

Optimize Process Filtration with High Integrity Metallic **Cartridges**

Parker's Fulflo® 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.

Fulflo® 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.

Applications

- 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

Fulflo® Metallic Filter Cartridges

■ Stainless Steel

Pleated & Cylindrical Series



Features and Benefits

- Temperature capability up to 500°F with synthetic seals; up to 1500°F 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 edible liquids.

Process Filtration Division



Pleated and Cylindrical 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

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

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

■ Removal Rating/Mesh Count/Open Area

Micrometer Rating Nominal/(Absolute)	Mesh Count (per inch)	Per Cent Open Area
2 (9)	325 × 2300	NA
5 (14)	200 × 1400	NA
10 (18)	165 × 1400	NA
20 (32)	200 × 600	NA
40 (55)	120 × 400	NA
75	190 × 200	35
100	30 × 150	31
150	90 × 100	33
190	70 × 80	35
230	50 x 60	41
280	40 × 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

= 1 10W 1 40t010					
Length (in)	Flow Factor				
9 3/4, 10	0.00036				
19 1/2, 20	0.00076				
29 1/4, 30	0.00116				
Note: Flow factors are the same for all ratings.Center					

core ID and length are primary flow restrictions.

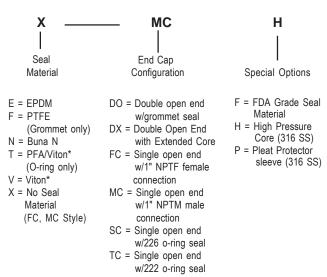
Flow Rate and Pressure Drop Formulae:

Flow Rate (gpm) = Clean ΔP Viscosity x Flow Factor

Clean ΔP = Flow Rate x Viscosity x Flow Factor

Notes

- 1. Clean ΔP is PSI 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 gpm flow rate.



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