Flo-Pac® Filter Cartridges

Pleated cartridges for superior industrial filtration



Parker Fulflo® Flo-Pac® Cartridges are the perfect choice for many industrial filtration requirements. Flo-Pac pleated cartridges contain premium grade, phenolic impregnated cellulosic filter media. Parker's line of pleated cartridges is designed for critical filtration applications, providing long service life, high flow rate and low pressure drop.

Flo-Pac Pleated Cartridges are available in $0.5\mu m$, $1\mu m$, $5\mu m$, $10\mu m$, $20\mu m$, $30\mu m$, and $60\mu m$ pore sizes (95% removal; $\beta = 20$).



Benefits

- Pleated cellulosic media allow high flow capacity at low pressure drop
- Available in a variety of sizes and configurations to fit most industrial vessels
- Phenolic resin impregnated to provide strength, integrity and high contaminant capacity
- High strength spiral core withstands pressure surges to 100psid
- Suitable for operating temperatures to 250°F (121°C)
- Outer sleeve protects the media from damage
- ETP (Electro-tin-plated) steel metal components for both aqueous and oil-based applications
- Buna-N gaskets are standard, other materials are available

Applications

- Water Soluble
- Coolants
- · Quench Oils
- Fuels
- Lubricating Oils
- Hydraulic Oils
- EDM Dielectrics
- Rolling Mill Oils
- Processing Liquids
- Gasoline



ENGINEERING YOUR SUCCESS.

Flo-Pac® Filter Cartridges

SPECIFICATIONSFiltration Ratings

95% at 0.5μm, 1μm, 5μm, 10μm, 20μm, 30μm, and 60μm pore sizes

Materials of Construction

Filter Media:

Phenolic impregnated cellulose

Core: ETP steel

End Caps: ETP steel

Sleeve:

300 series - Polypropylene 600 & 700 series - ETP steel

Adhesive: Thermosetting PVC

End Seals:

300 & 700 Series–Buna-N gaskets, 600 Series–Buna-N gaskets/grommets, 500 Series–fiber gaskets

Packaging

300 Series

310–24/carton (12 lb ≈ shipping wt) 320–12/carton (12 lb ≈ shipping wt) 330–12/carton (18 lb ≈ shipping wt)

340-12/carton (24 lb \approx shipping wt)

500 Series

518-6/carton (14 lb ≈ shipping wt)

600 Series

614-6/carton (20 lb \approx shipping wt) 629-4/carton (26 lb \approx shipping wt) 644-4/carton (40 lb \approx shipping wt)

700 Series

718–6/carton (20 lb \approx shipping wt) 736–4/carton (26 lb \approx shipping wt) 754–4/carton (39 lb \approx shipping wt)

Maximum Recommended Operating Conditions

Temperature: 250°F (121°C)

Differential Pressure: 70psi (4.8bar) Change Out ΔP: 35psid (2.4bar)

Flow Rate per Single Length Cartridge: 300 Series 7gpm

 $\begin{array}{lll} 500 \; \text{Series} & 50 \text{gpm} \\ 600 \; \text{Series} \; (3 \; 1 \text{m. ID}) & 50 \text{gpm} \\ 600 \; \text{Series} \; (1 \; 1 \text{m. ID}) & 35 \text{gpm} \\ 700 \; \text{Series} & 50 \text{gpm} \\ \end{array}$

Dimensions

300 Series

2 ½ in. OD x 1 in. ID x 9 % in., 19 % in., 29 % in., 40 in.

500 Series

4 ½ in. OD x 1 ¾ in. ID x 18 in.

600 Series

6 ½ in. OD x 3 $1\!\!/_{12}$, or 1 $9\!\!/_{16}$ in. x 14 $3\!\!/_{8}$, 29 or 43 $3\!\!/_{8}$ in. long

700 Series

6 $1\!\!/_{\!\!4}$ in. OD x 2 $^5\!\!/_{\!\!8}$ in. or 2 $^1\!\!/_{\!\!8}$ in. ID x 18, 36, or 54 in. long

Liquid Particle Retention Ratings (μm) @ Removal Efficiency of:

Cartridge	ß=5000 Absolute	ß=1000 99.9%	ß=100 99%	ß=20 95%	ß=10 90%
FP-0.5	12	10	3	0.5	<.0.5
FP-1	15	12	6	1	<1.0
FP-5	30	20	9	5	3.5
FP-10	50	35	18	10	7
FP-20	90	70	40	20	12
FP-30	100	85	50	30	21
FP-60	200	150	90	60	45

Flow Rate and Pressure Drop Formulas

Flow Rate (gpm) = <u>Clean∆P x Length Factor</u> Viscosity x Flow Factor

Clean $\Delta P = Flow Rate x Viscosity x Flow Factor$ Length Factor

FP Flow Factor (psid/gpm @ 1cks)

(psid/gpm @ rcks)				
Rating (µm)	Flow Factor			
0.5	0.0260			
1	0.0170			
5	0.0020			
10	0.0018			
20	0.0010			
30	0.0009			
60	0.0005			

FP Length Factors

Style	Length Factor	
FP310	1.0	
FP320	2.0	
FP329	3.0	
FP330	3.0	
FP340	4.0	
FP518	3.3	
FP614	3.6	
FP629	7.2	
FP644	10.8	
FP718	6.5	
FP736	13.0	
FP754	19.5	

Notos

- Clean ΔP is psi differential at start.
- Viscosity is centistokes. Use
 Conversion Tables for other units.
- Flow Factor is ΔP/GPM at 1cks for 10 in. (or single).
- Length Factors convert flow or ΔP from 10 in. (single length) to required cartridge length.

