



## INTRODUCTION

### BAG FILTRATION CONCEPT

Consists of heavy duty vessel, quality perforated strainer basket and either single or multiple bag. Fluid enters the vessel, passing through the bag where debris and particles are collected at the inner surface and delivers to the point-of-use.

Bag filtration system has higher Dust Holding Capacity (D.H.C.) than normal conventional filter cartridges. One 7"Ø x 32" length (Code No.2) filter bag's effective filtration area is equivalent to about 20 pcs. x 10" filter cartridge.

Bag filtration system is suitable for applying to all kind of industries in petrochemicals, coatings, resin, paints, inks, food and beverage, hard disc, electronics, water treatment, membrane, metal work, pharmaceutical, etc.

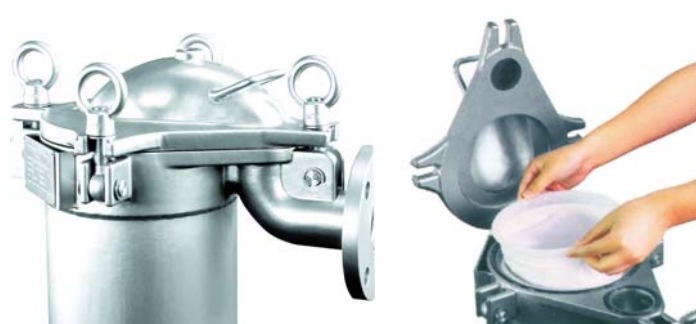
Various bag sizes and materials available capable to perform filtration down to 0.5 micron.

Bag filtration system eliminates the needs of frequent cartridge change. User friendly design allows a replacement of single filter bag within 30 seconds and eases the maintenance work.

Compare with many conventional systems where many cartridges is employed, probability of by-passing is greatly reduced with the use of only few bags and patented 'W' type bag seal.

Trumpet lid cover design distributes fluid more evenly. With larger distribution area design, it allows more time for the bag to perform its job and results in lower pressure drop and better filtration performance. Unlike many conventional systems which fluid enters directly from the inlet, creates turbulent flow and might causes the bag out of position.

Can be used as a stand alone or combined unit system to meet various flow rate requirements.



## MATERIAL OF BAG

### A) NEEDLE FELT/ MELT-BLOWN

- i) Silicone-Free Polypropylene (Model: **PPB**)  
Resistance to acid and alkaline. Maximum operating temperature of 90°C.
- ii) Silicone-Free Polyester (Model: **PEB**)  
Resistance to acid and alkaline. Maximum operating temperature of 160°C.

### Grade Of Media Material

- i) A : Silicone-Free with nominal rated up to 80%.
- ii) ABS : Silicone-Free with absolute rated of >99%.
- iii) AF : Silicone-Free and FDA compliant. Nominal rated up to 80%.
- iv) ABF : Silicone-Free and FDA compliant. Absolute rated of >99%.

### B) MONOFILAMENT MESH

- i) Nylon (Model: **NYB**)  
Maximum operating temperature of 150°C. Absolute filtration efficiency of >99% from 25 to 1250 micron.
- ii) Polypropylene (Model: **MPPB**)
- iii) Polyester (Model: **MPEB**)  
Absolute filtration efficiency of >99% from 25 to 1950 micron.

### C) MULTIFILAMENT MESH

- i) Nylon (Model: **MLNB**)
- ii) Polyester (Model: **MLEB**)  
Absolute >99% filtration efficiency from 5 to 1950 micron. High mechanical strength for high pressure applications.

## MATERIAL OF BAG RING

- i) Filter Cloth Band Seal
- ii) Stainless Steel
- iii) G.I. (Galvanized Iron)
- iv) Silicone-Free Polypropylene
- v) Silicone-Free Polyester

## O-RING SEAL MECHANISM

- i) SYNC SEAL  
Patented pressure sensitive design. Totally seal with the housing lid cover. Can be used in both nominal and absolute filtration.
- ii) ULTIMA SEAL  
Combination of SYNC and O-Ring seal. Provides 100% seal effect to use in absolute filtration system.

## BAG FILTER SEAL MECHANISM

### i) Ultrasonic Weld

State-of-art ultrasonic welding technique. Provides super strong joint strength and eliminates by-pass that normally find in the sewn seam design. Use in critical applications where absolute filtration is needed.

### ii) Sewing

Precise, smooth and durable process. Pure Polypropylene thread free from silicone further enhances the cleanliness of bags.

## BAG SURFACE TREATMENT

Can be specially treated with melted glaze to totally eliminate fiber migration.

## MATERIAL OF BASKET STRAINER

- i) Stainless Steel 304
- ii) Stainless Steel 316  
Can be employed for high temperature and high pressure application. Mesh size from 25 to 1200 micron is available for selection.

## SPECIAL BAG FILTER

### i) Multi-Layer Bag

2 to 12 layers of bag can be made in one single element. With different pore size selection, the filter bag can be in graded density design to capture particles at different microns and achieve maximum filtration results.

