








# ABSDEP MW™

Melt-blown Depth Filters / Absolute Ratings



## INDUSTRIES & APPLICATIONS

-  **Food & Beverage** : Bottle water, Beers, Wines, Syrups, Soft drinks
-  **Pharmaceuticals** : Membrane pre-filtration
-  **Electronics** : Process chemicals, CMP slurries, MLCC slurries
-  **Chemicals** : Acids, Bases, Solvents
-  **Cosmetics** : Alcohol, Creams, Oils
-  **Coats** : Coating solutions, Paints, Inks
-  **Battery** : Battery slurries

ABSDEP MW™ is an absolute rated melt-blown depth filters designed for filtering high viscosity fluids and high contaminant fluids.

ABSDEP MW™ is composed of melt-blown nonwovens with various fiber diameters and pore sizes. The filter has optimized to have a continuously graded density, which has a coarse upstream part and fine downstream part. The construction provides the ideal filtration performance for high viscosity fluids and fine slurry dispersion applications with exceptional filter service life and high particle removal efficiency.

## FEATURES & BENEFITS

- Graded density construction provides high dirt holding capacity, reducing process time and maintenance cost
- Cost-effective to reduce expenses
- All polypropylene construction provides excellent chemical compatibility
- No surfactants or binders are present to interrupt product quality
- Available in a wide range of end styles and micron ratings
- All materials of construction are FDA listed and conform to the relevant requirements of 21 CFR 177 and USP Class VI-121°C plastics VI-121°C plastics

## TECHNICAL DATA

### Nominal Dimensions

- Cartridge 68Ø**
- Length : 250, 500, 750, 1000 mm
  - Inner Diameter : 30 mm
  - Outer Diameter : 62, 65mm

### CAP I

- Length : 143, 216 mm
- Outer Diameter : 71, 73 mm

### CAP II

- Length : 203, 212 mm
- Outer Diameter : 97 mm

### CAP III

- Length : 292, 544 mm
- Outer Diameter : 71, 73 mm

### Capsule series from CAP I to CAP III



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

### Materials of Construction

- **Filtration Media** Polypropylene
- **Inner Core** Polypropylene
- **Outer Cage** Polypropylene
- **End Caps** Polypropylene
- **Shell** Polypropylene
- **O-rings / Gaskets** Silicone, EPDM, Viton, TEV Foamed Polyethylene

### 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

### Recommended Change Out Differential Pressure

- 2 bard (29.0 psid)

### Micron Ratings

- 0.5, 0.7, 1, 2, 3, 5, 7, 10, 20 µm
- 99.98% (β-Ratio 5000) in accordance with modified ASTM F-795-88
- (Single pass, constant flow of 10LPM/10" cartridge, ISO standard dust A3 in water)

### Food Contact Compliance

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

### Biological Safety

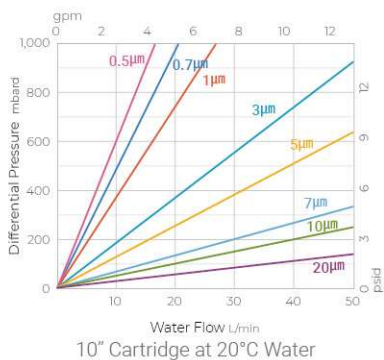
All materials of construction are conform to the relevant requirements of USP <88> Class VI-121°C, plastics

### Particle Releasing

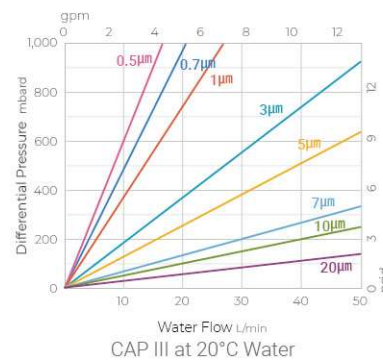
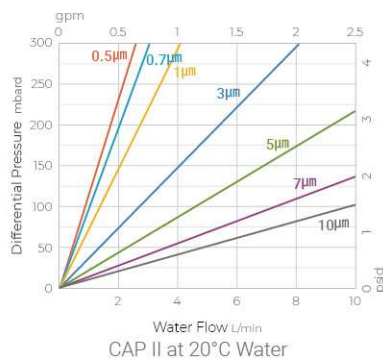
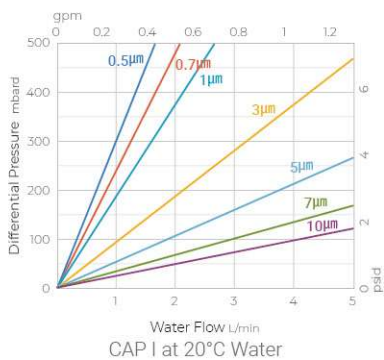
Meet the requirements of USP<788> Particulate matter (≤ 25particles/ml at 10um, ≤ 3particles/ml at 25um)

**TYPICAL CLEAN WATER FLOW**

**CARTRIDGE**



**CAP**



**ABSFIL**

**ORDERING INFORMATION**

**CARTRIDGES**

|  |                 |  |   |   |  |
|--|-----------------|--|---|---|--|
| ①<br><b>DMW</b>  | ②<br><b>001</b> | ③<br><b>C1</b>   | P | ④<br><b>S</b>   | ⑤<br><b>10</b>   |
| <b>MICRON RATING</b>   |                 | <b>END STYLE</b>   |   | <b>SEALS</b>  | <b>LENGTH</b>  |
| P50 : 0.5µm<br>P70 : 0.7µm<br>001 : 1µm<br>003 : 3µm<br>005 : 5µm<br>007 : 7µm<br>010 : 10µm<br>020 : 20µm |                 | C1 : DOE<br>C2 : 226Lock/FLAT<br>C3 : 222/FLAT<br>C7 : 226Lock/FIN<br>C8 : 222/FIN |   | P : Foamed PE<br>S : Silicone<br>E : EPDM<br>V : Viton<br>F : TEV | 10 : 250mm<br>20 : 500mm<br>30 : 750mm<br>40 : 1,000mm<br>1E : 254mm<br>2E : 508mm<br>3E : 762mm<br>4E : 1,016mm |

