



ADSORBER

COALESCING 0.01

PARTICULATE

COALESCING

COALESCING

INTERNAL DRAINS

ADSORBER

PARTICULATE

UTILITY GRADE

HIGH EFFICIENCY GRADE COALESCING

GH Series Filtration Products

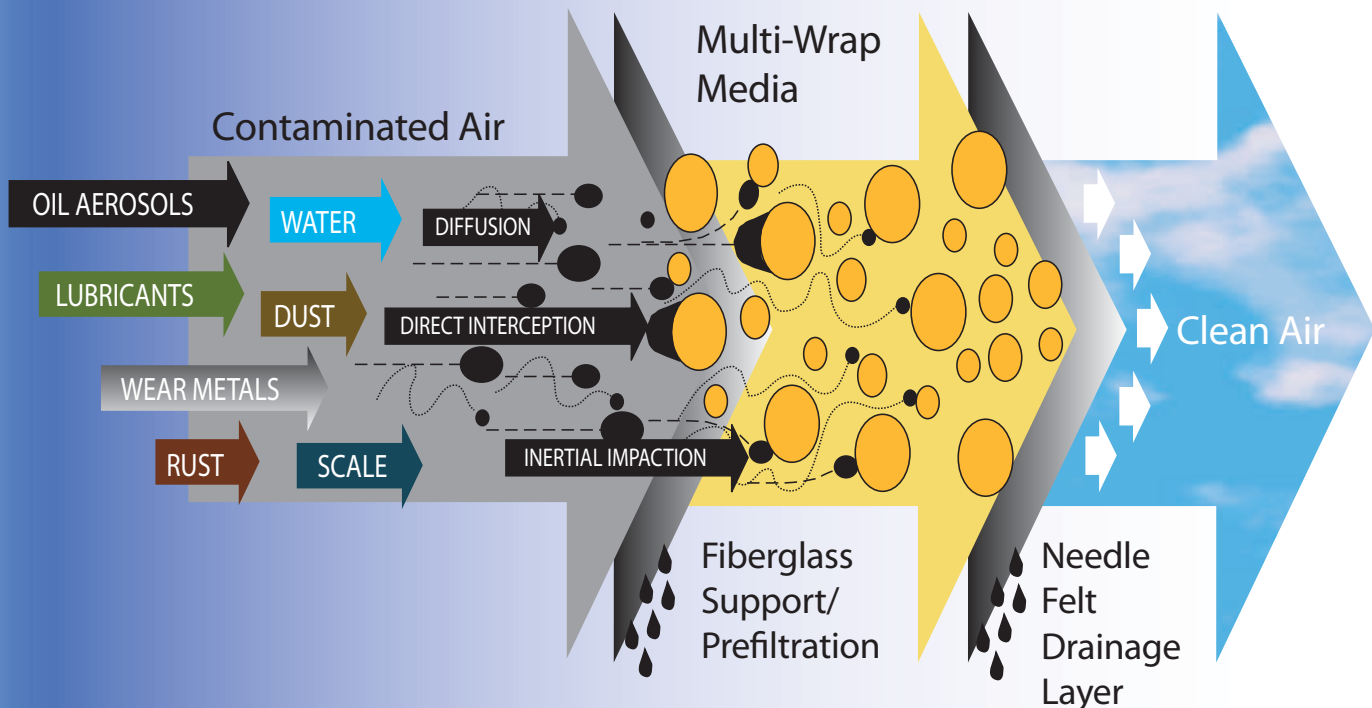
Why is Compressed Air Filtration Required?

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 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

