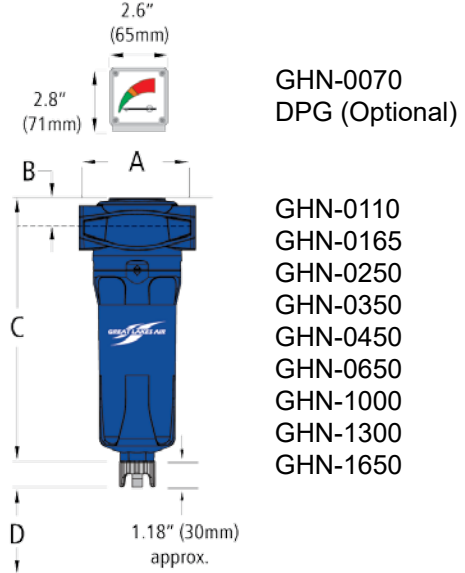
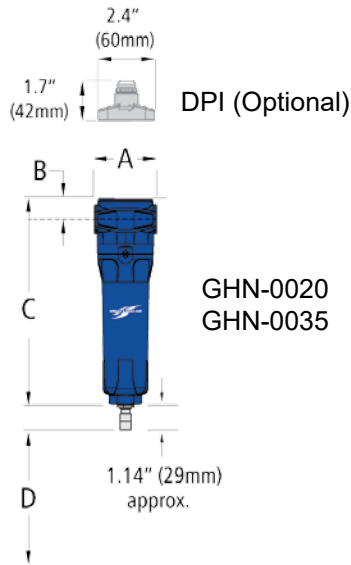
Model #	Capacity SCFM @		Filtration Type	Indication	Drain	Max. Temp.	In/Out Conn.	Replacement Element
	100 PSIG	125 PSIG						
GHN-0020-A-◇	20	22	Coalescing	None	Auto	248°F	1/4	EGH-0020-◇
GHN-0035-A-◇	35	39	Coalescing	None	Auto	248°F	1/2	EGH-0035-◇
GHN-0070-A-◇	70	78	Coalescing	None	Auto	248°F	1/2	EGH-0070-◇
GHN-0080-GA-◇	80	90	Coalescing	Gauge	Auto	248°F	3/4	EGH-0080-◇
GHN-0110-GA-◇	110	123	Coalescing	Gauge	Auto	248°F	1	EGH-0110-◇
GHN-0165-GA-◇	165	185	Coalescing	Gauge	Auto	248°F	1	EGH-0165-◇
GHN-0250-GA-◇	250	280	Coalescing	Gauge	Auto	248°F	1-1/2	EGH-0250-◇
GHN-0350-GA-◇	350	392	Coalescing	Gauge	Auto	248°F	1-1/2	EGH-0350-◇
GHN-0450-GA-◇	450	504	Coalescing	Gauge	Auto	248°F	2	EGH-0450-◇
GHN-0650-GA-◇	650	728	Coalescing	Gauge	Auto	248°F	2	EGH-0650-◇
GHN-1000-GA-◇	1000	1120	Coalescing	Gauge	Auto	248°F	3	EGH-1000-◇
GHN-1300-GA-◇	1300	1456	Coalescing	Gauge	Auto	248°F	3	EGH-1300-◇
GHN-1650-GA-◇	1650	1848	Coalescing	Gauge	Auto	248°F	3	EGH-1650-◇

◇ = Element Designation	H=High Efficiency Coalescing	PC= Pre Coalescer
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GHN-0020-M-PP	20	22	Particulate	None	Manual	248°F	1/4	EGH-0020-PP
GHN-0035-M-PP	35	39	Particulate	None	Manual	248°F	1/2	EGH-0035-PP
GHN-0070-M-PP	70	78	Particulate	None	Manual	248°F	1/2	EGH-0070-PP
GHN-0080-GM-PP	80	90	Particulate	Gauge	Manual	248°F	3/4	EGH-0080-PP
GHN-0110-GM-PP	110	123	Particulate	Gauge	Manual	248°F	1	EGH-0110-PP
GHN-0165-GM-PP	165	185	Particulate	Gauge	Manual	248°F	1	EGH-0165-PP
GHN-0250-GM-PP	250	280	Particulate	Gauge	Manual	248°F	1-1/2	EGH-0250-PP
GHN-0350-GM-PP	350	392	Particulate	Gauge	Manual	248°F	1-1/2	EGH-0350-PP
GHN-0450-GM-PP	450	504	Particulate	Gauge	Manual	248°F	2	EGH-0450-PP
GHN-0650-GM-PP	650	728	Particulate	Gauge	Manual	248°F	2	EGH-0650-PP
GHN-1000-GM-PP	1000	1120	Particulate	Gauge	Manual	248°F	3	EGH-1000-PP
GHN-1300-GM-PP	1300	1456	Particulate	Gauge	Manual	248°F	3	EGH-1300-PP
GHN-1650-GM-PP	1650	1848	Particulate	Gauge	Manual	248°F	3	EGH-1650-PP

