#### HIGH EFFICIENCY MICRO-DENIER MELT-BLOWN FILTER CARTRIDGE

# **KAREI**<sup>™</sup>



## DESCRIPTIONS

**HM** depth cartridge filter is made of Silicone-Free Non Foaming Pure Polypropylene media. Provides broad range of chemical compatibility.

FDA Code Of Federal Regulation Title 21 compliances material suitable for food and beverage use.

Low pressure drop with extensive life span due to its coreless and rigid structure design. Thus, do not impede the flow rate as normally found in the conventional filter.

**HM** is the economical and high purity filter cartridge for various types of applications.

**HM** features a graded density matrix of all Polypropylene fibers that provides consistent filtration for wide variety of fluids.

Continuous fiber matrix prevents media migration and improves production yield, overall quality and performance.

Fixed pore structure enhances efficiency integrity and optimizing particle retention capacity.

**H** is thermally bonded without the use of surfactant, binders and adhesives. Thus, provides superior filtration results and eliminates the need for circulation to achieve product clarity.

Thermally imposed tiny grooves pattern of **HMI** and **II** provide reinforcement to the media surface ensures even water distribution, lower pressure drop and prolong life span of filter.

High density matrix structure allows for high pressure filtration than conventional type depth filter.

## HMI Series

Rugged surface of **HMII** with 'Crystal' likes structure design increases effective filtration area and suitable for viscous (<500cP) application.

Nominal micron rating of 0.5, 1, 3, 5, 10, 25, 50, 75, 100 & 150 micron.

Sealed in individual poly bag.

A guarantee quality product (ISO 9001 certified).

## **SPECIFICATIONS**

#### NOMINAL MICRON RATING

0.5, 1, 3, 5, 10, 25, 50, 75, 100 & 150 micron

#### **NOMINAL LENGTH**

125, 250, 500, 750, 1000, 1250, 1500 mm or 127, 254, 508, 762, 1016, 1270, 1524 mm Note: Until 60 Inches.

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

НМІ	: 28/ 63 mm
HMII	: 28/ 65 mm
HMIII	: 28/ 63 mm

Note: 30mm inner diameter is available upon request.

#### **MEDIA MATERIAL**

Melt Blown Micro-Denier & High Density Silicone Free Pure Polypropylene Fibers.

### END STYLE

1) DOE	: Double Opened End
	(End Hardened)
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

#### GASKET MATERIAL (OPTIONAL)

1) PE	: PE Foamed Gasket
Note:	For filter with DOE style only.

#### O-RING MATERIAL (OPTIONAL)

1) Standard	: EPDM
2) V	: Viton
3) S	: Silicone
4) T	: Teflon
Note: For filter	with SOE style only.

## **OPERATING CONDITIONS**

#### MAX. DIFFERENTIAL PRESSURE

2.1 Bar (30 PSID) at 60°C 2.8 Bar (40 PSID) at 30°C

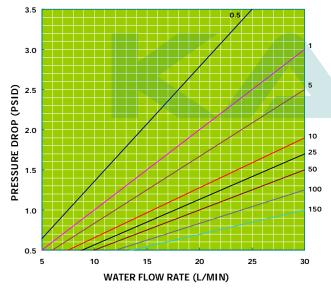
#### MAX. OPERATING TEMPERATURE 80°C at 10 PSID

**CHANGE OUT DIFFERENTIAL PRESSURE** 2.4 Bar (35 PSID)

## **APPLICATIONS**

Bulk Chemicals	Acids, Bases, Organic Solvents, Plating Solutions, Magnetic Paints, etc.	
Food And Beverages	Wine, Potable Water, Beer, Soft drink, Brewery, Sugar, Edible oils, Syrup, Bottled water, Distilled spirits, etc.	
Electronic	Etching Solution, Electroplating, Pre-filtration For R.O. And D.I. system, etc.	
Oil And Gas	Amines, Glycols, Condensate, Lubricating Oils, etc.	
Cosmetics	Toiletries, Perfumes and colognes, Lotions, Ointments, Shampoos, Body Rinses, Mouthwashes, Toothpaste, Creams, etc.	
Biological	Vaccine preparation, Serum & serum fraction, Tissue culture media, etc.	
Film And Fiber	Monomers, Slurry additives, Delusterants, Slip agents, Spin finishes, Aqueous salt solution, etc.	
Pharmaceutical	Ophthalmic, Oral medications, Small & large volume parenterals, Oral and topical medicines, etc.	
Chemical & Petrochemical	Polymers, Glycols, Photo-resists, Deep disposal well fluids, Mono-ethanol-amine and Di-ethanol-amine for gas scrubbing, Acids, Bases, Polishing products, etc.	
Power Generation Industries	Steam generator blow-down pre-filter, Waste water, Make-up water.	
General	Adhesive, Audio and videotape, Automotive paints, Computer tape coatings, Floppy disc coatings, etc.	

WATER PRESSURE DROP (10 INCHES CARTRIDGE)-HM



## PARTICLES REMOVAL RATING

EFF. MICRON	β = 1000 (99.9%)	β = 100 (99.0%)	β = 10 (90.0%)
0.5	9.0	2.4	1.1
1	11.5	4.3	1.9
3	15.0	7.3	3.8
5	18.2	9.1	5.9
10	21.0	13.0	10.2
25	25.0	21.0	15.3
50	49.5	41.0	21.4
75	73.0	52.0	25.3
100	97.0	64.0	35.1
150	137.0	82.0	61.0

The removal efficiency was obtained using specific testing ISO standard dusts.

## ORDERING GUIDE : KAREI - HM (A) - (B) - (C) - (D) - (E)

( A ) TYPE	(B) MICRON	(C) LENGTH	( D ) END STYLE	(E) GASKET MATERIAL
I : Grooved	05 : 0.5	125, 250, 500,	None : DOE (End Hardened)	None : EPDM
	1, 3, 5, 10,	750, 1000, 1250,	PE : DOE (PE Foamed Gasket)	V : Viton
II : For Viscous	25, 50, 75,	1500 mm	S2C : SOE, 222 O-Ring & Closed End	S : Silicone
Applications	100, 150		S2F : SOE, 222 O-Ring & Fin End	T : Teflon
		127, 254, 508,	S6C : SOE, 226 O-Ring & Closed End	Note : Apply to SOE end style
III : Rugged		762, 1016, 1270, 1524 mm	S6F : SOE, 226 O-Ring & Fin End	only.

#### EXAMPLE:

1) KAREI-HMI-05-1016 (HM, Type I, 0.5 um, 1016mm, DOE, End Hardened)

2) KAREI-HMI-10-508-PE (HM, Type I, 10 um, 508mm, DOE, PE Foamed Gasket)

3) KAREI-HMII-5-500-S2C (HM, Type II, 5 um, 500mm, 222 EPDM O-Ring With Closed End)

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.