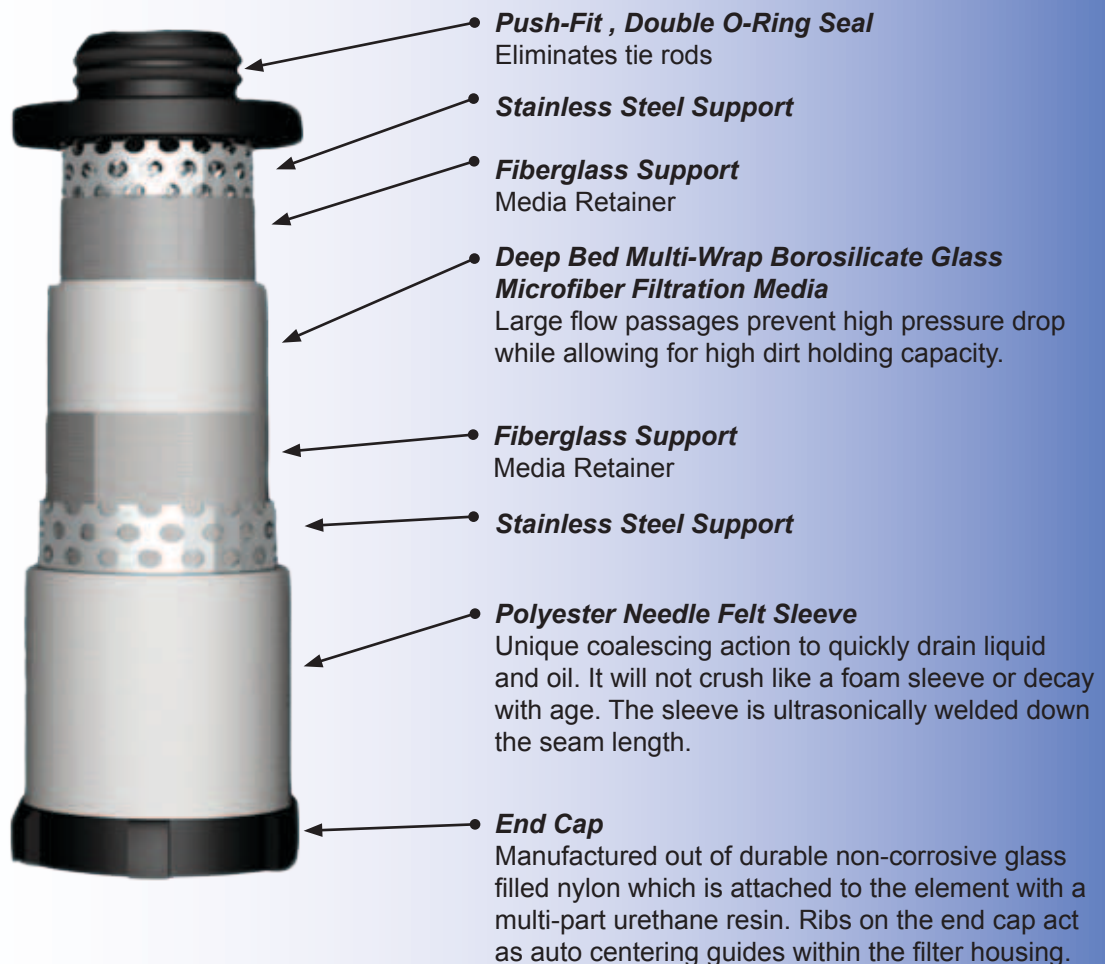
- General Compressed Air Filtration
- Particle Removal Down to 0.1 Micron
 - Max. Oil Carryover 0.09 PPM w/w
 - Clean Dry Pressure Drop 1.0 PSID
- Oil Saturated Pressure Drop 2.0 PSID
 - ISO 8573 (Class 2)

