




# ABSFON PD™

PES Membrane Filters for the Pharmaceuticals / Double layers



## INDUSTRIES & APPLICATIONS

-  **Food & Beverage** : Bottle water, Beers, Wines, Syrups, Soft drinks
-  **Pharmaceuticals** : API, Drugs and other sterile filtration
-  **Cosmetics** : Alcohol, Creams, Oils
-  **Water treatment** : Process water clarification, Membrane pre-filtration

ABSFON PD™ are sterile grade PES (polyethersulfone) membrane filters designed for the food, beverage and biopharmaceutical industries to meet and surpass the critical requirements.

ABSFON PD™ are composed of double layered PES membrane that both have asymmetric pore morphology. The filter media construction provides improved throughput and high flow rate in viscosity and high contaminant fluid applications. Lower protein binding properties minimize product loss and allows longer filter life in biopharmaceutical fluids as well.

## TECHNICAL DATA

### Nominal Dimensions

- Cartridge 68Ø**
- Length : 250, 500, 750, 1000 mm
  - Inner Diameter : 30 mm
  - Outer Diameter : 68 mm

- CAP I**
- Length : 143, 216 mm
  - Outer Diameter : 71, 73 mm

- CAP II**
- Length : 203, 212 mm
  - Outer Diameter : 97 mm

### Capsule series CAP I and CAP II



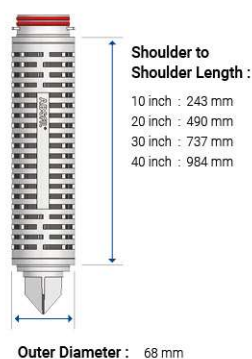
\* For details, see the Appendix II – Capsule Filter Types

### Materials of Construction

- Filtration Media : PES (Polyethersulfone)
- Pre-Filter Media : PES (Polyethersulfone)
- Support Media : Polypropylene
- Inner Core : Polypropylene
- Outer Cage : Polypropylene
- End Caps : Polypropylene
- Shell : Polypropylene
- Insert : STS 304
- O-rings / Gaskets : Silicone, EPDM, Viton, TEV

## FEATURES & BENEFITS

- Asymmetric pore structure provides exceptional filter life and reliable bacterial retention
- 100% UPW flushed and integrity tested
- Fully validated
- Repeatedly integrity testable and steam sterilizable
- No binders are present to interrupt product quality
- All polypropylene construction provides excellent chemical compatibility and very low level of extractables
- Available in a wide range of end styles and micron ratings



### Max. Operating Temperature

- Cartridge : 80°C (176°F)
- Capsules : 60°C (140°F)

### Max. Operating Forward Differential Pressure

- 4 bard (58.0 psid) at 20 °C
- 3 bard (43.5 psid) at 40 °C
- 2 bard (29.0 psid) at 60 °C
- 1 bard (14.5 psid) at 80 °C

# ABSFIL

---

**Recommended Change Out Differential Pressure**

2 bard (29.0 psid)

---

**Particle Releasing**

Meet the requirements of USP<788>  
Particulate matter, ≤ 25particles/ml at 10um, ≤ 3particles/ml at 25um

---

**Filtration Area**

· Cartridge 68Ø : 0.55 m<sup>2</sup> / 10 inch  
· CAP I : 0.10 m<sup>2</sup> / unit  
· CAP II : 0.27 m<sup>2</sup> / unit

---

**Nominal Pore Sizes**

0.1, 0.2, 0.45 µm

---

**TOC (Total Organic Carbon)**

Meet the requirements of the USP <643> TOC, <500ppb

---

**Bacterial Retention**

≥ LRV7 \* Performed in accordance with ASTM F 838-15, ATCC 19146 Brevundimonas diminuta

---

**Conductivity**

Meet the requirements of the USP <645>  
Conductivity, <1.3uS/cm

---

**Food Contact Compliance**

All materials of construction are FDA listed and conform to the relevant requirements of 21 CFR 177

---

**NVR (Non-Volatile Residue)**

Meet the requirements of the USP <661> NVR, <15mg

---

**Biological Safety**

All materials of construction are conform to the relevant requirements of USP <88> Class VI-121°C, plastics

