

# PARTICLE FILTER ELEMENTS

**Process Filtration** 

## Donaldson® P particle filter elements are designed for the removal of solid contaminants in gases.

The P pre-filter elements utilize a highly porous sintered polyethylene media for absolute filtration of particles down to 25 µm in size. The primary filtration mechanism of this media is sieving, which captures most particles near the surface allowing for regeneration of the element and reduced operating cost through fewer element change-outs. Although the P element is primarily used as a particulate pre-filter, a simple reversal of flow through the element allows the P to be used as an effective coarse coalescing filter element, removing bulk quantities of water and oil from an air or gas stream (standard housings are equipped with an internal float drain, so no special equipment is required).



#### **APPLICATIONS**

Donaldson P filter elements are ideal in the following industries and applications:

- Particulate pre-filters upstream of final filters
- Centralized pre-filtration in compressor rooms
- Particle filtration after cyclone separators
- Coarse coalescing after cyclone separators and before fine coalescers

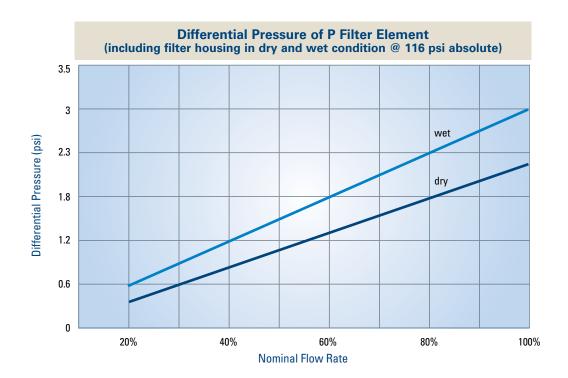
FEATURES	BENEFITS
Void volume: porosity grade 45%	High dirt holding capacity and lower differential pressure
Removal of contaminants down to 25 µm	Absolute retention grade
Regenerative	Economical, longer service lifetime

### **SPECIFICATIONS**

MATERIALS	
Filter Media	Polyethylene
Bonding	Polyurethane
End Caps	Glass fiber reinforced polymer
0-Rings	Viton®*: silicone free and free of compound (standard)

RETENTION RATE		
Particulate	> 99.98% @ 25 μm	
Oil retention rate according to ISO 12500-1	P = 90%	
Residual oil content at an inlet oncentration of 10 mg/Nm³	P = 1	

<sup>\*</sup> Viton is a registered trademark of DuPont PerformanceElastomers L.L.C.



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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