

# **Industrial Filters**



www.purelife-filters.com

## **CMB** Melt-Blown PP Filter Cartridge

Melt blown cartridge is formed by melting pure polypropylene with heat.

This type of cartridge filter is suitable for pre-filtration and it's usually used as a "security filter" before ultra filtration membrane.

#### **CHARACTERISTICS**

-The filter cartridge consists of three layers of heat-melted polypropylene.

Compared to mono-layer filters, its life lasts much longer, therefore, the maintenance cost is reduced drastically.

- Using the light heating way for PP fibre, it can reduce the filtering resistance a lot and increase the water flow.

-As the filter cartridge is only made from polypropylene, it provides resistance to chemical reagents and organic solvents.

#### **APPLICATIONS**

- Filtering for plating solutions of electronic products, waste water, liquid medicine and pure water.
- Pre-filtering for various ultra filtration.
- Filtering water for medical purposes, and water treatment in chemical field.
- Filtering water used in the Food & beverage production.
- Pre-filtering before RO and UF, as long as various other treatment for industrial purposes.





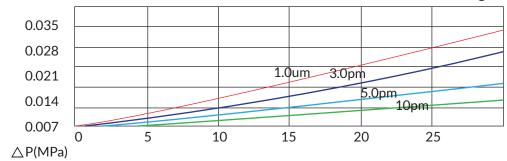


| Item                  | Specification              |
|-----------------------|----------------------------|
| Temperature           | <60°C,(△P:0.03MPa)         |
| Temperature           | <90°C,(△P: 0.02MPa)        |
| Flow Rate             | 0.05-0.09 m2 per 10 inch   |
| (60°C)                | O.IMPa/O.IMPa inpouring    |
| AP(MAX)               | 0.06MPa/0.06MPa outpouring |
| Hot-Water Sterilizing | 70°C/30min                 |
| РН                    | 1-13                       |



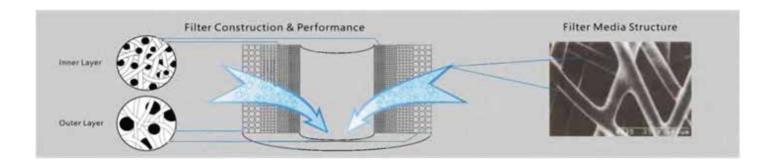
Per 10"length





#### **PRODUCTS CODE TABLE**

| Item | Precision | Length             | OD              | ID     | Inner Core  | Surface     | Code Eg.             |
|------|-----------|--------------------|-----------------|--------|-------------|-------------|----------------------|
|      | 01:lum    | 05:127±1.5mm       | A:45mm          | 1:28mm | N:no core   | F:fla t     |                      |
|      | O5:5um    | 10M:250±1.5mm      | B:55mm          | 2:30mm | W:with core | O:orange    |                      |
|      | 10:10um   | 10l:10"(254±1.5mm) | 25:2.5"(63.5mm) | 3:20mm |             | E:embossing |                      |
|      | 20:20um   | 20M:500±1.5mm      | 45:4.5"(115mm)  |        |             | P:point     |                      |
| СМВ  | 30:30um   | 20l:20"(508±1.5mm) |                 |        |             |             | CMB -01-10M-25-1-N-F |
|      | 50:50um   | 30M:750±2mm        |                 |        |             |             |                      |
|      |           | 30l:30"(762±2mm)   |                 |        |             |             |                      |
|      |           | 40M:1000±2mm       |                 |        |             |             |                      |
|      |           | 40I:40"(1016±2mm)  |                 |        |             |             |                      |
|      |           | 50l:50"(1270mm)    |                 |        |             |             |                      |
|      |           | 70l:70"(1778mm)    |                 |        |             |             |                      |





## **PPW** PP Yarn Filter Cartridge

### CHARACTERISTICS

PP String Wound filter cartridge consists of a core winded tightly with PP textile fibre in order to form filters that may vary in filtration precision, according the density of the string during winding. This type of filter can remove the suspended particles in liquids. Pure Life String Woud filters provide high quality depth filtration. It can also be manufactured by many types of material in order to meet different needs or types of liquids.

