Cabiya Distributor Corp.

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Clarity
clear solutions

Pleated Depth & Membrane Cartridges

We Provide Innovative, Real-Time Solutions

At Strainrite, we believe in developing and maintaining long-term, strategic relationships with clients in order to deliver innovative real time solutions to specific customer and market requirements. Our new product innovations are derived from a collaborative philosophy where new products are developed through customer-supplier communication and cooperation. Additionally, within our organization, a cross-functional approach to product development is utilized to ensure that the product realization cycle is fast, complete, and efficient. Due to this unique cross-functional approach and our customer-focused company culture to support this philosophy; we are able to consistently meet and exceed our customers' expectations.

We Believe in Quality Control & Skilled Technical Support

At Strainrite, we believe in Science and Service. All Clarity™ pleated filter cartridges are manufactured in our 81,000ft^2 facility located in Auburn, Maine. Our Quality Management System is certified to be ISO 9001:2008 compliant, and our extensive internal systems ensure the highest quality products and processes. Our state-of-the-art equipment and highly skilled technicians are able to maintain the highest levels of product reliability and repeatability, from receipt of raw materials to shipment of finished filters.

A few controls that are in-place include:

- Raw material performance verification
- Bubble point and air diffusion testing
- Bacteria challenge verifications of performance
- Extractable verification and determination
- Ultra-pure water rinsing with resistivity verification of effectiveness
- Finished validated products are integrity tested by air diffusion

Our technical and scientific staff works closely with our clients during the validation process. The focus of this support is to offer technical advice on developing effective protocols and experimental testing parameters to assure predictable and repeatable output results.

Clarity™ clear solutions

Pleated Depth & Membrane Cartridges

Clarity Membrane Series

Clarity Dual Pleated Series

Clarity Depth Series

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Mem-PLEAT E & Pur-MAXX E

Pleated Polyethersulfone Membrane

- ▶ LIQUID CLARIFICATION
- ▶ GENERAL-USE WATER FILTRATION
- ▶ CHEMICAL FILTRATION
- ▶ DEIONIZED WATER SYSTEMS

Strainrite's Pleated Polyethersulfone Membrane Cartridges were developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

Hydrophilic asymmetric polyethersulfone membrane ensures excellent flow rates, broad chemical compatibility, low protein binding, low extractability, high mechanical strength, and temperature resistance in a variety of applications for the biopharmaceutical, microelectronics, chemical, food and beverage industries.

These cartridges meet USP Biological Reactivity Test, in vivo for class VI-121°C plastics. Sterilizable using industry recognized and accepted methods.

The Pur-MAXX E now offers a Special Pleat option, which provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ HIGH SURFACE AREA MEMBRANE OFFERS EXCELLENT LIFE AND FLUX RATES, WHILE PROVIDING ABSOLUTE-RATED FILTRATION
- ▶ ABSOLUTE-RATED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ INTEGRITY TESTED
- ▶ THERMALLY BONDED CONSTRUCTION WITHOUT THE USE OF ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES
- ▶ HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI-AUTOCLAVE CYCLES
- ▶ ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21, PHARMACEUTICAL GRADES ARE BIO-SAFE IN ACCORDANCE WITH USP CLASS VI
- ▶ NON FIBER-SHEDDING POLYESTER AND POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ▶ PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER ELEMENT
- ▶ PHARMACEUTICAL GRADE ELEMENTS ARE 100% INTEGRITY TESTED

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat E and Pur-MAXX E, the following vessel types are most commonly used:

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As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPE PRMXE	0.1	–	10	PP	C1	S	2	DIF	MPE0.1-10PPC1S2DIF
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene	275°F (135°C) Continuous Duty Polyester

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polyethersulfone	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

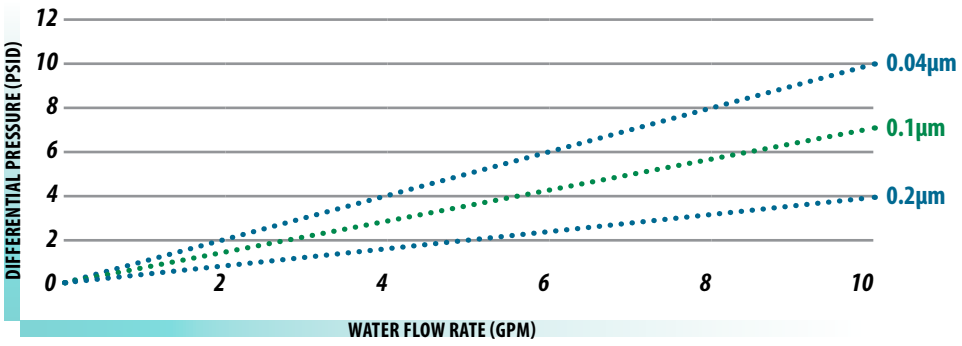
Thermal Bond

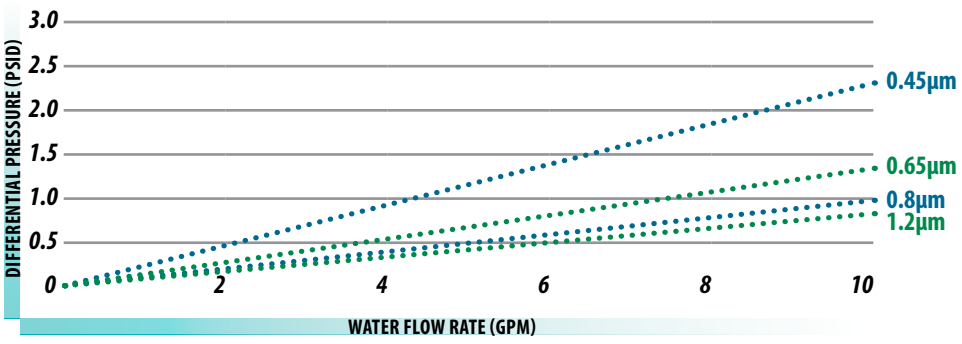
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPE: 2.55" (6.48cm) | PRMXE: 2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

MPE	Mem-Pleat E (2.55")
PRMXE	Pur-MAXX E (2.7")

MICRON RATINGS

0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical
5	Water

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush
APH	All Polyester Hardware

SPECIAL PLEAT OPTION

SP	Special Pleat (PRMXE only)

Mem-PLEAT S & Pur-MAXX S

Pleated Polysulfone Membrane

- INK JET INKS
- DEIONIZED WATER POINT OF USE
- HIGH PURITY AQUEOUS CHEMICALS
- DEIONIZED WATER PRE AND POST FILTER

Strainrite's Pleated Polysulfone Membrane Cartridges were developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

Hydrophilic asymmetric polysulfone membrane ensures excellent flow rates, broad chemical compatibility, low protein binding, low extractability, high mechanical strength, and temperature resistance in a variety of applications for the biopharmaceutical, microelectronics, chemical, food and beverage industries.

These cartridges meet USP Biological Reactivity Test, in vivo for class VI-121°C plastics. Sterilizable using industry recognized and accepted methods.

The Pur-MAXX S now offers a Special Pleat option, which provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- HIGHLY TAPERED ASYMMETRIC PORE STRUCTURE WHICH OFFERS EXCELLENT FLOW RATES AND HIGH SOLIDS LOADING CHARACTERISTICS
- ABSOLUTE-RATED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- MAXIMUM PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER ELEMENT
- ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21, PHARMACEUTICAL GRADES ARE BIO-SAFE IN ACCORDANCE WITH USP CLASS VI
- THERMALLY BONDED CONSTRUCTION WITHOUT THE USE OF ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES

SPECIAL PLEAT OPTION:

- OPTIMIZED PLEAT GEOMETRY
- EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat S and Pur-MAXX S, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPS PRMXS	0.45	–	10	C1	S	2	DIF	MPS0.45-10C1S2DIF
	MICRON RATING		CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

0.03, 0.05, 0.1, 0.2, 0.45, 0.65

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polysulfone	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

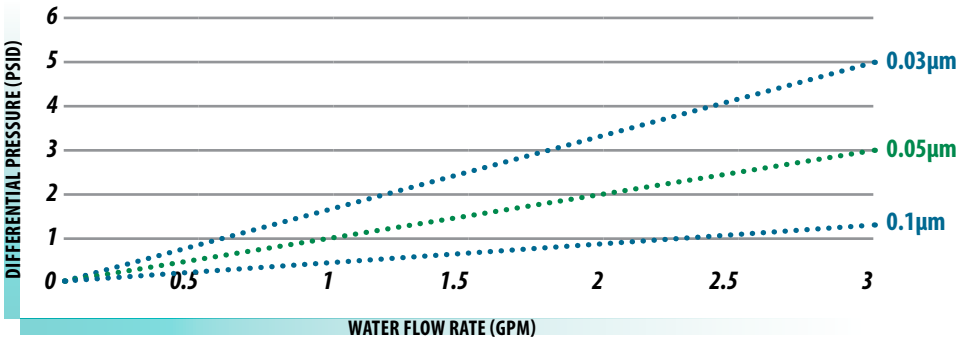
Thermal Bond

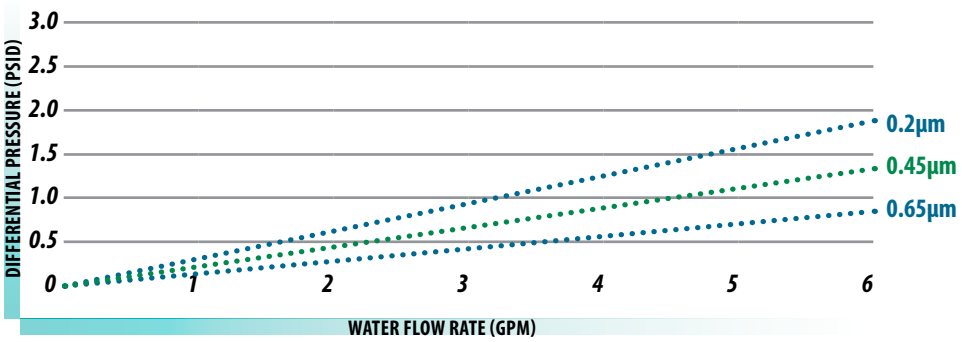
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPS: 2.55" (6.48cm) | PRMXS: 2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

MPS	Mem-Pleat S (2.55")
PRMXS	Pur-MAXX S (2.7")

MICRON RATINGS

0.03, 0.05, 0.1, 0.2, 0.45, 0.65

CARTRIDGE LENGTH

5, 10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
5	Water

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush

SPECIAL PLEAT OPTION

SP	Special Pleat (PRMXS only)

Mem-PLEAT N & Pur-MAXX N

Pleated Nylon 6,6 Membrane

- ▶ API CHEMICALS
- ▶ REAGENT-GRADE CHEMICALS
- ▶ FINE CHEMICALS
- ▶ BIOLOGICAL FLUIDS

Strainrite's Pleated Nylon Membrane Cartridges are highly retentive, naturally hydrophilic nylon membrane filters that are specially designed for critical filtration requirements of aqueous fluids.

The Nylon 6,6 membrane, in an all-polypropylene construction*, provides excellent wet-out characteristics and superior flow performance per surface area as compared to other membrane cartridges. No additives, resins, surfactants or binders are used in the manufacturing process, which dramatically reduces rinse up time, extractables and downtime.

These cartridges are perfectly suited for critical applications where superior flow, and particle removal efficiency between 0.1 and 1.2 micron is required.

The Pur-MAXX N now offers a Special Pleat option, which provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

Filter medium is cast on a polyester support.

- ▶ 100% HYDROPHILIC MATERIALS OF CONSTRUCTION THAT ARE FDA LISTED AS SUITABLE FOR CONTACT WITH FOOD AND BEVERAGE
- ▶ ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ NO ADHESIVES, BINDERS, RESIN OR SURFACTANTS ARE USED DURING MANUFACTURING, RESULTING IN SUPERIOR DOWNSTREAM CLEANLINESS
- ▶ LOWER FILTER EXTRACTABLES THAN OTHER HYDROPHILIC MEMBRANES
- ▶ HIGH SURFACE AREA, YIELDING LOWER PRESSURE DROPS AND LONGER FILTER LIFE
- ▶ NON FIBER-SHEDDING POLYESTER AND POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ▶ PHARMACEUTICAL GRADE ELEMENTS ARE 100% INTEGRITY TESTED
- ▶ IPA PRE-WETTING NOT REQUIRED
- ▶ INTEGRITY TESTABLE

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat N and Pur-MAXX N, the following vessel types are most commonly used:

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As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPN / PRMXN	0.1	–	10	PP	C1	S	2	DIF	MPN0.1-10PPC1S2DIF
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

0.1, 0.2, 0.45, 0.65, 0.8, 1.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene	275°F (135°C) Continuous Duty Polyester

TOXICITY

Cartridge materials meet CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Nylon 6,6 cast on Polyester	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

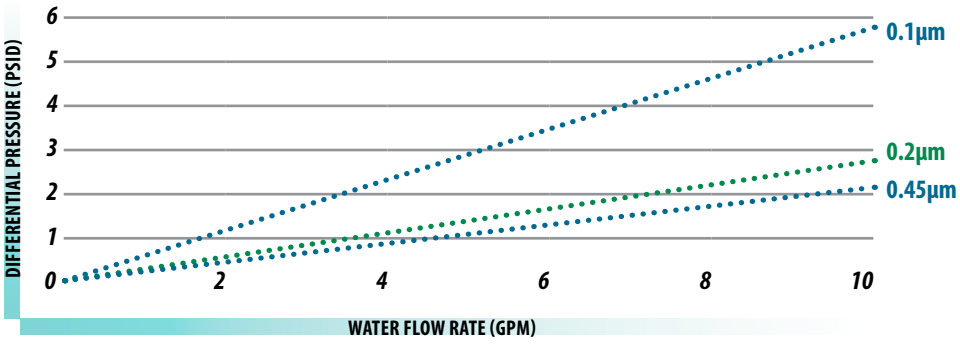
Thermal Bond

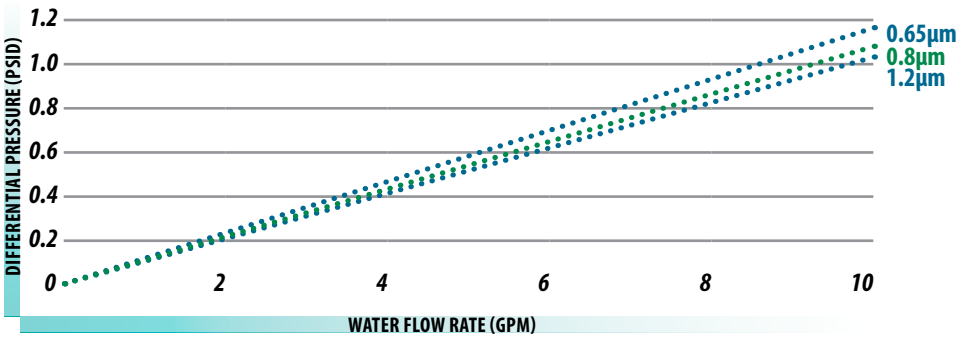
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPN: 2.55" (6.48cm) | PRMXN: 2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

MPN	Mem-Pleat N (2.55")
PRMXN	Pur-MAXX N (2.7")

MICRON RATINGS

0.1, 0.2, 0.45, 0.65, 0.8, 1.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical
5	Water

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush
APH	All Polyester Hardware

SPECIAL PLEAT OPTION

SP	Special Pleat (PRMXN only)

Mem-PLEAT CN & Pur-MAXX CN

Pleated Charged Nylon 6,6 Membrane

- ▶ API CHEMICALS
- ▶ FINE CHEMICALS
- ▶ REAGENT-GRADE CHEMICALS
- ▶ BIOLOGICAL FLUIDS
- ▶ ENDOTOXIN REMOVAL
- ▶ SILICA REMOVAL

Strainrite's Pleated Charged Nylon Membrane Cartridges are manufactured with highly retentive, naturally hydrophilic, Nylon membranes that have an added cationic, positively charged, functional group. The positive surface charge or positive zeta potential, provides enhanced retention of smaller negatively charged particles such as endotoxins by electrokinetic mechanisms.

These cartriges provide absolute particle retention by size exclusion while having the added benefit of removing significantly smaller, negatively charged particles. The charged Nylon 6,6 membrane provides excellent wet-out characteristics and superior flow performance per surface area in an all-polypropylene construction, as compared to other membrane cartridges. These cartridges are perfectly suited for critical applications where superior flow and particle removal efficiency between 0.04 and 1.2 micron is required.

The Pur-MAXX CN now offers a Special Pleat option, which provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ MEETS USP BIOLOGICAL TESTS FOR USP CLASS VI – 1210C PLASTICS, IN VIVO AND CYTOTOXICITY TESTS, IN VITRO
- ▶ 100% HYDROPHILIC MATERIALS OF CONSTRUCTION THAT ARE FDA LISTED AS SUITABLE FOR CONTACT WITH FOOD AND BEVERAGE
- ▶ PHARMACEUTICAL GRADE ELEMENTS ARE 100% INTEGRITY TESTED
- ▶ ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ HIGH SURFACE AREA, YIELDING LOWER PRESSURE DROPS AND LONGER FILTER LIFE
- ▶ POSITIVE ZETA POTENTIAL FOR REMOVAL OF PARTICLES SMALLER THAN ABSOLUTE RATING OF FILTER
- ▶ NON-FIBER SHEDDING POLYESTER AND POLYPROPYLENE SUPPORT MATERIALS ELIMINATES FIBER MIGRATION
- ▶ LOWER FILTER EXTRACTABLES THAN OTHER HYDROPHILIC MEMBRANES
- ▶ IPA PRE-WETTING NOT REQUIRED
- ▶ INTEGRITY TESTABLE

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat CN and Pur-MAXX CN, the following vessel types are most commonly used:

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As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPCN / PRMXCN	0.1	–	10	PP	C1	S	2	DIF	MPCN0.10-10PPC1S2DIF
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene	275°F (135°C) Continuous Duty Polyester

TOXICITY

Cartridge materials meet CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Charged Nylon 6,6 cast on Polyester	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

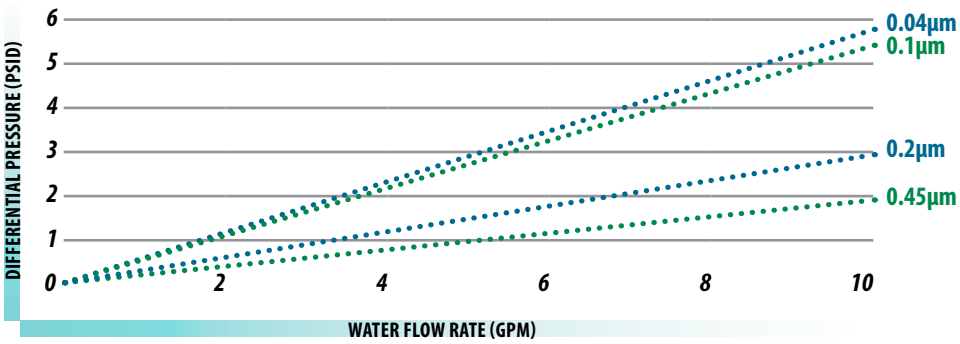
Thermal Bond

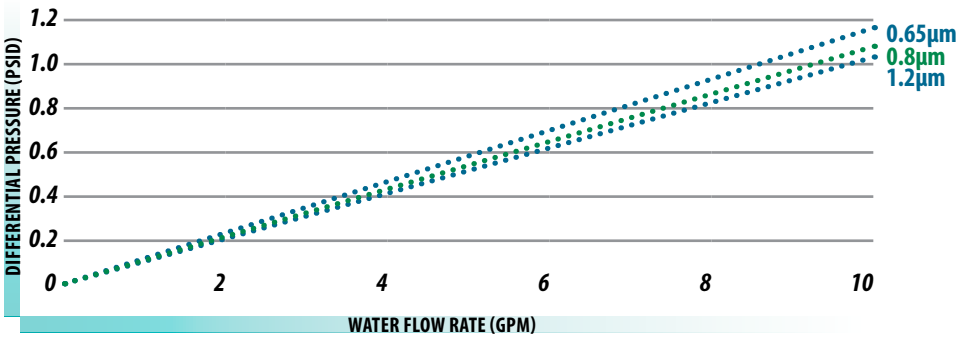
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPCN: 2.55" (6.48cm) | PRMXCN: 2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

MPCN	Mem-Pleat CN (2.55")
PRMXCN	Pur-MAXX CN (2.7")

MICRON RATINGS

0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical
5	Water

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush
APH	All Polyester Hardware

SPECIAL PLEAT OPTION

SP	Special Pleat (PRMXCN only)

Mem-PLEAT T & Pur-MAXX T

Pleated PTFE Membrane

- PHOTORESISTS
- ELECTRONIC GRADE SOLVENTS
- PHARMACEUTICAL SOLVENTS
- HOT DEIONIZED WATER

Strainrite's Pleated PTFE Membrane Cartridges were developed for critical filtration applications where PTFE and polypropylene materials are compatible.

Utilizing a proprietary PTFE membrane casting method we are able to achieve a pore configuration that optimizes cartridge flow rates with absolute and reliable particle and microorganism retention. This unique combination of features positions them as one of the most reliable and economical PTFE membranes in the market.

These cartridges are manufactured and tested in our 3rd party certified clean room with components that meet USP Class VI Biological Reactivity Test resulting in extremely low extractables. These high purity elements are perfect for biopharmaceutical, microelectronics and high purity chemical applications.

