

C-2020

Fulflo® PCC Filter Cartridge

Unique Cartridge Construction Improves Particle Retention, Service Life and Flow Rates

Parker Fulflo® Pleated Cellulosic Cartridges meet a broad range of critical filtration applications. Each cartridge in the Fulflo Pleated Cellulosic series is manufactured with premium grade, phenolic impregnated, cellulosic filter media. Phenolic resin locks the cellulosic fibers into a rigid, porous matrix. This structure provides superior particle removal and particle retention performance under the most severe conditions.

Fulflo Pleated Cartridges are available in 2µm, 3µm, 10µm, 30µm and 60µm pore sizes (99%+ removal: $\beta = 100$).



Benefits

- Premium pleated cellulosic media allow high flow capacity at low pressure drop
- Available in a variety of cartridge lengths and end cap configurations to fit most industrial vessels
- Phenolic resin impregnated to provide strength, integrity and high contaminant capacity
- High flow rates permit the use of smaller vessels and fewer cartridges
- Lower ΔP reduces power requirements and pump wear and tear
- Longer cartridge life reduces frequency of filter change out resulting in less disposal costs, reduced inventory and less process interruptions

Applications

- Chemical
- Oil Field
- Photographic
- Film & Paper
- Metal Treatment
- Process Water
- Synthetic Fibers
- Process Gas
- Petroleum
- Coatings, Paint
- Ink & Resins
- Recording Media



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Fulflo[®] PCC Filter Cartridge

Specifications

Materials of Construction

Phenolic impregnated cellulosic media (PCC)
 Polypropylene support
 Stainless steel support (optional)
 PCG is glass-modified cellulose

Recommended Operating Conditions

Maximum 10 gpm per 10 in length
 (38 lpm/254 mm)

Stainless Steel Support:

Maximum Temperature: 250°F (121°C)
 Maximum DP: 50 psi (3.5 kg/cm²)
 Optimum Change Out DP:
 35 psi (2.5 km/cm²)

Polypropylene Support

Maximum Temperature
 @ 10 psid (0.7 km/cm²): 200°F (93°C)
 Maximum Temperature
 @ 35 psid (2.5 km/cm²): 125°F (52°C)
 Maximum ΔP
 @ 75°F (24°C): 60 psi (4.2 kg/cm²)
 Change Out DP: 35 psi (2.5 km/cm²)

Filtration Ratings

99%+ at 2μm, 3μm, 10μm, 30μm, and 60μm pore sizes

Performance Attributes

PCC / PCG Flow Factor (psid/gpm @ 1 cks)

Rating (μm)	Flow Factor
2	0.026
3	0.017
10	0.002
30	0.001
60	0.0005

Flow Rate and Pressure Drop Formulas

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

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

Beta Ratio (β) =

Upstream Particle Count @ Specified Particle Size and Larger

Downstream Particle Count @ Specified Particle Size and Larger

$$\text{Percent Removal Efficiency} = \left(\frac{\beta - 1}{\beta} \right) 100$$

Performance determined per ASTM F-795-88. Single-Pass Test using AC test dust in water at a flow rate of 3.5 gpm per 10 in (13.2 lpm per 254 mm) cartridge.

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.

Liquid Particle Retention Ratings

Cartridge	β=5000 absolute	β=1000 99.7%	β=100 99%	β=50 98%	β@2 micron
PCG020	10	8.6	1.8	0.9	110
PCC3	12	10	3.2	1.7	64
PCC10	22	18	6	3.2	35
PCC30	100	85	11	4.5	25
PCC60	150	90	30	15.0	10

Ordering Information

Cartridge Code (μm)	Nominal Length (code) (in) (mm)	Support Construction	Seal Material	End Cap Configurations
PCG020 - 2 PCC3 - 3 PCC10 - 10 PCC30 - 30 PCC60 - 60	9 9-5/8 244 10 9-13/16 249 19 19-5/8 498 20 19-15/16 506 29 29-1/4 743 30 30-1/16 764 40 40 1016	A = Polypropylene (DOE/SOE) G = 304 Stainless Steel (DOE)	P = Poly Foam (DOE Gasket Only) E = EPR N = Buna-N S = Silicone V = Viton*	AR = 020 O-Ring/Recessed (Gelman) DO = Double-Open-End (DOE) DX = DOE With Core Extender LL = 120/120 (Filterite LMO and Nuclepore Polymeric Vessels)** LR = 120 O-Ring/Recessed (Nuclepore)** OB = Std. Open End/Polypro Spring Closed End PR = 213 O-Ring/Recessed (Ametek and Parker)LT Polymeric Vessels** SC = 226 O-Ring/Cap SF = 226 O-Ring/Fin TC = 222 O-Ring/Cap TF = 222 O-Ring/Fin TX = 222 O-Ring/Flex Fin XB = Ex. Core Open End / Polypro Spring Closed End

