Fulflo® Metallic Filter Cartridges

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.

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

Applications

- Heat Transfer
- Hot Melt Processes
- · Viscous Fluids
- Hot Wax
- Aggresive Gases
- Polymer Filtration
- High Temperature Processes
- Process
 Fluids Steam
- Corrosive Fluids
- Catalyst Recovery
- Caustic Cleaning Solutions



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Specifications

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 encapsu-

lated Viton

Construction Method:

Welded and crimped (no adhesives)

Meets FDA guidelines with optional seal materials ("F" Code)

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 ΔP : 35 psi (2.4 bar)

Particle Removal Ratings (Nominal):

Effective Filtration Area:

Cylindrical

0.5 ft²/10 in length (465 cm²/254mm)

Pleated

1.7 ft²/10 in length (1580 cm²/254 mm)

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

Flow Rate and Pressure Drop Formulas

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

Clean DP = Flow Rate x Viscosity x Flow Factor

Length Factor

Removal Rating/Mesh Count/Open Area

Micrometer Rating Nominal/(Absolute)		Mesh Count (per inch)	Percent Open Area
2	(9)	325 x 2300	NA
5	(14)	200 x 1400	NA
10	(18)	165 x 1400	NA
20	(32)	200 x 600	NA
40	(55)	120 x 400	NA
75		190 x 200	35
100		30 x 150	31
150		90 x 100	33
190		70 x 80	35
230		50 x 60	41
280		40 x 50	35
370		40 x 40	36
540		30 x 30	45
840		20 x 20	52

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

Flow Factors

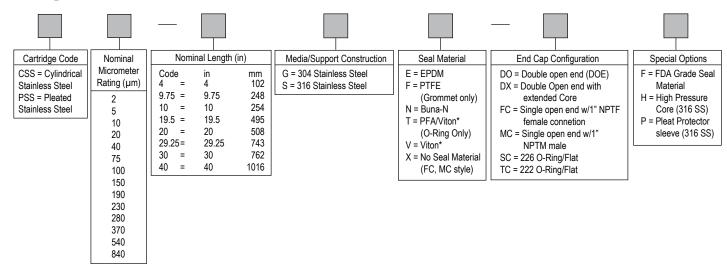
Length (in)	Flow Factor
9 3/4, 10	0.00036
19 1/2, 20	0.00076
29 1/4, 30	0.00116

Note: Flow factors are the same for all ratings. Center core ID and length are primary flow restrictions.

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.

Ordering Information



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