The Pur-MAXX T now offers a Special Pleat option, which provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- PHARMACEUTICAL GRADE ELEMENTS ARE 100% INTEGRITY TESTED
- HIGH FLOW RATES
- LOW EXTRACTABLES
- THERMALLY BONDED CONSTRUCTION
- FDA LISTED MATERIALS PER CFR 21
- MANUFACTURED IN CERTIFIED CLEAN ROOMS

SPECIAL PLEAT OPTION:

- OPTIMIZED PLEAT GEOMETRY
- EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat T and Pur-MAXX T, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPT PRMXT	0.2	–	10	C1	E	2	I	MPT0.20-10C1E2I
	MICRON RATING		CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

0.1, 0.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
PTFE	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

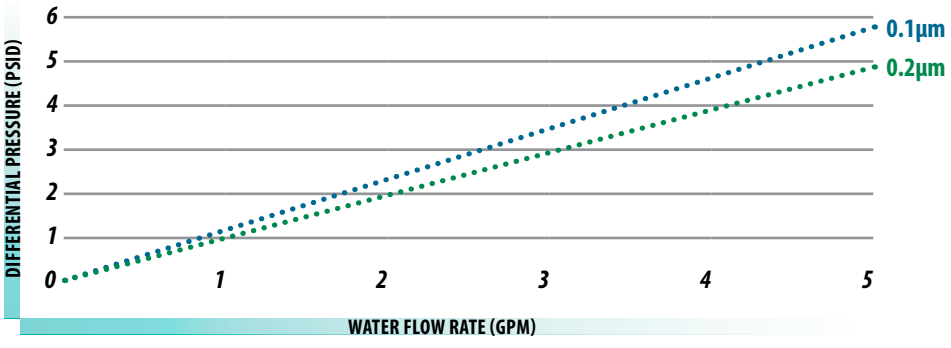
Thermal Bond

OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPT: 2.55" (6.48cm) | PRMXT: 2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

MPT	Mem-Pleat T (2.55")
PRMXT	Pur-MAXX T (2.7")

MICRON RATINGS

0.1, 0.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush

SPECIAL PLEAT OPTION

SP	Special Pleat (PRMXT only)

Mem-PLEAT C & Pur-MAXX C

Pleated Cellulose Acetate Membrane

- ▶ PROTEIN FILTRATION
- ▶ BIOLOGICAL FLUID STERILIZATION
- ▶ ENZYME FILTRATION
- ▶ TISSUE CULTURE MEDIA STERILIZATION

Strainrite's Pleated Cellulose Acetate Membrane Cartridges were developed for the filtration of fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization. Our cellulose acetate membrane is manufactured under a proprietary manufacturing process that meets rigorous quality standards throughout every step of production. This process generates consistent lot-to-lot filtration properties among the membranes to ensure product uniformity.

These filter cartridges use highly asymmetric cellulose acetate supported membrane that is hydrophilic, which ensures excellent flow rates, quick wet out and rinse up characteristics. These cartridges are naturally low binding, which is excellent for applications where maximum recovery of protein is critical.

The Pur-MAXX C now offers a Special Pleat option, which provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ HIGH SURFACE AREA ELEMENTS OFFERS EXCELLENT LIFE AND FLUX RATES WHILE PROVIDING ABSOLUTE FILTRATION
- ▶ ABSOLUTE-RATED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ NON-FIBER SHEDDING POLYESTER AND POLYPROPYLENE SUPPORT MATERIALS ELIMINATE POTENTIAL FOR FIBER MIGRATION
- ▶ ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21, PHARMACEUTICAL GRADES ARE BIO-SAFE IN ACCORDANCE WITH USP CLASS VI
- ▶ 100% THERMALLY BONDED CONSTRUCTION
- ▶ LOW EXTRACTABLES, WHICH ENSURES FILTRATE WILL BE CLEAN WITH CONSISTENT RESULTS
- ▶ HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI-AUTOCLAVE CYCLES
- ▶ PHARMACEUTICAL GRADE ELEMENTS ARE 100% INTEGRITY TESTED
- ▶ LOW PROTEIN BINDING
- ▶ INTEGRITY TESTED

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat C and Pur-MAXX C, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPC PRMXC	0.1	–	10	PE	C1	TF	2	APH	MPC0.10-10PEC1TF2APH
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

0.1, 0.2, 0.45, 0.65, 0.8, 1.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene	275°F (135°C) Continuous Duty Polyester

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Cellulose Acetate	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

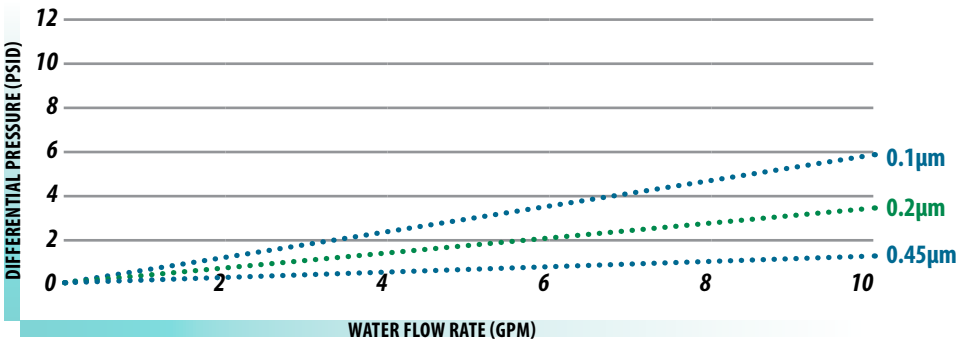
Thermal Bond

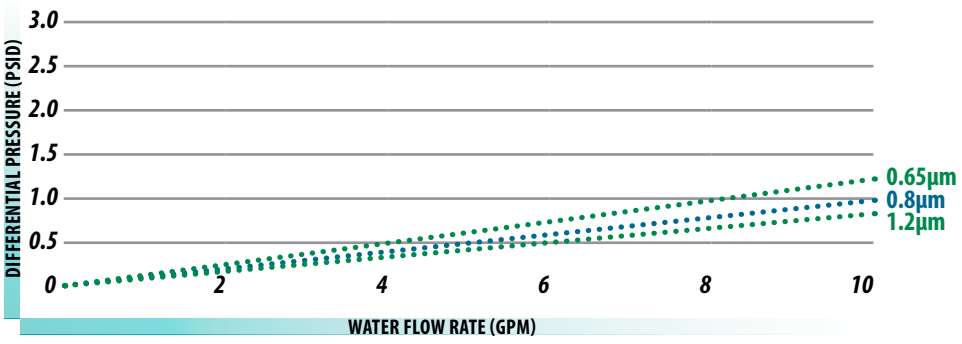
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPC: 2.55" (6.48cm) | PRMXC: 2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

MPE	Mem-Pleat E (2.55")
PRMXE	Pur-MAXX E (2.7")

MICRON RATINGS

0.1, 0.2, 0.45, 0.65, 0.8, 1.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush
APH	All Polyester Hardware

SPECIAL PLEAT OPTION

SP	Special Pleat (PRMXC only)

Duo-PLEAT & Duo-MAXX

Dual Pleated Cartridges

- ▶ BIOPHARMACEUTICAL
- ▶ VISCOUS FLUIDS
- ▶ PRE-FINAL ULTRA PURE WATER
- ▶ BIOBURDEN REDUCTION
- ▶ VISCOUS POLYMERS
- ▶ PRE-FINAL HIGH PURITY CHEMICALS

Designed as a "Pre-Final" filter, Strainrite's Depth Over Membrane Cartridges were created to protect final filters saving money and extending the life of your final filters. These filters incorporate a synchronized media design. This design utilizes a prefiltration layer up-stream over a final membrane layer in the same cartridge. These filters are a pre-filter and a final filter in one.

These filters are available in multiple micron ranges and combinations to meet the requirements of your process They are available in two prefiltration materials: polypropylene microfiber and borosilicate microglass. The final filtration layer is available in Nylon, polysulfone, cellulose acetate, and Strainrites' asymmetric polyethersulfone membrane.

- ▶ RELIABLE NON FIBER RELEASING MEDIA
- ▶ SYNCHRONIZED MEDIA
- ▶ THERMALLY BONDED CONSTRUCTION
- ▶ NO ADDITIVES OR GLUE
- ▶ ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21
- ▶ THERMALLY BONDED CONSTRUCTION WITHOUT ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES
- ▶ HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI-AUTOCLAVE CYCLES

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Duo-Pleat and Duo-MAXX, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

DP DMX	GF	0.04	–	10	E	PP	10	C1	S	DIF	DPGF0.04-10EPP10C1SDIF
	PRE-FILTER MATERIAL	MICRON RATING		CARTRIDGE LENGTH	MEMBRANE MEDIA	PLEAT SUPPORT	CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

Polyethersulfone: 0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2
Polysulfone: 0.2, 0.45, 0.65
Nylon: 0.1, 0.2, 0.45, 0.65, 0.8, 1.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

PRE-FILTER MEDIA	FILTER MEDIA	PLEAT SUPPORT MATERIAL	END CAPS	CAGE/ CORE	CONSTRUCTION METHOD
Boroslicate Microglass Polypro. Microfiber	Polyethersulfone Nylon Polysulfone	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester	Thermal Bond

SEALS

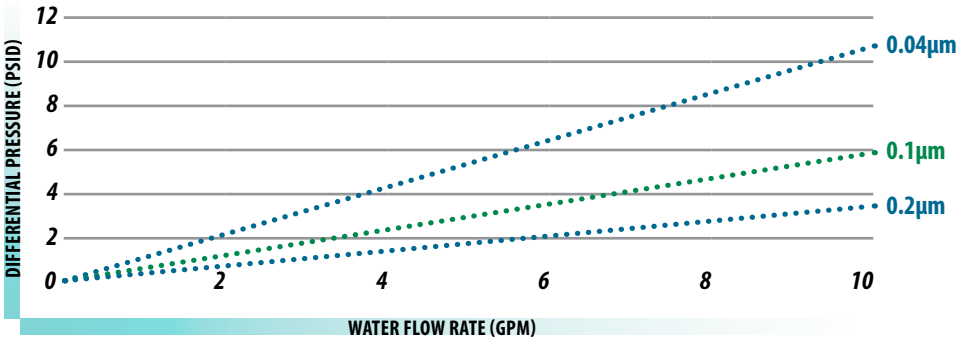
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

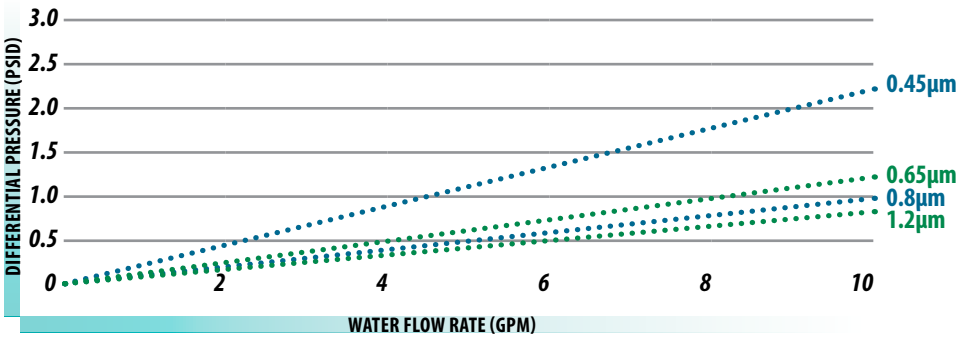
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA	
DP: 2.55" (6.48cm) | DMX: 2.7" (6.87cm)	Polypropylene Microfiber: 6 square feet per 10" equivalent	Boroslicate Microglass: 5 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS - POLYETHERSULFONE MEMBRANE ONLY





ORDER OPTIONS

CARTRIDGE

DP	Duo-Pleat (2.55")
DMX	Duo-MAXX (2.7")

PRE-FILTER MATERIAL

GF	Borosilicate Microglass
MF	Polypropylene Microfiber

MICRON RATINGS

E: 0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2
N: 0.1, 0.2, 0.45, 0.65, 0.8, 1.2
S: 0.2, 0.45, 0.65

CARTRIDGE LENGTH

5, 10, 20, 30, 40

MEMBRANE

E	Polyethersulfone
N	Nylon
S	Polysulfone

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush

Pur-PLEAT & Poly-MAXX

Absolute-Rated Polypropylene Depth

- ▶ RECIRCULATING LIQUIDS
- ▶ DI/RO PREFILTRATION
- ▶ WASTE WATER
- ▶ GENERAL WATER FILTRATION
- ▶ REAGENT GRADE CHEMICALS

Strainrite's Absolute-Rated Polypropylene Depth Cartridges are designed to optimize throughput while achieving absolute and repeatable effluent quality. Our filter media is constructed on the latest continuous microfiber blowing equipment that accurately controls fiber diameter and integrity.

Utilizing state-of-the-art, on-line monitoring equipment, Strainrite delivers the industry's most uniform media, ensuring unparalleled product consistency. Our 100% polypropylene construction provides an expansive chemical compatibility range for your most demanding applications. All materials of construction meet USP Class VI and CFR 21 requirements for food and beverage contact.

The Poly-MAXX now offers a Special Pleat option in micron ratings of 1, 1.5, 2.5. This option provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION
- ▶ MAXIMIZED PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ 100% POLYPROPYLENE CONSTRUCTION OFFERS A WIDE RANGE OF CHEMICAL COMPATIBILITY
- ▶ FDA, CFR 21 AND USP CLASS VI COMPLIANT
- ▶ THERMALLY BONDED CONSTRUCTION ELIMINATES PARTICLE BYPASS

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Pur-Pleat and Poly-MAXX, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

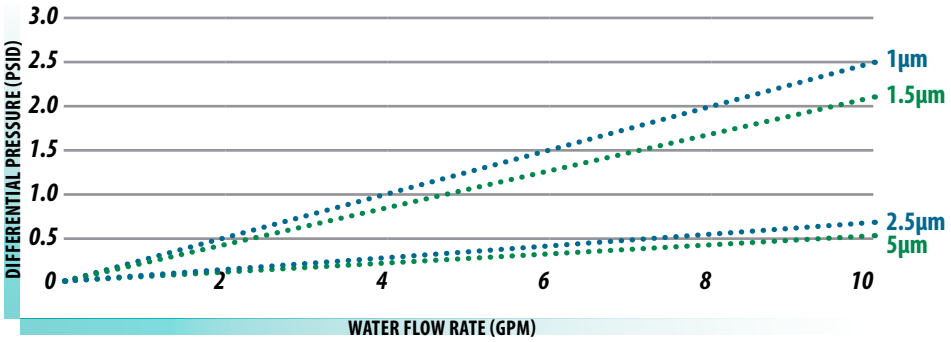
As always, discuss your options with your local sales representative to find the best fit for your application.

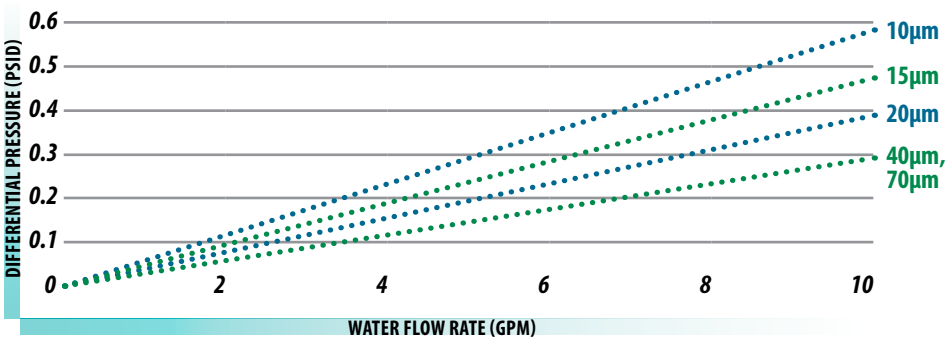
ORDER GUIDE

PP / PMX	1	–	10	C1	S	1	DIF	PP1-10C1S1DIF
	MICRON RATING		CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ASTM F795-88 RETENTION RATING			
1, 1.5, 2.5, 5, 10, 15, 20, 40, 70			
MAXIMUM DIFFERENTIAL PRESSURE		**MAXIMUM OPERATING TEMPERATURE**	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		180°F (82°C) Continuous Duty	
TOXICITY			
All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Polypropylene Microfiber	Polypropylene	Polypropylene	Polypropylene
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
CONSTRUCTION METHOD			
Thermal Bond			
OUTSIDE DIAMETER			
PP: 2.55" (6.48cm) | PMX: 2.7" (6.87cm)			
LENGTHS			
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
EFFICIENCY			
PP1/PMX1 — 99.98% @ 1µm PP1.5/PMX1.5 — 99.98% @ 1.5µm PP2.5/PMX2.5 — 99.98% @ 2.5µm	PP5/PMX5 — 99.98% @ 5µm PP10/PMX10 — 99.98% @ 10µm PP15/PMX15 — 99.98% @ 15µm	PP20/PMX20 — 99.98% @ 20µm PP40/PMX40 — 99.98% @ 40µm PP70/PMX70 — 99.98% @ 70µm	

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

PP	Pur-Pleat (2.55")
PMX	Poly-MAXX (2.7")

MICRON RATINGS

1, 1.5, 2.5, 5, 10, 15, 20, 40, 70

CARTRIDGE LENGTH

5, 10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush

SPECIAL PLEAT OPTION

SP	Special Pleat (PMX 1, 1.5, 2.5 only)

Pur-PLEAT G & Poly-MAXX G

Nominally Rated Polypropylene Depth

- ▶ WATER FILTRATION
- ▶ LIQUEFIED SUGAR
- ▶ WASTE WATER
- ▶ SOLVENT FILTRATION
- ▶ DI/RO PREFILTRATION
- ▶ WINE CLARIFICATION

Strainrite's Nominally Rated Polypropylene Depth Cartridges are designed to reduce overall filtration costs when compared to spunbonded, stringwound, and nominally-rated pleated cartridges. This polypropylene media is designed and manufactured on state-of-the-art meltblowing equipment to Strainrite's strict specifications for high solids-loading requirements for a variety of prefiltration applications.

These filters are constructed using the latest high-speed thermal bonding equipment in a clean environment to ensure superior product cleanliness and thermal and chemical compatibility. All of these depth cartridges are manufactured using 100% virgin polypropylene materials that comply with FDA Title 21 of The Code of Federal Regulations for food and beverage contact.

The Poly-MAXX G now offers a Special Pleat option in micron ratings of 0.25, 0.5, 1. This option provides expected surface area improvements of as much as 25%. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ MAXIMIZED PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ▶ FDA TITLE 21 COMPLIANT FOR FOOD AND BEVERAGE CONTACT
- ▶ LOWER PRESSURE DROPS, WHICH YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ 100% POLYPROPYLENE CONSTRUCTION OFFERS A WIDE RANGE OF CHEMICAL COMPATIBILITY
- ▶ THERMALLY BONDED CONSTRUCTION ENSURES A CLEANER FILTRATE

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Pur-Pleat G and Poly-MAXX G, the following vessel types are most commonly used:

SRC—Page 130 **SRVC—Page 132**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

PPG / PMXG	0.25	–	10	C1	S	1	DIF	PPG0.25-10C1S1DIF
	MICRON RATING		CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

RETENTION RATING

0.25, 0.5, 1, 2.5, 5, 8, 12, 20, 30, 50

MAXIMUM DIFFERENTIAL PRESSURE	MAXIMUM OPERATING TEMPERATURE
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)	180°F (82°C) Continuous Duty

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:

5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polypropylene Microfiber	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

Thermal Bond

OUTSIDE DIAMETER

PPG: 2.55" (6.48cm) | PMXG: 2.7" (6.87cm)

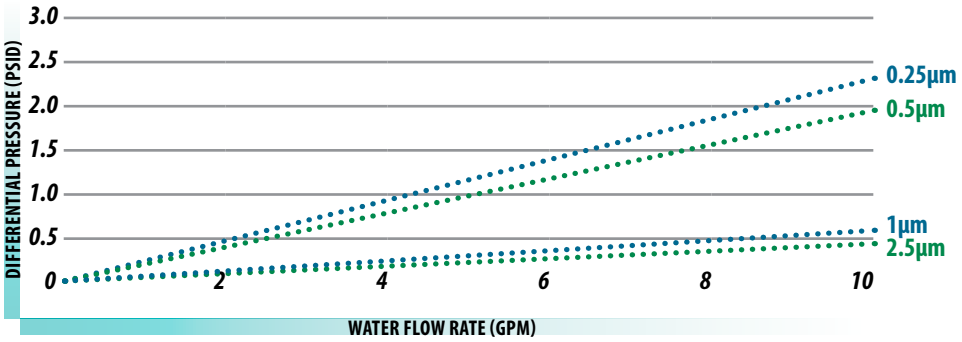
LENGTHS

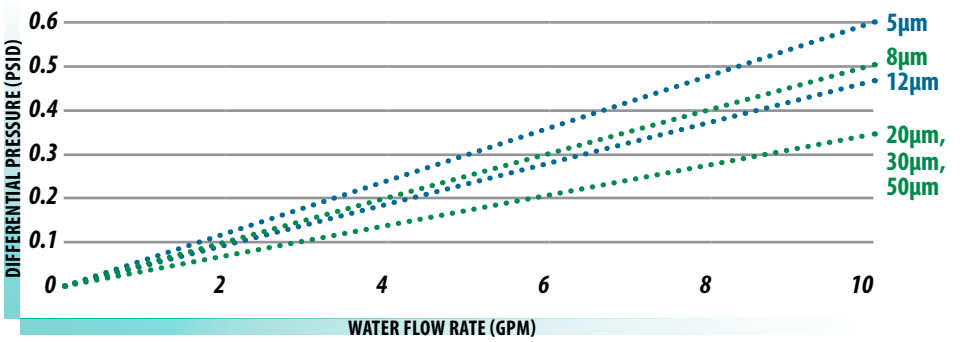
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

EFFICIENCY

PPG0.25/PMXG0.25 — BETA5000 @ 0.25µm
PPG0.5/PMXG0.5 — BETA5000 @ 0.5µm
PPG1/PMX1 — BETA5000 @ 1µm
PPG2.5/PMXG2.5 — BETA5000 @ 2.5µm
PPG5/PMXG5 — BETA5000 @ 5µm
PPG8.0/PMXG8 — BETA5000 @ 8µm
PPG12/PMXG12 — BETA5000 @ 12µm
PPG20/PMXG20 — BETA5000 @ 20µm
PPG30/PMXG30 — BETA5000 @ 30µm
PPG50/PMXG50 — BETA5000 @ 50µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

PPG	Pur-Pleat G (2.55")
PMXG	Poly-MAXX G (2.7")

MICRON RATINGS

0.25, 0.5, 1, 2.5, 5, 8, 12, 20, 30, 50

CARTRIDGE LENGTH

5, 10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush

SPECIAL PLEAT OPTION

SP	Special Pleat (PMXG 0.25, 0.5, 1 only)

Pur-PLEAT Select & Poly-MAXX Select

Gradient Density Polypropylene Depth

- ► WATER FILTRATION
- ► LIQUEFIED SUGAR
- ► WASTE WATER
- ► SOLVENT FILTRATION
- ► DI/RO PREFILTRATION
- ► WINE CLARIFICATION
- ► BLEACH

Strainrite's Select (High Solids Loading) Polypropylene Depth Cartridges offer a unique, absolute rated, gradient density, polypropylene depth filter that utilizes the revolutionary HSL technology in combination with our high efficiency micro-fiber meltblown media.