**Available only in 9-5/8 (-9) and 19-5/8 (-19) lengths.

Specifications are subject to change without notification.
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C-2060

Fulflo® 336 Pleated Cartridge

Pleated cartridge construction improves filtration efficiency, dirt holding capacity and flow rates

Parker's Fulflo® Pleated 336 size filter cartridges provide highly efficient removal of solid contaminants from a variety of petrochemical, refinery and oilfield applications. Cartridges are manufactured from premium grade phenolic impregnated cellulose and polypropylene blown media. These structures provide superior removal efficiency. The cartridges are available in 3 μ , 10 μ , 12 μ , 22 μ , and 100 μ pore sizes. (99.98% removal; $\beta = 5000$)



Benefits

- Retrofits housings that use 3" OD x 36" long SOE cartridges with spring
- High surface area
- Low pressure drop
- Materials compatible with most applications
- High filtration efficiency
- High dirt-holding capacity
- Rugged construction

Applications

- Petrochemical
- Refineries
- Oil Fields
- Produced Water
- Amines
- Glycols



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Fulflo[®] 336 Pleated Cartridges

Specifications

Materials of Construction:

- Cellulose: Phenolic impregnated cellulose media
- Polypropylene support core and end caps (Steel core optional)
- Buna-N gasket 316 st. stl. spring
- Polypropylene: Filter media and support layers – Polypropylene
- Polypropylene support core and end caps (steel core optional)
- Buna-N gasket 316 st. stl. spring

Length	Length Factor
336	4

Cartridge	Flow Factor
PPC005	0.090
PCG020	0.026
PCC2	0.017
PCC10	0.002
PCC30	0.001
PCC60	0.005

Cartridge	$\beta=5000$ Absolute	$\beta=1000$ 99.7%	$\beta=100$ 99%	$\beta=50$ 98%	$\beta@2$ micron
PPC005	3	2.8	0.5	<0.5	400
PCG020	10	8.6	1.8	0.9	110
PCC2	12	10	3.2	1.7	64
PCC10	22	18	6	3.2	35
PCC30	100	85	11	4.5	25
PCC60	150	90	30	15.0	10

Recommended Operating Conditions:

Maximum 33 GPM per cartridge

Polypropylene Support:

- Maximum Temperature @ 10 PSID (0.7 km/cm²): 200°F (93°C)
- Maximum Temperature @ 35 PSID (2.5 km/cm²): 125°F (52°C)
- Maximum Temperature @ 60 PSID (4.2 km/cm²): 75°F (24°C)
- Optimum Change Out at ambient temp.: 35 PSID (25 km/cm)

Steel Support:

- Maximum Temperature: 250°F (121°C)
- Maximum ΔP : 50 PSID (3.5 km/cm²)
- Optimum change Out ΔP : 35 PSID (2.5 km/cm²)

Dimensions:

- Length: 34-3/4 in (883 mm) w/o spring:
37-1/8 in (943 mm) with spring
- OD: 3 in (76 mm)
- ID: 1-9/16 in (40 mm)