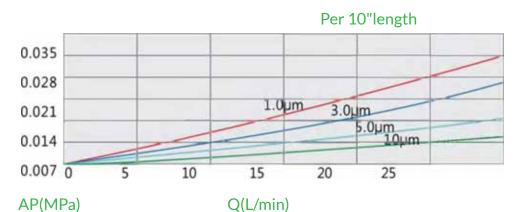
### **APPLICATIONS**

- Food & beverage industry.
- Cosmetics industry.
- Pharmaceutical industry.
- Fishing industry.
- Processed water.
- Reverse Osmosis Pre-treatment
- Water-based solutions.
- Solar heating industry.
- Petrochemical industry .

#### PHYSICAL PROPERTIES

Filtering medium: Polypropylene Core: Polypropylene, stainless steel Filtering grades: 1, 5, 10, 25, 50 pm Length (inches):10", 20", 30", 40", 50", 70" External diameter: 60 mm Internal diameter: 28 mm Maximum operating temperature: 80°C Differential pressure for replacement: 1.2 bar at 209C Coupling: Double Open End Packaging: Cardboard boxes on pallets











#### **DEPTH FILTRATION**

To achieve depth filtration Pure Life's filter media is thicker in depth with pores smaller, equal or greater than the particles that need to be retained. That way even particles that are smaller than the surface pores can be retained. Depth filtration is much better contrary to simple surface filtration. Media that offer surface filtration, have

essentially smaller pores, than the particles they need to retain. That way particles are retained in the surface area of the filter and the media becomes more vulnerable to escaping of particles or breaking.



#### **PRODUCTS CODE TABLE**

| Item | Material  | Precision | Length             | Inner CoreMaterial | OD              | ID     | Code Eg.            |
|------|-----------|-----------|--------------------|--------------------|-----------------|--------|---------------------|
|      | P:PP line | 01:lum    | 10M:250±1.5mm      | P:PP               | 25:2.5"(63.5mm) | 1:28mm |                     |
|      | C:Cotton  | 05:5um    | 10l:10"(254±1.5mm) | S:304              | 45:4.5"(115mm)  | 2:30mm |                     |
|      |           | 10:10um   | 20M:500±1.5mm      | T:316              |                 |        |                     |
|      |           | 20:20um   | 20I:20"(508±1.5mm) | F:Stainless iron   |                 |        |                     |
| PPW  |           | 30:30um   | 30M:750±2mm        |                    |                 |        | PPW-P-01-10M-P-25-1 |
|      |           | 50:50um   | 30l:30"(762±2mm)   |                    |                 |        |                     |
|      |           | 75:75um   | 40M:1000±2mm       |                    |                 |        |                     |
|      |           | 1H:100um  | 40l:40"(1016±2mm)  |                    |                 |        |                     |
|      |           | 1H:100um  | 50l:50"(1270mm)    |                    |                 |        |                     |
|      |           | 1H:100um  | 70l:70"(1778mm)    |                    |                 |        |                     |





## **Pleated Filter**

**PP Pleated Filter Cartridge** 

## MATERIAL AND CONSTRUCTION

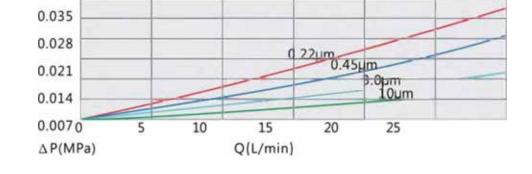
- The filtering media is combined with ultra fibre membrane (belongs to depth filtration) and a guidance layer, which offers high resistance to pollutants.

The end caps, outer shell and inner core are all made of pure polypropylene. - Pleated layes can enlarge the permited concetration of pollutants, increase the water flow and expand the filter's life. All the parts are sealed into a complete unit via sweating soldering without any adhesive.

Per 10" Length

## APPLICATIONS

- Electronic industry: Pre-filtering ultrapure water.
- Food & beverage industry: Filtering mineral water, liquor, juice, etc.
- Medical industry: Filtering liquid medicine, gas, etc.
- Chemical industry: Filtering organic solvents.
- Oil indsutry: Filtering oil-field affusion.



| ltem              | Specification              |
|-------------------|----------------------------|
| Temprature        | <60°C,(△p:0.03MPa)         |
|                   | <90°C,(△P: 0.02MPa)        |
| Flow Rate         | 0.3T/H • 10"               |
| (60°C)            | 0.1 MPa/0.1 MPa inpouring  |
| △p (MAX)          | 0.06MPa/0.06MPa outpouring |
| Steam Slerilizing | 121°C/30min                |