This filter combines high solids loading with absolute filtration to create one of the longest lasting, absolute-rated, pleated polypropylene filters on the market. All Select filters are manufactured without binders or resins, resulting in an extremely clean non-media migration filter.

Select gradient density depth media is outstanding for removing gels as compared to other pleated polypropylene filters. Our 100% polypropylene construction provides an excellent range of chemical compatibility for your most demanding applications. All polypropylene construction materials are CFR 21 listed for direct food contact, which makes this filter ideal for a broad range of applications.

- ► **ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION**
- ► **LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME**
- ► **100% POLYPROPYLENE, FDA COMPLIANT WITH CFR 21**
- ► **THERMALLY BONDED CONSTRUCTION ELIMINATES PARTICLE BYPASS WHILE MINIMIZING EXTRACTABLES**

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Pur-Pleat Select and Poly-MAXX Select, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

SPP SPMX	→	1	–	10	→	C1	→	S	→	1	→	DIF	→	SPP1-10C1S1DIF
		MICRON RATING		CARTRIDGE LENGTH		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		CARTRIDGE GRADE		CARTRIDGE OPTIONS		

ASTM F795-88 RETENTION RATING

1, 1.5, 3, 5, 10, 15, 20, 40, 70, 90

MAXIMUM DIFFERENTIAL PRESSURE	MAXIMUM OPERATING TEMPERATURE
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)	180°F (82°C) Continuous Duty

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:

5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polypropylene Microfiber Composite	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

Thermal Bond

OUTSIDE DIAMETER

SPP: 2.55" (6.48cm) | SPMX: 2.7" (6.87cm)

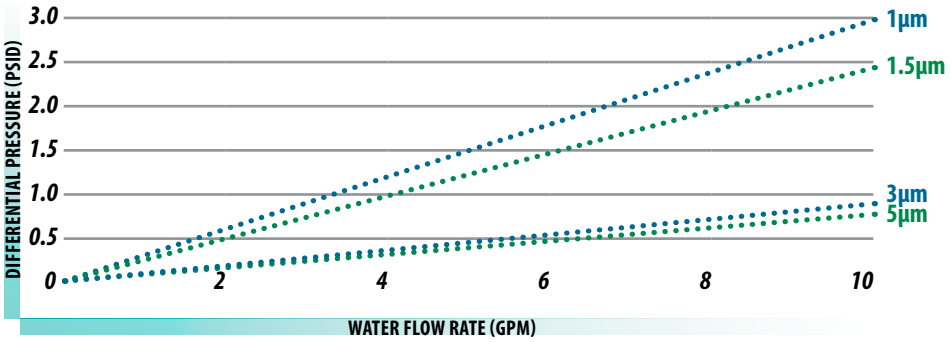
LENGTHS

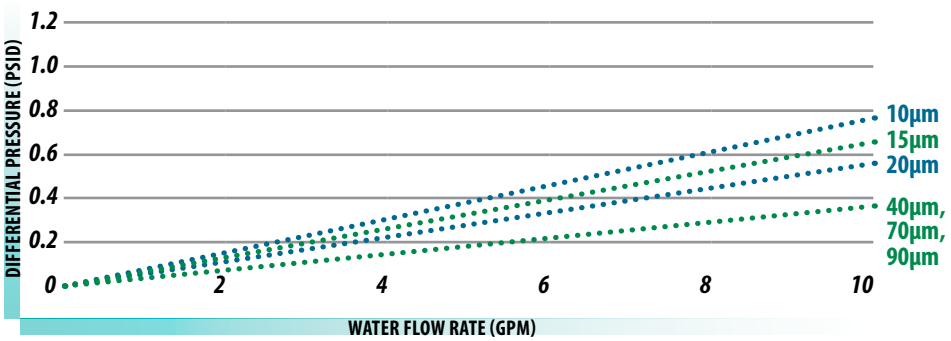
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

EFFICIENCY

SPP1/SPMX1 — 99.98% @ 1µm
SPP1.5/SPMX1.5 — 99.98% @ 1.5µm
SPP3/SPMX3 — 99.98% @ 3µm
SPP5/SPMX5 — 99.98% @ 5µm
SPP10/SPMX10 — 99.98% @ 10µm
SPP15/SPMX15 — 99.98% @ 15µm
SPP20/SPMX20 — 99.98% @ 20µm
SPP40/SPMX40 — 99.98% @ 40µm
SPP70/SPMX70 — 99.98% @ 70µm
SPP90/SPMX90 — 99.98% @ 90µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

SPP	Pur-Pleat Select (2.55")
SPMX	Poly-MAXX Select (2.7")

MICRON RATINGS

1, 1.5, 3, 5, 10, 15, 20, 40, 70, 90

CARTRIDGE LENGTH

5, 10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush

Glass-PLEAT & Fiber-MAXX

Absolute-Rated Microglass Depth

- ▶ INKS AND COATINGS
- ▶ PLATING SOLUTIONS
- ▶ SOLVENT FILTRATION
- ▶ WASTE WATER
- ▶ CHEMICAL PROCESSING
- ▶ PHOTOGRAPHIC FILMS
- ▶ OIL AND GAS PRODUCTION

Strainrite's Absolute-Rated Microglass Cartridges utilize a high surface area and high void volume media, incorporating microglass fibers in a uniform matrix that optimizes element flow rate and service life unattainable by other microfiber technologies. This revolutionary microfiber matrix optimizes pore size geometry required to offer absolute-rated filtration performance. Strainrite's non-calendared microglass cartridges exhibit significantly reduced resistance to flow when compared to similarly rated microfiber technologies. These cartridges are an excellent choice for filtering beverages such as beer and wine, as they do not remove flavor enhancing proteins.

Our materials of construction meet or exceed the requirements of the CFR 21 for Food and Beverage contact. Strainrite offers elements that utilize an epoxy binder providing these microglass depth cartridges with an increased range of applications where chemical compatibility is critical.

The Fiber-MAXX now offers a Special Pleat option which provides expected surface area improvements of as much as 45% in General and Pharmaceutical grades. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ ABSOLUTE-RATED MEDIA
- ▶ NON-FIBER RELEASING MATERIALS WITH MINIMAL EXTRACTABLES PROVIDE HIGH PURITY FILTRATE
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ MAXIMIZED PLEAT DESIGN COUPLED WITH NON-CALENDARED MICROGLASS MATRIX OFFERS GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, LESS DOWNTIME AND REDUCED COSTS
- ▶ INDUSTRIAL GRADE USES AN EPOXY BINDER, FDA GRADE USES AN ACRYLIC BINDER

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 25%

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Glass-Pleat and Fiber-MAXX, the following vessel types are most commonly used:

SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

GP FMX	0.8	–	10	PP	C3	B	1	APH	GP0.8-10PPC3B1APH
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ASTM F795-88 RETENTION RATING

0.8, 0.9, 1, 2, 3, 5, 10, 15

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene	275°F (135°C) Continuous Duty Polyester

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Borosilicate Microglass	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD	OUTSIDE DIAMETER
Thermal Bond	GP: 2.55" (6.48cm) | FMX: 2.7" (6.87cm)

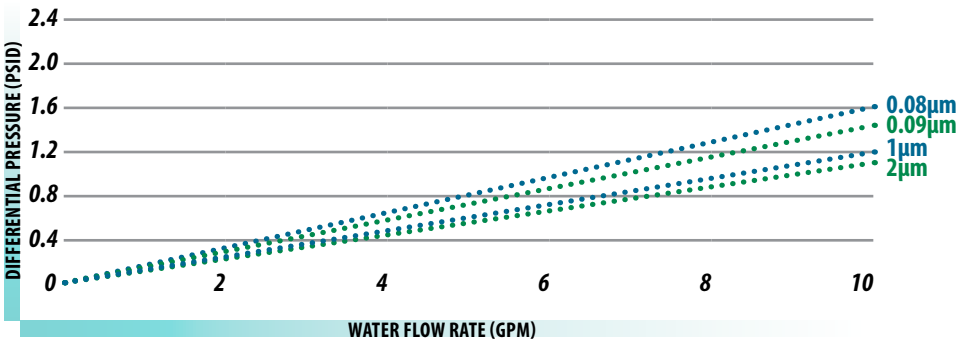
LENGTHS

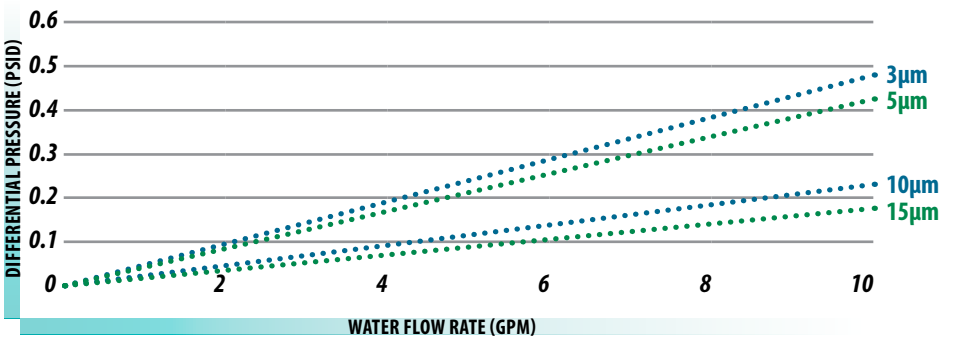
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

EFFICIENCY

GP0.8/FMX0.8 — 99.98% @ 0.8µm | 90.00% @ 0.25µm
GP0.9/FMX0.9 — 99.98% @ 0.9µm | 90.00% @ 0.45µm
GP1/FMX1 — 99.98% @ 1µm | 90.00% @ 0.65µm
GP2/FMX2 — 99.98% @ 2µm | 90.00% @ 1µm
GP3/FMX3 — 99.98% @ 3µm | 90.00% @ 1.5µm
GP5/FMX5 — 99.98% @ 5µm | 90.00% @ 2.5µm
GP10/FMX10 — 99.98% @ 10µm | 90.00% @ 5µm
GP15/FMX15 — 99.98% @ 15µm | 90.00% @ 10µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

GP	Glass-Pleat (2.55")
FMX	Fiber-MAXX (2.7")

MICRON RATINGS

0.8*, 0.9, 1*, 2, 3*, 5*, 10*, 15

*Available in FDA grade

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush
APH	All Polyester Hardware

SPECIAL PLEAT OPTION

SP	Special Pleat (FMX only) Not available in FDA grade

Glass-PLEAT G & Fiber-MAXX G

Nominally Rated Microglass Depth

- ▶ INKS AND COATINGS
- ▶ PLATING SOLUTIONS
- ▶ SOLVENT FILTRATION
- ▶ WASTE WATER
- ▶ CHEMICAL PROCESSING
- ▶ PHOTOGRAPHIC FILMS
- ▶ OIL AND GAS PRODUCTION

Strainrite's Nominally Rated Microglass Depth Filter Cartridges utilize a high surface area and high void volume media, incorporating microglass fibers in a uniform matrix that optimizes element flow rate and service life unattainable by other traditional microfiber technologies. This revolutionary microfiber matrix optimizes pore size geometry required to offer beta rated filtration performance.

Strainrite's non-calendared microglass cartridges exhibit significantly reduced resistance to flow when compared to similarly rated microfiber technologies. These cartridges are an excellent choice for filtering beverages such as beer and wine, as they do not remove flavor-enhancing proteins.

Our FDA grade cartridges meet or exceed the requirements of the 21 CFR 177 for food and beverage contact. Strainrite also offers elements that utilize an epoxy binder providing an increased range of applications where chemical compatibility is critical.

The Fiber-MAXX G now offers a Special Pleat option which provides expected surface area improvements of as much as 45% in General and Pharmaceutical grades. This optimized pleat geometry option was developed for the filtration of process fluids that require a high degree of particle retention and/or constant bacterial barrier for effective sterilization.

- ▶ BETA-RATED MEDIA PROVIDE RELIABLE PORE SIZE CONTROL RESULTING IN REPEATABLE FILTRATION PERFORMANCE
- ▶ NON-FIBER RELEASING MATERIALS WITH MINIMAL EXTRACTABLES PROVIDE HIGH PURITY FILTRATE
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ MAXIMIZED PLEAT DESIGN COUPLED WITH NON-CALENDARED MICRO-GLASS MATRIX OFFERS GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, LESS DOWNTIME AND REDUCED COSTS
- ▶ INDUSTRIAL GRADE UTILIZES AN EPOXY BINDER, FDA GRADE UTILIZES AN ACRYLIC BINDER
- ▶ THERMALLY BONDED CONSTRUCTION ELIMINATES PARTICLE BYPASS

SPECIAL PLEAT OPTION:

- ▶ OPTIMIZED PLEAT GEOMETRY
- ▶ EXPECTED SURFACE AREA IMPROVEMENTS OF AS MUCH AS 45% IN GENERAL AND PHARMACEUTICAL GRADES

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Glass-Pleat G and Fiber-MAXX G, the following vessel types are most commonly used:

SRC—Page 130 **SRVC—Page 132**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

GPG FMXG	0.2	–	10	PP	C3	S	1	DIF	GPG0.2-10PPC3S1DIF
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

RETENTION RATING

0.2, 0.45, 0.65, 1, 5, 10

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene	275°F (135°C) Continuous Duty Polyester

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Borosilicate Microglass	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD	OUTSIDE DIAMETER
Thermal Bond	GPG: 2.55" (6.48cm) | FMXG: 2.7" (6.87cm)

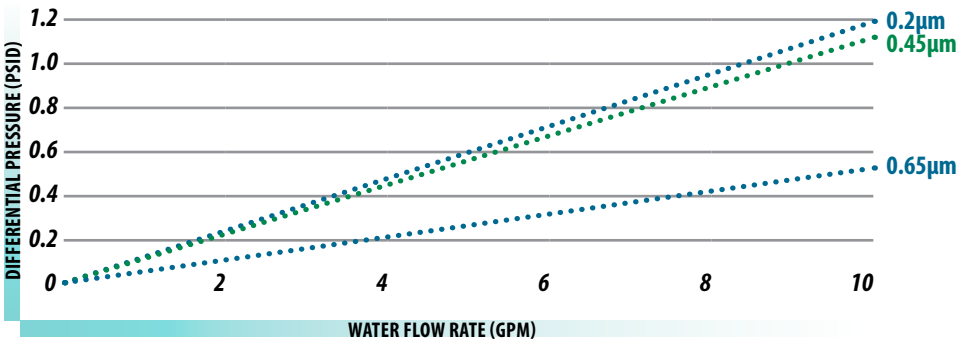
LENGTHS

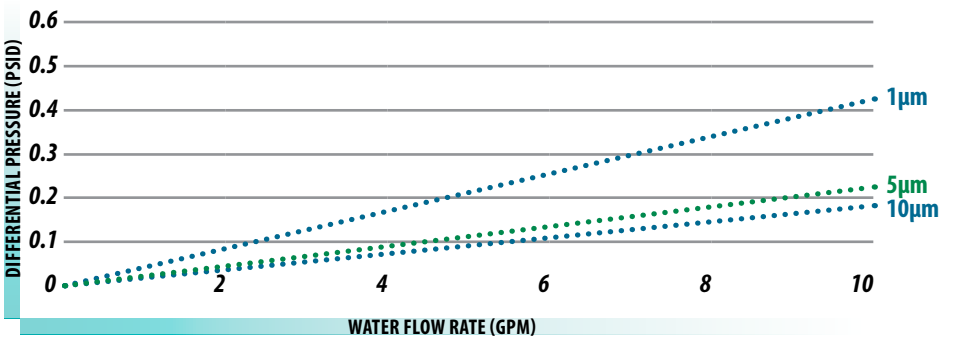
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

EFFICIENCY

GPG0.2/FMXG0.2 — BETA5000 @ 0.2µm
GPG0.45/FMXG0.45 — BETA5000 @ 0.45µm
GPG0.65/FMXG0.65 — BETA5000 @ 0.65µm
GPG1/FMXG1 — BETA5000 @ 1µm
GPG5/FMXG5 — BETA5000 @ 5µm
GPG10/FMXG10 — BETA5000 @ 10µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

GPG	Glass-Pleat (2.55")
FMXG	Fiber-MAXX (2.7")

MICRON RATINGS

0.2, 0.45, 0.65, 1, 5, 10

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade
2	Pharmaceutical

CARTRIDGE OPTIONS

I	316 SS Insert
DIF	DI Flush
APH	All Polyester Hardware

SPECIAL PLEAT OPTION

SP	Special Pleat (FMXG only) Not available in FDA grade

CPP - Continuous Pleat-Rite

Continuous Pleat Polypropylene Depth

- ▶ GENERAL CHEMICAL
- ▶ LIQUEFIED SUGAR
- ▶ WASTE WATER
- ▶ BLEACH
- ▶ SOLVENT FILTRATION
- ▶ DI/RO PREFILTRATION
- ▶ GENERAL WATER FILTRATION

Strainrite's Continuous Pleat All-Polypropylene Filter Cartridges optimize throughput while achieving consistent and repeatable effluent quality.

Our filter media is constructed on the latest continuous microfiber blowing equipment that precisely control fiber diameter and integrity across the entire web.

Utilizing state-of-the-art on-line monitoring equipment, we are able to deliver the industry's most uniform and consistent media ensuring unparalleled product consistency.

These filters are manufactured in continuous lengths without binders or resins resulting in an extremely clean non-fiber releasing filter. All construction materials comply with FDA Title 21 of The Code of Federal Regulations for food and beverage contact.

- ▶ CPP ELEMENTS HAVE BETWEEN 4-6 FT^2 OF SURFACE AREA PER 10″ EQUIVALENT
- ▶ WATER GRADE ELEMENTS HAVE BETWEEN 3-4.5 FT^2 OF SURFACE AREA PER 10″ EQUIVALENT
- ▶ HIGH EFFICIENCY MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION RESULTS
- ▶ HIGH SURFACE AREA PLEAT DESIGN FOR GREATER SURFACE AREA ENSURES LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER CARTRIDGE
- ▶ FDA TITLE 21 COMPLIANT FOR FOOD AND BEVERAGE CONTACT
- ▶ 100% POLYPROPYLENE CONSTRUCTION OFFERS A WIDE RANGE OF CHEMICAL COMPATIBILITY
- ▶ THERMALLY BONDED CONSTRUCTION ENSURES A CLEANER FILTRATE

NEED A VESSEL FOR YOUR CARTRIDGES?

For the CPP, the following vessel types are most commonly used:

SRC—Page 130 **SRVC—Page 132**

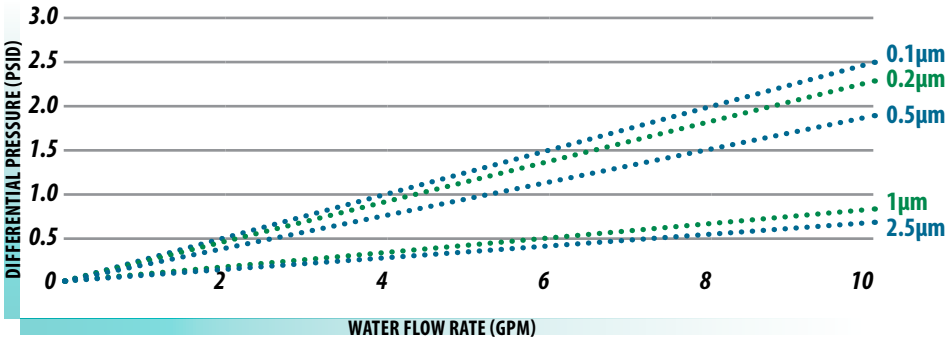
As always, discuss your options with your local sales representative to find the best fit for your application.

