KNIGHT HIGH EFFICIENCY FILTER BAGS
500 SERIES

FEATURES

- Absolute Micron-Rated Particle Capture at High Efficiencies
- Maximum Dirt Load Capacity
- Structural strength with up to 10 individually sealed layers
- No exposed seams
- High performance and lower cost alternative to cartridge filters
- Longer filter life reducing amount of bags needed and time spent on bag change-out
- Outperforms competition with a unique configuration of variable micron-rated media and microfiber layers.
- Low initial pressure drop
- Silicone-Free
- Standard with FDA acceptable materials for food and beverage applications
- Alternative with thermally welded seams also available
- Designed to fit most size 1 and size 2 filter vessels
- In stock and ready to ship!

ITEM DESCRIPTION

MATERIAL: Polypropylene or Polyester

MICRONS: 1/2, 1, 2, 3, 5, 8, 18, 25

SIZES: 1 or 2

DIAMETER: 7”

APPROXIMATE LENGTH: 16” or 32”

TOP: Standard with Stainless Steel Ring

Many other top options available.

CONSTRUCTION: Standard is Sewn

Also available with welded seams

PRODUCT SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE: 180°F*

FLOW RATE (size 2): up to 50 gpm*

CHANGE OUT: 15 psi*

MAX DIFFERENTIAL PRESSURE: 35 psid*

**please consult chemical resistance chart, as temperature, flow rate, and bag change-out may be affected by chemical being filtered, viscosity, micron, and various other factors.*

Although the information contained in this brochure is accurate to the best of our knowledge, due to the many variables that may be present in an application, Knight Filter Corporation makes no guarantees as to the results that may be obtained and assumes no obligation or responsibility because of this Information.

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INDEPENDENT TESTING RESULTS

The following charts reflect the results of tests performed by an independent test laboratory on a size 2 Knight High Efficiency filter bag in a standard size 2 vessel. Counts were taken on an automatic particle counter.

300 SERIES PART NUMBER	EFFICIENCY (A) 93%	96%	MAX (B) FLOW GPM
KHE 323P2SSL	1 µm	2 µm	75
KHE 325P2SSL	3 µm	5 µm	75
KHE 327P2SSL	8 µm	18 µm	75
KHE 329P2SSL	18 µm	25 µm	75
500 SERIES PART NUMBER	**EFFICIENCY (A) 96%**	**99%**	**MAX (B) FLOW GPM**
KHE 523P2SSL	1 µm	2 µm	50
KHE 525P2SSL	3 µm	5 µm	50
KHE 527P2SSL	8 µm	18 µm	50
KHE 529P2SSL	18 µm	25 µm	50

(A) Efficiency represents the initial efficiency on a clean element challenged on a single pass through a water base slurry of PTI fine test dust at 3 GPM. Efficiencies are derived by counting the ratio of upstream versus downstream particles. µm = micron.

(B) Flow data based on gallons per minute (GPM) for 1 pound (PSID) of pressure across a clean filter.

	300 SERIES	500 SERIES
Max Dirt Grams of Dust (C)	1,200	2,042
Max Total Filter Layers	5	10
Max Sq. Ft. Surface Area	23	43
Quantity Per Large Box	20	10
Max Temperature	200° F	200° F
Pure Polypropylene Media	Yes	Yes
Felt & Microfiber Sections	Yes	Yes
Easy Lift Handles	Yes	Yes
Silicone Free	Yes	Yes
No Exposed Sewn Seams	Yes	Yes
Oil Absorption & Removal	Yes	Yes
Batch operations	Yes	Yes
Continuous Operations	Yes	Yes

(C) Dirt load conducted until vessel pressure reached 40 pound (PSID).

PRODUCT APPLICATIONS

MEMBRANE PRE-FILTER

Knight High Efficiency Filter Bags offer excellent results when used as a pre-filter for membrane filtration by retaining a large quantity of contaminant that could unnecessarily clog membrane filters. Membrane Filters can be very expensive.

REPLACE EXPENSIVE CARTRIDGE FILTERS

You can use Knight High Efficiency Filter Bags where dirt carrying needs previously required expensive cartridges. Bags cost less, are easier to install and remove, require less storage space, can be disposed of by incineration, and prevent the downstream contaminant associated with cartridges.

FDA ACCEPTABLE CONSTRUCTION

Constructed with FDA acceptable fibers, KHE bags are ideal for food and beverage applications. Our natural fiber is produced from virgin polypropylene resin that meets FDA approval and the Code of Federal Regulations, Food and Drugs, 21 CFR CH. Parts 176.170, 176.280, and 176.210. We also have spin finish polypropylene and polyester felt available that also meets these standards.

GIARDIA PRE-FILTER

Giardia Lamblia (commonly referred to as Giardia) is a single-celled microbe or protozoa which measures about 8-12 microns in size. When ingested, Giardia can cause a gastrointestinal disease called giardiasis. KHE bags can be used as a pre-filter to help extend the life of the final filter, when filtering water that may be contaminated with Giardia.

OTHER SPECIALTY APPLICATIONS

- Oil particulate removal
- Desalination: Potable water from salt water
- Cleaning Amine
- Other Absolute Micron Filtration Applications