### ii) Oil Absorption Bag (Model: **OAB**)

Dual purpose bag designs to provide nominal particle removal rating as well as oil removal capabilities. Consists of special single or multiple oil suction Polypropylene melt-blown media and supported by pre and post non-woven Polypropylene layers. Ideal choice for removing trace amount of non-emulsified Hydrocarbons and critical filtration applications in automotive paint, metal casting, chemical process, wastewater system, etc..

### iii) Activated Carbon Bag (Model: **ACB**)

Dual purpose bag designs to provide 70% nominal particle removal rating as well as chlorine, bad taste, odor and certain VOCs removal capabilities. Consists of special single or multiple Activated Carbon cellulose media and supported by pre and post non-woven Polypropylene layers.

# ORDERING GUIDE

## A) NEEDLE FELT/ MELT-BLOWN

### KAREI – ( A ) – ( B ) – ( C ) – ( D ) – ( E ) – ( F ) – ( G ) – ( H )

<b>( A ) Model</b>	PPB=Polypropylene Bag, PEB=Polyester Bag
<b>( B ) Micron</b>	05=0.5, 1, 3, 5, 10, 25, 50, 75, 100, 150, 200, 300
<b>( C ) Grade</b>	A=Silicone-Free needle felt with nominal rated up to 80%. ABS=Silicone-Free melt-blown media with absolute rated of >99%. AF=Silicone-Free and FDA compliance needle felt media. Nominal rated up to 80%. ABF=Silicone-Free and FDA compliance melt-blown media. Absolute rated of >99%.
<b>( D ) Size</b>	48=4x8", 414=4x14", 717=7x17", 732=7x32" (Special size is available upon request).
<b>( E ) Bag Ring</b>	P=Polypropylene, E=Polyester, S=SUS 304, S6=SUS 316, G=Galvanized Iron, B=Band ring
<b>( F ) Seal</b>	W=Ultrasonic Welding, S=Sewn, WS=Ultrasonic Weld & Sewn
<b>( G ) No. Of Layer</b>	2L=2 Layers until 10L=10 Layers
<b>( H ) Bag Cover</b>	P=Non-Woven Polypropylene, E=Non-Woven Polyester, NY=Monofilament Nylon

#### EXAMPLE:

1) KAREI-PPB-1A-717-PW

(P.P. bag, 1 um, Silicone Free needle felt nominal rated media, 7x17", Polypropylene bag ring, Ultrasonic weld seal).

2) KAREI-PEB-25AF-732-PWS-2L-P

P.E. bag, 25 um, Silicone Free and FDA compliance needle felt media, 7x32", Polypropylene bag ring, Ultrasonic weld and sewn seal, 2 Layers, Polypropylene non-woven cover).

## B) MONOFILAMENT AND MULTIFILAMENT MESH

### KAREI – ( A ) – ( B ) – ( C ) – ( D ) – ( E ) – ( F )

<b>( A ) Model</b>	NYB=Monofilament Nylon Mesh MPPB=Monofilament Polypropylene Mesh MPEB= Monofilament Polyester Mesh MLNB=Multifilament Nylon Mesh MLEB=Multifilament Polyester Mesh
<b>( B ) Micron</b>	25, 50, 75, 100, 150, 200, 300 until 1950
<b>( C ) Size</b>	48=4x8", 414=4x14", 717=7x17", 732=7x32" (Special size is available upon request).
<b>( D ) Bag Ring</b>	P=Polypropylene, E=Polyester, S=SUS 304, S6=SUS 316, G=Galvanized Steel, B=Band ring
<b>( E ) Seal</b>	S=Sewn
<b>( F ) No. Of Layer</b>	2L=2 Layers until 12L=12 Layers

#### EXAMPLE:

1) KAREI-NYB-25-717-SS (Monofilament Nylon bag, 25 um, 7x17", SUS 304 bag ring, Sewn seal).

2) KAREI-MLNB-350-732-BS (Multifilament Nylon bag, 350 um, 7x32", Band ring, Sewn seal).

## C) OIL ABSORPTION AND ACTIVATED CARBON CELLULOSE

### KAREI – ( A ) – ( B ) – ( C ) – ( D ) – ( E ) – ( F )

<b>( A ) Model</b>	OAB=Oil Absorption Bag ACB=Activated Carbon Cellulose Bag
<b>( B ) Micron</b>	25, 50, 75, 100, 150 (OAB model), 1, 5, 10, 25, 50, 75, 100, 150 (ACB model)
<b>( C ) Size</b>	48=4x8", 414=4x14", 717=7x17", 732=7x32" (Special size is available upon request).
<b>( D ) Bag Ring</b>	P=Polypropylene, E=Polyester, S=SUS 304, S6=SUS 316, G=Galvanized Steel B=Band ring
<b>( E ) Seal</b>	W=Ultrasonic Welding, S=Sewn, WS=Ultrasonic Weld & Sewn
<b>( F ) No. Of Layer</b>	2L=2 Layers until 5L=5 Layers

#### EXAMPLE:

1) KAREI-OAB-50-717-PW (Oil Absorption bag, 50 um, 7x17", Polypropylene ring, Ultrasonic weld seal).

2) KAREI-ACB-10-732-SWS (Activated Carbon Cellulose bag, 10 um, 7x32", SUS 304 ring, Ultrasonic weld and sewn seal).