

C-9000

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 accommodates 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
- Aggressive 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

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

$$\text{Clean DP} = \frac{\text{Flow Rate} \times \text{Viscosity} \times \text{Flow Factor}}{\text{Length Factor}}$$

Removal Rating/Mesh Count/Open Area

Micrometer Rating	Mesh Count	Percent Open Area
Nominal/(Absolute)	(per inch)	
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 ΔP/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

Cartridge Code	Nominal Micrometer Rating (μm)	Nominal Length (in)	Media/Support Construction	Seal Material	End Cap Configuration	Special Options
CSS = Cylindrical Stainless Steel		Code in mm	G = 304 Stainless Steel	E = EPDM	DO = Double open end (DOE)	F = FDA Grade Seal Material
PSS = Pleated Stainless Steel		4 = 4 102	S = 316 Stainless Steel	F = PTFE	DX = Double Open end with extended Core	H = High Pressure Core (316 SS)
	2	9.75 = 9.75 248		(Grommet only)	FC = Single open end w/1" NPTF female connction	P = Pleat Protector sleeve (316 SS)
	5	10 = 10 254		N = Buna-N	MC = Single open end w/1" NPTM male	
	10	19.5 = 19.5 495		T = PFA/Viton* (O-Ring Only)	SC = 226 O-Ring/Flat	
	20	20 = 20 508		V = Viton*	TC = 222 O-Ring/Flat	
	40	29.25 = 29.25 743		X = No Seal Material (FC, MC style)		
	75	30 = 30 762				
	100	40 = 40 1016				
	150					
	190					
	230					
	280					
	370					
	540					
	840					

Specifications are subject to change without notification.

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