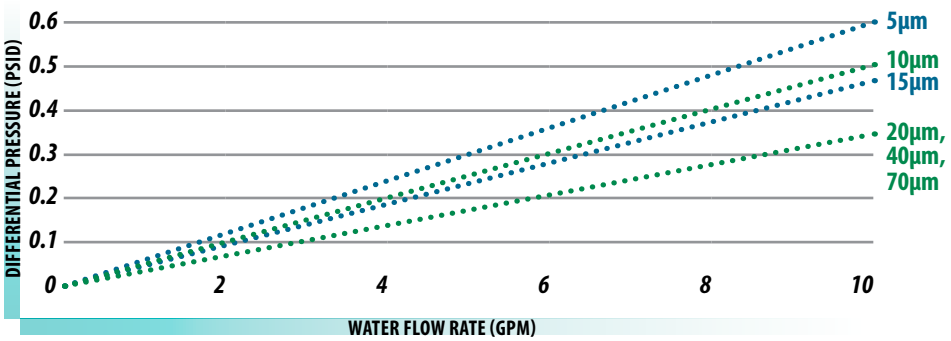
ORDER GUIDE

CPP	→	10	–	20	→	C4	→	V	→	5	→	MC	→	CPP10-20C4V5MC
		MICRON RATING		CARTRIDGE LENGTH		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		CARTRIDGE GRADE		CARTRIDGE OPTIONS		

RETENTION RATING			
0.1, 0.2, 0.5, 1, 2.5, 5, 10, 15, 20, 40, 70			
MAXIMUM DIFFERENTIAL PRESSURE		**MAXIMUM OPERATING TEMPERATURE**	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		180°F (82°C) Continuous Duty	
TOXICITY			
All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Polypropylene Microfiber	Polypropylene	Polypropylene	Polypropylene
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
CONSTRUCTION METHOD			
Thermal Bond			
OUTSIDE DIAMETER		**APPROXIMATE SURFACE AREA PER 10"**	
EXTRUDED CAGE: 2.55" (6.48cm) | MOLDED CAGE: 2.68" (6.81cm)		GENERAL GRADE: 4-6 SQUARE FEET | WATER GRADE: 3-4.5 SQUARE FEET	
LENGTHS			
10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
EFFICIENCY			
CPP0.1 — BETA100 @ 0.1µm CPP0.2 — BETA100 @ 0.2µm CPP0.5 — BETA100 @ 0.5µm CPP1 — BETA100 @ 1µm	CPP2.5 — BETA100 @ 2.5µm CPP5 — BETA100 @ 5µm CPP10 — BETA100 @ 10µm	CPP15 — BETA100 @ 15µm CPP20 — BETA100 @ 20µm CPP40 — BETA100 @ 40µm CPP70 — BETA100 @ 70µm	

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

CPP	Continuous Pleat-Rite

MICRON RATINGS

0.1, 0.2, 0.5, 1, 2.5, 5, 10, 15, 20, 40, 70

CARTRIDGE LENGTH

10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
5	Water Grade

CARTRIDGE OPTIONS

I	316 SS Insert
MC	Molded Cage

HSLP

Continuous Pleat High-Solids-Loading Polypropylene Depth

- ▶ COSMETICS
- ▶ HIGH PURITY WATER
- ▶ PHOTOCHEMICAL
- ▶ PHARMACEUTICAL
- ▶ FOOD AND BEVERAGE
- ▶ ELECTROPLATING
- ▶ DI/RO PREFILTRATION
- ▶ FERMENTATION PROCESSES

Strainrite's Continuous Pleat High-Solids-Loading Polypropylene (HSLP) Depth Filter Cartridges is a unique polypropylene depth filter that utilizes long strand small and large diameter fibers to provide a high solids loading, absolute-rated, pleated depth filter. This binder-free depth media is excellent for removing gels and offers more than twice the surface area compared with industry standard non-pleated depth filters. The increased surface area provides higher flow rates at reduced pressure, resulting in increased filter life.

Our 100% polypropylene construction provides an excellent range of chemical compatibility for your most demanding applications. All polypropylene construction materials are CFR 21 listed for direct food contact, which makes this filter ideal for a broad range of applications.

- ▶ **ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION**
- ▶ **LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME**
- ▶ **MAXIMIZED PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER CARTRIDGE**
- ▶ **100% POLYPROPYLENE, FDA COMPLIANT WITH CFR 21**
- ▶ **THERMALLY BONDED CONSTRUCTION, ELIMINATING PARTICLE BYPASS**

NEED A VESSEL FOR YOUR CARTRIDGES?

For the HSLP, the following vessel types are most commonly used:

SRC—Page 130 **SRVC—Page 132**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

HSLP	→	10	–	10	→	C1	→	B	→	1	→	I	→	HSLP10-10C1B1I
		MICRON RATING		CARTRIDGE LENGTH		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		CARTRIDGE GRADE		CARTRIDGE OPTIONS		

RETENTION RATING

1, 2.5, 5, 10, 15, 20, 25, 35, 70, 90, 120

MAXIMUM DIFFERENTIAL PRESSURE	MAXIMUM OPERATING TEMPERATURE
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)	180°F (82°C) Continuous Duty

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polypropylene Microfiber Composite	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

Thermal Bond

OUTSIDE DIAMETER

EXTRUDED CAGE: 2.55" (6.48cm) | MOLDED CAGE: 2.68" (6.81cm)

LENGTHS

10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

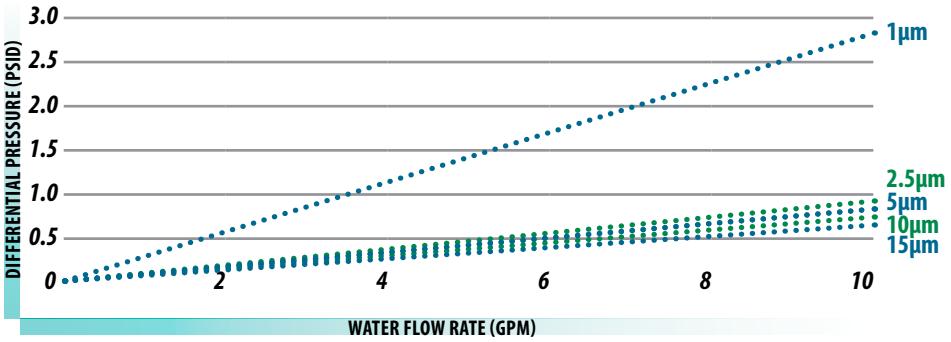
EFFICIENCY

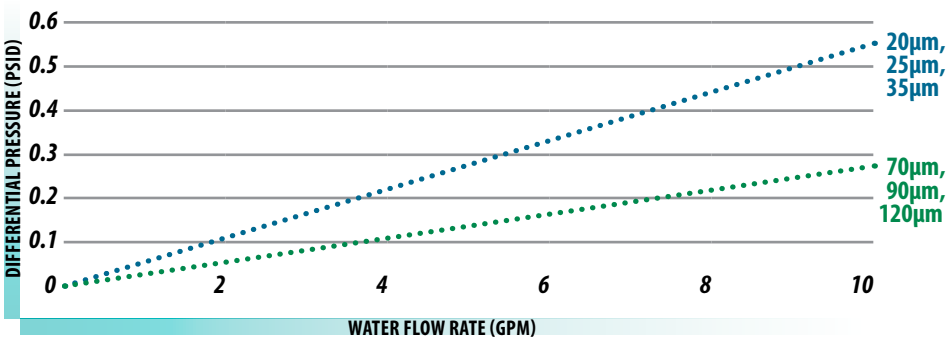
HSLP1 — 99.98% @ 1µm
HSLP2.5 — 99.98% @ 2.5µm
HSLP5 — 99.98% @ 5µm
HSLP10 — 99.98% @ 10µm

HSLP15 — 99.98% @ 15µm
HSLP20 — 99.98% @ 20µm
HSLP25 — 99.98% @ 25µm

HSLP35 — 99.98% @ 35µm
HSLP70 — 99.98% @ 70µm
HSLP90 — 99.98% @ 90µm
HSLP120 — 99.98% @ 120µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

HSLP

MICRON RATINGS

1, 2.5, 5, 10, 15, 20, 25, 35, 70, 90, 120

CARTRIDGE LENGTH

10, 20, 30, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

-	General
1	FDA Grade

CARTRIDGE OPTIONS

I	316 SS Insert
MC	Molded Cage

CFP - Continuous Fiber Pleat

Continuous Pleat Microglass Depth

- ▶ GENERAL CHEMICAL
- ▶ PLATING SOLUTIONS
- ▶ WASTE WATER
- ▶ SOLVENT FILTRATION
- ▶ DI/RO PREFILTRATION
- ▶ GENERAL WATER FILTRATION

Strainrite's Continuous Pleat Microglass Filter Cartridges utilize a high surface area of small denier fibers to create more void volume in a highly uniform matrix, optimizing flow rate and service life without sacrificing particle efficiency.

This revolutionary microfiber optimizes pore size geometry required to offer absolute rated filtration performance. Our high efficiency media is non-calendared at the lower micron ratings resulting in significantly reduced resistance to flow or pressure drop when compared to similarly rated polypropylene microfiber technologies.

These products are available in industrial grades that utilize epoxy binders or in FDA compliant grades, which utilize acrylic binders, and are perfect for a wide range of applications where chemical compatibility is critical.

- ▶ **HIGH EFFICIENCY MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION RESULTS**
- ▶ **HIGH SURFACE AREA PLEAT DESIGN FOR GREATER SURFACE AREA ENSURES LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER CARTRIDGE**
- ▶ **FDA TITLE 21 COMPLIANT FOR FOOD AND BEVERAGE CONTACT**
- ▶ **THERMALLY BONDED CONSTRUCTION TO ENSURE A CLEANER FILTRATE**

NEED A VESSEL FOR YOUR CARTRIDGES?

For the CFP, the following vessel types are most commonly used:

SRC—Page 130 **SRVC—Page 132**

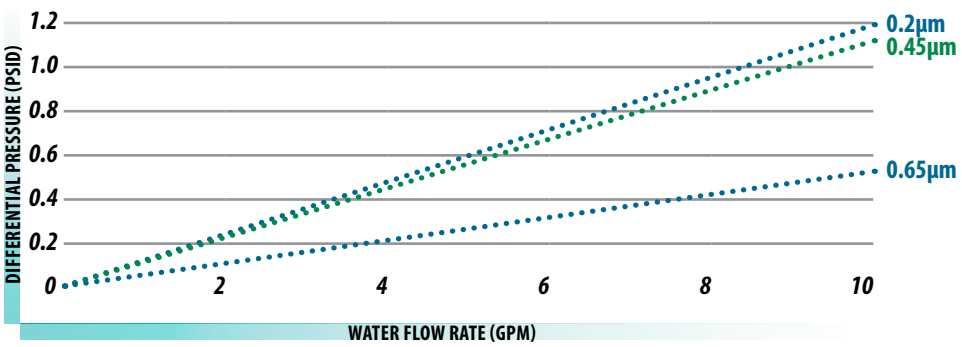
As always, discuss your options with your local sales representative to find the best fit for your application.

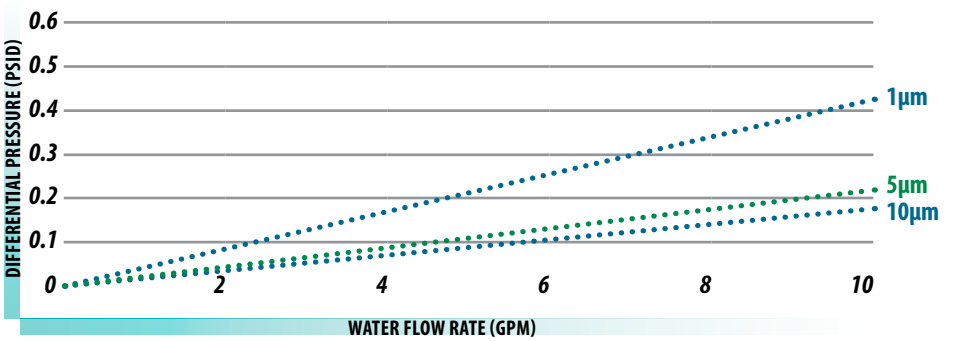
ORDER GUIDE

CFP	0.2	–	20	C1	S	1	I	CFP0.2-20C1S1I
	MICRON RATING		CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

RETENTION RATING			
0.2, 0.45, 0.65, 1, 5, 10			
MAXIMUM DIFFERENTIAL PRESSURE		**MAXIMUM OPERATING TEMPERATURE**	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		180°F (82°C) Continuous Duty	
TOXICITY			
All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Borosilicate Microglass	Polypropylene	Polyester	Polypropylene
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
CONSTRUCTION METHOD			
Thermal Bond			
OUTSIDE DIAMETER		**APPROXIMATE SURFACE AREA**	
EXTRUDED CAGE: 2.55" (6.48cm) | MOLDED CAGE: 2.68" (6.81cm)		4 SQUARE FEET PER 10"	
LENGTHS			
10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
EFFICIENCY			
CFP0.2 — BETA1000 @ 0.8µm | BETA10 @ 0.25µm CFP0.45 — BETA1000 @ 0.9µm | BETA10 @ 0.45µm CFP0.65 — BETA1000 @ 1µm | BETA10 @ 0.65µm		CFP1 — BETA1000 @ 2µm | BETA10 @ 1µm CFP5 — BETA1000 @ 10µm | BETA10 @ 5µm CFP10 — BETA1000 @ 15µm | BETA10 @ 10µm	

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE	
CFP	Continuous Fiber Pleat

MICRON RATINGS
0.2, 0.45, 0.65, 1, 5, 10

CARTRIDGE LENGTH
10, 20, 30, 40

END CAP CONFIGURATIONS	
C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL	
S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE	
-	General
1	FDA Grade

CARTRIDGE OPTIONS	
I	316 SS Insert
MC	Molded Cage

GPVS - Glass Pleat Value Series

Continuous Microglass Pleat - Value Series

- ▶ GENERAL CHEMICAL
- ▶ PLATING SOLUTIONS
- ▶ WASTE WATER
- ▶ OIL AND GAS PRODUCTION
- ▶ SOLVENT FILTRATION
- ▶ DI/RO PREFILTRATION
- ▶ GENERAL WATER FILTRATION

Strainrite's Glass Pleat Value Series (GPVS) Filter Cartridges utilize a high surface area of small denier fibers to create more void volume in a highly uniform matrix, optimizing flow rate and service life without sacrificing particle efficiency. This revolutionary microfiber optimizes pore size geometry required to offer absolute rated filtration performance.

Our high efficiency media is non-calendared at the lower micron ratings resulting in significantly reduced resistance to flow or pressure drop when compared to similarly rated polypropylene microfiber technologies. These products are perfect for a wide range of applications where chemical compatibility is critical.

- ▶ **RECOMMENDED WHEN CHEMICAL COMPATIBILITY AND TEMPERATURE ARE CRITICAL FACTORS**
- ▶ **HIGH EFFICIENCY MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION RESULTS**
- ▶ **HIGH SURFACE AREA PLEAT DESIGN FOR GREATER SURFACE AREA ENSURES LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER CARTRIDGE**
- ▶ **THERMALLY BONDED CONSTRUCTION TO ENSURE A CLEANER FILTRATE**

NEED A VESSEL FOR YOUR CARTRIDGES?

For the GPVS, the following vessel types are most commonly used:

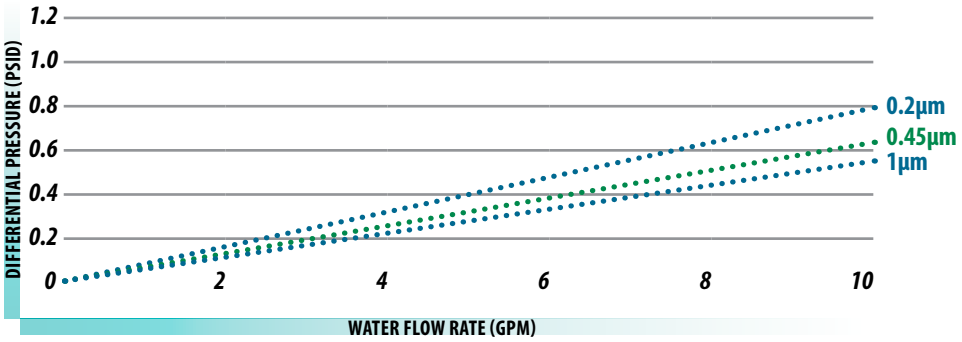
SRC—Page 130 **SRVC—Page 132**

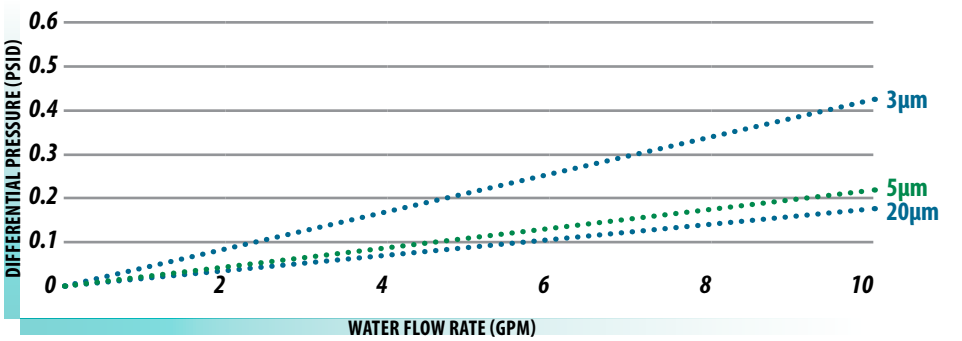
As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

GPVS	0.2	–	20	PE	C1	S	PE	GPVS0.2-20PEC1SPE
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CAGE / CORE / END CAPS	

RETENTION RATING			
0.2, 0.45, 1, 3, 5, 20			
MAXIMUM DIFFERENTIAL PRESSURE		**MAXIMUM OPERATING TEMPERATURE**	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		275°F (135°C) Continuous Duty	
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Borosilicate Microglass	Polypropylene	Polyester	Polypropylene
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
CONSTRUCTION METHOD		**CAGE DESIGN**	
Thermal Bond		Netting	
OUTSIDE DIAMETER		**APPROXIMATE SURFACE AREA**	
2.55" (6.48cm)		4.5 SQUARE FEET PER 10"	
LENGTHS			
10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
EFFICIENCY			
CFP0.2 — BETA1000 @ 0.8µm | BETA10 @ 0.25µm CFP0.45 — BETA1000 @ 0.9µm | BETA10 @ 0.45µm CFP0.65 — BETA1000 @ 1µm | BETA10 @ 0.65µm		CFP1 — BETA1000 @ 2µm | BETA10 @ 1µm CFP5 — BETA1000 @ 10µm | BETA10 @ 5µm CFP10 — BETA1000 @ 15µm | BETA10 @ 10µm	
PERFORMANCE CHARACTERISTICS			





ORDER OPTIONS

CARTRIDGE	
GPVS	Glass Pleat Value Series

MICRON RATINGS
0.2, 0.45, 1, 3, 5, 20

CARTRIDGE LENGTH
10, 20, 30, 40

PLEAT SUPPORT	
PE	Polyester

END CAP CONFIGURATIONS	
C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL	
S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CAGE / CORE / END CAPS	
PE	Polyester

CRB Pleat

Continuous Resin-Bonded Depth

- ▶ INKS
- ▶ ADHESIVES
- ▶ COATINGS
- ▶ RESINS
- ▶ OILS
- ▶ HYDRAULIC FLUIDS
- ▶ HIGHLY VISCOUS FLUIDS
- ▶ HEAVY BRINE SOLUTIONS
- ▶ MACHINE TOOL COOLANTS
- ▶ OIL WELL COMPLETION FLUIDS

Strainrite's Continuous Resin-Bonded Depth Filter Cartridges are manufactured using long staple polyester fibers, in a specific blend of fiber diameters, and offer the broadest range of micron rated cartridges, while virtually eliminating fiber migration. Utilizing our proprietary resin coating process, we are able to take well defined micron rated depth media and treat the material, converting it from a soft, compressible fabric, to a highly advanced rigid fiber technology.

This unique rigid fiber depth filter cartridge is engineered to take advantage of targeted depth media in an optimized pleated configuration, to maximize solids loading, gel removal capacity, and filter life. CRB cartridges contain more than 3.5 ft^2 of surface area per 10" segment, as compared to approximately 0.5 ft^2 of surface area per 10" segment in a typical molded or wound resin bonded cartridge. Increased surface area reduces flow velocity, which increases filter life exponentially due to a reduction in particle penetration, promoting increased dirt holding capacity and filter life.

These exceptional pleated cartridges are perfect for both aqueous and non-aqueous liquids. CRB fibers are already fully impregnated, diminishing problematic swelling caused by fluid absorption. This prevents the CRB from prematurely blinding off, making it superior to common untreated filters.

- ▶ VIRTUALLY NO FIBER MIGRATION, DUE TO THE UTILIZATION OF LONG POLYESTER HEAT SET FIBERS
- ▶ LONGER FILTER LIFE ALSO REDUCES LABOR TIME ASSOCIATED WITH CHANGE-OUTS
- ▶ HIGHER SURFACE AREA COMPARED TO INDUSTRY STANDARD RESIN BONDED CARTRIDGES, WHICH PROVIDES LONGER FILTER LIFE, REDUCED DISPOSAL COST AND LOWER COST PER GALLON TO FILTER
- ▶ EXTREMELY HIGH FLOW RATES, DUE TO A SUBSTANTIAL INCREASE IN SURFACE AREA
- ▶ HIGH INTEGRITY ONE PIECE CONSTRUCTION
- ▶ NO EPOXIES, GLUES OR ADHESIVES

NEED A VESSEL FOR YOUR CARTRIDGES?

