

**KAREI™****APM Series**

## DESCRIPTIONS

**APM** is constructed of FDA CFR Title 21 listed pure Polypropylene material that provides reliable and consistent performance.

Polypropylene is a pure hydrocarbon material, there is no disposal issue relating to halogen content and makes **APM** an environmental friendly product.

Due to its high symmetrical pore structure, **APM** offers superior flow rates and higher throughputs with low pressure drop and high contaminant holding capacities.

**APM** is best suit for using in gas filtration, chemical processing, photo-resist production, automotive industry, pharmaceutical, micro-electronic, food and beverages, etc. due to its hydrophobic membrane properties.

100% Pure Polypropylene ensures wide range of chemical compatibility and suitable for filtration of wide range of solvents and liquids.

**APM** is designed to provide longer service life and can be used for final filtration when absolute particle removal is necessary or pre-filtration where extremely fine particle removal is needed to protect the final filtration system.

Superior particles retention capacity.

Inherently hydrophobic.

High flow rates and superior throughputs for more filter value.

100% pure Polypropylene provides good chemicals compatibility.

Available in 0.1 and 0.2 micron absolute pore sizes.

All parts and supporting layer are thermally welded without any binder to ensure extremely low extractable.

Manufactured in Class 10K clean room environment.

100% integrity tested to ensure product reliability.

Wide range of end configurations to fit any standard housing.

A guaranteed high quality product (ISO 9001 Certified).

## SPECIFICATIONS

### ABSOLUTE MICRON RATING

0.1 and 0.2 micron

### NOMINAL LENGTH

125, 250, 500, 750, 1000 mm or  
127, 254, 508, 762, 1016 mm

### NOMINAL INNER/OUTER DIAMETER (ID/OD)

Standard : 28/ 68 mm or BB : 28/ 114 mm  
Note: 30mm inner diameter is available upon request.

### MEDIA MATERIAL

Hydrophobic Polypropylene Membrane

### SUPPORTING MATERIAL

Non Woven Polypropylene Micro-Denier Fibers

### INNER CORE, CAGE AND END ADAPTOR MATERIAL

Standard : High Strength Pure Polypropylene  
RPG : Reinforced Polypropylene With Glass  
HPE : High Density Polyethylene

### RECOMMENDED INTEGRITY TEST Minimum Bubble Point

0.1 micron : > 1.5 Bar (21 PSI) in IPA  
0.2 micron : > 0.5 Bar (7 PSI) in IPA

### SEALING TECHNIQUE

Thermal Bonding

### FILTRATION AREA

>0.65m<sup>2</sup>/ 10" Filter Cartridge

### END STYLE

1) DOE : Double Opened End  
2) SOE : Single Opened End  
i) S2C : SOE, 222 O-Ring With Closed End  
ii) S2F : SOE, 222 O-Ring With Finned End  
iii) S6C : SOE, 226 O-Ring With Closed End  
iv) S6F : SOE, 226 O-Ring With Finned End

Note: Extended adaptor for SOE filter cartridge is available upon request.

### GASKET AND O-RING MATERIAL

1) Standard : EPDM 2) V : Viton  
3) S : Silicone 4) T : Teflon  
5) FEP : Teflon Encapsulated Viton

## OPERATING CONDITIONS

### MAX. FORWARD DIFFERENTIAL PRESSURE

4.1 Bar (60 PSI) at 25°C

### MAX. REVERSE DIFFERENTIAL PRESSURE

2.8 Bar (40 PSI) at 25°C

### MAX. OPERATING TEMPERATURE

90°C at 0.7 Bar (10 PSI)