Flow Rate and Pressure Drop Formulas

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

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

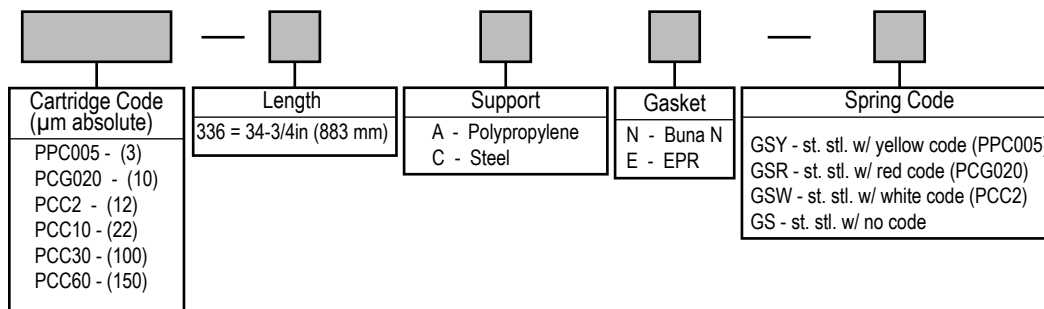
- Clean ΔP is PSI differential at start.
- Viscosity is centistokes. Use Conversion Tables for other units.
- Flow Factor is $\Delta P/\text{GPM}$ at 1 cks for 10 in (or single).
- Length Factors convert flow or ΔP from 10 in (single length) to required cartridge length.

Beta Ratio (β) =

$$\frac{\text{Upstream Particle Count @ Specified Particle Size and Larger}}{\text{Downstream Particle Count @ Specified Particle Size and Larger}}$$

$$\text{Percent Removal Efficiency} = \left(\frac{\beta - 1}{\beta} \right) 100$$

Ordering Information



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C-2030

Fulflo[®] 1401 Pleated Cartridge

High Efficiency, Flow Rate, Dirt Holding Capacity & High Pressure Pleated Cartridges

Parker's Fulflo[®] 1401 cartridges are designed to replace similar competitive cartridges in high pressure water injection & disposal, gas streams and fluid processing. The cartridges are available in cellulosic and polypropylene media. Fulflo[®] 1401's are available in absolute ratings of 2.5, 6, 10, 12, 22, and 100 microns ($\beta = 5000, 99.98\%$)



Benefits

- Retrofits into compatible housing that use 1401 style cartridges
- Maximize surface area to prevent particle bridging.
- High filtration efficiency
- Low pressure drops
- High flow rates
- Internal o-ring seal for positive sealing
- Rugged construction

Applications

- Water Injection
- Solvents
- Acids
- Chemicals
- Hydrocarbons
- Water



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Fulflo[®] 1401 Pleated Cartridges

Specifications

Filtration Rtings:

99.98% at 2.5µm, 6µm, 10µm, 12µm, 22µm, and 100µm pore sizes

Recommended Operating Conditions:

Pressure rating - 150 PSID
 Temperature Rating - 275°F
 Recommended flow rate - 75 GPM
 Change out ΔP - 35 PSID

Dimensions:

3 3/4" OD x 2 1/8" ID x 38-3/4" long

Materials of Construction:

Filter media;
 PCC/PCG - phenolic impregnated cellulose
 PPC - Polypropylene
 Core & End Cap: Steel
 Outer Mesh Sleeve: Polypropylene
 Internal O-Ring: Buna-N

■ Liquid Particle Retention Ratings (µm) @ Removal Efficiency of:

Cartridge	β=5000 99.98%	β=1000 99.9%	β=100 99%	β=20 95%	β=10 90%
PPC005 -1401	2.5	2.8	0.5	<0.5	<0.5
PPC010 -1401	6	4.8	1.2	<0.5	<0.5
PPC020 -1401	10	8	5	<1.0	<0.5
PCG020 1401	10	8.6	1.8	0.9	<0.5
PCC3 - 1401	12	10	3	1.7	<0.5
PCC10 - 1401	22	18	6	3.2	<1.0
PCC30 - 1401	100	85	11	3.0	<1.0

1401 Cross Reference

Pall	Process Filtration
MCC 1401JO25 - H13	PPC005 - 1401
MCC 1401JO60 - H13	PPC010 - 1401
MCC 1401 J100 - H13	PPC020 - 1401
MCC 1401 E100 - H13	PCG020 - 1401
MCC 1401E280 - H13	PCC10 - 1401
MCC 1401E500 - H13	PCC30 - 1401
	PCC3 - 1401