Carbon Adsorption Filtration Grade - V

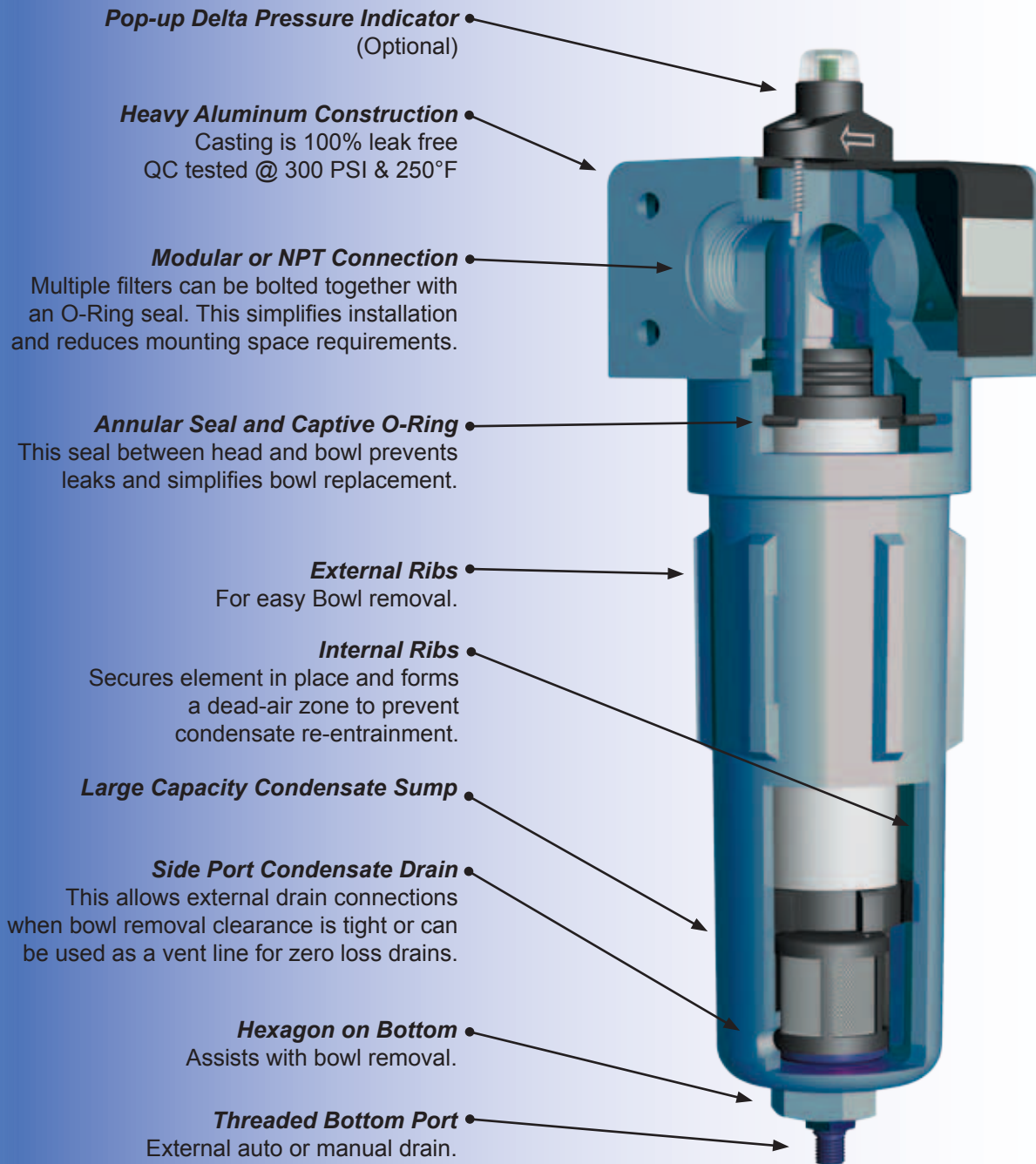
- High purity extended surface area activated carbon removes hydrocarbon mist and vapor.
- Max. Oil Carryover 0.003 PPM w/w
- Nominal Pressure Drop 1.0 PSID

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)



Clever & Efficient Housing Design



GH Series Housing Specifications:

Maximum Pressure:	300 PSIG
Maximum Temperature:	248°F
Maximum Pressure w/ Internal Float:	232 PSIG
Housing Material:	Aluminum
Port Connection:	NPT Standard
Seals:	Nitrile

Features Benefits & Options

Differential Pressure Switch

Allows for remote monitoring of filter performance. Capable of field retrofit in existing installations.

GH-DGNO = Normally Open Switch
GH-DGNC = Normally Closed Switch

Mounting Brackets

Allows convenient wall mounting of single or multiple filters.

Filter Models = Part #'s
GH-0020 / GH0040 = GH0035-BK
GH-0070 / GH0165 = GH0165-BK
GH-0250 / GH0700 = GH0700-BK
GH-1000 / GH1650 = GH1650-BK

Each part # is a set of two brackets with hardware.

Differential Gauge

Dual sided, allowing view in wall mount applications

Optional: GH-0020 through GH-0070
Standard: GH-0080 through GH-1650

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.

Filter Models = Part #'s
GH-0020 / GH0040 = GH0035-CK
GH-0070 / GH0165 = GH0165-CK
GH-0250 / GH0700 = GH0700-CK
GH-1000 / GH1650 = GH1650-CK



Side Port Condensate Drain

This allows external drain connections when bowl removal clearance is tight or can be used as a vent line for zero loss drains.

Standard GH-0080 through GH-1650



Large Capacity Drain Adapter Plate

Allows easy removal of external or internal drains for inspection or maintenance without bowl removal.