## PRODUCTS CODE TABLE

| Item | Precision | Adaptor    | O-ring    | Length | Material | Code Eg.        |
|------|-----------|------------|-----------|--------|----------|-----------------|
|      | 02:0.2um  | 0:2-222    | S:Silicon | 1:10"  | PV:PP    |                 |
|      | 04:0.45um | 7:2-226    | E:EPDM    | 2:20"  | TV:PTFE  |                 |
| TPP  | 10:1um    | F:Double   | V:Viton   | 3:30"  | UV:PESU  | TPP-02-0-S-1-PV |
|      | 50:5um    | O:Open end |           | 4:40"  |          |                 |
|      | 1H:10um   |            |           |        |          |                 |
|      | 2H:20um   |            |           |        |          |                 |

| Article<br>Number |                       | Effective<br>Filter Area |        |       |              |
|-------------------|-----------------------|--------------------------|--------|-------|--------------|
|                   | <b>Rejection Rate</b> | 100%                     | 99.9%  | 99%   |              |
|                   | Accuracy              | -                        | 6=1000 | 6=100 | (250mm:IPCS) |
| TPP-002           | 0.22 UM               | 0.5                      | 0.2    | 0.15  | 0.65         |
| TPP-004           | 0.45 UM               | 0.7                      | 0.45   | 0.3   | 0.65         |
| TPP-010           | 1 UM                  | 2.8                      | 1      | 0.9   | 0.64         |
| TPP-030           | 3 UM                  | 5.4                      | 3      | 2.8   | 0.59         |
| TPP-050           | 5 UM                  | 7.6                      | 5      | 4.5   | 0.56         |
| TPP-100           | 10 UM                 | 13.9                     | 10     | 9.1   | 0.63         |



## **Pleated Filter**

**Pleated Cartridge Filter** 

#### **FEATURES & BENEFITS:**

- Designed for oilfield fluids and desalination
- One piece rigid outer cage and outer netting are available
- Broad chemical compatibility
- High flow rate, low pressure drop, excellent contaminant loading capacity
- Standard to fit different brands



#### Material

| Filtration Media:           | Glass Fiber / Polypropylene |
|-----------------------------|-----------------------------|
| Inner core:                 | polypropylene               |
| Outer cage or outer netting | : polypropylene             |
| End Caps:                   | ABS                         |

#### Dimensions

| Length:           | 40inch/30inch      |
|-------------------|--------------------|
| Outer diameter:   | 2.5inch            |
| Inner diameter:   | 1.1 Inch           |
| Connection:       | 222/Flat or others |
| Filtration Media: | 12 m3 / 40 inch    |

#### **Operation Conditions**

| Max. Temperature:                 | ~80°C       |
|-----------------------------------|-------------|
| Recommended Flow Rate:            | 10m3/40inch |
| Recommended differential pressure | 2.1-2.4bar  |
| for change-out:                   |             |

#### **Applications**

| Well completion fluids. | Process water.      |
|-------------------------|---------------------|
| Work over fluids        | Gravel pack fluids. |
| Injection water.        | Amine.              |
| Produced water.         | Desalination.       |

#### **Ordering Information:**

| Model              | Length    | Pleated Media    | Outer Material | Micron Rating | O-ring     | End Caps  |
|--------------------|-----------|------------------|----------------|---------------|------------|-----------|
|                    |           |                  |                | 1=lum         |            |           |
| <b>PPFC Series</b> | 40=40inch | GF=Glass Fiber   | EN= Netting    | 3=3um         | E=EPDM     |           |
| Pleated            |           | PP=polypropylene | RC=Rigid Cage  | 5=5um         | V=Viton    | 2=222Flat |
| Cartridge          |           |                  |                | 10=10um       | B=Buna N   | O=others  |
| Filter             |           |                  |                | 20=20um       | S=Silicone |           |
|                    |           |                  |                | 50=50um       | O=others   |           |

## **High Flow Pleated**

#### **High Flow Pleated Filter Cartridge**

High Flow Pleated Filter is a large

diameter, coreless, single open end, pleated cartridge filter with an inside-to-outside flow pattern. Its optimized pleats structure design with its large 152 mm (6 inch) diameter increases effectively the filtration area, allowing you to use significantly fewer filters and smaller housings for all high and large flow rate applications.