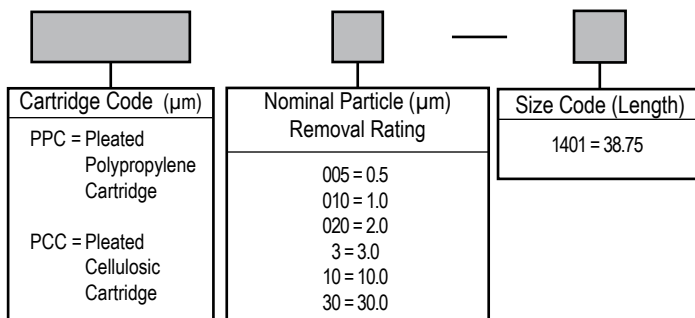
Beta Ratio (β) =

$$\frac{\text{Upstream Particle Count @ Specified Particle Size and Larger}}{\text{Downstream Particle Count @ Specified Particle Size and Larger}}$$

$$\text{Percent Removal Efficiency} = \left(\frac{\beta - 1}{\beta} \right) \times 100$$

Performance determined per ASTM F-795-88. single-pass test using AC test dust in water.

Ordering Information



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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	Outside Diameter	Length	Micron Rating (μm)	Inside Diameter	Seal Material	Body
Cartridge Code 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

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C-4016

Fulflo® Flo-Pac® + Filter Cartridges

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; $\beta = 20$).



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
- Spiral core withstands pressure surges to 100 psid

Applications

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



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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: ETP steel
 Adhesive: epoxy
 End Seals: Vellumoid (standard), Viton,* cork

Maximum Recommended Operating Conditions:

Temperature: 250°F (121°C)
 Change Out ΔP: 35 psi (2.4 bar)
 Flow Rate per Single Length Cartridge:
 300 Series 7 gpm
 600 Series (3-1/2 in ID) 50 gpm
 600 Series (1-9/16 in ID) 35 gpm
 700 Series 50 gpm
 Differential Pressure: 70 psi (4.8 bar)

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 and 40 in long
 600 Series -
 6-1/4 in OD x 3-1/2 in ID or 1-9/16 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 wt)
 320–12/carton (12 lb ≈ shipping wt)
 330–12/carton (18 lb ≈ shipping wt)
 340–12/carton (24 lb ≈ shipping wt)
 600 Series:
 614–6/carton (20 lb ≈ shipping wt)
 629–6/carton (40 lb ≈ shipping wt)
 700 Series:
 718–6/carton (20 lb ≈ shipping wt)
 736–4/carton (26 lb ≈ shipping wt)

Filtration Ratings:

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

Flow Rate and Pressure Drop Formulas

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

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

- 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

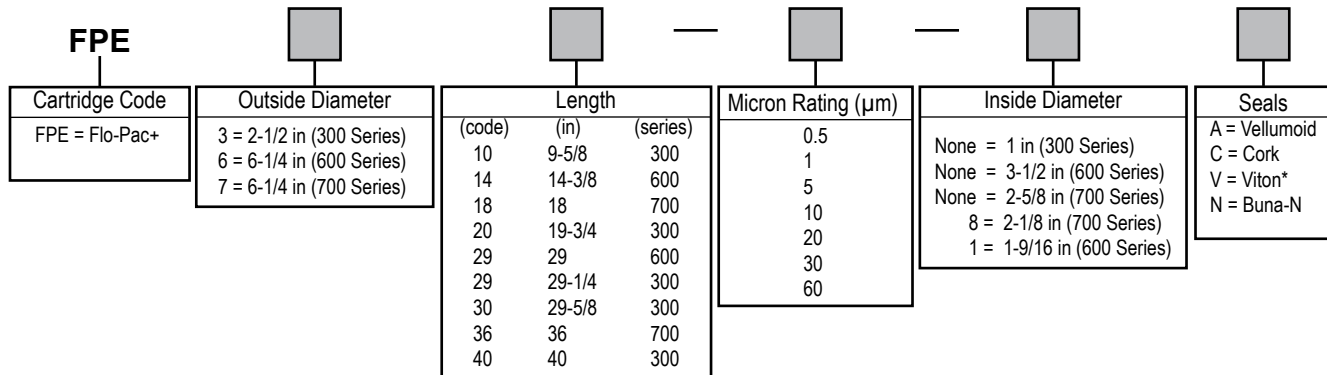
FP Length Factors

Style	Length Factor
310	1.0
320	2.0
330	3.0
340	4.0
614	3.6
629	7.2
718	6.5
736	13.0

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

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

Ordering Information



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Multi-Cartridge Filter Vessel Series

C-3160

Fulflo® FP Filter Vessels

Fulflo® FP Model Cartridge Filter Vessels Designed for Economical Liquid Filtration

The FP Filter Vessel Series is designed for use with the Fulflo® Flo-Pac® 718 and 736 Pleated Filter Cartridge Series.