GHN-0020-M-V	20	22	Adsorber	None	Manual	122°F	1/4	EGH-0020-V
GHN-0035-M-V	35	39	Adsorber	None	Manual	122°F	1/2	EGH-0035-V
GHN-0070-M-V	70	78	Adsorber	None	Manual	122°F	1/2	EGH-0070-V
GHN-0080-M-V	80	90	Adsorber	None	Manual	122°F	3/4	EGH-0080-V
GHN-0110-M-V	110	123	Adsorber	None	Manual	122°F	1	EGH-0110-V
GHN-0165-M-V	165	185	Adsorber	None	Manual	122°F	1	EGH-0165-V
GHN-0250-M-V	250	280	Adsorber	None	Manual	122°F	1-1/2	EGH-0250-V
GHN-0350-M-V	350	392	Adsorber	None	Manual	122°F	1-1/2	EGH-0350-V
GHN-0450-M-V	450	504	Adsorber	None	Manual	122°F	2	EGH-0450-V
GHN-0650-M-V	650	728	Adsorber	None	Manual	122°F	2	EGH-0650-V
GHN-1000-M-V	1000	1120	Adsorber	None	Manual	122°F	3	EGH-1000-V
GHN-1300-M-V	1300	1456	Adsorber	None	Manual	122°F	3	EGH-1300-V
GHN-1650-M-V	1650	1848	Adsorber	None	Manual	122°F	3	EGH-1650-V

Dimensions & Specifications



Model #	In/Out Connections	Drain Connections	Weight	Dimensions			
				A	B	C	D
GHN-0020-A-◇	1/4"	1/8" MPT	1.1	2.76	0.91	7.44	2.76
GHN-0035-A-◇	1/2"	1/8" MPT	1.3	5.0	0.91	9.09	2.76
GHN-0070-A-◇	1/2"	1/8" MPT	3.7	5.0	1.26	11.22	3.15
GHN-0080-GA-◇	3/4"	1/8" MPT	3.7	5.0	1.26	11.22	3.15
GHN-0110-GA-◇	1"	1/8" MPT	3.7	5.0	1.26	11.22	3.15
GHN-0165-GA-◇	1"	1/8" MPT	4.4	5.0	1.26	11.22	3.15
GHN-0250-GA-◇	1-1/2"	1/4"	6.6	5.5	1.6	18.75	3.25
GHN-0350-GA-◇	1-1/2"	1/4"	10.8	6.7	2.08	20.0	3.94
GHN-0450-GA-◇	2"	1/4"	10.8	6.7	2.08	20.0	3.94
GHN-0650-GA-◇	2"	1/4"	12.1	6.7	2.08	27.9	3.94
GHN-1000-GA-◇	3"	1/4"	23.1	8.7	2.75	29.0	3.94
GHN-1300-GA-◇	3"	1/4"	25.4	8.7	2.75	33.7	3.94
GHN-1650-GA-◇	3"	1/4"	27.6	8.7	2.75	39.6	3.94

Notes: All Dimensions are in Inches / Weight is in Pounds / Connections are in Inches NPT

Series	Capacity	Accessories		Element Grade	
GHN -	XXXX -	X or XX -		X or XX	
Inline T-Type	0020	A	Auto Float Drain	H	High Efficiency Coalescing
	0035	GA	Delta Pressure Gauge w/ Auto Float Drain		
	0070			M	Manual Drain
	0080	GM	Delta Pressure Gauge w/ Manual Drain		
	0110			DA	Delta Pressure Indicator w/ Auto Float Drain
	0165				
	0250	DM	Delta Pressure Indicator w/ Manual Drain		
	0350				
	0450				
	0650				
	1000				
	1300				
1650					

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