Standard GH-1000 through GH-1650

Model #	Capacity In SCFM @		Filtration Type	Indication	Drain	Max. Temp.	In/Out Conn.	Replacement Element
	100 PSIG	125 PSIG						
GH-0020-A-◇	20	22	Coalescing	None	Auto	248°F	1/4	EGH-0020-◇
GH-0035-A-◇	35	39	Coalescing	None	Auto	248°F	1/2	EGH-0035-◇
GH-0070-A-◇	70	78	Coalescing	None	Auto	248°F	1/2	EGH-0070-◇
GH-0080-GA-◇	80	90	Coalescing	Gauge	Auto	248°F	3/4	EGH-0080-◇
GH-0110-GA-◇	110	123	Coalescing	Gauge	Auto	248°F	1	EGH-0110-◇
GH-0165-GA-◇	165	185	Coalescing	Gauge	Auto	248°F	1	EGH-0165-◇
GH-0250-GA-◇	250	280	Coalescing	Gauge	Auto	248°F	1-1/2	EGH-0250-◇
GH-0350-GA-◇	350	392	Coalescing	Gauge	Auto	248°F	1-1/2	EGH-0350-◇
GH-0500-GA-◇	500	560	Coalescing	Gauge	Auto	248°F	2	EGH-0500-◇
GH-0700-GA-◇	700	784	Coalescing	Gauge	Auto	248°F	2	EGH-0700-◇
GH-1000-GA-◇	1000	1120	Coalescing	Gauge	Auto	248°F	3	EGH-1000-◇
GH-1300-GA-◇	1300	1456	Coalescing	Gauge	Auto	248°F	3	EGH-1300-◇
GH-1650-GA-◇	1650	1848	Coalescing	Gauge	Auto	248°F	3	EGH-1650-◇

◇ = Element Designation:

H=High Efficiency Coalescing

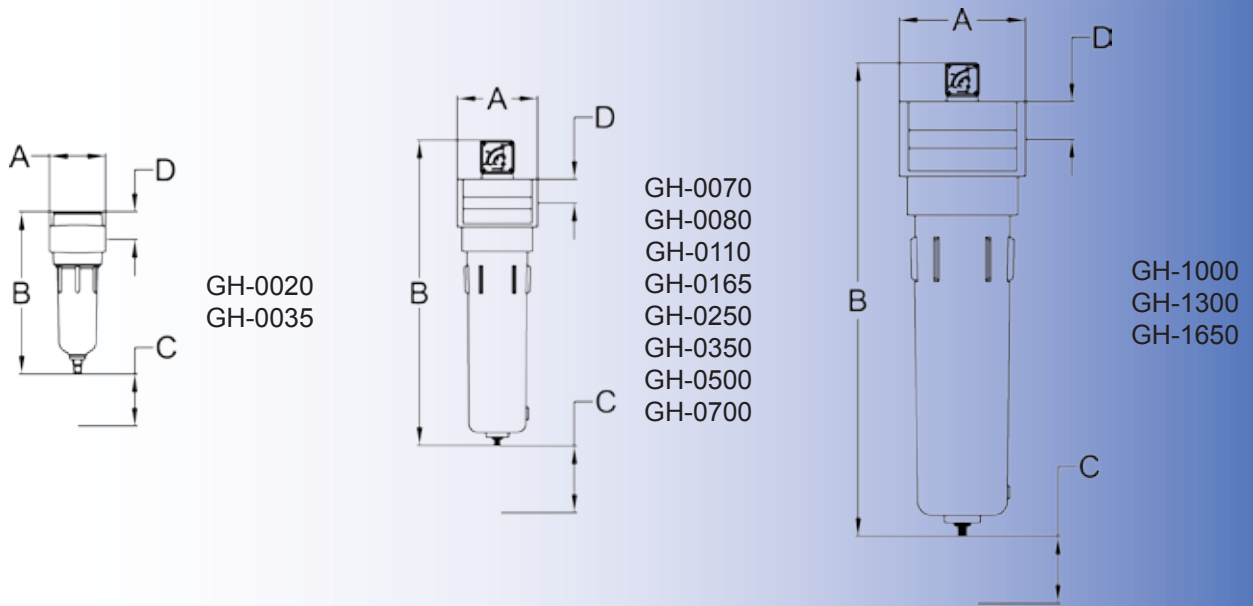
PC= Pre Coalescer

Model #	Capacity In SCFM @		Filtration Type	Indication	Drain	Max. Temp.	In/Out Conn.	Replacement Element
	100 PSIG	125 PSIG						
GH-0020-M-PP	20	22	Particulate	None	Manual	248°F	1/4	EGH-0020-PP
GH-0035-M-PP	35	39	Particulate	None	Manual	248°F	1/2	EGH-0035-PP
GH-0070-M-PP	70	78	Particulate	None	Manual	248°F	1/2	EGH-0070-PP
GH-0080-GM-PP	80	90	Particulate	Gauge	Manual	248°F	3/4	EGH-0080-PP
GH-0110-GM-PP	110	123	Particulate	Gauge	Manual	248°F	1	EGH-0110-PP
GH-0165-GM-PP	165	185	Particulate	Gauge	Manual	248°F	1	EGH-0165-PP
GH-0250-GM-PP	250	280	Particulate	Gauge	Manual	248°F	1-1/2	EGH-0250-PP
GH-0350-GM-PP	350	392	Particulate	Gauge	Manual	248°F	1-1/2	EGH-0350-PP
GH-0500-GM-PP	500	560	Particulate	Gauge	Manual	248°F	2	EGH-0500-PP
GH-0700-GM-PP	700	784	Particulate	Gauge	Manual	248°F	2	EGH-0700-PP
GH-1000-GM-PP	1000	1120	Particulate	Gauge	Manual	248°F	3	EGH-1000-PP
GH-1300-GM-PP	1300	1456	Particulate	Gauge	Manual	248°F	3	EGH-1300-PP
GH-1650-GM-PP	1650	1848	Particulate	Gauge	Manual	248°F	3	EGH-1650-PP