For the CRB-Pleat, the following vessel types are most commonly used:

SRC—Page 130 **SRVC—Page 132**

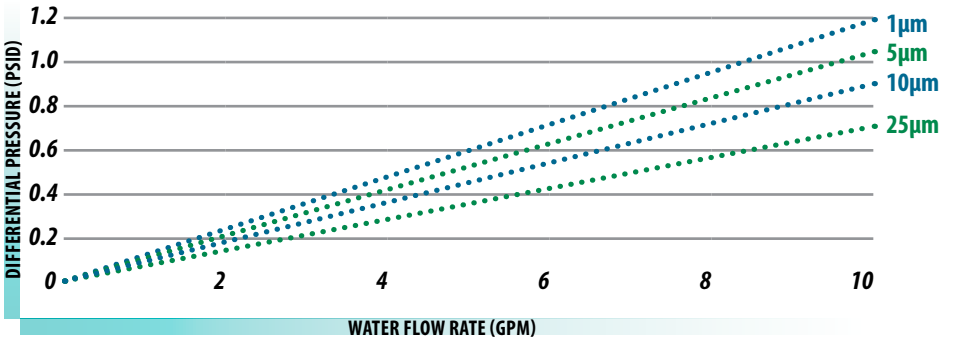
As always, discuss your options with your local sales representative to find the best fit for your application.

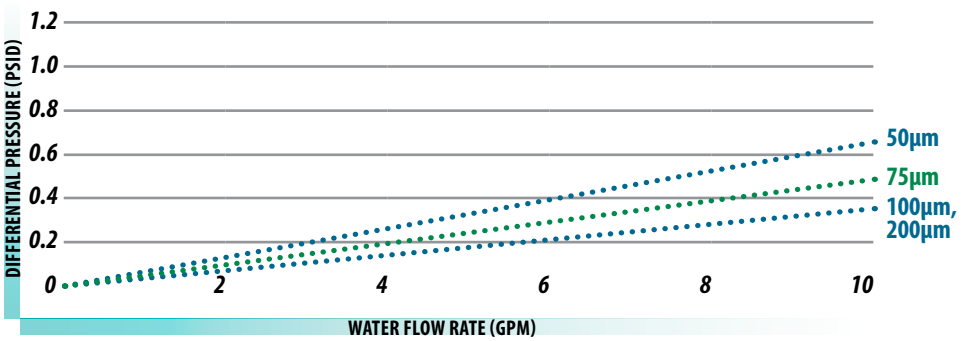
ORDER GUIDE

CRB	→	1	–	20	→	C1	→	S	→	MC	→	CRB1-20C1SMC
		MICRON RATING		CARTRIDGE LENGTH		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		CARTRIDGE OPTIONS		

NOMINAL RATED RETENTION			
1, 5, 10, 25, 50, 75, 100, 200			
MAXIMUM DIFFERENTIAL PRESSURE		**MAXIMUM OPERATING TEMPERATURE**	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		250°F (121°C) Continuous Duty	
TOXICITY			
All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 9.75-10 inch - 24 per carton | 19.5-20 inch - 12 per carton | 29.35-30 inch - 12 per carton | 39-40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**CAGE/CORE**	**CONSTRUCTION METHOD**
Phenolic Resin-Impregnated Polyester Material	Polypropylene Polyester	Polypropylene Polyester	Thermal Bond
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
OUTSIDE DIAMETER		**APPROXIMATE SURFACE AREA**	
EXTRUDED CAGE: 2.55" (6.48cm) | MOLDED CAGE: 2.68" (6.81cm)		3 SQUARE FEET PER 10"	
LENGTHS			
9.75" (24.8 cm) | 10" (25.4 cm) | 19.5" (49.6 cm) | 20" (50.8 cm) | 29.25" (74.4 cm) | 29.5" (76.2 cm) | 30" (76.2 cm) | 39" (99.4 cm) | 40" (102 cm)			

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

CRB	CRB Pleat

MICRON RATINGS

1, 5, 10, 25, 50, 75, 100, 200

CARTRIDGE LENGTH

9.75, 10, 19.5, 20, 29.25, 29.5, 30, 39, 40

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE OPTIONS

MC	Molded Cage
APH	All Polyester Hardware

Bev-MAXX

Polyethersulfone for Food & Beverage Sterilization

► FOOD AND BEVERAGE APPLICATIONS

Strainrite's Bev-MAXX pleated membrane filters are specifically engineered to provide an absolute barrier to beverage spoiling micro-organisms. The Bev-MAXX incorporates a highly asymmetric polyethersulfone membrane within our exclusive pleat support configuration creating one of the industry's most rugged yeast removal filters. This exceptionally robust filter design means filter performance will remain effective after multiple steam sterilization cycles.

Every Bev-MAXX filter is integrity tested and flushed with high purity water to assure product performance and purity. Integrity test parameters have been correlated to microbiological retention for all of our membrane filters (refer to microbiological performance chart).

- ► ABSOLUTE-RATED AND INTEGRITY TESTED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE TO ENSURE MICROBIOLOGICAL STABILITY
- ► LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ► NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ► MAXIMUM PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ► 100% THERMALLY BONDED CONSTRUCTION
- ► HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI AUTOCLAVE AND HOT WATER SANITIZATION CYCLES
- ► 316 STAINLESS STEEL INSERT STANDARD
- ► ALL MATERIALS ARE LISTED IN TITLE 21 OF THE US CODE OF FEDERAL REGULATIONS 177-182
- ► COMPONENT MATERIALS MEET THE BIOSAFETY CRITERIA OF THE USP REACTIVITY TEST FOR CLASS VI PLASTICS
- ► COMPONENT MATERIALS MEET THE "NON-FIBER RELEASING" CRITERIA AS DEFINED IN 21 CFR 210.3 (B) (6)
- ► BEV-MAXX CARTRIDGES ARE MANUFACTURED IN A FACILITY WHOSE QUALITY MANAGEMENT SYSTEM IS APPROVED BY AN ACCREDITED REGISTERING BODY TO THE ISO 9001:2008 STANDARD
- ► BEV-MAXX CARTRIDGES ARE 100% INTEGRITY TESTED AND DI FLUSHED

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Bev-MAXX, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

BVM	→	0.2	–	20	→	PP	→	C3	→	E	→	BVM0.2-20PPC3E
		MICRON RATING		CARTRIDGE LENGTH		PLEAT SUPPORT		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		

ABSOLUTE RATED RETENTION			
0.2, 0.45, 0.65			
MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		**Reverse:** 50 psid (3.4 bar) @ 75°F (24°C)	
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty			
STERILIZATION			
Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C) Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Polyethersulfone	Polypropylene	Polypropylene	Polypropylene
SEALS		**REINFORCING RING**	
EPDM | Silicone		316 Stainless Steel	
CONSTRUCTION METHOD			
Thermal Bond			
OUTSIDE DIAMETER		**APPROXIMATE SURFACE AREA**	
2.7" (6.87cm)		7 square feet per 10" equivalent	
LENGTHS			
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			

INTEGRITY TEST VALUES

PORE SIZE	BUBBLE POINT	TEST PRESSURE	AIR DIFFUSION
BVM0.2	50 psig in water	40 psig	≤16mL/min
BVM0.45	29 psig in water	23 psig	≤13.5mL/min
BVM0.65	26 psig in water	20 psig	≤14mL/min

MICROBIOLOGICAL PERFORMANCE

MICROORGANISM	BVM0.2	BVM0.45	BVM0.65
Oenococcus oeni		$\geq 10^7$	
Lactobacillus hilgardii		$\geq 10^7$	
Saccharomyces cerevisiae		$\geq 10^7$	$\geq 10^7$
Brevundimonas diminuta	$\geq 10^7$		

ORDER OPTIONS

CARTRIDGE

BVM	Bev-MAXX

MICRON RATINGS

0.2, 0.45, 0.65

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene

END CAP CONFIGURATIONS

C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
E	EPDM

Bev-Rite

Polyethersulfone for Food & Bioburden Reduction

► FOOD AND BEVERAGE APPLICATIONS

Strainrite's Bev-Rite pleated membrane filters are specifically engineered to provide a barrier to beverage spoiling micro-organisms. The Bev-Rite bio-reduction filter incorporates a highly asymmetric polyethersulfone membrane within our exclusive pleat support configuration, creating one of the industry's most rugged bacteria removal filters.

This exceptionally robust filter design means filter performance will remain effective after multiple steam sterilization cycles. Every Bev-Rite filter is integrity tested and flushed with high purity water to assure product performance and purity.

- ► ABSOLUTE-RATED AND INTEGRITY TESTED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE TO ENSURE MICROBIOLOGICAL STABILITY
- ► LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ► NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ► MAXIMUM PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ► 100% THERMALLY BONDED CONSTRUCTION
- ► HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI AUTOCLAVE AND HOT WATER SANITIZATION CYCLES
- ► 316 STAINLESS STEEL INSERT STANDARD
- ► ALL MATERIALS ARE LISTED IN TITLE 21 OF THE US CODE OF FEDERAL REGULATIONS 177-182
- ► COMPONENT MATERIALS MEET THE BIOSAFETY CRITERIA OF THE USP REACTIVITY TEST FOR CLASS VI PLASTICS
- ► COMPONENT MATERIALS MEET THE "NON-FIBER RELEASING" CRITERIA AS DEFINED IN 21 CFR 210.3 (B) (6)
- ► BEV-RITE CARTRIDGES ARE MANUFACTURED IN A FACILITY WHOSE QUALITY MANAGEMENT SYSTEM IS APPROVED BY AN ACCREDITED REGISTERING BODY TO THE ISO 9001:2008 STANDARD
- ► BEV-RITE CARTRIDGES ARE 100% INTEGRITY TESTED AND DI FLUSHED

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Bev-Rite, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

BVR	→	0.8	–	10	→	PP	→	C1	→	S	→	BVR0.8-10PPC1S
		MICRON RATING		CARTRIDGE LENGTH		PLEAT SUPPORT		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		

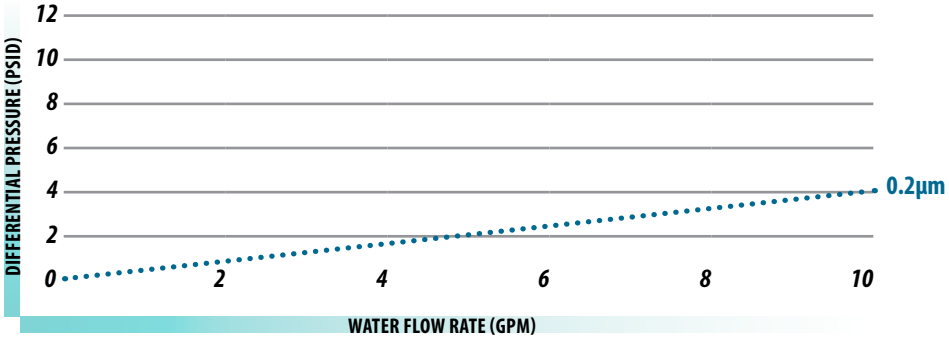
ABSOLUTE RATED RETENTION			
0.2, 0.45, 0.65, 0.8			
MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		Reverse: 50 psid (3.4 bar) @ 75°F (24°C)	
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty			
STERILIZATION			
Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C) Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Polyethersulfone	Polypropylene	Polypropylene	Polypropylene
SEALS		**REINFORCING RING**	
EPDM | Silicone		316 Stainless Steel	

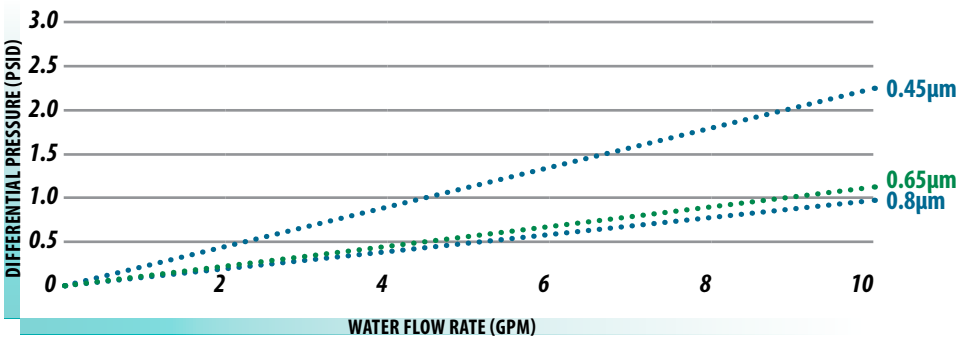
CONSTRUCTION METHOD	OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
Thermal Bond	2.7" (6.87cm)	7 square feet per 10" equivalent
LENGTHS		
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)		

INTEGRITY TEST VALUES

PORE SIZE	BUBBLE POINT	TEST PRESSURE
BVR0.2	50 psig in water	40 psig
BVR0.45	38 psig in water	30 psig
BVR0.65	26 psig in water	23 psig
BVR0.8	16 psig in water	20 psig

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE	
BVR	Bev-Rite
MICRON RATINGS	
0.2, 0.45, 0.65, 0.8	
CARTRIDGE LENGTH	
5, 10, 20, 30, 40	
PLEAT SUPPORT	
PP	Polypropylene
END CAP CONFIGURATIONS	
C1	Double Open Ends
C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222
GASKET / O-RING MATERIAL	
S	Silicone
E	EPDM

Guard-Rite

Microglass over Polyethersulfone
for Beverage Pre-final filtration

- ► PREFILTRATION OF JUICE
- ► PREFILTRATION OF WINE
- ► PREFILTRATION & CLARIFICATION FOR FINAL STERILIZING GRADE FILTER PROTECTION
- ► PREFILTRATION OF BEER

Created for beverage pre-final filtration, the Guard-Rite is the pre-final filter, to cost effectively reduce bioburden before final filtration and packaging. With a depth layer and synchronized final filtration layer optimized to extend final filter life with a stainless steel insert for steam or hot water sanitization.

Guard-Rite is engineered to provide cost effective removal of particles and reduction of beverage-spoiling micro-organisms. The superior flowing membrane ensures that flavor and color stay in your beverage.

Every Guard-Rite filter comes with a certificate of conformance and is manufactured to meet the highest cleanliness standards.

- ► RELIABLE NON FIBER RELEASING MEDIA
- ► SYNCHRONIZED MEDIA
- ► THERMALLY BONDED CONSTRUCTION
- ► NO ADDITIVES OR GLUE
- ► ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21
- ► THERMALLY BONDED CONSTRUCTION WITHOUT THE USE OF ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES
- ► HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI-AUTOCLAVE CYCLES

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Guard-Rite, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

GR	561	–	10	PP	C1	S	1	DIF	GR561-10PPC1S1DIF
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION

561 = 1µm Microglass over 0.65 µm Polyethersulfone
562 = 2µm Microglass over 0.65 µm Polyethersulfone
563 = 3µm Microglass over 0.65 µm Polyethersulfone
568 = 0.8µm Microglass over 0.65 µm Polyethersulfone

MAXIMUM DIFFERENTIAL PRESSURE	MAXIMUM OPERATING TEMPERATURE
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)	180°F (82°C) Continuous Duty

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Microglass over Polyethersulfone	Polypropylene	Polypropylene Polyester	Polypropylene

SEALS

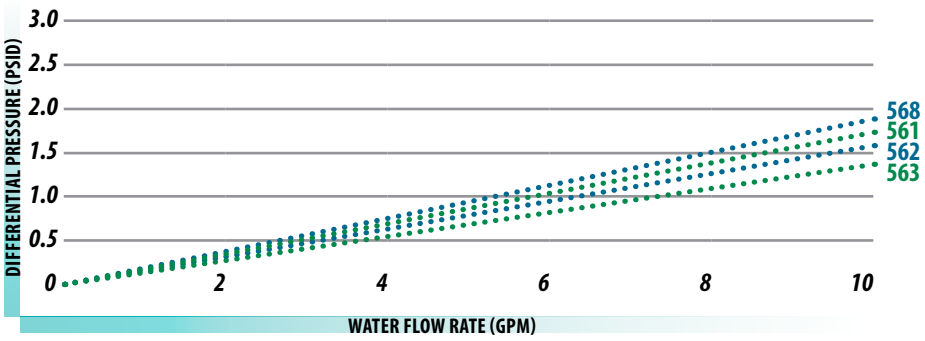
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD	OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
Thermal Bond	2.7" (6.87cm)	5 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

GR	Guard-Rite

MICRON RATINGS

561, 562, 563, 568

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene
PE	Polyester

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

1	FDA Grade

CARTRIDGE OPTIONS

DIF	DI Flush

Vino-MAXX E

Polyethersulfone for Final Sterilization of Wine

► FOOD AND BEVERAGE APPLICATIONS

Strainrite's Vino-Maxx E pleated membrane filters are specifically engineered to provide an absolute barrier to wine spoiling micro-organisms.

The Vino-Maxx E incorporates a highly asymmetric polyethersulfone membrane within our exclusive pleat support configuration creating one of the industry's most rugged yeast removal filters. This exceptionally robust filter design means filter performance will remain effective after multiple steam sterilization cycles.

Every Vino-Maxx E filter is integrity tested and flushed with high purity water to assure product performance and purity. Integrity test parameters have been correlated to microbiological retention for both of our 0.45µm and 0.65µm membrane filters (refer to microbiological performance chart).

- ► ABSOLUTE-RATED AND INTEGRITY TESTED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE TO ENSURE MICROBIOLOGICAL STABILITY
- ► LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ► NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ► MAXIMUM PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ► 100% THERMALLY BONDED CONSTRUCTION
- ► HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI AUTOCLAVE AND HOT WATER SANITIZATION CYCLES
- ► 316 STAINLESS STEEL INSERT STANDARD
- ► ALL MATERIALS ARE LISTED IN TITLE 21 OF THE US CODE OF FEDERAL REGULATIONS 177-182
- ► COMPONENT MATERIALS MEET THE BIOSAFETY CRITERIA OF THE USP REACTIVITY TEST FOR CLASS VI PLASTICS
- ► COMPONENT MATERIALS MEET THE "NON-FIBER RELEASING" CRITERIA AS DEFINED IN 21 CFR 210.3 (B) (6)
- ► VINO-MAXX E CARTRIDGES ARE MANUFACTURED IN A FACILITY WHOSE QUALITY MANAGEMENT SYSTEM IS APPROVED BY AN ACCREDITED REGISTERING BODY TO THE ISO 9001:2008 STANDARD
- ► VINO-MAXX E CARTRIDGES ARE 100% INTEGRITY TESTED AND DI FLUSHED

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Vino-MAXX E, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

VNXE	→	0.45	–	10	→	PP	→	C1	→	S	→	VNXE0.45-10PPC1S
		MICRON RATING		CARTRIDGE LENGTH		PLEAT SUPPORT		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		

ABSOLUTE RATED RETENTION			
0.45, 0.65			
MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		**Reverse:** 50 psid (3.4 bar) @ 75°F (24°C)	
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty			
STERILIZATION			
Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C) Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polyethersulfone	Polyethersulfone	Polypropylene	Polypropylene

SEALS	REINFORCING RING
EPDM | Silicone	316 Stainless Steel

CONSTRUCTION METHOD	OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
Thermal Bond	2.7" (6.87cm)	7 square feet per 10" equivalent

LENGTHS
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

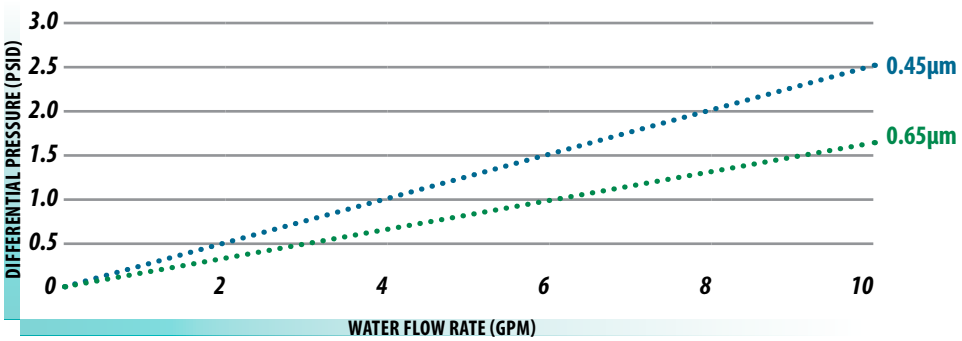
INTEGRITY TEST VALUES

PORE SIZE	BUBBLE POINT	TEST PRESSURE	AIR DIFFUSION
VNXE0.45	38 psig in water	30 psig	≤13.5mL/min
VNXE0.65	20 psig in water	16 psig	≤14mL/min

MICROBIOLOGICAL PERFORMANCE

MICROORGANISM	VNXE0.45	VNXE0.65
Oenococcus oeni	$\geq 10^7$	
Lactobacillus hilgardii	$\geq 10^7$	
Saccharomyces cerevisiae	$\geq 10^9$	$\geq 10^9$

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

VNXE	Vino-MAXX E

MICRON RATINGS

0.45, 0.65

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene

END CAP CONFIGURATIONS

C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

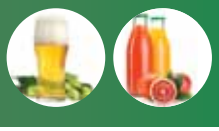
GASKET / O-RING MATERIAL

S	Silicone
E	EPDM

Trap-Rite

Polypropylene for Trap Filtration of Beer

- BREWERY CHEMICALS
- FILTER AID PARTICLE REMOVAL
- FOOD AND BEVERAGE APPLICATIONS



Strainrite continues its tradition of state-of-the-art advanced filtration innovation with the Trap-Rite. A unique polypropylene depth filter, that utilizes long strand small and large diameter fibers to provide a high solids loading, absolute-rated, pleated depth filter. This binder-free depth media is excellent for removing filter aid particles from bright beer. Trap-Rite also offers more than twice the surface area compared with industry standard non-pleated depth filters. The increased surface area provides higher flow rates at reduced pressure, resulting in increased filter life.