**CAPSULE SERIES**

| ①<br><b>C1</b>   | ②<br><b>DMW</b> | ③<br><b>001</b>  | ④<br><b>S6</b> | P | ⑤<br><b>S</b>   | ⑥<br><b>1S</b> |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|--|-----------------|--|----------------|---|---|----------------|-------------------|--------------|-------|---------------|---------------|---------------|-------|----------|----------|--|-------|----|---------------|----------|--|----|---------------|--|--|----|-------------------|-----------|--|----|----|--|-------|----|---------------|----|--|----|--------------|----------------|-------|----|-----------------|----------|--|----|----------|----|--|--|
| <b>FILTER TYPE</b>   |                 | <b>END STYLE</b>   |                |   | <b>SEALS</b>  |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| C1 : CAP I<br>C2 : CAP II<br>C3 : CAP III  |                 | <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></td> <td>S6</td> <td>1/4" Swagelok</td> <td>1/8" Swagelok</td> </tr> <tr> <td></td> <td>N6</td> <td>1/4" NPT</td> <td></td> </tr> <tr> <td>CAP 1</td> <td>F3</td> <td>1/8" Flaretek</td> <td>1/8" NPT</td> </tr> <tr> <td></td> <td>F9</td> <td>3/8" Flaretek</td> <td></td> </tr> <tr> <td></td> <td>P6</td> <td>1/4" Super Pillar</td> <td>1/8" Luer</td> </tr> <tr> <td></td> <td>CL</td> <td>CL</td> <td></td> </tr> <tr> <td>CAP 2</td> <td>F9</td> <td>3/8" Flaretek</td> <td>NA</td> </tr> <tr> <td></td> <td>FE</td> <td>1.5" Ferrule</td> <td>1/4" Hose Barb</td> </tr> <tr> <td>CAP 3</td> <td>A1</td> <td>One Touch Quick</td> <td>1/4" NPT</td> </tr> <tr> <td></td> <td>B1</td> <td>Coupling</td> <td>NA</td> </tr> </tbody> </table> |                |   | TYPE  | CODE           | In/Out Connection | Vent / Drain |       | S6            | 1/4" Swagelok | 1/8" Swagelok |       | N6       | 1/4" NPT |  | CAP 1 | F3 | 1/8" Flaretek | 1/8" NPT |  | F9 | 3/8" Flaretek |  |  | P6 | 1/4" Super Pillar | 1/8" Luer |  | CL | CL |  | CAP 2 | F9 | 3/8" Flaretek | NA |  | FE | 1.5" Ferrule | 1/4" Hose Barb | CAP 3 | A1 | One Touch Quick | 1/4" NPT |  | B1 | Coupling | NA | X : NA<br>S : Silicone<br>E : EPDM<br>V : Viton<br>F : TEV |  |
| TYPE   | CODE            | In/Out Connection  | Vent / Drain   |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | S6              | 1/4" Swagelok  | 1/8" Swagelok  |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | N6              | 1/4" NPT   |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| CAP 1  | F3              | 1/8" Flaretek  | 1/8" NPT       |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | F9              | 3/8" Flaretek  |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | P6              | 1/4" Super Pillar  | 1/8" Luer      |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | CL              | CL   |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| CAP 2  | F9              | 3/8" Flaretek  | NA             |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | FE              | 1.5" Ferrule   | 1/4" Hose Barb |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| CAP 3  | A1              | One Touch Quick  | 1/4" NPT       |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | B1              | Coupling   | NA             |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| <b>MICRON RATING</b>   |                 |  |                |   | <b>LENGTH</b>   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| P50 : 0.5µm<br>P70 : 0.7µm<br>001 : 1µm<br>003 : 3µm<br>005 : 5µm<br>007 : 7µm<br>010 : 10µm<br>020 : 20µm |                 |  |                |   | <table border="1"> <thead> <tr> <th>TYPE</th> <th>CODE</th> </tr> </thead> <tbody> <tr> <td>CAP 1</td> <td>1S : Standard</td> </tr> <tr> <td>CAP 2</td> <td>2S : Standard</td> </tr> <tr> <td rowspan="2">CAP 3</td> <td>31 : 10"</td> </tr> <tr> <td>32 : 20"</td> </tr> </tbody> </table> |                | TYPE              | CODE         | CAP 1 | 1S : Standard | CAP 2         | 2S : Standard | CAP 3 | 31 : 10" | 32 : 20" |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| TYPE   | CODE            |  |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| CAP 1  | 1S : Standard   |  |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| CAP 2  | 2S : Standard   |  |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
| CAP 3  | 31 : 10"        |  |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |
|  | 32 : 20"        |  |                |   |   |                |                   |              |       |               |               |               |       |          |          |  |       |    |               |          |  |    |               |  |  |    |                   |           |  |    |    |  |       |    |               |    |  |    |              |                |       |    |                 |          |  |    |          |    |  |  |

