

Fulflo® PCC Filter Cartridge

Unique 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: $\beta = 100$).



Contact Information

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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 & 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
- ISO 9001 registered company

Applications

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



ENGINEERING YOUR SUCCESS.

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 10gpm per 10 in length
 (38 lpm/254 mm)
 Stainless Steel Support:
 Maximum Temperature: 250°F (121°C)
 Maximum DP: 50psi (3.5 kg/cm²)
 Optimum Change Out DP:
 35psi (2.5 km/cm²)

Polypropylene Support

Maximum Temperature @ 10psid
 (0.7 km/cm²): 200°F (93°C)

Maximum Temperature @ 35psid
 (2.5 km/cm²): 125°F (52°C)

Maximum ΔP @ 75°F (24°C):

60psi (4.2 kg/cm²)

Change Out DP: 35psi (2.5 km/cm²)

Filtration Ratings

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

Performance Attributes

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) =

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

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

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

Notes:

1. Clean ΔP is psi differential at start.
2. Viscosity is centistokes. Use Conversion Tables for other units.
3. Flow Factor is ΔP/GPM at 1cks for 10 in. (or single).
4. Length Factors convert flow or ΔP from 10 in. (single length) to required cartridge length.

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

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

Cart.	β=5000 Absolute	β=1000 99.7%	β=100 99%	β=50 98%	β@2 μm
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
PCC 60	150	90	30	15.0	10

Ordering Information

Cartridge Code		Nominal Length		Support Construction		Seal Material		End Cap Configuration	
CODE	INCHES (MM)	CODE	MATERIAL	CODE	MATERIAL	CODE	DESCRIPTION	CODE	DESCRIPTION
PCG020	2	9	9 5/8" (244)	A	Polypropylene (DOE/SOE)	P	Poly Foam (DOE Gasket Only)	AR	020 O-ring/Recessed (Gelman)
PCC3	3	10	9 13/16" (249)	G	304 Stainless Steel (DOE)	E	EPR	DO	Double open end (DOE)
PCC10	10	19	19 5/8" (498)			N	Buna-N	DX	DOE w/Core Extender
PCC30	30	20	19 15/16" (506)			S	Silicone	LL	120/120 (Filterite LMO and Nuclepore Polymeric Vessels)*
PCC60	60	29	29 1/4" (743)			V	Viton®	LR	120 O-ring/Recessed (Nuclepore)*
		30	30 1/8" (764)					OB	Std. Open End/Polypro Spring Closed End
		40	40 (1016)					PR	213 O-ring/Recessed (Ametek Polymeric Vessels)*
								SC	226 O-ring/Flat
								SF	226 O-ring/Fin
								TB	222 Open End/Polypro Spring Closed End
								TC	222 O-ring/Flat
								TF	222 O-ring/Fin
								TX	222 O-ring/Flex Fin
								XB	Extended 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.
 For User Responsibility Statement, see www.parker.com/safety

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