Benefits

- Single O-ring design closure assures quick, positive cover sealing.
- Swing bolts with eyenuts for fast, easy opening and closing of cover
- Maximum design pressure is 150 psi (10.3 bar) at 450°F* (232°C) and 200 psig at 100°F (38°C) plus full vacuum
- Buna-N O-ring standard with EPR, Viton** and fluoropolymer available
- ASME Code UM stamp is standard (U stamp is optional)

- Threaded vent and drain connections
- Adjustable leg height
- Threaded or flanged inlet and outlet options
- Side inlet, bottom outlet and crevice-free welded design provide a smooth interior for easy wash-out and cleaning

Applications

- Process Water
- Coatings
- Lubricants
- Coolants
- Cutting Oils
- Solvents
- EDM



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Fulflo® FP Filter Vessels

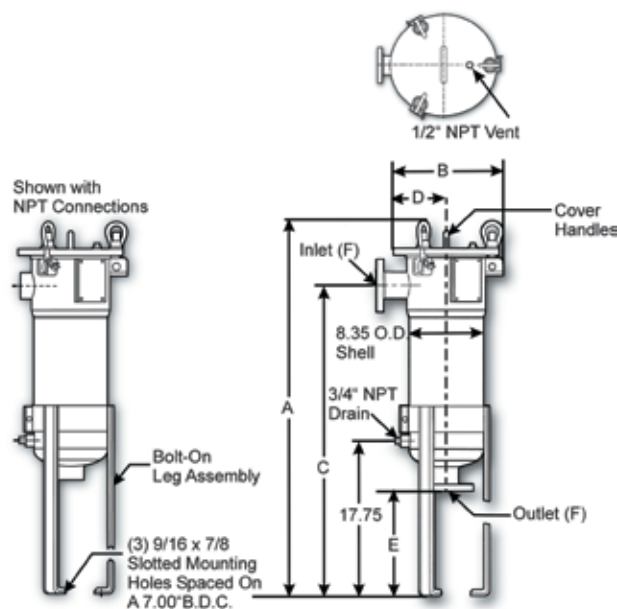
Design Specifications

Model Volume	No. & Length of Cartridges (in)	Typical Aqueous Flow † (gpm)	Dimensions (in)						Shipping Weight (lbs) (gal)
			A	B	C	D	E	F	
FP1-1-2	(1) 18	50	42.56	12.25	35.13	5.75	13.19	2 NPT	112 5.5
FP1-1-2F	(1) 18	50	42.56	14.50	35.13	8.00	12.00	2 NPS	120 5.5
FP1-2-2	(2) 18	100	60.56	12.25	53.13	5.75	13.19	2 NPT	132 9.6
FP1-2-2F	(2) 18	100	60.56	14.50	53.13	8.00	12.00	2 NPS	140 9.6
FP1-2-3F	(2) 18	100	60.56	14.50	53.13	8.00	11.75	2 NPS	150 9.6

(F) NPS - ANSI Class 150# Slip-On Flanges

(F) NPT - ANSI Class 300# Threaded Couplings

†Actual rate is dependent on fluid viscosity, micron rating, contaminant and media type. Consult flow charts for each application.



* Operating temperature limited to 250°C (121°F) by standard Buna-N O-Ring and exterior paint on carbon steel models. Optional O-Ring materials are available.

Ordering Information

Material	Model	Number of 18 in Cartridges/Column	Inlet/Outlet Flange Size
None = Carbon Steel 4L = 304L Stainless Steel	1	1 2	2 3 No F = NPT

Specifications are subject to change without notification.

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ENGINEERING **YOUR** SUCCESS.

C-4020

Fulflo® CPM Oil Filter Vessels

Steel Single Element Filter Vessel Series

The light, compact oil filtration solution. The Fulflo® CPM Vessel Series of single element oil filters is designed for high efficiency and economical operation in oil reclamation and maintenance applications. The compact design makes the CPM vessel series easy to mount on equipment or on the floor to conserve space. The adjustable legs offer installation flexibility by allowing various inlet elevations and nozzle orientations.



