

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: $\beta = 100$).

Applications

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

Features and 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.

Fulflo[®] PCC **Filter Cartridge**

Cellulosic/Phenolic

Pleated Series



- 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.

Process Filtration Division

Bulletin C-2020 Eff. 8/97, Rev. 03/03 © 2000 Parker Hannifin Corporation All Rights Reserved Page 1 of 2

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Pleated Series

Specifications

Filtration Ratings:

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

Materials of Construction:

- Phenolic impregnated cellulosic media (PCC)
- Polypropylene support
- Stainless steel support (optional)

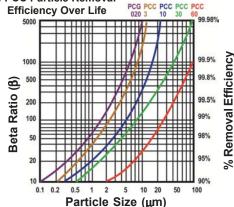
PCG is glass-modified cellulose **Recommended Operating Conditions:**

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

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

	ß=5000	ß=1000	ß=100	ß=50	ß=20	ß=10
Cartridge	Absolute	99.9%	99%	98%	95%	90%
PCG 020	10	7.0	1.8	0.9	0.3	0.1
PCC 3	12	9.5	3.0	1.7	0.6	0.2
PCC 10	22	17.0	5.5	3.0	1.0	0.3
PCC 30	100	50.0	11.0	5.5	1.5	0.5
PCC 60	150	100.0	30.0	15.0	5.0	2.0

PCC Particle Removal



Ordering Information

PCG020	10			Α
Cartridge Code (µm)	Nominal Length			Suppor
PCG020 - 2 PCC3 - 3 PCC10 - 10 PCC30 - 30 PCC60 - 60	(code) 9 = 10 = 19 = 20 = 29 = 30 = 40 =	(in) 9-5/8 9-13/16 19-5/8 19-15/16 29-1/4 30-1/16 40	(<i>mm</i>) 244 249 498 506 743 764 1016	A = Poi (D G = 30 (D

- Stainless Steel Support: Maximum Temperature: 250°F (121°C) Maximum ΔP : 50 psi (3.5 kg/cm²) Optimum Change Out ΔP : 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 ∆P @ 75°F (24°C): 60 psi (4.2 kg/cm²) Change Out △P: 35 psi (2.5 km/cm²)

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

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

PCC/PCG Length Factors

Length <i>(in)</i>	Length Factor
9	1.0
10	1.0
19	2.0
20	2.0
29	3.0
30	3.0
40	4.0

Flow Rate and Pressure Drop Formulas:

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

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

Notes:

- 1. Clean ΔP is 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.

Beta Ratio (ß) = Upstream Particle Count @ Specified Particle Size and Larger Downstream Particle Count @ Specified Particle Size and Larger

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 at a flow rate of 2.5 gpm per 10 in (9.5 lpm per 254 mm).

	10	Α	N ——	TC		
Code (µm)	Nominal Length	Support Construction	 Seal Material	 End Cap Configurations		
2 3 10 30 60	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	A = Polypropylene (DOE/SOE) G = 304 Stainless Steel (DOE)	A = Polyethylene 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	

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

* A trademark of E. I. duPont de Nemours & Co.

For pleated cartridge configurations and dimensions, see Bulletin A-700 in the Appendix.

Bulletin C-2020 Page 2 of 2

Process Filtration Division

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XB = Ex. Core Open End/Polypro Spring Closed End