All polypropylene construction materials are CFR 21 listed for direct food contact, which makes this filter ideal for a broad range of applications.

- ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION
- LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- 100% POLYPROPYLENE, FDA COMPLIANT WITH CFR 21
- REMOVES FILTER AID PARTICLES
- VERY HIGH CONTAMINANT HOLDING CAPACITY
- MAXIMIZED PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- EXCELLENT RESISTANCE TO TYPICAL BREWERY USE CHEMICALS
- THERMALLY BONDED CONSTRUCTION, ELIMINATING PARTICLE BYPASS

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Trap-Rite, the following vessel types are most commonly used:

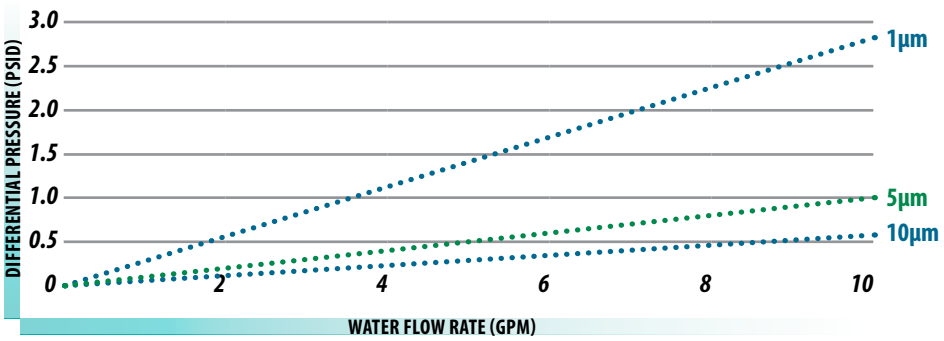
SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

TR	10	–	10	PP	C1	S	1	I	TR10-10PPC1S1I
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

RETENTION RATING			
1, 5, 10			
MAXIMUM DIFFERENTIAL PRESSURE		**MAXIMUM OPERATING TEMPERATURE**	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		180°F (82°C) Continuous Duty	
TOXICITY			
All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Polypropylene Microfiber Composite	Polypropylene	Polypropylene	Polypropylene
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
CONSTRUCTION METHOD		**OUTSIDE DIAMETER**	
Thermal Bond		2.55" (6.48cm)	
LENGTHS			
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
PERFORMANCE CHARACTERISTICS			



ORDER OPTIONS

CARTRIDGE	
TR	Trap-Rite

MICRON RATINGS
1, 5, 10

CARTRIDGE LENGTH
5, 10, 20, 30, 40

PLEAT SUPPORT	
PP	Polypropylene

END CAP CONFIGURATIONS	
C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL	
S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE	
-	General
1	FDA Grade

CARTRIDGE OPTIONS	
I	316 SS Insert
MC	Molded Cage

Aqua-Pro Cartridge

Polypropylene for Drinking Water

- FOOD AND BEVERAGE APPLICATIONS
- DRINKING WATER

Strainrite's Aqua-Pro Cartridge filters are engineered to produce the highest purity drinking water, by optimizing throughput while maintaining absolute rated performance that is both predictable and repeatable.

Utilizing state-of-the-art online monitoring equipment and superior control over fiber diameter and web design, our continuous composite microfiber material delivers the industry's most uniform and consistent results.

Aqua-Pro Cartridge filters bring the strongest line of defense against waterborne diseases traced to cryptosporidium and giardia cysts. These organisms, potentially lethal to those with weakened or underdeveloped immune systems, are highly resistant to conventional water treatment processes such as chlorination, but are no match for the Aqua-Pro Cartridge filters, at an absolute 1 micron designed to exceed the ANSI/NSF Standard 53 of 99.95% for the removal of cysts.

- PERFORMANCE TESTED AND VERIFIED BY OUTSIDE LAB TO COMPLY WITH NSF/ANSI STANDARD 53 FOR REDUCTION OF CRYPTOSPORIDIUM AND GIARDIA CYSTS
- MEETS THE REQUIREMENTS OF USP PLASTIC CLASS VI
- HIGH SURFACE AREA – HIGH FLOW RATES AND LONG ON-LINE SERVICE
- CONSTRUCTED ENTIRELY OF POLYPROPYLENE
- COMPLIES WITH FDA TITLE 21 OF THE CODE OF FEDERAL REGULATIONS SECTIONS 174.5, AND 177.1520, AS APPLICABLE FOR FOOD AND BEVERAGE CONTACT
- DOUBLE O-RING STYLE ENDS FOR THE HIGHEST SEAL INTEGRITY
- VARIOUS O-RING MATERIALS AND CONFIGURATIONS – EASILY RETROFITS MOST SYSTEMS

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Aqua-Pro Cartridge, the following vessel types are most commonly used:

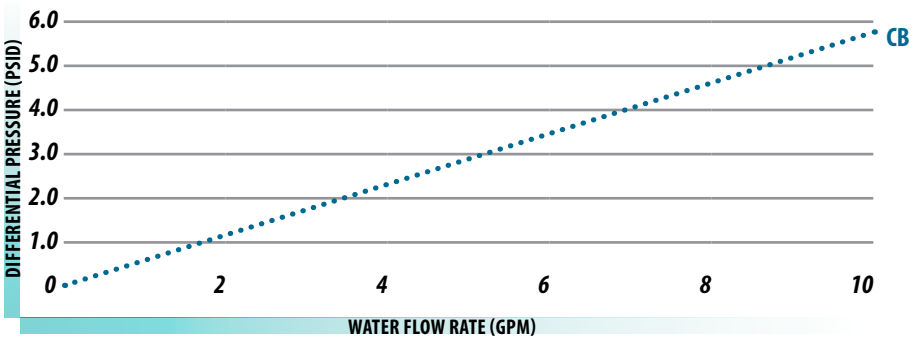
SRCT—Page 128 **SRC—Page 130**

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

APC	→	CB	–	10	→	C3	→	S	→	APCCB-10C3S
		MICRON RATING		CARTRIDGE LENGTH		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		

RETENTION RATING			
Crypto-Barrier			
MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)		**Reverse:** 50 psid (3.4 bar) @ 75°F (24°C)	
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Polypropylene	Polypropylene	Polypropylene	Polypropylene
SEALS		**CONSTRUCTION METHOD**	
EPDM | Silicone		Thermal Bond	
OUTSIDE DIAMETER		**INSIDE DIAMETER**	
2.7" (6.87cm)		1.0" (2.54cm)	
LENGTHS			
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
PERFORMANCE CHARACTERISTICS			



ORDER OPTIONS

CARTRIDGE	
APC	Aqua-Pro Cartridge

MICRON RATINGS
CB

CARTRIDGE LENGTH
5, 10, 20, 30, 40

END CAP CONFIGURATIONS	
C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL	
S	Silicone
E	EPDM

Mem-PLEAT SG & Pur-MAXX SG

Sterilizing Grade Pleated Polyethersulfone Membrane

- ▶ DIAGNOSTICS
- ▶ LARGE VOLUME PARENTERALS
- ▶ BUFFER SOLUTIONS
- ▶ CELL CULTURE PURIFICATION
- ▶ FINAL FILTRATION OF WFI AND CIP WATER
- ▶ VACCINES

Strainrite's Sterilizing Grade Pleated Polyethersulfone Membrane Cartridges are engineered to meet the highest standards of microorganism control for sterile fluids. These filter elements are validated for complete removal of Brevundimonas diminuta (ATCC 19146) at test concentrations of 10^7 CFU/cm^2 (Colony Forming Units).

This product is ideally suited for applications where microorganism contamination causes product defects or extra processing time due to increase fluid instability. These cartridges are produced utilizing a unique multi-pleated configuration integrating highly asymmetric and hydrophillic polyethersulfone membrane with exceptional pleat support materials. This novel multi-pleated approach increases cartridge life, strength and durability, and allows our filter cartridges to withstand multiple sterilization cycles without sacrificing product integrity.

These cartridges comply with FDA CFR Title 21 and USP Biological Reactivity for Class VI Plastics. By combining these ultra pure components with the low protein binding features of highly asymmetric hydrophillic polyethersulfone membrane makes them perfect for applications in the biopharmaceutical and bottled water industries.

- ▶ VALIDATED 0.2 µm ABSOLUTE RATED MEMBRANE CONFIGURATION
- ▶ HIGH SURFACE AREA MEMBRANE OFFERS EXCELLENT LIFE AND FLUX RATES WHILE PROVIDING ABSOLUTE FILTRATION
- ▶ ABSOLUTE-RATED DUAL LAYER MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ▶ PLEAT DESIGN FOR GREATER SURFACE AREA: LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS
- ▶ 100% THERMALLY BONDED CONSTRUCTION
- ▶ INTEGRITY TESTED
- ▶ HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI AUTOCLAVE AND HOT WATER SANITIZATION CYCLES
- ▶ 316 SS REINFORCED END TREATMENTS
- ▶ ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21 AND ARE BIO-SAFE IN ACCORDANCE WITH USP CLASS VI
- ▶ VALIDATION GUIDE AVAILABLE ON REQUEST

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Mem-Pleat SG and Pur-MAXX SG, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

MPE PRMXE	→	0.2	–	20	→	PP	→	C3	→	V	→	SG	→	MPE0.2-20PPC3VSG
		MICRON RATING		CARTRIDGE LENGTH		PLEAT SUPPORT		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		CARTRIDGE GRADE		

ABSOLUTE RATED RETENTION

0.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS/ CAGE/CORE	PLEAT SUPPORT MATERIAL	REINFORCING RING
Polyethersulfone	Polypropylene	Polypropylene	316 Stainless Steel

SEALS	CONSTRUCTION METHOD
Buna N | Fluorocarbon | EPDM | Silicone	Thermal Bond

OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
MPESG: 2.55" (6.48cm) | PRMXESG: 2.7" (6.87cm)	6.5 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

INTEGRITY TEST VALUES

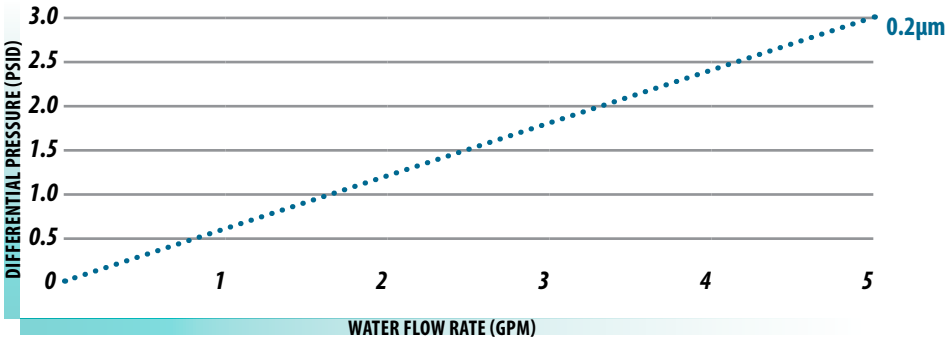
PORE SIZE	BUBBLE POINT	TEST PRESSURE	AIR DIFFUSION
0.2-SG	50 psig	40 psig	≤16mL/min

USP PHYSIOCHEMICAL TESTS FOR PLASTICS

Ultrapure water extracts from multiple lots of cartridges were tested and shown to have values that comply with USP limits

TEST	RESULTS	USP LIMIT
Non volatile residue	<2mg	<15mg
Heavy Metals	<1ppm	<1ppm
Residue on Ignition	<2mg	<5mg
Buffering Capacity	<1mL	<10ml

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

MPE	Mem-Pleat E (2.55")
PRMXE	Pur-MAXX E (2.7")

MICRON RATINGS

0.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene

END CAP CONFIGURATIONS

C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM

CARTRIDGE GRADE

SG	Sterilizing Grade

Endo-MAXX CN

Charged Nylon for Endotoxin Reduction

- ENDOTOXIN REMOVAL
- HIGH PURITY WATER

Strainrite's Endo-Maxx CN was developed for the filtration of fluids that require a high degree of particle and bacterial retention while achieving a two and a half log reduction of endotoxin.

Hydrophilic charged nylon membrane provides excellent flow rates, broad chemical compatibility, low extractability, high mechanical strength, and temperature resistance in a variety of applications for the biopharmaceutical and dialysis processes.

The Endo-Maxx CN meets USP Biological Reactivity Test, in vivo for class VI-121°C plastics. Sterilizable using industry recognized and accepted methods.

- INTEGRITY TESTED ENDOTOXIN REMOVAL FILTER
- ABSOLUTE-RATED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- MAXIMUM PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER ELEMENT
- ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21, PHARMACEUTICAL GRADES ARE BIO-SAFE IN ACCORDANCE WITH USP CLASS VI
- THERMALLY BONDED CONSTRUCTION WITHOUT THE USE OF ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES
- POSITIVE ZETA POTENTIAL FOR REMOVAL OF CHARGED PARTICLES SMALLER THAN THE ABSOLUTE RETENTION RATING OF THE FILTER

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Endo-MAXX CN, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

EDXCN	→	0.1	–	10	→	PP	→	C3	→	S	→	EDXCN0.1-10PPC3S
		MICRON RATING		CARTRIDGE LENGTH		PLEAT SUPPORT		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		

ABSOLUTE RATED RETENTION

0.1, 0.2

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Charged Nylon 6,6 cast on Polyester	Polypropylene	Polypropylene Polyester	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

Thermal Bond

OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
2.7" (6.87cm)	6.8 square feet per 10" equivalent

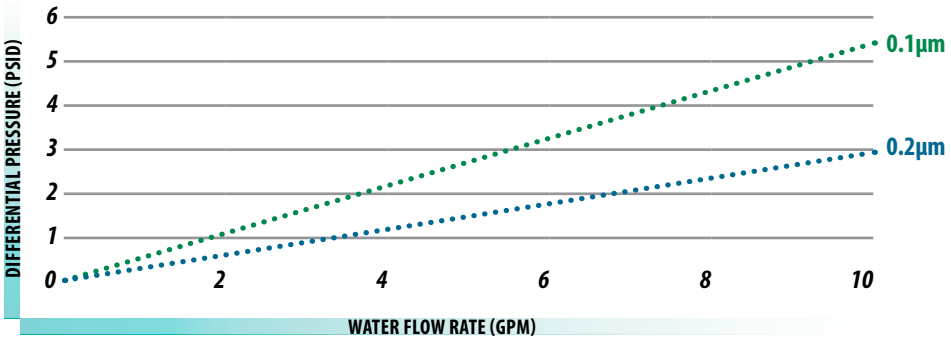
LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

ENDOTOXIN REDUCTION

The Endo-MAXX CN cartridge media has been third party verified
to deliver a >2 log reduction of bacterial endotoxin using the gel-clot characterization method

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

EDXCN	Endo-MAXX CN

MICRON RATINGS

0.1, 0.2

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PE	Polyester
PP	Polypropylene

END CAP CONFIGURATIONS

C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

Ink-Jet IKP

Polypropylene for Ink-jet Inks

- ▶ HIGH VISCOSITY INK-JET INKS
- ▶ PIGMENT BASED INK-JET INKS
- ▶ DYE BASED INK-JET INKS

Strainrite's Ink-Jet IKP filter is another example of Strainrite's continued tradition of providing industry leading filtration solutions. IKP filters offer more surface area and less depth than the dual-density IKS filters to achieve industry leading performance as a final filter for pigment and dye based inkjet inks.

The Ink-Jet IKP filters are manufactured without binders or resins, in our class 10,000 clean room resulting in an extremely clean non-fiber shedding filter.

- ▶ ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION RESULTS
- ▶ LOWER PRESSURE DROPS, WHICH YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ 100% POLYPROPYLENE CONSTRUCTION OFFERS A WIDE RANGE OF CHEMICAL COMPATIBILITY
- ▶ THERMALLY BONDED CONSTRUCTION ENSURES A CLEANER FILTRATE WHILE MINIMIZING EXTRACTABLES

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Ink-Jet IKP, the following vessel types are most commonly used:

SRC—Page 130

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

IKP	0.3	–	10	PP	C1	S	I	IKP0.3-10PPC1SI
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	

RETENTION RATING

0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polypropylene	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

Thermal Bond

OUTSIDE DIAMETER

2.68" (6.81cm)

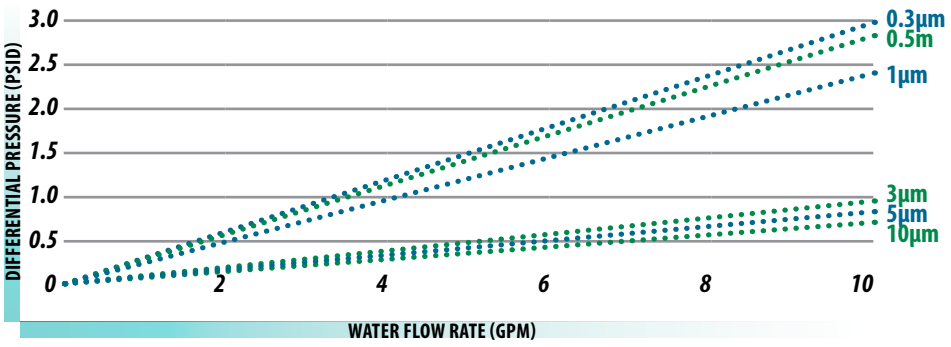
LENGTHS

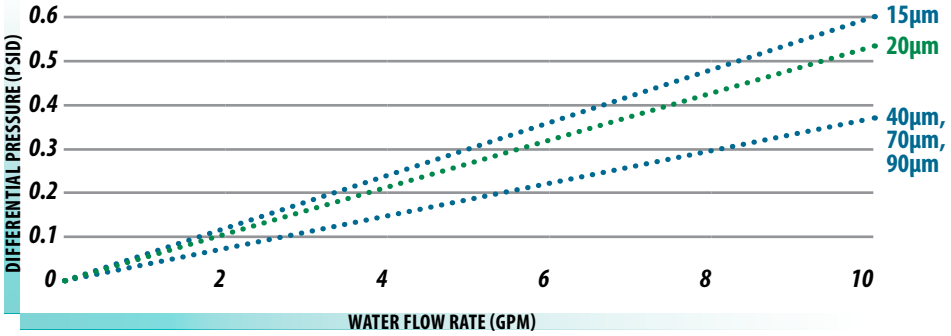
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

EFFICIENCY

IKP0.3 — BETA100 @ 0.3µm
IKP0.5 — BETA100 @ 0.5µm
IKP1 — BETA100 @ 1µm
IKP3 — BETA100 @ 3µm
IKP5 — BETA100 @ 5µm
IKP10 — BETA100 @ 10µm
IKP15 — BETA100 @ 15µm
IKP20 — BETA100 @ 20µm
IKP40 — BETA100 @ 40µm
IKP70 — BETA100 @ 70µm
IKP90 — BETA100 @ 90µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

IKP	Ink-Jet IKP

MICRON RATINGS

0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

I	316 SS Insert

Ink-Jet IKS

Dual Density Polypropylene for Ink-jet Inks

- ▶ HIGH VISCOSITY INK-JET INKS
- ▶ GEL REMOVAL
- ▶ PIGMENT BASED INK-JET INKS
- ▶ DYE BASED INK-JET INKS

Strainrite's Ink-Jet Select IKS filter is another example of Strainrite's continued tradition of providing industry leading filtration solutions. Ink-Jet Select filters feature a graded pore density to maximize filter life and performance. IKS filters incorporate our proprietary melt blown, micro- and nano-fiber technology to achieve industry leading performance for both pigment and dye based ink-jet inks.

The Ink-Jet Select filters are manufactured without binders or resins, in our class 10,000 clean room resulting in an extremely clean non-fiber shedding filter. Due to our utilization of the unique graded pore density depth media this element is outstanding for removing gels, compared to traditional pleated polypropylene filters.