Benefits

- Single O-ring design closure assures quick, positive cover sealing
- Swing bolts for fast, easy and safe opening and closing of cover
- Pivot pin cover allows cover to remain attached when opened
- Adjustable leg height

Applications

- Hydraulic oils
- Quench Oils
- Engine & Compressor Lube Oils
- Cutting Oils
- Coolants
- EDM Liquids



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Fulflo® CPM Oil Filter Vessels

Specifications

Maximum Recommended Operating Conditions:

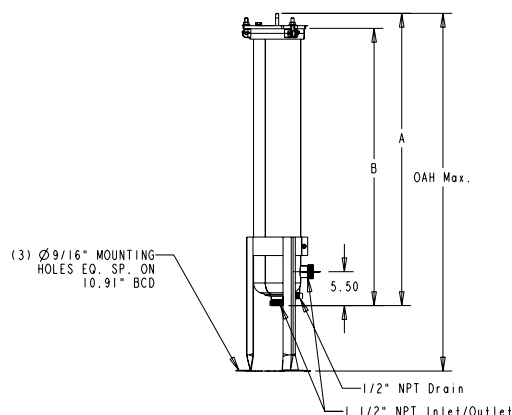
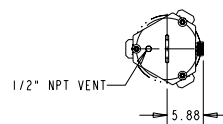
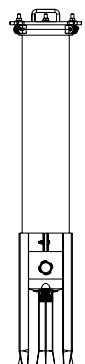
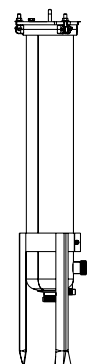
175 psi (12 bar) at 250°C(121°F)

- Buna-N O-Ring standard with optional EPR and Viton*
- Carbon steel vessel construction
- Zinc plated bolting and legs for corrosion resistance

Cartridge Configuration Supported

Filter Element	Series Number	Operating Temperature
Fulflo® Flo-Pac & Flo-Pac+®	718, 736	250°F (121°C)
TruBind®	700	150°F (65°C) @ 20 psid (1.4 bar) 180°F (82°C) @ 10 psid (0.7 bar)

Model	Number of 18" Elements Per Column	Typical Aqueous Flow ¹ (gpm)	A	B	C	Shipping Weight (lbs)
CPM1-1.5	1	30	29.44	27.00	40.66	58
CPM2-1.5	2	60	47.44	45.00	58.06	75



Ordering Information

CPM

Number of 18 in Elements	
Code	Quantity
1	1
2	2

Inlet/Outlet Flange Size	
Code	Description
15	1.5 MNPT (external thread)

Specifications are subject to change without notification.
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ENGINEERING YOUR SUCCESS.

C-4030

Fulflo® P Filter Vessel

High Efficiency and High Flow Rate with Fulflo® P Vessel Series

Fulflo® P Series Multi-Cartridge Filter Vessels are designed for high flow rate where the contaminants can be effectively removed by pleated paper (surface type) media.

The P Vessel Series is designed for use with the Fulflo® Flo-Pac® 718 and 736 pleated filter cartridge series. TruBind® 700 Series absorbent cartridges also fit these vessels.



Benefits

- Designed and fabricated in accordance with the ASME Boiler and Pressure Vessel Code, U or UM stamp with 150 psi (10.3 bar) rating at 250°F (121°C)
- Non-code design and construction (parallel to code standards) available
- Mechanical coverlifts
- Designed for minimum pressure drop
- Cartridge capacity from 1 to 18 cartridges

- All P models feature swing bolts for easier cleaning and servicing
- O-ring seals provide positive closure sealing
- Standard Buna-N seal with optional Viton* elastomer, neoprene, ethylene propylene rubber and fluoropolymer elastomer O-rings
- Optional hydraulic coverlifts

