

# **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  $60\mu m$  pore sizes (95% removal;  $\beta = 20$ ).

## **Applications**

- Water Soluble Coolants
- Hydraulic Oils
- Quench Oils Fuels
- Lubricating 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

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# **Fulflo<sup>®</sup> Flo-Pac<sup>®</sup> Filter Cartridges**

Cellulosic/Phenolic

# **Pleated Series**



# **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
- **Dimensions:** 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

#### Flow Rate and Pressure Drop Formulas:

Flow Rate (gpm) =	Clean $\triangle P$ x Length Factor
	Viscosity x Flow Factor

Clean △P = Flow Rate x Viscosity x Flow Factor Length Factor

## Ordering Information

<b>O</b> a c i i i g	mornatio						
FP	6	14			5 —	1	G
Cartridge Code	Outside Diameter	Lengt	h		Micron Rating (µm)	Inside Diameter	Seal Material
FP = Flo-Pac <sup>®</sup>	3 = 2-1/2 in	(code		(series)	0.5	None = 1 in	None = Buna-N Gaskets
	(300 Series)	10	9-5/8	300	1	(300 Series)	A = Vellumoid
	5 = 4-1/2 in	14	14-3/8	600	5	None = 1-3/4 in	(300, 600, 700 Series)
	(500 Series)	18	18	700 & 500	10	(500 Series)	B = Fiber
	6 = 6-1/4 in	20	19-3/4	300	20	None = 3-1/2 in,	(500 Series Only)
	(600 Series)	29	29	600	30	(600 Series)	C = Čork
	7 = 6-1/4 in	29	29-1/4	300	60	None = 2-5/8 in,	(700 Series Only)
	(700 Series)	30	29-5/8	300		(700 Series)	G = Buna-N Grommets
	. ,	36	36	700		1 = 1-9/16 in	(600 Series 1-9/16 in ID)
		40	40	300		(600 Series)	V = Viton*

Maximum Recommended

Temperature: 250°F (121°C)

300 Series

500 Series

700 Series

300 Series -

40 in long

500 Series -

Flow

Factor

0.0260

0.0170

0.0020

0.0018

0.0010

0.0009 0.0005

FP Flow Factors

Rating

(µm)

0.5

1

5

10

20

30

60

44

54

43-3/8

54

600

700

(psid/gpm @ 1 cks)

Differential Pressure; 70 psi (4.8 bar)

600 Series (3-1/2 in ID) 50 gpm

600 Series (1-9/16 in ID) 35 gpm

Change Out ∆P: 35 psid (2.4 bar) Flow Rate per Single Length Cartridge:

2-1/2 in OD x 1 in ID x 9-5/8 in,

4-1/2 in OD x 1-3/4 in ID x 18 in long

19-3/4 in, 29-1/4 in, 29-5/8 in,

**Operating Conditions** 

#### 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:

7 gpm

50 gpm

50 gpm

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

Cartridge	β=5000 Absolute	<mark>β=</mark> 1000 99.9%	<mark>β=100</mark> 99%	<mark>β=20</mark> 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

#### Notes:

8 = 2-1/8 in

(700 Series)

1. Clean  $\Delta P$  is PSI differential at start.

- 2. Viscosity is centistokes. Use Conversion Tables for other units.
- 3. Flow Factor is △P/GPM at 1 cks for 10 in (or single).
- 4. Length Factors convert flow or  $\Delta P$  from 10 in (single length) to required cartridge length.

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None = Metal
(500, 600
700 series)
= Polypro
(300 series)
M = Metal
(300 series)
N = No Body

Ν

Body

### **Process Filtration Division**

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