



GSD-S Sterile Air Series Filter Cartridges

Product Introduction

Filtrafine GSD-S Sterile Air Series is wrapped depth filter cartridges, which is used for sterile filtration of compressed air, process air, technical gases and vent applications.

The retention rate is $\geq 99.99998\%$ related to $\leq 0.2 \mu\text{m}$ ensuring safe and sterile filtration of process gases.

The GSD-S series provides low pressure drop, high dirt-holding capacity, great strength, and long service life to dramatically reduce your operating costs.



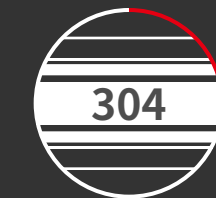
Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations.



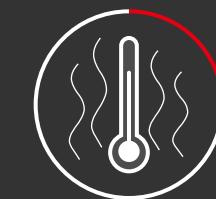
CE Certificated.



Manufactured under a certificated ISO9001 and ISO14001 quality system.



High-quality 304 Stainless Steel Material.



Maximum temperature 200°C (392°F).
 $\geq 150^\circ\text{C}(302^\circ\text{F})$ only for dry compressed air



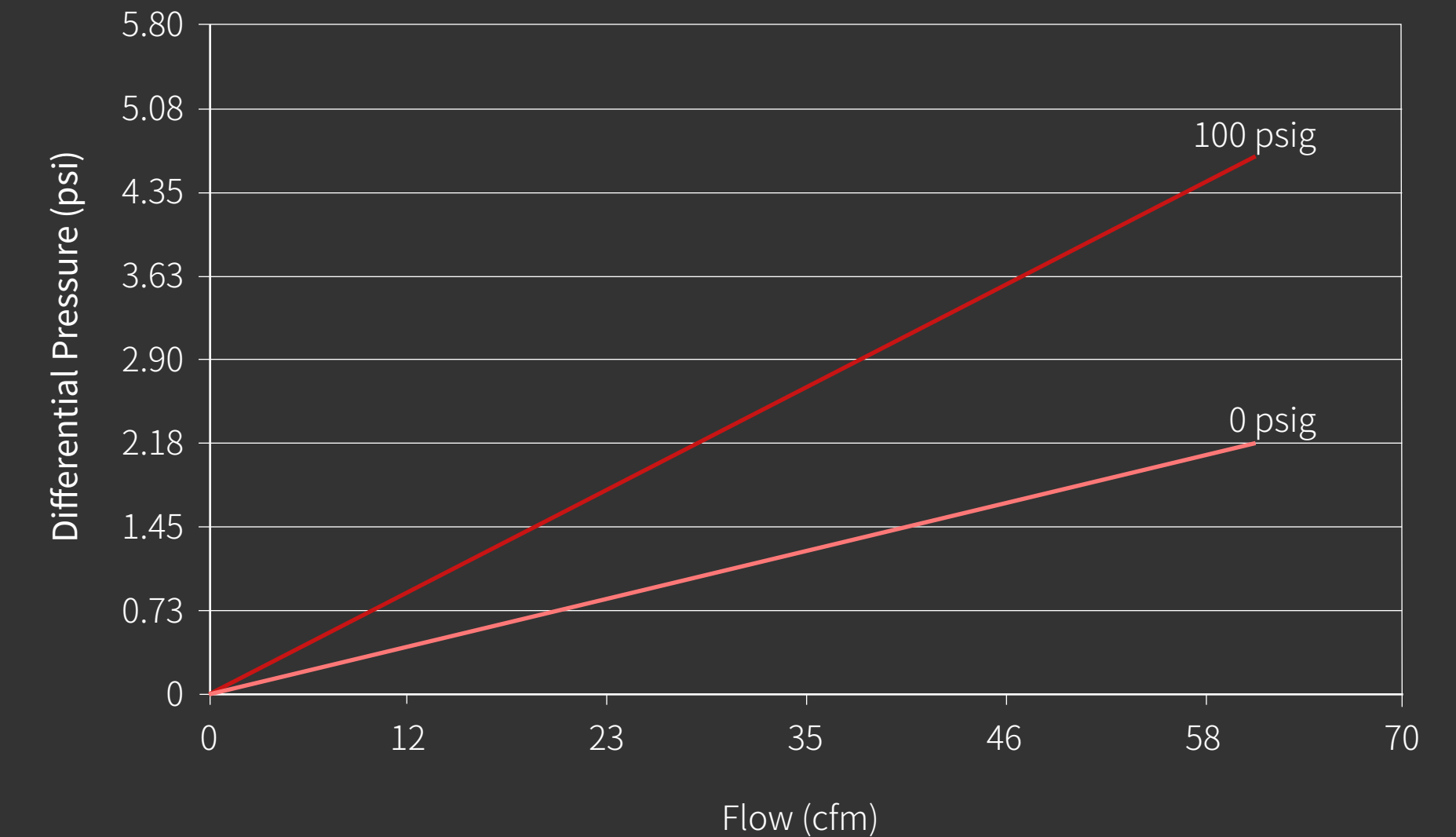
High flow rates and low pressure drop.