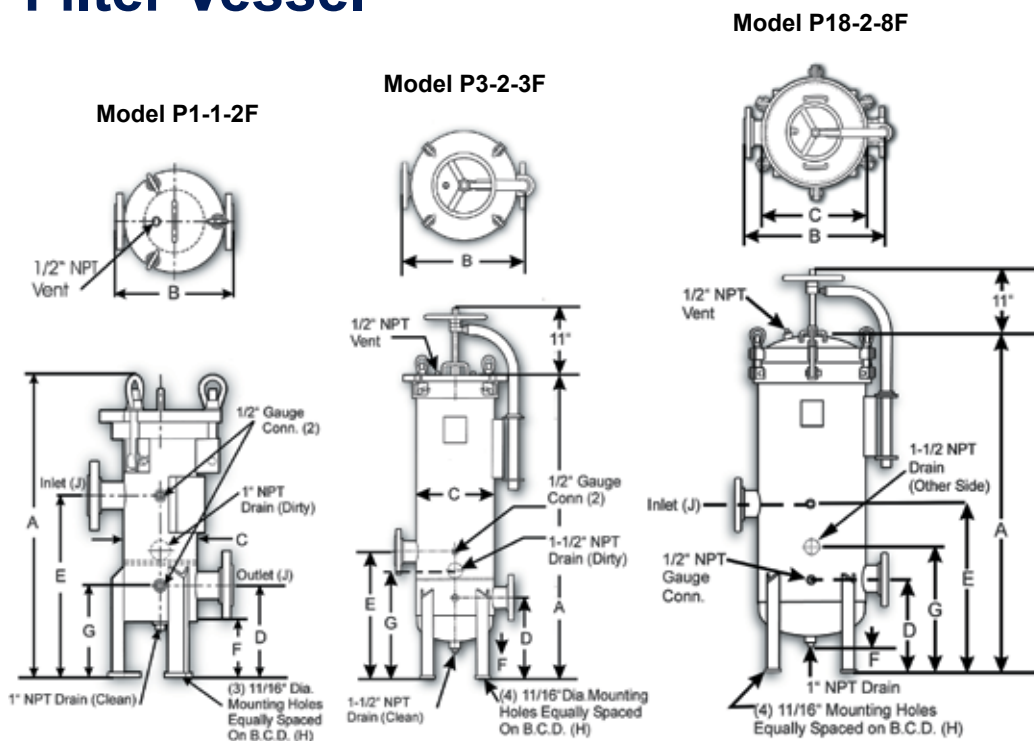
Applications

- Fuels
- Lubricating Oils
- Solvents
- Coolants
- Refineries
- Hydraulic Oils
- Rolling Mill Oils
- Processing Liquids



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Fulflo® P Filter Vessel



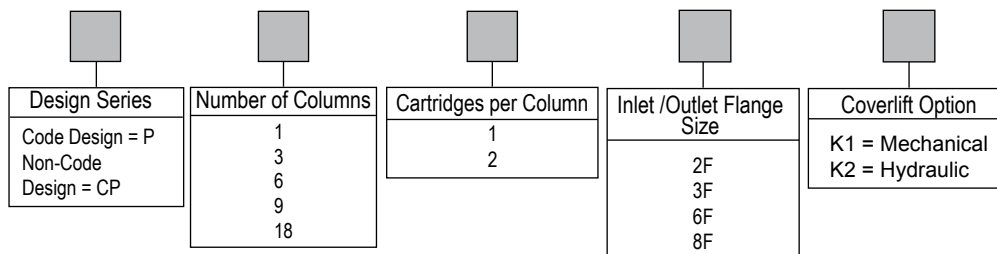
Reference Dimensions

Model	Number & Length of Cartridges (in)	Maximum flow (GPM)	Dimensions (in)									Shipping Weight (lbs)
			A	B	C	D	E	F	G	H	J	
P1-1-2F	1 (18)	50	36.13	14.88	8.63	8.19	16.19	5.06	11.31	7.81	2	180
P1-2-2F	1 (36)	100	54.13	14.88	8.63	8.19	16.19	5.06	11.31	7.81	2	200
P3-1-3F	3 (18)	150	38.74	22.50	15.06	13.38	21.00	5.00	17.88	14.75	3	405
P3-2-3F	3 (36)	300	57.31	22.50	15.06	13.38	21.00	5.00	17.88	14.75	3	465
P6-2-6F	6 (36)	600	65.00	29.25	20.06	16.50	31.00	5.00	22.56	19.75	6	790
P9-2-6F	6 (36)	900	67.19	33.38	24.06	18.00	31.00	6.00	24.19	23.75	6	985
P18-2-8F	18 (36)	1800	76.06	42.25	32.06	23.63	41.25	6.00	31.69	31.81	8	1570

Actual flow rate is dependent on fluid viscosity, micron rating, contaminant and media type. Consult flow charts for each application. Shipping weights and dimensions are for 150 psig nominal design only.

+Add 5" to this dimension for hydraulic coverlift

Ordering Information



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