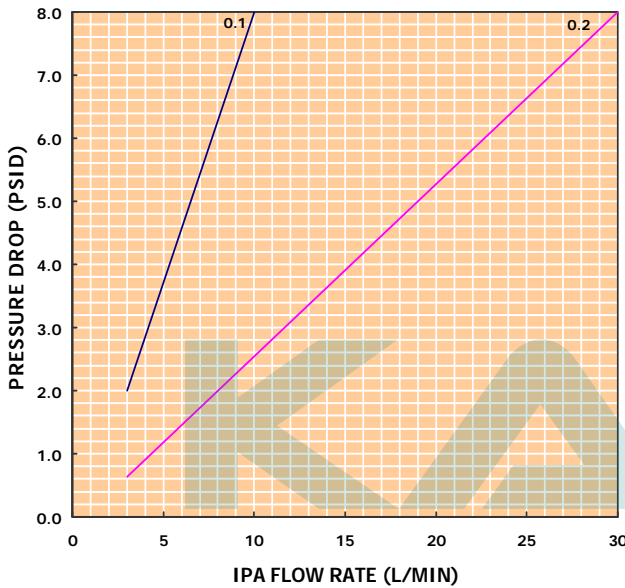
### CHANGE OUT DIFFERENTIAL PRESSURE

2.4 Bar (35 PSID)

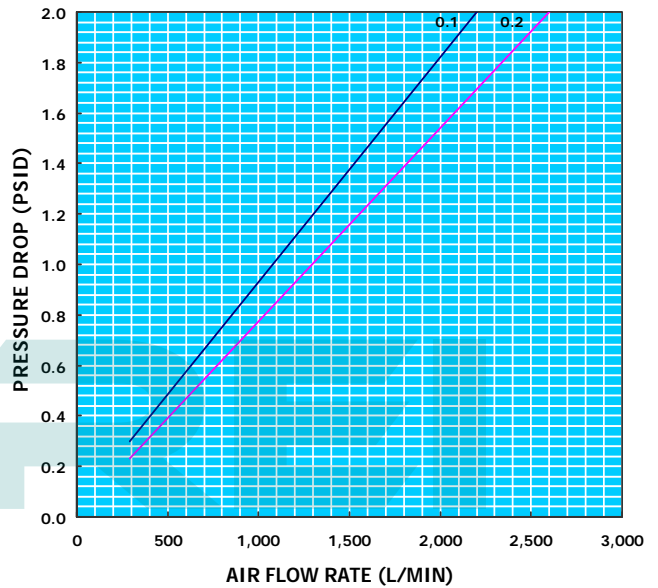
# TYPICAL APPLICATIONS

<b>Process Gases</b>	Filtration of compressed air, General and point-of use gases etc.
<b>Food And Beverages</b>	Sterile vents for holding tanks, Sterile CO <sub>2</sub> filtration, Microbial control of inlet air, etc.
<b>Pharmaceutical</b>	Air and tank vents, Compressed air, Re-crystallization chemicals, Chemical extraction, Ophthalmic, Oral Medications, Small & Large volume parenterals.
<b>Chemical &amp; Petrochemical</b>	Polymers, Glycols, Photo-resists, Deep disposal well fluids, Mono-ethanol-amine and Di-ethanol-amine for gas scrubbing, Acids, Bases, Polishing products, Inks, Paints, Electroplating solution, Can, Coil, Tape, Disc, Fabric & Paper coating, Metal etching solution, Liquid detergents, Dyestuffs, etc.
<b>Power Generation Industries</b>	Steam generator blow-down pre-filter, Waste water, Make-up water.
<b>Fermentation Bio-processing</b>	Additives, Exhaust gas filtration, Liquid growth media, Intermediates, Downstream processing, Pre & Final liquid filtration, etc.

**IPA FLOW RATE (10 INCHES CARTRIDGE)-APM**



**AIR PRESSURE DROP (10 INCHES CARTRIDGE)-APM**



Air Temperature: 24 °C, Inlet Pressure: 15 PSID (1 Bar)

## ORDERING GUIDE

**KAREI – APM – [ A ] – [ B ] – [ C ] – [ D ] – [ E ] – [ F ]**

[ A ] MICRON	[ B ] LENGTH	[ C ] END STYLE	[ D ] GASKET/ O-RING MATERIAL	[ E ] PARTS MATERIAL	[ F ] TYPE
01 : 0.1 02 : 0.2	125, 250, 500, 750, 1000 mm  127, 254, 508, 762, 1016 mm	None : DOE S2C : 222 & Closed End S2F : 222 & Finned End S6C : 226 & Closed End S6F : 226 & Finned End  NOTE : For SOE with extended adaptor, please include the code of 'EX'	None : EPDM V : Viton S : Silicone T : Teflon FEP : Teflon Encapsulated Viton	None : PP RPG : Reinforced PP With Glass  HPE : High Density PE	None: Standard  BB: 28/114mm

**EXAMPLE:**

- 1) KAREI-APM-01-250-DOE (APM, 0.1 um, 250mm, DOE, EPDM Gasket, PP Parts Material)
- 2) KAREI-APM-01-250-S2C-EX-V-RPG (APM, 0.1 um, 250mm, SOE, 222 Viton O-Ring With Extended Adaptor, Closed End, Reinforced PP With Glass Parts Material)

Note: We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. We accept no responsibility for results obtained by the applications. Users are advised to make their own testing under actual condition to determine the safety and suitability of each product or product combination for their own purposes and applications. Buyers and users assume all responsibility for liability performance or damage. We reserve the entire right to modify the information without prior notice due to continuous R & D.