Fulflo® Flo-Pac®+ 300, 600 and 700 Series Filter Cartridges

- **Phenolic Resin Bonded Cellulosic Media**

Pleated Series

Special Construction for Organic Solvent Filtration

Parker Fulflo® Flo-Pac®+ Cartridges are the filters of choice for many industrial filtration requirements. Flo-Pac+ Pleated Cartridges are manufactured with premium grade, phenolic impregnated cellulosic filter media for long service life, high flow rate and low pressure drop. Unique epoxy resin bonding of end caps, pleat side seal and gaskets provides excellent resistance to most organic solvents.

Flo-Pac+ Pleated Cartridges are available in 0.5µm, 1µm, 5µm, 10µm, 20µm, 30µm, and 60µm pore sizes (95% removal; ß = 20).

Applications

- Alcohols (methanol, ethanol, butanol)
- Aromatic Hydrocarbons (toluene, xylene, benzene)
- Aliphatic Hydrocarbons (hexane, pentane, naphtha)
- Ketones (acetone, isophorone, methyl ethyl ketone)
- Halogenated Hydrocarbons (methylene chloride, chloroform, perchloroethylene)
- Ethers (THF, dioxane)
- Glycols (EG, PEG, DEG)
- Amines (DEA, TEA, DMEA)
- Esters (ethyl acetate, cellosolve acetate)

Features and Benefits

- Epoxy bonding of end caps, pleat side seal and gaskets provides resistance to most organic solvents.
- Premium pleated cellulosic media allow high flow capacity at low pressure drop.
- Available in a variety of sizes and configurations to fit most industrial vessels.
- Impregnated phenolic resin provides strength, integrity and high contaminant capacity.
- Suitable for operating temperatures to 250°F (121°C).
- Perforated outer metal sleeve protects the media against damage.
- ETP (Electro-tin-plated) steel metal components for aqueous and oil-based applications.
- Gaskets provide positive seals and are available in Viton;* cork and standard vellumoid.
- Recommended range is pH 4-10. Please call for specific recommendation.

Process Filtration Division

Bulletin C-4016 Eff. 8/97, Rev. 11/00

Parker Filtration

Specifications

Filtration Ratings:

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

Materials of Construction:

- Filter Media: phenolic impregnated cellulose
- Cores: ETP steel
- End Caps: ETP steel
- Sleeve: ETP steel
- Adhesive: epoxy
- End Seals: vellumoid (standard), Viton,* cork

Recommended Operating Conditions:

- Maximum Temperature: 250°F (121°C)
- Change Out ΔP: 35 psi (2.4 bar)
- Maximum Flow Rate per Single Length Cartridge:

300 Series	7 gpm
600 Series (3-1/2 in ID)	50 gpm
600 Series (1-1/4 in ID)	35 gpm
700 Series	50 gpm

Dimensions:

- *300 Series* - 2-1/2 in OD x 1 in ID x 9-5/8 in, 19-3/4 in, 29-1/4 in, 29-5/8 in long
- *600 Series* - 6-1/4 in OD x 3-1/2 in or 1-1/4 in ID x 14-3/8 in long or 29 in long
- *700 Series* - 6-1/4 in OD x 2-5/8 in or 2-1/8 in ID x 18 in or 36 in long

Packaging:

- *300 Series* -
  310 - 24/carton (12 lb ≈ shipping weight)
  320 - 12/carton (12 lb ≈ shipping weight)
  330 - 12/carton (18 lb ≈ shipping weight)
- *600 Series* -
  614 - 6/carton (20 lb ≈ shipping weight)
  629 - 6/carton (40 lb ≈ shipping weight)
- *700 Series* -
  718 - 6/carton (20 lb ≈ shipping weight)
  736 - 4/carton (26 lb ≈ shipping weight)

FP+ Length Factor

Style	Length Factor
310	1.0
320	2.0
330	3.0
614	3.6
629	7.2
718	6.5
736	13.0

FP Flow Factors (psid/gpm @ 1 cks)

Rating *um)*	Flow Factor
0.5	0.0260
1	0.0170
5	0.0020
10	0.0018
20	0.0010
30	0.0009
60	0.0005

Liquid Particle Retention Ratings *(µm)* at Removal Efficiencies of:

Cartridge	ß=5000 Absolute	ß=1000 99.9%	ß=100 99%	ß=20 95%
FPE-0.5	12	10	3	0.5
FPE-1	15	12	6	1
FPE-5	30	20	9	5
FPE-10	50	35	18	10
FPE-20	90	70	40	20
FPE-30	100	85	50	30
FPE-60	200	150	90	60

Flow Rate and Pressure Drop Formulas:

$$\textbf{Flow Rate (gpm)} = \frac{\text{Clean } \Delta P \times \text{Length Factor}}{\text{Viscosity} \times \text{Flow Factor}}$$

$$\textbf{Clean } \Delta\textbf{P} = \frac{\text{Flow Rate} \times \text{Viscosity} \times \text{Flow Factor}}{\text{Length Factor}}$$

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

Ordering Information

FPE **7** **18** —— **5** —— **8** **A**

Cartridge Code	*Outside Diameter*	*Length*			*Micron Rating (µm)*	*Inside Diameter*	*Seals*
FPE = Flo-Pac+	3 = 2-1/2 in (300 Series)	*(code)*	*(in)*	*(series)*	0.5	300 Series - None = 1 in	A = Vellumoid
	6 = 6-1/4 in (600 Series)	10	9-5/8	300	1	600 Series - None = 3-1/2 in	V = Viton*
	7 = 6-1/4 in (700 Series)	14	14-3/8	600	5	1 = 1-1/4 in	C = Cork
		18	18	700	10	700 Series - None = 2-5/8 in	
		20	19-3/4	300	20	8 = 2-1/8 in	
		29	29	600	30		
			29-1/4	300	60		
		30	29-5/8	300			
		36	36	700			

Process Filtration Division

* A trademark of E. I. du Pont de Nemours & Co.

For pleated cartridge configurations and dimensions, see Bulletin A-700 in the Appendix.

Parker Hannifin Corporation
Process Filtration Division
P.O. Box 1300
Lebanon, Indiana 46052
Telephone (765) 482-3900
Fax (765) 482-8410
http://www.parker.com

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