Metallic [™] Fulflo[®] Filter Cartridges

Stainless Steel

Pleated & Cylindrical Series

Optimize Process Filtration with High Integrity Metallic Cartridges

Parker's Fulflo^Æ stainless steel cartridges provide the optimum filtration solution for fluids and gases in high temperature and high flow rate applications.

Available in a cylindrical or pleated design, cleanable stainless steel cartridges are the logical choice when natural and synthetic media cartridges cannot meet aggressive process conditions.

Fulflor reusable 304 and 316 grade stainless steel cartridges offer versatility of choice with fourteen nominal particle removal ratings, six standard lengths and a variety of end configurations and seal materials.

- Heat Transfer Fluids
- Process Steam
- Hot Melt Processes
- Viscous Fluids
- Corrosive Fluids
- Hot Wax

- Aggresive Gases
- Catalyst Recovery
- Polymer Filtration
- High Temperature Processes
- Caustic Cleaning Solutions



Features and Benefits

- Temperature capability up to 260°C with synthetic seals; up to 260°C with NPT connections.
- Available in 304 and 316 stainless steel for compatibility choice with aggressive chemicals.
- Available in fourteen nominal ratings from 2 to 840 microns for a wide range of particle size removal.
- Dimensional integrity of stainless steel media accomodates high flow rate and high temperature systems.
- Cartridges may be cleaned and reused.
- Available with a wide range of grommet and o-ring materials to optimize fluid and temperature compatibility.

- Variety of seal configurations allow retrofit in many filter vessel designs.
- Welded and crimped construction eliminates the need for adhesives which can be a contaminant source and limit temperature range
- Pleated surface maximizes filtration area for longer service life.
- Plain (cylindrical) surface provides ease of cleaning.
- Optional perforated stainless steel pleat protectors minimize handling damage.
- Meets FDA guidelines for use with potable and

Process Filtration Division





Pleated Series

Specifications

Particle Removal Ratings (Nominal):

14 ratings from 2 to 840 micrometers

Effective Filtration Area:

- Cylindrical: 0.5 ft²/10 in length (465 cm²/254mm)
- Pleated: 1.7 ft²/10 in length (1580 cm²/254 mm)

Materials of Construction:

- Filter Medium: stainless steel wire cloth
- Structural Components: 100% stainless steel
- Seal Materials:
 - *Grommets: Buna N, Viton, PTFE, EPDM
 - O-Rings: Buna N, EPDM, Viton, PFA encapsulated Viton
- Construction Method: Welded and crimped (no adhesives)
- Meets FDA guidelines with optional seal materials ("F" Code).

Dimensions:

- Outside Diameter:
 - Cylindrical: 2-1/2 in (64 mm)
- Pleated: 2-5/8 in (67 mm)
- Inside Diameter: 1-1/16 in (27 mm)
- Lengths (nominal): 10, 20 and 30 in (25.4, 50.8 and 76.2 mm)
 Grommet: 1-1/16 in (27 mm) ID X 1-7/8 in (48 mm) OD

Maximum Recommended Operating Conditions:

- Temperature:
 - 1500°F (816°C): NPTF and NPTM styles only
 - •500°F (260°C): Any cartridge style with PTFE grommet
 - 400°F (204°C): Any cartridge style with Viton or PFA encapsulated Viton seal material
 - •300°F (149°C): Any cartridge style with EPDM seal material
 - •250°F (121°C): Any cartridge style with Buna N seal material
- Differential Pressure:
 - · Standard core: 60 psi (4.1 bar)
 - ·High pressure core: 300 psi (20.7 bar)
- Flow Rate: 10 gpm (38 lpm) per 10 in cartridge
- Changeout ∆P: 35 psi (2.4 bar)

Ordering Information:

•					
PSS 	40 — Nominal		10 		G
	Micrometer		Nominal		Media/Support
Cartridge Code	Rating		Length		Construction
		Code	(in)	(mm)	
CSS - Cylindrical	2	9 =	09 3/4	248	G = 304 Stainless
Stainless Steel	5	10 =	10	254	Steel
	10	19 =	19 1/2	495	S = 316 Stainless
PSS - Pleated	20	20 =	20	508	Steel
Stainless Steel	40	29 =	29 1/4	743	
	75	30 =	30	762	
	100				
	150				
	190				
	230				
	280				
	370				
	540 840				
	840				

^{*}A trademark of E. I. duPont Nemours & Co.

■ Removal Rating/Mesh Count/Open Area

Published Nominal Rating (micrometers)	Mesh Count (per inch)	Per Cent Open Area
2	325 × 2300	NA
5	200 × 1400	NA
10	165 × 1400	NA
20	200 × 600	NA
40	120 × 400	NA
75	190 × 200	35
100	30 × 150	31
150	90 × 100	33
190	70 × 80	35
230	50 × 60	41
280	40 x 50	35
370	40 x 40	36
540	30 x 30	45
840	20 × 20	52

Ratings From 2 - 40 micrometers are twill dutch weave pattern Ratings From 75 - 840 micrometers are open square weave pattern

■ Flow Factors

Length (mm)	Flow Factor			
248, 254	0.0065			
495/508	0.0130			
743/762	0.0209			
Note: Flow factors are the same for all ratings. Center core ID and length are primary flow restrictions.				

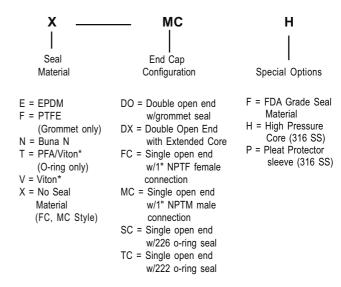
Flow Rate and Pressure Drop Formulae:

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

Clean ΔP = Flow Rate x Viscosity x Flow Factor

Notes:

- 1. Clean ΔP is mbar differential at start.
- 2. Viscosity is centistokes. Use Conversion Tables for other units.
- 3. Flow Factor is ΔP/length at 1 cks viscosity and 1 l/min flow rate.



Process Filtration Division

Parker Filtration Filter Division Europe Shaw Cross Business Park Dewsbury, West Yorkshire WF12 7RD, England Phone: +44 (0) 1924 487000 Fax: +44 (0) 1924 487001

Website: www.parker.com