Product Specifications

Temperature Range	-4°F to 392°F ($\geq 302^\circ\text{F}$ only for dry compressed air)
Effective Filtration Area (nominal)	0.5 ft ² per 10 inch element (For other element sizes see Correction Factors Filtration Surface Area)
Absolute Retention Rate	$\geq 99.99998\%$ at $\leq 0.2 \mu\text{m}$
Bacterial/Viral Retention	Scientifically validated by an independent institute via: Brevundimonas diminutas aerosol challenge ($\geq 0.2 \mu\text{m}$) LRV $> 7/\text{cm}^2$ MS2 Coliphage aerosol challenge ($\geq 0.02\mu\text{m}$) LRV $> 9/\text{cm}^2$
Integrity Test Values	DOP Test according to HIMA $> 99.99998\%$
Configurations	UF: Push-in connection and flat end cap
Maximum Differential Pressure	75 psid (-4°F to 302°F), regardless of the system pressure or flow direction
Typical Continuous Air Service Life	12 months recommended changeout cycle
Typical Vent Service Life	6 months recommended changeout cycle
Cumulative Steam Time	250°F, Saturated Steam ≥ 100 cycles (30 minutes) Figures based on steaming resistance lab tests. Filter elements must be checked in actual use. Contact Donaldson for recommended Autoclaving/Steaming procedures.

Flow Rate vs. Initial Differential Pressure

Measured differential pressure for GSD0.2-1030A-S24S, air, 68°F, 0 psig and 100 psig. The actual differential pressure may vary depending on the on-site conditions.



Pressure Correction Factors

Flow for other pressures can be calculated with the correction factors below.

Pressure (psig)	15	29	58	87	100	116	145	174	203	232
Correction Factor	0.25	0.36	0.6	0.9	1.0	1.1	1.4	1.6	1.9	2.1

