

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 μ m pore sizes (95% removal; β = 20).

Applications

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

Fulflo® Flo-Pac® **Filter Cartridges**

■ Cellulosic/Phenolic

Pleated Series



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

Maximum Recommended Operating Conditions

- Temperature: 250°F (121°C)
- Differential Pressure; 70 psi (4.8 bar)
- Change Out ∆P: 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 \approx shipping weight) 629 - 4/carton (26 lb \approx shipping weight) 644 - 4/carton (40 lb \approx 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)

■ 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 <i>(µm)</i> | Flow Factor |
|-----------------------|----------------|
| 0.5 | 0.0260 |
| 1 | 0.0170 |
| 5 | 0.0020 |
| 10 | 0.0018 |
| 20 | 0.0010 |
| 30 | 0.0009 |
| 60 | 0.0005 |

Flow Rate and Pressure Drop Formulas:

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

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

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 |

Notes:

- 1. Clean ΔP is \underline{PSI} differential at start.
- 2. **Viscosity** is centistokes. Use Conversion Tables for other units.
- 3. Flow Factor is $\Delta P/GPM$ 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

| _ | | | | | | | | |
|--------|------------------------|--|---|---|---------------------------------------|---|--|---|
| FP | | 6 | 14 | | 5 — | 1 | G | N |
| Ca | rtridge 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) 10 9-5/8 14 14-3/8 18 18 20 19-3/4 29 29 29 29-1/4 30 29-5/8 36 36 40 40 44 43-3/8 54 54 | 700 & 500 300 600 300 300 700 300 | 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) = Polypro (300 series) M = Metal (300 series) N = No Body |

* Trademark of E. I. duPont de Nemours & Co.

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