#### **FEATURES AND BENEFITS**

- 6 " diameter , large geometry for high flow capacity.
- Depth pleated structure, combined with multiple media, providing large dirt holding capacity and absolute or nominal micron rate.
- Larger surface filtration area per cartridge. Provides higher flow rate, lower pressure drop and longer service life. Thereby reducing labor and disposal cost.
- Suitable for high flow rate liquid filtration. Possible applications: Cooling Water Filtration , RO Pre-Filtration, Seawater Desalination, Amine Circulation Filtration and all kinds of chemical solution filtration.
- Absolute-rated filter medium for reproducible performance.
- Coreless and full plastic construction to minimize waste disposal.
- Inside-out flow pattern design allows for excellent dirt holding capacity.
- Ergonomically designed handle.
- Facilitates fast and easy cartridge change-out without use of special tools Available in a variety of filter lengths and grades

#### **TYPICAL APPLICATIONS**

- Power Condensate System
- Municipal Water
- Electronics (RO Pre-Filtration, Process Water)
- Chemical
- Petrochemicals









## **CTO** Activated Carbon Filter Cartridge

#### CHARACTERISTICS

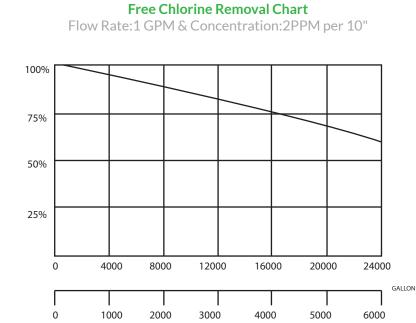
Activated carbon is a porous material, which has the ability to absorb organic compounds. Therefore, it is widely used in as a tool for decoloration, deodorization and deoil, in order to absorb those unwanted contamination particles in filtered liquids. Adsorbability depends on the filter method, water flow rate, contact time, contact area with active carbon, etc.

Taking all these facts into consideration our filters are well designed to offer efficiency and improve the filtration quality that the medium offers.

#### **APPLICATIONS**

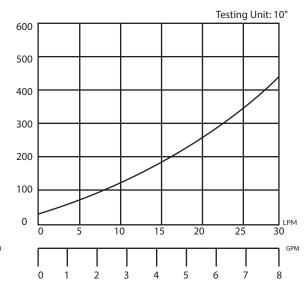
- For water for medical industry.
- For surfwee preparation, electroplating solution.
- To get rid of the oil and aromatics in liquids.
- To get rid of the free chlorine and VOC in liquids.
- To get rid of odours, sediments or organic pigments in liquids.
- To get rid of organic chemicals.





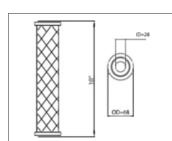
#### Flow Rate and Differential Pressure Chart

Pure Water Flow at 20°C (LPM/GPM)



#### **Filtration Efficiency Value**

| Specific Surface Area: m2/g           | 850 |
|---------------------------------------|-----|
| Adsorptive Value of Benzene: mg/g     | 270 |
| Adsorptive Value of Iodine: mg/g      | 800 |
| Decolor Value of Methylene Blue: mg/g | 100 |
| Thickness: mm                         | 2   |





#### **Structure and Material**

| Activated Carbon Type       | Coconut Shell Based Activated Carbon |  |
|-----------------------------|--------------------------------------|--|
|                             | Polyester                            |  |
| Inner Core                  | Polypropylene                        |  |
| Coating Layer of Inner Core | Polyester                            |  |
| Outer Carrier Net           | Polyethylene                         |  |
| Endcap                      | PPR (Food Grade)                     |  |
|                             |                                      |  |

#### **Design and Operating Parameters**

| Pore Size                                    | 5UM              |  |
|----------------------------------------------|------------------|--|
| Maximum Operating Temperature                | 52°C (125 F)     |  |
| Maximum Differential Pressure                | 3.45Bar(50 psid) |  |
| Recommended Change-out Differential Pressure | 2.07Bar(30 psid) |  |
| Breaking-out Differential Pressure           | 5.17Bar(75 psid) |  |



#### **Products Code Table**

| Item | Material                 | Length              | OD              | Code Eg.            |
|------|--------------------------|---------------------|-----------------|---------------------|
| СТО  | C:Activated Carbon Fiber | 10M:250±1.5mm       | 25:2.5"(63.5mm) |                     |
|      |                          | 10I:10"(254± 1.5mm) | 45:4.5"(115mm)  | СТО-Р-01-10М-Р-25-1 |
|      |                          | 20M:500±1.5mm       |                 |                     |
|      |                          | 20I:20"(508±1.5mm)  |                 |                     |