- ▶ ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION RESULTS
- ▶ LOWER PRESSURE DROPS, WHICH YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ 100% POLYPROPYLENE CONSTRUCTION OFFERS A WIDE RANGE OF CHEMICAL COMPATIBILITY
- ▶ GRADED PORE DENSITY PLEAT DESIGN TO OPTIMIZE SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER CARTRIDGE

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Ink-Jet Select IKS, the following vessel types are most commonly used:

SRC—Page 130

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

IKS	0.3	–	10	PP	C1	S	I	IKS0.3-10PPC1SI
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	

RETENTION RATING

0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

TOXICITY

All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polypropylene Micro/Nano-fiber Composite	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

Thermal Bond

OUTSIDE DIAMETER

2.68" (6.81cm)

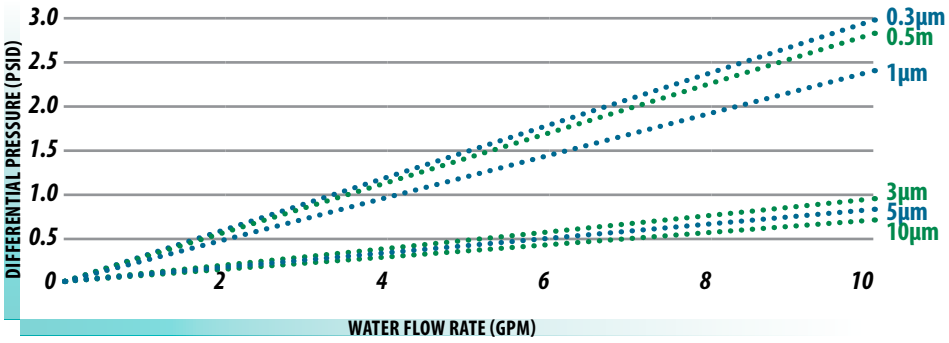
LENGTHS

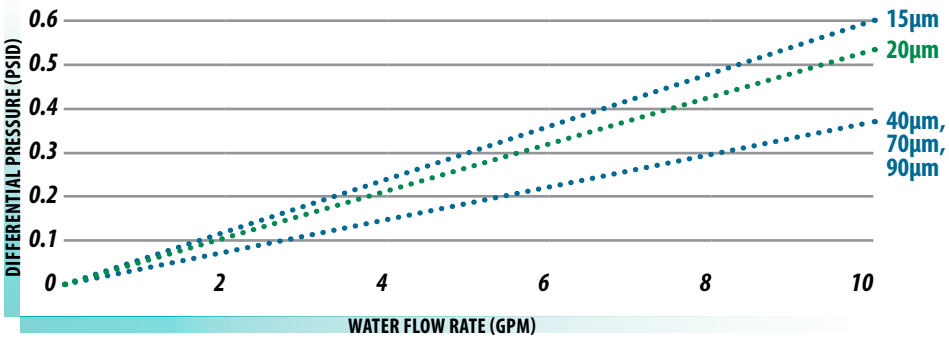
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

EFFICIENCY

IKS0.3 — BETA100 @ 0.3µm
IKS0.5 — BETA100 @ 0.5µm
IKS1 — BETA100 @ 1µm
IKS3 — BETA100 @ 3µm
IKS5 — BETA100 @ 5µm
IKS10 — BETA100 @ 10µm
IKS15 — BETA100 @ 15µm
IKS20 — BETA100 @ 20µm
IKS40 — BETA100 @ 40µm
IKS70 — BETA100 @ 70µm
IKS90 — BETA100 @ 90µm

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

IKS	Ink-Jet Select IKS

MICRON RATINGS

0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

I	316 SS Insert

Ink-Jet IKG

Microglass for Ink-jet Inks

- ► HIGH VISCOSITY INK-JET INKS
- ► GEL REMOVAL
- ► PIGMENT BASED INK-JET INKS
- ► DYE BASED INK-JET INKS

The Ink-Jet IKG filter is another example of Strainrite's continued tradition of providing industry leading filtration solutions.

The Ink-Jet IKG filters are assembled without binders or resins, in our class 10,000 clean room, resulting in an extremely clean non-fiber shedding filter. Due to our utilization of the unique graded pore density depth media this element is outstanding for removing gels, compared to traditional pleated polypropylene filters.

- ► ABSOLUTE-RATED MEDIA PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATION RESULTS
- ► LOWER PRESSURE DROPS, WHICH YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ► THERMALLY BONDED CONSTRUCTION ENSURES A CLEANER FILTRATE WHILE MINIMIZING EXTRACTABLES

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Ink-Jet IKG, the following vessel types are most commonly used:

SRC—Page 130

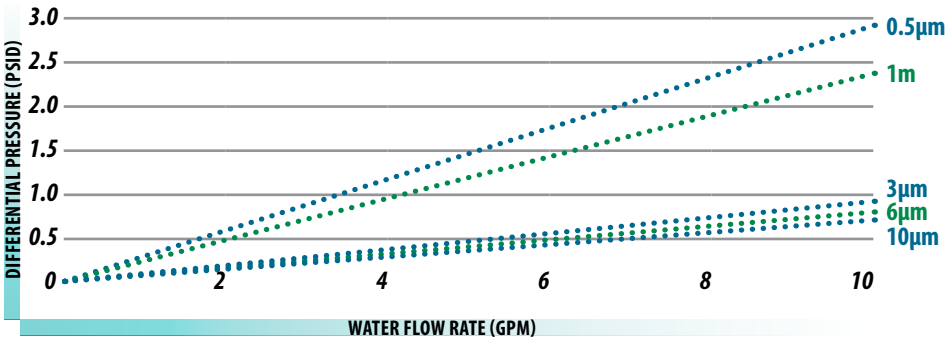
As always, discuss your options with your local sales representative to find the best fit for your application.

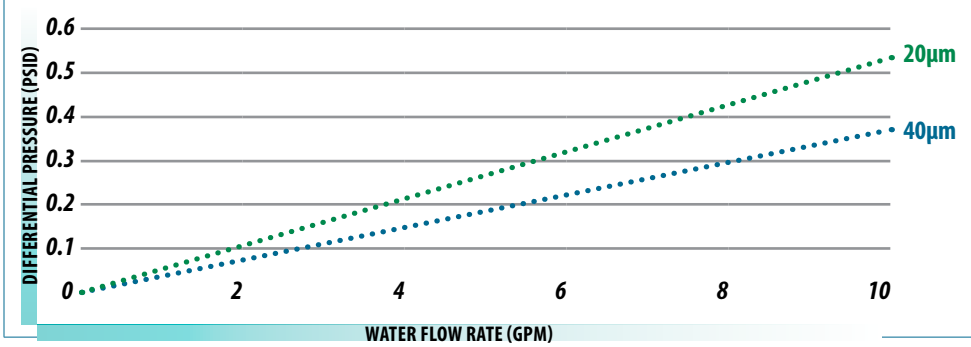
ORDER GUIDE

IKG	1	–	20	PP	C2	B	I	IKG1-20PPC2BI
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	

RETENTION RATING			
0.5, 1, 3, 6, 10, 20, 40			
MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)			
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty Polypropylene		275°F (135°C) Continuous Duty Polyester	
TOXICITY			
All components meet all relevant USP XXII Class VI test for biological safety and FDA requirements for contact with food and beverage per 21CFR177.1520			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton			
FILTER MEDIA	**END CAPS**	**PLEAT SUPPORT MATERIAL**	**CAGE/CORE**
Borosilicate Microglass	Polypropylene Polyester	Polypropylene Polyester	Polypropylene Polyester
SEALS			
Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard			
CONSTRUCTION METHOD			
Thermal Bond			
OUTSIDE DIAMETER			
2.68" (6.81cm)			
LENGTHS			
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			
EFFICIENCY			
IKG0.5 — BETA100 @ 0.5µm IKG1 — BETA100 @1µm	IKG3 — BETA100 @ 3µm IKG6 — BETA100 @ 6µm IKG10 — BETA100 @ 10µm	IKG20 — BETA100 @ 20µm IKG40 — BETA100 @ 40µm	

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

IKG	Ink-Jet IKG

MICRON RATINGS

0.5, 1, 3, 6, 10, 20, 40

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PE	Polyester
PP	Polypropylene

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

I	316 SS Insert
APH	All Polyester Hardware

PES-E

Polyethersulfone For Microelectronics

- ▶ HIGH PURITY CHEMICAL FILTRATION
- ▶ LIQUID CLARIFICATION
- ▶ GENERAL WATER FILTRATION
- ▶ SEMICONDUCTOR
- ▶ ELECTRONICS
- ▶ DEIONIZED WATER SYSTEMS

Strainrite's PES-E was developed for microelectronics industry where a high degree of particle retention and/or constant bacterial barrier for effective sterilization is required.

Hydrophilic asymmetric polyethersulfone membranes ensure excellent flow rates, broad chemical compatibility, low protein binding, low extractability, high mechanical strength, and temperature resistance in a variety of applications in the microelectronics industry. The PES-E is 100% integrity testable and utilizes Strainrite's double rinse process to ensure extremely low extractables. Polyethersulfone offers a broad range of chemical compatibility and temperature performance.

The PES-E meets USP Biological Reactivity Test, in vivo for class VI-121°C plastics. Sterilizable using industry recognized and accepted methods.

- ▶ HIGH SURFACE AREA MEMBRANE OFFERS EXCELLENT LIFE AND FLUX RATES WHILE PROVIDING ABSOLUTE FILTRATION
- ▶ ABSOLUTE-RATED MEMBRANE PROVIDES RELIABLE, CONSISTENT AND REPEATABLE FILTRATE QUALITY
- ▶ LOW PRESSURE DROPS YIELD HIGHER FLOW RATES AND REDUCED PROCESSING TIME
- ▶ NON-FIBER SHEDDING POLYPROPYLENE SUPPORT MATERIALS ELIMINATE FIBER MIGRATION
- ▶ INTEGRITY TESTABLE
- ▶ MAXIMUM PLEAT DESIGN FOR GREATER SURFACE AREA, ENSURING LONGER SERVICE LIFE, FEWER CHANGE OUTS AND REDUCED OPERATING COSTS PER ELEMENT
- ▶ THERMALLY BONDED CONSTRUCTION WITHOUT THE USE OF ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES
- ▶ HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE

NEED A VESSEL FOR YOUR CARTRIDGES?

For the PES-E, the following vessel types are most commonly used:

SRC—PAGE 130

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

PESE	50	–	10	PP	C1	S	E	T	PESE50-10PPC1SET
	MICRON RATING		CARTRIDGE LENGTH	PLEAT SUPPORT	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GRADE	CARTRIDGE OPTIONS	

ABSOLUTE RATED RETENTION (NANOMETERS)

50, 100, 200, 450, 650, 800, 1200

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty Polypropylene

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Cartridge can be sterilized via steam or Autoclave: 20 times at 275°F (135°C)
Cartridge may be sanitized in place with common sanitizing agents, contact factory for chemical compatibility

DI WATER SPECIFICATIONS

All Cartridges are 18 megohm flushed

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton | 40 inch - 9 per carton

FILTER MEDIA	END CAPS	PLEAT SUPPORT MATERIAL	CAGE/CORE
Polyethersulfone	Polypropylene	Polypropylene	Polypropylene

SEALS

Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone | PTFE Foam | PTFE Hard

CONSTRUCTION METHOD

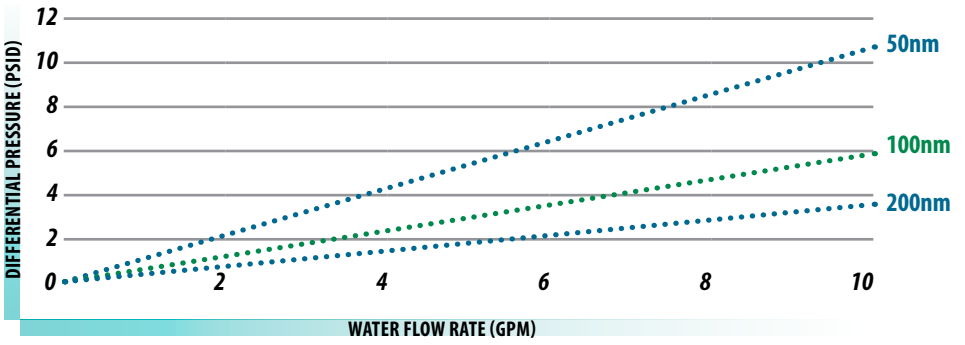
Thermal Bond

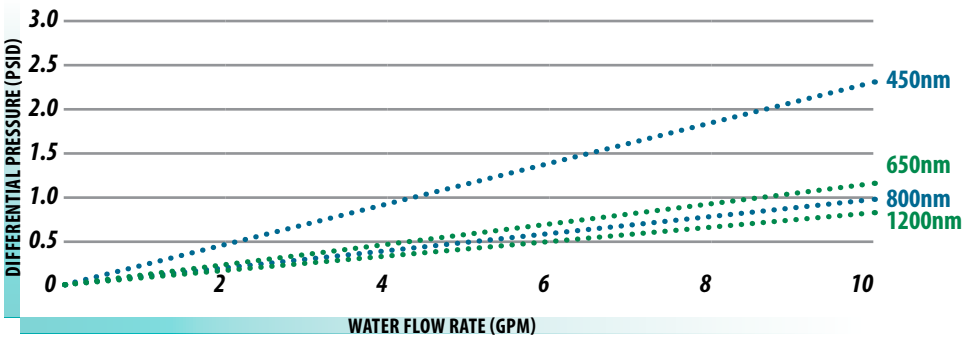
OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
2.7" (6.87cm)	6.8 square feet per 10" equivalent

LENGTHS

5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)

PERFORMANCE CHARACTERISTICS





ORDER OPTIONS

CARTRIDGE

PESE	PES-E

NANOMETER RATINGS

50, 100, 200, 450, 650, 800, 1200

CARTRIDGE LENGTH

5, 10, 20, 30, 40

PLEAT SUPPORT

PP	Polypropylene

END CAP CONFIGURATIONS

C1	Double Open Ends
C2	213/Recessed Cup
C3	Flat/222
C4	Single Open End/Flat
C5	Recessed Cup/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TF	PTFE Foam
TH	PTFE Hard
TV	Encapsulated Fluorocarbon
TS	Encapsulated Silicone

CARTRIDGE GRADE

E	Electronics

CARTRIDGE OPTIONS

I	316 SS Insert
T	Integrity Tested

Vent-MAXX

Double Layer PTFE for Sterilization in Air & Vent Gas Applications

- ▶ FERMENTER INLET AIR
- ▶ STERILE VENTING OF TANKS
- ▶ STERILE PROCESS AIR
- ▶ EXHAUST VENTING

Strainrite's Vent-Maxx gas sterilizing filters set a new standard for PTFE membrane elements. These filters utilize a technologically advanced membrane in our unique pleat construction to deliver unrivalled efficiency, superior strength, and high flow rates.

Vent-Maxx double layer PTFE membrane filters are designed to remove microorganisms, particulate, and moisture in your most demanding air and gas applications. These liquid validated sterilizing grade filters are designed to meet the highest levels of security required in the pharmaceutical, food and beverage, and biopharmaceutical industries.

Vent-Maxx filters conform to USP Class VI – 121oC and 21 CFR Part 177. Strainrite delivers clear solutions to your air and gas filtration applications.

- ▶ PTFE MEMBRANES
- ▶ INHERENTLY HYDROPHOBIC MEDIA
- ▶ 100% INTEGRITY TESTED
- ▶ HIGH SURFACE AREA
- ▶ STERILIZING GRADE IN LIQUIDS
- ▶ VIRUS RETENTIVE IN GASES
- ▶ THERMALLY BONDED CONSTRUCTION
- ▶ WATER INTRUSION TESTABLE
- ▶ QUALITY CONTROL CERTIFICATE WITH EVERY FILTER
- ▶ FDA LISTED MATERIALS PER CFR 21
- ▶ CAN BE STEAM STERILIZED MULTIPLE TIMES IN SITU FOR LONGER FILTER LIFE
- ▶ MANUFACTURED IN CERTIFIED CLEAN ROOMS

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Vent-MAXX, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

VM	–	10	C3	S	2	VM-10C3S2
		CARTRIDGE LENGTH	END CAP CONFIGURATION	GASKET / O-RING MATERIALS	CARTRIDGE GUIDE	

MAXIMUM DIFFERENTIAL PRESSURE

Forward:
75 psid (5.1 bar) @ 75°F (24°C)
40 psid (2.8 bar) @ 180°F (82°C)

Reverse:
50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE

180°F (82°C) Continuous Duty

TOXICITY

Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION

Vent-Maxx cartridges have been validated for bacterial removal in air
at an aerosol bacterial challenge level of Brevundimonas diminuta at 10^7 per cm^2 per ASTM (F 838-05)
Liquid challenge validated as sterilizing grade filter at a
challenge level of Brevundimonas diminuta at 10^7 per cm^2 per ASTM (F 838-05)
Water Intrusion Test (WIT) value of > 60 psi with a WIT not to exceed 75 psi

PACKAGING ECONOMY

Bulk packaging in case quantities to reduce material disposal:
5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton

FILTER MEDIA	END CAPS/ CAGE/CORE	PLEAT SUPPORT MATERIAL	END CAP INSERT
Double Layer PTFE	Polypropylene	Polypropylene	316 Stainless Steel

SEALS	CONSTRUCTION METHOD
Fluorocarbon | Silicone	Thermal Bond

OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
2.7" (6.87cm)	7.5 square feet per 10" equivalent

LENGTHS

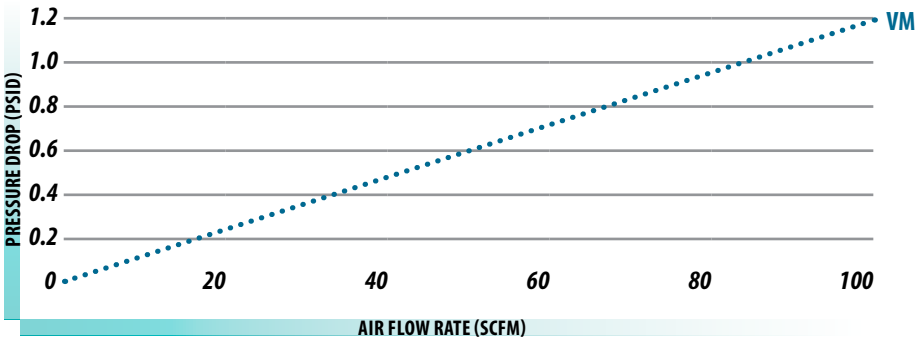
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm)

INTEGRITY TEST VALUES

All cartridges are integrity tested prior to shipment using pressure decay test method. Values below are for cartridges wetted with 100% IPA.

CARTRIDGE	TEST PRESSURE	DIFFUSIONAL FLOW
10"	14 psi	25mL/min
20"	14 psi	50mL/min
30"	14 psi	75mL/min

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

VM	Vent-MAXX

CARTRIDGE LENGTH

5, 10, 20, 30

END CAP CONFIGURATIONS

C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
V	Fluorocarbon

CARTRIDGE GRADE

2	Pharmaceutical

Vent-Rite

Pleated PTFE for Sterilization in Air & Vent Gas Applications

- ▶ FERMENTER INLET AIR
- ▶ STERILE VENTING OF TANKS
- ▶ STERILE PROCESS AIR
- ▶ EXHAUST VENTING

Strainrite's Vent-Rite hydrophobic, sterilizing PTFE membrane filters provide the highest levels of security in demanding air and gas applications. These filters are designed to remove microorganisms, particulate and moisture. Strainrite's optimized design ensures exceptional gas flow rate and throughput for the biopharmaceutical, food and beverage markets.

Vent-Rite filters are designed for applications that require particulate security to 0.003µm in gas and air and 0.2µm in liquids. Strainrite delivers value and security with these aerosol validated cartridges.

Vent-Rite meets USP Biological Reactivity Test Criteria, is non-fiber-releasing, and manufactured to withstand multiple sterilization cycles, when using industry recognized and accepted methods.

- ▶ PTFE MEMBRANES
- ▶ INHERENTLY HYDROPHOBIC MEDIA
- ▶ 100% INTEGRITY TESTED
- ▶ HIGH SURFACE AREA
- ▶ AEROSOL VALIDATED
- ▶ VIRUS RETENTIVE IN GASES
- ▶ THERMALLY BONDED CONSTRUCTION
- ▶ WATER INTRUSION TESTABLE
- ▶ QUALITY CONTROL CERTIFICATE WITH EVERY FILTER
- ▶ FDA LISTED MATERIALS PER CFR 21
- ▶ CAN BE STEAM STERILIZED MULTIPLE TIMES IN SITU FOR LONGER FILTER LIFE
- ▶ MANUFACTURED IN CERTIFIED CLEAN ROOMS

NEED A VESSEL FOR YOUR CARTRIDGES?

For the Vent-Rite, the following vessel types are most commonly used:

SRCT—PAGE 128

As always, discuss your options with your local sales representative to find the best fit for your application.

ORDER GUIDE

VR	–	10	→	C8	→	S	→	2	→	VR-10C8S2
		CARTRIDGE LENGTH		END CAP CONFIGURATION		GASKET / O-RING MATERIALS		CARTRIDGE GUIDE		

MAXIMUM DIFFERENTIAL PRESSURE	
Forward: 75 psid (5.1 bar) @ 75°F (24°C) 40 psid (2.8 bar) @ 180°F (82°C)	Reverse: 50 psid (3.4 bar) @ 75°F (24°C)

MAXIMUM OPERATING TEMPERATURE
180°F (82°C) Continuous Duty

TOXICITY
Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact

STERILIZATION
Vent-Maxx cartridges have been validated for bacterial removal in air at an aerosol bacterial challenge level of Brevundimonas diminuta at 10^7 per cm^2 per ASTM (F 838-05)

PACKAGING ECONOMY
Bulk packaging in case quantities to reduce material disposal: 5 inch - 48 per carton | 10 inch - 24 per carton | 20 inch - 12 per carton | 30 inch - 12 per carton

FILTER MEDIA	END CAPS/ CAGE/CORE	PLEAT SUPPORT MATERIAL	END CAP INSERT
PTFE	Polypropylene	Polypropylene	316 Stainless Steel

SEALS	CONSTRUCTION METHOD
Fluorocarbon | Silicone	Thermal Bond

OUTSIDE DIAMETER	APPROXIMATE SURFACE AREA
2.7" (6.87cm)	8.5 square feet per 10" equivalent

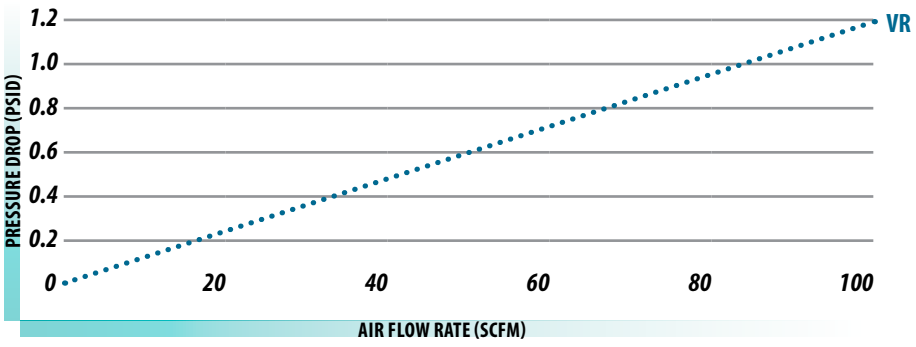
LENGTHS
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm)

INTEGRITY TEST VALUES

All cartridges are integrity tested prior to shipment using pressure decay test method. Values below are for cartridges wetted with 100% IPA.

