

C-4015

## Fulflo® Flo-Pac® Filter Cartridges

### 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;  $\beta = 20$ ).



### 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

### Applications

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



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# Fulflo® Flo-Pac® Filter Cartridges

## Specifications

### 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,

### 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 ≈ shipping wt)  
**500 Series:**  
 518—6/carton (14 lb ≈ shipping wt)  
**600 Series:**  
 614—6/carton (20 lb ≈ shipping wt)  
 629—4/carton (26 lb ≈ shipping wt)  
 644—4/carton (40 lb ≈ shipping wt)  
**700 Series:**  
 718—6/carton (20 lb ≈ shipping wt)  
 736—4/carton (26 lb ≈ shipping wt)  
 754—4/carton (39 lb ≈ shipping wt)

### 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  
 500 Series  
 4-1/2 in OD x 1-3/4 in ID x 18 in  
 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

### Filtration Ratings:

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

### ■ 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

### Flow Rate and Pressure Drop Formulas

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

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

- 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.

### 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

### 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

## Ordering Information

FP						
Cartridge Code	Outside Diameter	Length	Micron Rating (μm)	Inside Diameter	Seal Material	Body
FP = Flo-Pac	3 = 2-1/2 in (300 Series) 5 = 4-1/2 in (500 Series) 6 = 6-1/4 in (600 Series) 7 = 6-1/4 in (700 Series)	(code) (in) (series) 10 9-5/8 300 14 14-3/8 600 18 18 500,700 20 19-3/4 300 29 29 600 29 29-1/4 300 30 29-5/8 300 36 36 700 40 40 300 44 43-3/8 600 54 54 700	0.5 1 5 10 20 30 60	None = 1 in (300 Series) None = 1-3/4 in (500 Series) None = 3-1/2 in (600 Series) None = 2-5/8 in (700 Series) 1 = 1-9/16 in (600 Series) 8 = 2-1/8 in (700 Series)	None = Buna-N Gaskets A = Vellumoid (300, 600, 700 Series) B = Fiber (500 Series Only) C = Cork (700 Series Only) G = Buna-N Grommets (600 Series 1-9/16 in ID) V = Viton*	None = Metal (500, 600 700 series) 1 = Polypro (300 series) M = Metal (300 series) N = No Body

Specifications are subject to change without notification.

\*Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc.

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 SPEC-C4015-Rev. A 01/08



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