

Donaldson® V filter elements are designed for high quality filtration of compressed air and gas in industrial applications.

The element removes coarse contaminants including particles and oil/water aerosols from compressed air and gas. V coalescing filters can be used as stand-alone filters in industrial applications requiring low to moderate filtration levels, or as the first filter in a series of filters for production of clean, dry air in critical applications

V filter elements are designed exclusively for use in Donaldson DF-series housings and compressed air flow rates up to 650 SCFM @ 100 psig. The V elements feature a uniquely designed flow path developed specifically to reduce operating costs and save money. Donaldson's use of computational fluid dynamics software, filtration media, and advanced production methods ensures a filtration solution that is cost effective, energy saving, high performing, and reliable.



V

APPLICATIONS

V coalescing depth filter elements are ideal in the following industries and applications:

- Refrigerator/desiccant dryer protection
- Pneumatic tool protection
- Instrumentation and process control air purification
- Technical gas filtration
- Pneumatic valve and cylinder protection
- Pre-filter for sterile air filters
- Automotive and paint processes
- Bulk water removal for sand blasting
- Food packaging equipment

FEATURES	BENEFITS
Performance validation	Independent verification of filtration performance in compliance with industry standard ISO 12500:1/3
Reversible flow direction	Filter can be oriented for particulate (outside to inside flow) or coalescing/particulate (inside to outside flow) without removal of filter housing
Inner and outer stainless steel media support	Media is supported fully in both flow directions against destructive transient pressure impulses. Stainless steel offers protection against corrosion which can blind filter
Oleophobic/hydrophobic media	Aids in shedding water and oil from media. Liquid can be collected in filter bowl and drained away easily.
Fully bonded coalescing sleeve	Sleeve maintains full contact with media to efficiently drain liquids and will not separate from filter to potentially contaminate downstream processes
Fiber reinforced polyamide end caps	Non-corrosive, disposable and high-strength support for filter media ensures trouble-free operation
Low pressure drop	High void-volume media saves energy and lowers cost by minimizing pressure loss

SPECIFICATIONS

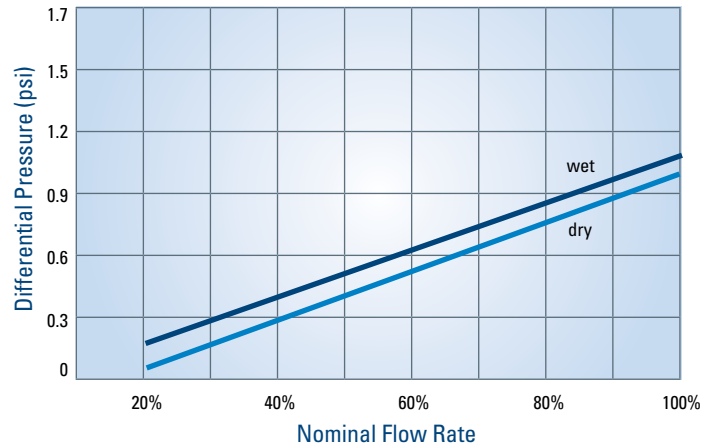
MATERIALS

Filter Media	Polyester fiber fleece
Coalescing Sleeve	Polyester fleece
Bonding	Polyurethane
End Caps	Glass-fiber reinforced polymer
O-Rings	Viton®* silicone free and free of compound (standard)
Inner and Outer Support Cores	304 SS

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

ELEMENT TYPE	NOMINAL FLOW RATE (scfm)
0035	21
0070	41
0120	71
0210	124
0320	188
0450	265
0600	353
0750	441
1100	647

DIFFERENTIAL PRESSURE OF V FILTER ELEMENT (in dry and wet conditions @ 100 psig)



Filter Type	V	Element Size						0035-1100		
Retention of oil aerosols acc. to ISO 12500-1										
Oil retention rate at 100 psig and 10 mg/m³ inlet concentration								96%		
Residual oil concentration at inlet concentration of				10 mg/m³				< 0.40 mg/m³		
				30 mg/m³				< 0.20 mg/m³		
Retention of particles acc. to ISO 12500-3										
Particle diameter [µm]	lower	0.19	0.24	0.36	0.52	0.81	1.16	1.78	2.74	3.92
	lower	0.24	0.36	0.52	0.81	1.16	1.78	2.74	3.92	6.00
Particle retention rate at 100 psig { % }		17.1	22.3	31.7	50.9	83.1	98.5	100	100	100



Important Notice

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, specifications, availability and data are subject to change without notice, and may vary by region or country.



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F117043 ENG (08/19) V Coalescing Filter Elements

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