CARTRIDGE	TEST PRESSURE	DIFFUSIONAL FLOW
10"	14 psi	100mL/min
20"	14 psi	200mL/min
30"	14 psi	300mL/min

PERFORMANCE CHARACTERISTICS



ORDER OPTIONS

CARTRIDGE

VR	Vent-Rite

CARTRIDGE LENGTH

5, 10, 20, 30

END CAP CONFIGURATIONS

C3	Flat/222
C6	Flat/226
C7	Fin/226
C8	Fin/222

GASKET / O-RING MATERIAL

S	Silicone
V	Fluorocarbon

CARTRIDGE GRADE

2	Pharmaceutical

MAXX-Cap

Single-Use / Multi-Use Ultrapure Polypropylene Capsules

- ULTRAPURE CHEMICAL
- BIO-PHARMACEUTICAL
- HIGH VALUE PRODUCTS
- BIO-TECHNOLOGY
- OPHTHALMICS
- FOOD AND BEVERAGE PROCESSING INKS

The Strainrite MAXX-Cap capsule is made of ultrapure polypropylene using FDA compliant materials. The MAXX-Cap was designed for single-use and multi-use applications. Strainrite's depth filters and our complete line of membranes can be installed in our proprietary capsule design.

D1/01 - Sanitary

D2/02- 1/2" Female NPT

D3/03 - 1/4" Hose Barb

D4/04 - 1/2" Hose Barb

D5/05 - Graduated Hose Barb

Our proprietary design utilizes an inlet and outlet vent for confident start up and safe efficient processing. Strainrite offers a wide array of materials from the innovative SG to our charged modified CN as well as absolute and nominal media like polypropylene and microglass. Strainrite capsules will also accept our sterile air and vent product line, the Vent Maxx and Vent Rite.

MAXX-Cap is available in sizes from 5" to 40". Strainrite offers the advantages of a capsule with low internal void space, that reduces valuable product loss by reducing your process costs. All Strainrite capsules are adaptable for use with sanitary fittings that can be autoclaved. Strainrite MAXX-Cap capsules may be integrated into existing capsule applications.

Made of 100% polypropylene, Strainrite's capsule design incorporates thermal bonding. Thermal bonding provides an integral fit that requires no glues, binders, surfactants or adhesives. This design ensures low extractable filtrate when incorporated with our low extractable 100% clean room manufactured cartridges.

- RELIABLE NON-FIBER RELEASING MATERIALS
- NO ADDITIVES OR GLUE
- ALL MATERIALS OF CONSTRUCTION ARE FDA COMPLIANT WITH CFR TITLE 21
- THERMALLY BONDED CONSTRUCTION WITHOUT THE USE OF ADHESIVES OR BINDERS, RESULTING IN LOWER EXTRACTABLES
- HIGH STRENGTH DESIGN ALLOWING FOR EXTENDED USE AND MULTI-AUTOCLAVE CYCLES

ORDER GUIDE

MC	–	P	→	5	D1	O1	PMX	1	2	E
		CAPSULE CONSTRUCTION		NOMINAL LENGTHI	INLET DESIGN	OUTLET DESIGN	CARTRDIGE STYLE	MICRON RATING	CARTRIDGE GUIDE	CARTRIDGE O-RING

MC-P5D1O1PMX12E

MAXIMUM DIFFERENTIAL PRESSURE			
Forward: 70 psi @ 70°F (21.1°C)			
MAXIMUM OPERATING TEMPERATURE			
180°F (82°C) Continuous Duty			
TOXICITY			
Cartridge materials meet USP Class VI and CFR 21 for food and beverage contact			
STERILIZATION			
Autoclave: May be autoclaved 3 times for 60 minutes. Not in line steam sterilizable.			
PACKAGING ECONOMY			
Bulk packaging in case quantities to reduce material disposal: 5 inch - Individually Boxed - 6 case / 9 case quantity 10 inch - Individually Boxed - 6 case / 12 case quantity 20 inch - Individually Boxed - 6 case quantity 30 inch - Individually Boxed - 6 case quantity 40 inch - Individually Boxed			
MEMBRANE MEDIA	**PLEATED DEPTH MEDIA**	**PLEAT SUPPORT MATERIAL**	**CAPSULE HARDWARE**
Polyethersulfone Polysulfone Nylon	Borosilicate Microglass Polypropylene Microfiber	Polypropylene Polyester	Polypropylene
END CAPS	**CARTRIDGE SEALS**		
Polypropylene	Buna N | Fluorocarbon | EPDM | Silicone | FEP Encapsulated Fluorocarbon | FEP Encapsulated Silicone		
CAGE/CORE	**CAPSULE VENT SEALS**		
Polypropylene	Buna N | Fluorocarbon | EPDM | Silicone | Perfluorocarbon (available on request)		
OUTSIDE DIAMETER		**CONSTRUCTION METHOD**	
3.5" (8.89cm)		Thermal Bond	
NOMINAL LENGTHS			
5 inch (12.7 cm) | 10 inch (25.4 cm) | 20 inch (50.8 cm) | 30 inch (76.2 cm) | 40 inch (102 cm)			

CARTRIDGE STYLE	MICRON RATING	CARTRIDGE GRADE					
		- General	1 FDA Grade	2 Pharma.	5 Water Grade	SG Sterilizing	E Electronics
PRMXE (Pur-MAXX E)	0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2		X	X	X		
PRMXS (Pur-MAXX S)	0.03, 0.05, 0.10, 0.2, 0.45, 0.65	X	X		X		
PRMXN (Pur-MAXX N)	0.1, 0.2, 0.45, 0.65, 0.8, 1.2	X	X	X	X		
PRMXCN (Pur-MAXX CN)	0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2	X	X	X	X		
PRMXT (Pur-MAXX T)	0.1, 0.2	X		X			
PRMXCN (Pur-MAXX C)	0.1, 0.2, 0.45, 0.65, 0.8, 1.2	X	X	X			
DMX (Duo-MAXX)	*Many options available; please contact customer service or inquire with a sales representative to learn more*						
PMX (Poly-MAXX)	1, 1.5, 2.5, 5, 10, 15, 20, 40, 70	X	X	X			
PMXG (Poly-MAXX G)	0.25, 0.5, 1, 2.5, 5, 8, 12, 20, 30, 50	X	X	X			
SPMX (Poly-MAXX Select)	1, 1.5, 3, 5, 10, 15, 20, 40, 70, 90	X	X	X			
FMX (Fiber-MAXX)	0.8, 0.9*, 1, 2*, 3, 5, 10, 15* **Not Available in FDA Grade*	X	X	X			
FMXG (Fiber-MAXX G)	0.2, 0.45, 0.65, 1, 5, 10	X	X	X			
CPP (Continuous Pleat)	0.2, 0.5, 1, 2.5, 5, 10, 15, 20, 40, 70	X			X		
HSLP (Continuous High Solids Loading)	1, 2.5, 5, 10, 15, 20, 25, 35, 70, 90, 120	X	X				
CFP (Continuous Fiber Pleat)	0.25, 0.45, 0.65, 1, 5, 10	X	X				
BVM (Bev-MAXX)	0.2, 0.45, 0.65	X					
BVR (Bev-Rite)	0.2, 0.45, 0.65, 0.8	X					
GR (Guard-Rite)	561, 562, 563, 568		X				
VNXE (Vino-MAXX E)	0.45, 0.65	X					
TR (Trap-Rite)	1, 5, 10	X	X				
PRMXE (Pur-MAXX E SG)	0.2					X	
EDXCN (Endo-MAXX CN)	0.1, 0.2	X					
IKP (Ink Jet IKP)	0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90	X					
IKS (Ink Jet Select)	0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90	X					
IKG (Ink Jet IKG)	0.5, 1, 3, 6, 10, 20, 40	X					
PESE (PES-E)	50, 100, 200, 450, 650, 800, 1200 *Nanometer ratings*						X
VM (Vent-MAXX)	-			X			
VR (Vent-Rite)	-			X			

ORDER OPTIONS

CAPSULE

MC	MAXX-Cap

NOMINAL LENGTHS

5, 10, 20, 30, 40

INLET DESIGN

D1	1", 1.5" sanitary
D2	0.5" female NPT
D3	0.25" hose barb
D4	0.5" hose barb
D5	grad. hose barb

OUTLET DESIGN

O1	1", 1.5" sanitary
O2	0.5" female NPT
O3	0.25" hose barb
O4	0.5" hose barb
O5	grad. hose barb

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CARTRIDGE STYLE
MICRON RATING
CARTRIDGE GUIDE

See Inset Chart
For Available Options

««««««««« «««««««««

CARTRIDGE O-RING

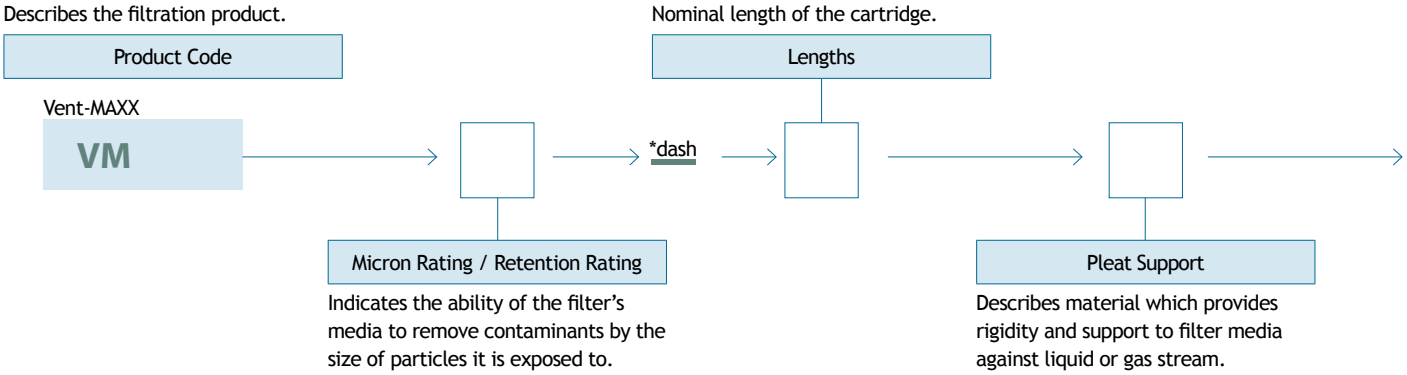
S	Silicone
B	Buna N
V	Fluorocarbon
E	EPDM
TV	Encapsulated Fluorocarbon
K	Perfluorocarbon

Code | Cartridge Style	Micron Rating	Length
MPE (Mem-Pleat E) / **PRMXE** (Pur-MAXX E)	0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2	5, 10, 20, 30, 40
MPS (Mem-Pleat S) / **PRMXS** (Pur-MAXX S)	0.03, 0.05, 0.10, 0.2, 0.45, 0.65	5, 10, 20, 30, 40
MPN (Mem-Pleat N) / **PRMXN** (Pur-MAXX N)	0.1, 0.2, 0.45, 0.65, 0.8, 1.2	5, 10, 20, 30, 40
MPCN (Mem-Pleat CN) / **PRMXCN** (Pur-MAXX CN)	0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2	5, 10, 20, 30, 40
MPT (Mem-Pleat T) / **PRMXT** (Pur-MAXX T)	0.1, 0.2	5, 10, 20, 30, 40
MPC (Mem-Pleat C) / **PRMXCN** (Pur-MAXX C)	0.1, 0.2, 0.45, 0.65, 0.8, 1.2	5, 10, 20, 30, 40
PP (Pur-Pleat) / **PMX** (Poly-MAXX)	1, 1.5, 2.5, 5, 10, 15, 20, 40, 70	5, 10, 20, 30, 40
PPG (Pur-Pleat G) / **PMXG** (Poly-MAXX G)	0.25, 0.5, 1, 2.5, 5, 8, 12, 20, 30, 50	5, 10, 20, 30, 40
SPP (Pur-Pleat Select) / **SPMX** (Poly-MAXX Select)	1, 1.5, 3, 5, 10, 15, 20, 40, 70, 90	5, 10, 20, 30, 40
GP (Glass-Pleat) / **FMX** (Fiber-MAXX)	0.8, 0.9*, 1, 2*, 3, 5, 10, 15* **Not Available in FDA Grade*	5, 10, 20, 30, 40
GPG (Glass-Pleat G) / **FMXG** (Fiber-MAXX G)	0.2, 0.45, 0.65, 1, 5, 10	5, 10, 20, 30, 40
CPP (Continuous Pleat)	0.2, 0.5, 1, 2.5, 5, 10, 15, 20, 40, 70	10, 20, 30, 40
HSLP (Continuous Pleat High Solids Loading)	1, 2.5, 5, 10, 15, 20, 25, 35, 70, 90, 120	10, 20, 30, 40
CFP (Continuous Fiber Pleat)	0.25, 0.45, 0.65, 1, 5, 10	10, 20, 30, 40
GPVS (Glass Pleat Value Series)	0.25, 0.45, 1, 3, 5, 20	10, 20, 30, 40
CRB (CRB-Pleat)	1, 5, 10, 25, 50, 75, 100, 200	9.75, 10, 19.5, 20, 29.25, 29.5, 30, 39, 40
BVM (Bev-MAXX)	0.2, 0.45, 0.65	5, 10, 20, 30, 40
BVR (Bev-Rite)	0.2, 0.45, 0.65, 0.8	5, 10, 20, 30, 40
GR (Guard-Rite)	561, 562, 563, 568	5, 10, 20, 30, 40
VNXE (Vino-MAXX E)	0.45, 0.65	5, 10, 20, 30, 40
TR (Trap-Rite)	1, 5, 10	5, 10, 20, 30, 40
APC (Aqua-Pro Cartridge)	CB	5, 10, 20, 30, 40
MPE (Mem-Pleat E SG) / **PRMXE** (Pur-MAXX E SG)	0.2	5, 10, 20, 30, 40
EDXCN (Endo-MAXX CN)	0.1, 0.2	5, 10, 20, 30, 40
IKP (Ink Jet IKP)	0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90	5, 10, 20, 30, 40
IKS (Ink Jet Select)	0.3, 0.5, 1, 3, 5, 10, 15, 20, 40, 70, 90	5, 10, 20, 30, 40
IKG (Ink Jet IKG)	0.5, 1, 3, 6, 10, 20, 40	5, 10, 20, 30, 40
PESE (PES-E)	50, 100, 200, 450, 650, 800, 1200 *Nanometer ratings*	5, 10, 20, 30, 40
VM (Vent-MAXX)	N/A	5, 10, 20, 30
VR (Vent-Rite)	N/A	5, 10, 20, 30

GF - Borosilicate Microglass
MF - Polypropylene Microfiber

Code | Cartridge Style	Code | Prefilter	Micron Rating	Code | Membrane
DP (Duo-Pleat) / **DMX** (Duo-MAXX) *Polyethersulfone Membrane*	GF, MF	0.04, 0.1, 0.2, 0.45, 0.65, 0.8, 1.2	**E** (Polyethersulfone)
DP (Duo-Pleat) / **DMX** (Duo-MAXX) *Nylon Membrane*	GF, MF	0.1, 0.2, 0.45, 0.65, 0.8, 1.2	**N** (Nylon)
DP (Duo-Pleat) / **DMX** (Duo-MAXX) *Polypropylene Membrane*	GF, MF	0.03, 0.05, 0.1, 0.2, 0.45, 0.65	**P** (Polypropylene)
DP (Duo-Pleat) / **DMX** (Duo-MAXX) *Cellulose Acetate Membrane*	GF, MF	0.1, 0.2, 0.45, 0.65, 0.8, 1.2	**C** (Cellulose Acetate)

Part Number Assembly



Cartridge Ordering Guide - Quick Glance

Pleat Support	End Cap	Gasket/O-Ring Material	Cartridge Grade	Options
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2, 5	I, DIF, APH, SP
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 5	I, DIF, SP
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2, 5	I, DIF, APH, SP
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2, 5	I, DIF, APH, SP
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 2	I, DIF, SP
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2	I, DIF, APH, SP
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2	I, DIF , SP
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2	I, DIF , SP
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2	I, DIF
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2	I, DIF, APH , SP
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1, 2	I, DIF, APH , SP
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 5	I, MC
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1	I, MC
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1	I, MC
PE	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	PE
N/A	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	MC, APH
PP	C3, C6, C7, C8	S, E	N/A	N/A
PP	C1, C3, C6, C7, C8	S, E	N/A	N/A
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	1	DIF
PP	C3, C6, C7, C8	S, E	N/A	N/A
PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	–, 1	I, MC
N/A	C3, C6, C7, C8	S, E	N/A	N/A
PP	C3, C6, C7, C8	S, B, V, E	SG	N/A
PE, PP	C3, C6, C7, C8	S, E	N/A	N/A
PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I
PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I
PE, PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I, APH
PP	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	E	I, T
N/A	C3, C6, C7, C8	S, V	2	N/A
N/A	C3, C6, C7, C8	S, V	2	N/A

PE - Polyester
PP - Polypropylene

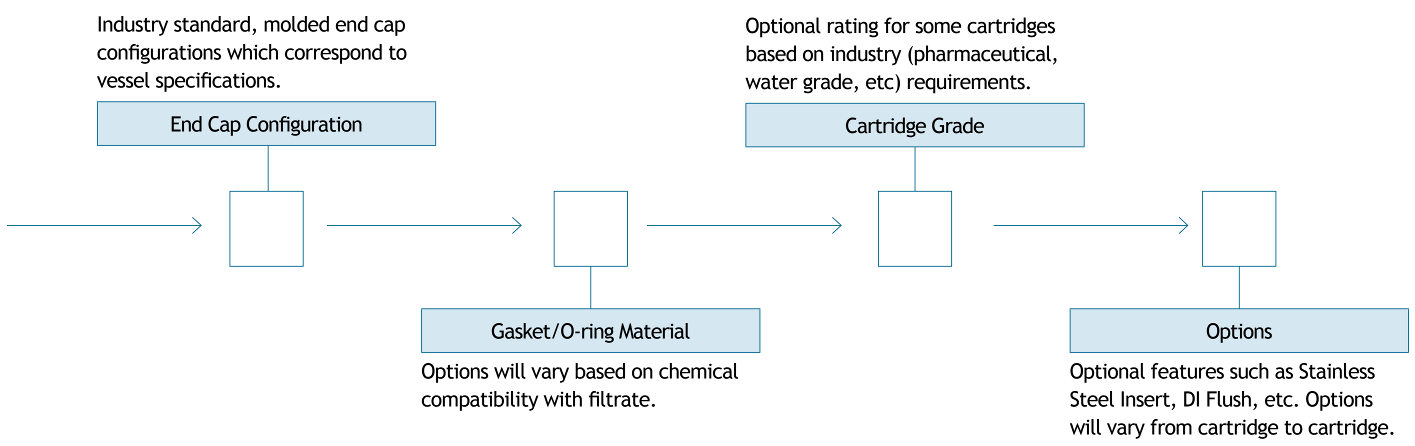
C1 - Double Open Ends
C2 - 213/Recessed Cup
C3 - Flat/222
C4 - Single Open End/Flat
C5 - Recessed Cup/222
C6 - Flat/226
C7 - Fin/226
C8 - Fin/222

S - Silicone
B - Buna N
V - Fluorocarbon
E - EPDM
TF - PTFE Foam
TH - PTFE Hard
TV - Encapsulated Fluoro.
TS - Encapsulated Silicone

– - General
1 - FDA Grade
2 - Pharmaceutical
5 - Water
E - Electronic
SG - Sterilizing Grade

I - 316 Stainless Steel Insert
DIF - DI Flush
APH - All Polyester Hardware
MC - Molded Cage
PE - Polyester Cage/Core/End Caps
T - Integrity Tested

Pleat	Length	End Cap	Gasket/O-Ring Material	Cartridge Grade	Options
PE, PP	5, 10, 20, 30, 40	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I, DIF
PE, PP	5, 10, 20, 30, 40	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I, DIF
PE, PP	5, 10, 20, 30, 40	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I, DIF
PE, PP	5, 10, 20, 30, 40	C1, C2, C3, C4, C5, C6, C7, C8	S, B, V, E, TF, TH, TV, TS	N/A	I, DIF



End Cap Configurations

Code 1 (C1)
Double Open Ends

Code 2 (C2)
213/Recessed Cup

Code 3 (C3)
Flat/222

Code 4 (C4)
Single Open End/Flat Closed End

Code 5 (C5)
Recessed Cup/222

Code 6 (C6)
Flat/226

Code 7 (C7)
Fin/226

Code 8 (C8)
Fin/222