---

**Autoclave Sterilization**

Can be repeatedly autoclaved up to 10cycles of 30minutes at 121°C

---

**Endotoxin**

Meet the requirements of the USP <85> LAL Test, ≤ 0.25EU/ml

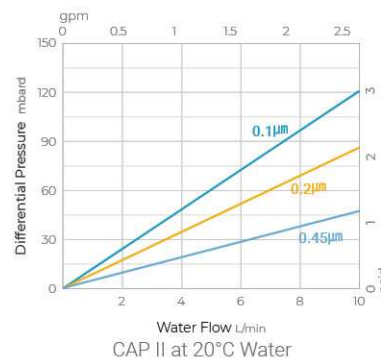
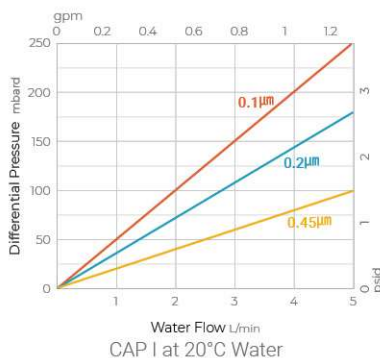
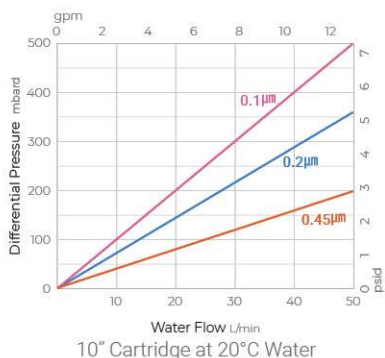
---

**Pre-Flush**

Pre-flushed with 18 MΩ UPW at 10LPM for 5min

**TYPICAL CLEAN WATER FLOW**

**CARTRIDGE & CAP**



**ORDERING INFORMATION**

**CARTRIDGES**

① <b>SPD</b>	-	② <b>001</b>	-	③ <b>C1</b>	<b>P</b>	④ <b>S</b>	-	⑤ <b>10</b>
		<b>MICRON RATING</b>	<b>END STYLE</b>		<b>SEALS</b>		<b>LENGTH</b>	
		P10 : 0.1µm P20 : 0.2µm P45 : 0.45µm	C1 : DOE C2 : 226Lock/FLAT C3 : c222/cFLAT E3 : 222/FLAT C7 : 226Lock/FIN E8 : 222/FIN		S : Silicone E : EPDM V : Viton F : TEV		10 : 250mm 20 : 500mm 30 : 750mm 40 : 1,000mm 1E : 254mm 2E : 508mm 3E : 762mm 4E : 1,016mm	

**CAPSULE SERIES**

① <b>C1</b>	② <b>SPD</b>	-	③ <b>001</b>	-	④ <b>S6</b>	<b>P</b>	⑤ <b>S</b>	-	⑥ <b>1S</b>																																				
<b>FILTER TYPE</b>		<b>END STYLE</b>				<b>SEALS</b>		<b>LENGTH</b>																																					
C1 : CAP I C2 : CAP II		<table border="1"> <thead> <tr> <th>TYPE</th> <th>CODE</th> <th>In/Out Connection</th> <th>Vent / Drain</th> </tr> </thead> <tbody> <tr> <td rowspan="3">CAP 1</td> <td>S6</td> <td>1/4" Swagelok</td> <td>1/8" Swagelok</td> </tr> <tr> <td>N6</td> <td>1/4" NPT</td> <td></td> </tr> <tr> <td>F3</td> <td>1/8" Flaretek</td> <td>1/8" NPT</td> </tr> <tr> <td rowspan="4">CAP 2</td> <td>F9</td> <td>3/8" Flaretek</td> <td></td> </tr> <tr> <td>P6</td> <td>1/4" Super Pillar</td> <td>1/8" Luer</td> </tr> <tr> <td>CL</td> <td>CL</td> <td>NA</td> </tr> <tr> <td>F9</td> <td>3/8" Flaretek</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>FE</td> <td>1.5" Ferrule</td> <td>1/4" Hose Barb</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				TYPE	CODE	In/Out Connection	Vent / Drain	CAP 1	S6	1/4" Swagelok	1/8" Swagelok	N6	1/4" NPT		F3	1/8" Flaretek	1/8" NPT	CAP 2	F9	3/8" Flaretek		P6	1/4" Super Pillar	1/8" Luer	CL	CL	NA	F9	3/8" Flaretek					FE	1.5" Ferrule	1/4" Hose Barb				X : NA S : Silicone E : EPDM V : Viton F : TEV		CAP 1 1S : Standard CAP 2 2S : Standard	
TYPE	CODE	In/Out Connection	Vent / Drain																																										
CAP 1	S6	1/4" Swagelok	1/8" Swagelok																																										
	N6	1/4" NPT																																											
	F3	1/8" Flaretek	1/8" NPT																																										
CAP 2	F9	3/8" Flaretek																																											
	P6	1/4" Super Pillar	1/8" Luer																																										
	CL	CL	NA																																										
	F9	3/8" Flaretek																																											
			FE	1.5" Ferrule	1/4" Hose Barb																																								
<b>MICRON RATING</b>																																													
P10 : 0.1µm P20 : 0.2µm P45 : 0.45µm																																													