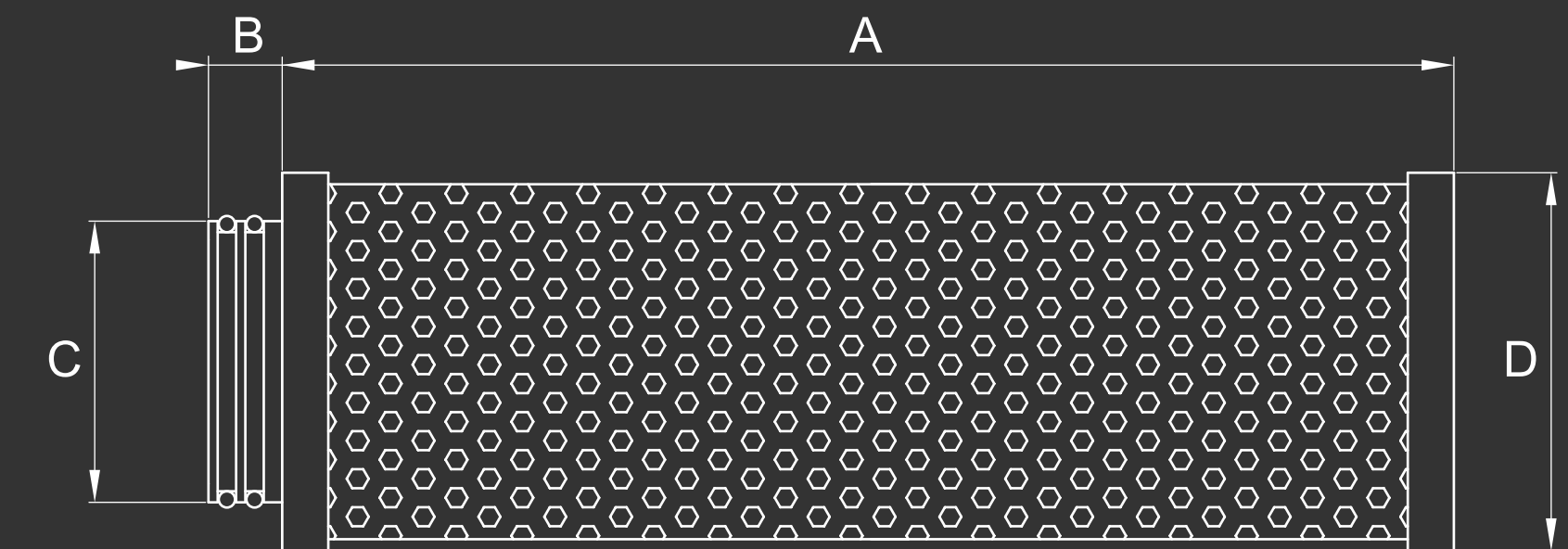
Ordering Information

GSD	0.2-	20	30	A-	S	24	S
Product Name	Retention Rating	Cartridge Length	Cartridge Outside Diameter	Material of Construction	Applications	Connection Size	O-rings Material
GSD	0.2µm	03=3", 04=4.1", 05=5", 07=7.1", 10=10", 15=15", 20=20", 30=30"	10=1.65", 20=2.05", 25=2.44", 30=3.39" 50=5.5"	A=304	S=Sterile filter	12=1.2", 15=1.5", 24=2.4", 35=3.5"	S=Silicone(standard), N=Buna N, E=EPDM, T=PTFE, F=PTFE over Viton®*

Materials

Filter Media	Borosilicate glass fiber	CFR Title 21: 177.2660
Upstream Support	PTFE	CFR Title 21: 177.1550
Downstream Support	PTFE	CFR Title 21: 177.1550
Outer Guard	Stainless Steel 1.4301 (304 SS)	CFR Title 21: 211.65
Inner Guard	Stainless Steel 1.4301 (304 SS)	CFR Title 21: 211.65
End Caps	Stainless Steel 1.4301 (304 SS)	CFR Title 21: 211.65
Potting Compound	Silicone	CFR Title 21: 177.2600
O-Rings Standard	Silicone	CFR Title 21: 177.2600
O-Rings Optional	Buna N	CFR Title 21: 177.2660
	EPDM	CFR Title 21: 177.2660
	PTFE	CFR Title 21: 177.1550
	PTFE over Viton®*	CFR Title 21: 177.1550

* Viton is a registered trademark of DuPont Performance Elastomers L.L.C.



inch

Element Size	A	B	C (I.D.)*	C (O.D.)*	D	Correction Factors**
03/10	3.0	0.43	0.79	1.20	1.65	0.12
04/10	4.1	0.43	0.79	1.20	1.65	0.17
04/20	4.1	0.55	0.98	1.46	2.05	0.19
05/20	5.0	0.55	0.98	1.46	2.05	0.25
05/25	5.0	0.55	0.98	1.46	2.44	0.32
07/25	7.1	0.55	0.98	1.46	2.44	0.47
05/30	5.0	0.55	2.09	2.40	3.39	0.46
07/30	7.1	0.63	2.09	2.40	3.39	0.68
10/30	10.0	0.63	2.09	2.40	3.39	1.00
15/30	15.0	0.63	2.09	2.40	3.39	1.55
20/30	20.0	0.63	2.09	2.40	3.39	2.1
30/30	30.0	0.63	2.09	2.40	3.39	3.28
30/50	30.0	0.63	3.20	3.50	5.50	5.89

* Plug-type connection with double o-ring.

** Correction factors filtration surface area.