



# Fulflo® Flo-Pac® Filter Cartridges

■ Cellulosic/Phenolic

*Pleated Series*

## Superior Industrial Filtration From a Pleated Cartridge Design

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 0.5µm, 1µm, 5µm, 10µm, 20µm, 30µm, and 60µm pore sizes (95% removal;  $\beta = 20$ ).

### Applications

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



### Features and 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 100 psid.
- 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.

**Process Filtration Division**



# Pleated Series

## 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: 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

### FP Length Factors

Style	Length Factor
FP310	1.0
FP320	2.0
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

### FP Flow Factors (psid/gpm @ 1 cks)

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

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

Cartridge	β=5000 Absolute	β=1000 99.9%	β=100 99%	β=20 95%	β=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

### Maximum Recommended Operating Conditions

- Temperature: 250°F (121°C)
- Differential Pressure; 70 psi (4.8 bar)
- Change Out ΔP: 35 psid (2.4 bar)
- Flow Rate per Single Length Cartridge:
 

300 Series	7 gpm
500 Series	50 gpm
600 Series (3-1/2 in ID)	50 gpm
600 Series (1-9/16 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, 40 in long
- 500 Series - 4-1/2 in OD x 1-3/4 in ID x 18 in long

- 600 Series - 6-1/4 in OD x 3-1/12, 1-9/16, in or 1-1/4 in ID 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

### Packaging:

- 300 Series - 310 - 24/carton (12 lb ≈ shipping weight)  
320 - 12/carton (12 lb ≈ shipping weight)  
330 - 12/carton (18 lb ≈ shipping weight)  
340 - 12/carton (24 lb ≈ shipping weight)
- 500 Series - 518 - 6/carton (14 lb ≈ shipping weight)
- 600 Series - 614 - 6/carton (20 lb ≈ shipping weight)  
629 - 4/carton (26 lb ≈ shipping weight)  
644 - 4/carton (40 lb ≈ shipping weight)
- 700 Series - 718 - 6/carton (20 lb ≈ shipping weight)  
736 - 4/carton (26 lb ≈ shipping weight)  
754 - 4/carton (39 lb ≈ shipping weight)

### Flow Rate and Pressure Drop Formulas:

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

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

### Notes:

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

## Ordering Information

FP	6	14	5	1	G	N	
Cartridge Code	Outside Diameter	Length (code) (in)	(series)	Micron Rating (µm)	Inside Diameter	Seal Material	Body
FP = Flo-Pac®	3 = 2-1/2 in (300 Series)	10 9-5/8	300	0.5	None = 1 in (300 Series)	None = Buna-N Gaskets	None = Metal (500, 600 700 series)
	5 = 4-1/2 in (500 Series)	14 14-3/8	600	1	None = 1-3/4 in (500 Series)	A = Vellumoid (300, 600, 700 Series)	= Polypro (300 series)
	6 = 6-1/4 in (600 Series)	18 18	700 & 500	5	None = 3-1/2 in, (600 Series)	B = Fiber (500 Series Only)	M = Metal (300 series)
	7 = 6-1/4 in (700 Series)	20 19-3/4	300	10	None = 2-5/8 in, (700 Series)	C = Cork (700 Series Only)	N = No Body
		29 29	600	20	1 = 1-9/16 in (600 Series)	G = Buna-N Grommets (600 Series 1-9/16 in ID)	
		29 29-1/4	300	30	8 = 2-1/8 in (700 Series)	V = Viton*	
		30 29-5/8	300	40			
		36 36	700				
		40 40	300				
		44 43-3/8	600				
		54 54	700				

## Process Filtration Division

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