# **PSSF Pleated Stainless Steel Felt Cartridges**

Cobetter **PSSF**<sup>®</sup> Stainless Steel Pleated Felt Filter Cartridges are composed of stainless steel sintered felt shaped during the pleating process. These filters have a large filtration area with high flow rates and low pressure drops.

The unique stainless steel sintered felt is made from stainless steel fibers which have been sintered to form a high porous depth filtration material.

PSSF Filter Cartridges features include a graded pore size from coarse (upstream) to fine (downstream), which results in a higher dirt holding capacity with excellent filtration efficiency and longer service life. These filters are widely used in steam filtration or liquids with high viscosities, e.g. sugars and syrups.





# Features and Benefits

- · Absolute-rated
- All stainless steel construction excellent chemical compatibility
- Excellent chemical compatibility and high temperature resistance
- Specialized alloy for high corrosion and oxidation resistance
- · Corrosive and oxidation resistant
- High dirt holding capacity and long service life

### **Materials of Construction**

Filter Media	304/316L Stainless Steel Felt
Cage/Support	304/316L Stainless Steel
Core/End Caps	304/316L Stainless Steel





### **Operating Conditions**

Recommended Continuous Operating Temperature Range	-75°C to +200°C Note: Temperature dependant on o-ring compound
Max. Differential Pressure	5.0 bar / 21°C (forward flow)
	2.0 bar / 21°C (reverse flow)
Hot Water Sterilization	85°C/30min @ Max. Differential Pressure of 2bar
Cleaning Solution	Reverse Rinse by Pure Water/Compressed Air @ <2bar; Ultrasonic Rinsing
Effective Filtration Area	0.12m²/10inch

# Retention Rates: PSSF v. TIC Titanium Filter

	PSSF	TIC Titanium Filter
Material	SS Sintered Felt (no fiber releasing)	Metal Powder Metal Powder (will release after long term use)
Strength	Pleated Structure High Temperature & Pressure Resistance	High Temperature (Sintered) Unstable Pressure
<b>Retention Rates</b>	Absolute-Rated EFA: up to 0.12m <sup>2</sup>	Depth Filter EFA: 0.056m <sup>2</sup>

#### **Parameters**

Code	Removal Rating in liquid(µm)	Removal Rating in gas(µm)	Pore Efficiency	Dirt Holding Capacity (mg/cm²)	Average Air Permeability (L/dm²min)	Flow Rate (m³/h)
1	3.0 <sup>©</sup>	0.5	70%	7.9	10	0.8
2	5.0	1	75%	5.0	47	1.3
3	7	1.5	76%	6.5	63	1.6
4	10	2	75%	7.8	105	2.0
5	25	16	80%	19.0	355	2.5
6	40	25	-	-	-	-
7	60	45	-	-	-	-

Testing Performed According to GB/T5453; Testing DP is 200Pa; Testing Medium is Air 0

Testing Liquid Viscosity is 1CP.S; Filter Tested with 60mm diameter and 300mm length; Testing Pressure is 1.5 bar 2 6

Bekaert Filtration Media

# **Ordering Information**

PSSF	Removal	End Cap	Nominal Length	Diameter	Seal Material
	<b>0300</b> =3.0 µm	DOE =Double open end	<b>05</b> = 5"	<b>D25</b> =25mm	<b>S</b> =Slilicone
	<b>0500</b> =5.0 µm	<b>TC</b> =222/Flat	<b>10</b> =10"	<b>D30</b> =30mm	E =EPDM
	<b>0700</b> =7.0 µm	<b>SC</b> =226/Flat	<b>20</b> =20"	<b>D50</b> =50mm	<b>V</b> =Viton
	<b>1000</b> =10 µm	L=Screw	<b>30</b> =30"	<b>D65</b> =65mm	<b>P</b> =PFA/Viton
	<b>2500</b> =25 μm		<b>40</b> =40"	<b>D70</b> =70mm	F =PTFE
	<b>4000</b> =40 µm				
	<b>6000</b> =60 µm				

#### Notes on Cleaning

Ultrasonic cleaning is recommended rather than back flush cleaning due to its depth and porous filtration media construction