Model #	Capacity In SCFM @		Filtration Type	Indication	Drain	Max. Temp.	In/Out Conn.	Replacement Element
	100 PSIG	125 PSIG						
GH-0020-M-V	20	22	Adsorber	None	Manual	122°F	1/4	EGH-0020-V
GH-0035-M-V	35	39	Adsorber	None	Manual	122°F	1/2	EGH-0035-V
GH-0070-M-V	70	78	Adsorber	None	Manual	122°F	1/2	EGH-0070-V
GH-0080-M-V	80	90	Adsorber	None	Manual	122°F	3/4	EGH-0080-V
GH-0110-M-V	110	123	Adsorber	None	Manual	122°F	1	EGH-0110-V
GH-0165-M-V	165	185	Adsorber	None	Manual	122°F	1	EGH-0165-V
GH-0250-M-V	250	280	Adsorber	None	Manual	122°F	1-1/2	EGH-0250-V
GH-0350-M-V	350	392	Adsorber	None	Manual	122°F	1-1/2	EGH-0350-V
GH-0500-M-V	500	560	Adsorber	None	Manual	122°F	2	EGH-0500-V
GH-0700-M-V	700	784	Adsorber	None	Manual	122°F	2	EGH-0700-V
GH-1000-M-V	1000	1120	Adsorber	None	Manual	122°F	3	EGH-1000-V
GH-1300-M-V	1300	1456	Adsorber	None	Manual	122°F	3	EGH-1300-V
GH-1650-M-V	1650	1848	Adsorber	None	Manual	122°F	3	EGH-1650-V

Capacity is stated in SCFM @ Specified Pressure & 100°F

Dimensions & Specifications



Model #	In/Out Connections	Drain Connections		Weight	Dimensions			
		Bottom	Side		A	B	C	D
GH-0020-A-◇	1/4"	1/8" MPT	N/A	1.7	3.0	7.5	4.0	1.5
GH-0035-A-◇	1/2"	1/8" MPT	N/A	1.9	3.0	7.5	4.0	1.5
GH-0070-A-◇	1/2"	1/8" MPT	1/4"	6.5	4.5	10.5	6.0	1.5
GH-0080-GA-◇	3/4"	1/8" MPT	1/4"	6.6	4.5	10.5	6.0	1.5
GH-0110-GA-◇	1"	1/8" MPT	1/4"	8.2	4.5	14.0	6.0	1.5
GH-0165-GA-◇	1"	1/8" MPT	1/4"	8.2	4.5	14.0	6.0	1.5
GH-0250-GA-◇	1-1/2"	1/4"	1/2"	12.8	5.7	19.0	6.5	2.0
GH-0350-GA-◇	1-1/2"	1/4"	1/2"	12.9	5.7	19.0	6.5	2.0
GH-0500-GA-◇	2"	1/4"	1/2"	13.2	5.7	19.0	6.5	2.0
GH-0700-GA-◇	2"	1/4"	1/2"	17.5	5.7	26.7	6.5	2.0
GH-1000-GA-◇	3"	1/4"	1/2"	46.4	9.0	27.5	7.0	2.5
GH-1300-GA-◇	3"	1/4"	1/2"	49.5	9.0	32.5	7.0	2.5
GH-1650-GA-◇	3"	1/4"	1/2"	53.3	9.0	38.5	7.0	2.5

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

Model Nomenclature					
Series	Capacity	Accessories		Element Grade	
GH -	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				
	0080	M	Manual Drain	PP	Particulate Removal
	0110	GM	Delta Pressure Gauge w/ Manual Drain		
	0165				
	0250	DA	Delta Pressure Indicator w/ Auto Float Drain	V	Activated Carbon Adsorber
	0350				
	0500	DM	Delta Pressure Indicator w/ Manual Drain		
	0700				
	1000				
	1300				
1650					

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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