# Fulflo® SWC Filter Cartridges

# Economical Filtration Solutions With String Wound Depth Cartridges

Parker Process Filtration's SWC Filter cartridge offers a wide range of fibers and core materials. Roving is wound onto a center core for strength. The diagonal pattern of the media forms a tight, interlocking weave. Parker Process Filtration has one of the world's largest manufacturing plants for wound cartridges, offering superior quality along with technical, engineering and marketing support.

Nominal removal ratings from  $1\mu m$  to  $100\mu m$  are available.



- SWC's provide excellent compatibility with a variety of organic solvents and petroleum products
- Optional core covers available to assure fiber migration control
- Multiple length cartridges minimize change out time, eliminate spacers and are available to fit competitive filter vessels
- Cotton and polypropylene materials are FDA listed as acceptable for potable and edible liquid contact according to CFR Title 21
- Continuous strand roving geometry provides performance consistency



- Exended center core option eliminates the need for cartridge guides in competitve and Fulflo multicartridge vessels
- One piece extended length center cores are available in tinned steel, 316 stainless steel and 304 stainless steel
- A special snap-in extender is available for polypropylene cores
- FDA grade polypropylene (DOE only) certified to ANSI/NSF61 standard for contact with drinking water components

## **Applications**

- Prefilter for R.O. Membranes
- Water
- Alkalies
- · Dilute Acids & Alkalies
- Organic Acids & Solvents
- · Potable Liquids
- · Petroleum Oils
- · Mineral Acids



**ENGINEERING YOUR SUCCESS.** 

# Fulflo® SWC Filter Cartridges

## **Specifications**

#### **Materials of Construction:**

Polypropylene Cotton

# **Maximum Recommended Operating Conditions:**

Temperature:

Polypropylene:

200°F (93°C) with tinned steel or

stainless steel cores;

120°F (49°C) with polypropylene cores;

Cotton:

250°F (121°C) with tinned steel or

stainless steel cores:

120°F (49°C) with polypropylene cores.

Change Out  $\Delta P$ : 30 psi (2.1 bar)  $\Delta P$  @ Ambient Temperature:

60 psi (4.1 bar)

Flow Rate: 5 gpm (18.9 lpm) per

10 in length

#### **Nominal Removal Ratings:**

90% efficiency from 1µm to 100µm

#### **Dimensions:**

1 in ID x 2-3/8 in OD 10, 20, 30 and 40 in lengths

## SWC Length Factors

Length (in)

10

20

30

40

SWC Flow Factors (psid/gpm @ 1 cks)

0.0	(poid	9P 6	g . o.c.,
Length Factor	Rating (µm)	Cotton	All Synthetics
1.0	1	2.00	0.75
2.0	3	0.63	0.33
3.0	5	0.36	0.24
4.0	10	0.19	0.14
	15	0.16	0.12
	20	0.11	0.09
	25	0.10	0.08
	30	0.09	0.07
	50	0.07	0.06
	75	0.06	0.05
	100	0.06	0.05

### Flow Rate and Pressure Drop Formulas

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

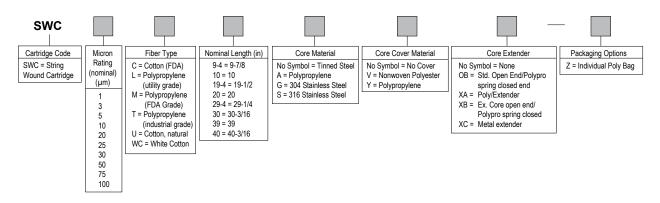
Clean DP = Flow Rate x Viscosity x Flow Factor

Length Factor

#### Notes:

- 1. Clean  $\Delta P$  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  $\Delta P$  from 10 in (single length) to required cartridge length.

## Ordering Information



Specifications are subject to change without notification

© 2007 Parker Hannafin Process Advanced Filtration Inc. All Rights Reserved SPEC-C1060-Rev. A 01/08

