



Factory

15000 square meter building is LEED Gold level certified.

No. 31, Dapumeiyuanqu 2nd Rd., Dalin Township, Chiayi County 62255, Taiwan

TEL: +886-5-262-3000 FAX: +886-5-262-1111

- Taiwan Grace International Corp established at 2000, specialized in Liquid Filtration.
- ISO 9001:2015 certificated.
- CE certification for Stainless Steel Housings.
- FDA certificated Filter Media.
- NSF/ANSI 42 certified melt blown filter.
- Partnering with customers over 60 countries.
- Focus on PCB, TFT-LCD, Semiconductor, Petrochemical, Pharmaceutical, Food and Beverage, Water Treatment, and Household Water Purification Industry.
- Intelligent production lines will be launched in 2023. Combine automation and intelligent process management to improve quality, efficiency and manufacture high-end filter cartridges.



Headquarter

5F, No. 16-2, Sec. 2, Jhongyang S. Rd., Beitou

District 11270, Taipei, Taiwan

TEL: +886-2-2898-1518 FAX: +886-2-2898-1517

E-Mail: info@taiwangrace.com.tw



China

East China: No. 360, Song Jia Gang Rd., Zhou Sh Town, Kun Shan City, Jiang Su Province, China South China: Room 104, No.17, 3rd St., Fengyan Garden, Phoenix-city Community, Yongning Sub-disctrict, Zengcheng District, Guangzhou, China

TEL: +86-512-5512-2200 FAX: +86-512-5512-2201

E-Mail: grace@gracefilter.com

Doing business in more than 70 countries worldwide



30 patents in 5 countries



























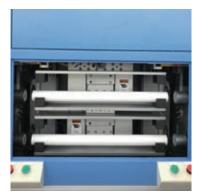








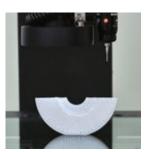


















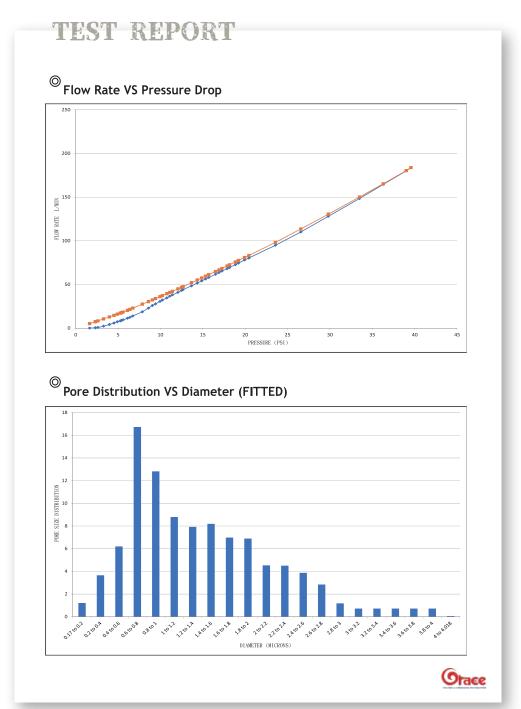






Capillary Flow Porometer

- Flow Rate vs Pressure Drop
- Pore Distribution vs Diamenter
- Pore Size Range: 1nm ~ 1000μm



Particle Counter

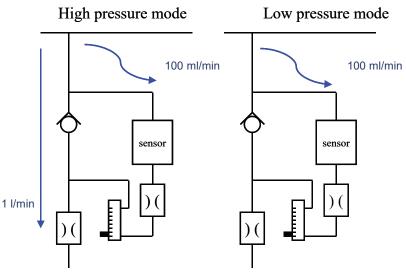
- Compatible with a wide range of measurement of various particle sizes and types
- Allowable Sample type: Ultra-pure water \ Chemicals
- Particle Diameter Range: 100μm ~ 30nm











Scanning Electron Microscope & Energy Dispersive Spectroscopy

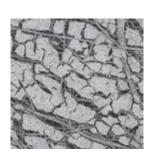


TEST REPORT **EDS** Analysis ■ Surface of Inflow - 1 **a** 0 00 100.00 100.00 Line Type 0.35 0.15 Line Type 65.93 22.28 6.24 2.71 0.77 0.60 1.11 0.36 100.00 19.60 1.57 0.60 0.35 0.30 0.19 0.16 100.00 Orace





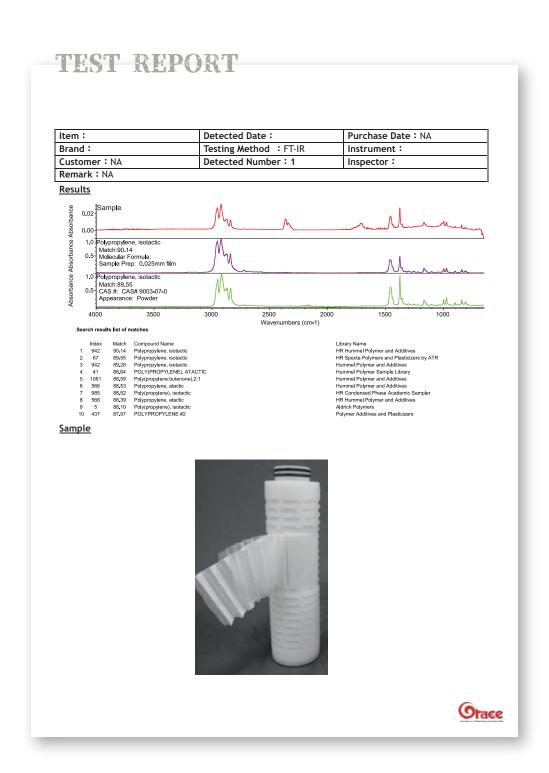






FT-IR Spectrometer

- Material identification and quantification of constituents in a sample
- The Library contains one hundred thousand spectra for use



Integrity/Diffusion Test



TEST REPORT

Filter Integrity Test

Item	PES 0.2μm	Testing Method	Bubble Point Test Diffusion Test	Instrument
Brand	N/A	Detected Date		Inspector

* Sartocheck 4plus

* Unit no.: 0032106286 * Prog. no. : 4 * Diffusion test

Date: 2021.06.29 Time: 9:37 User :00000

210629_0937_04BPT321062861.s4r

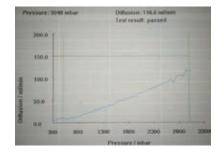
Data log:

:Taiwan grace :Chiayi Company Building Department :QA ${\tt Manufact. \ site \ : \dots \dots ...} {\tt Taiwan}$ Product :PES 0.2um Product lot :ZP210612003 Filter :10" Filter lot :20210612 Filter line :10" Housing :SUS304 Housing Wetting medium :DIW Test gas :CDA Water quality :Andy Jiang Comment 1 Comment 2 Comment 3



Bubble Point Test

Test pressure : ...3049 mbar
Stabil. time :3 min
Test time :5 min
Max. diffusion : ..116.6 ml/min
Net volume : ...AUTO
Test results : ...Passed



Diffusion Test

Τ

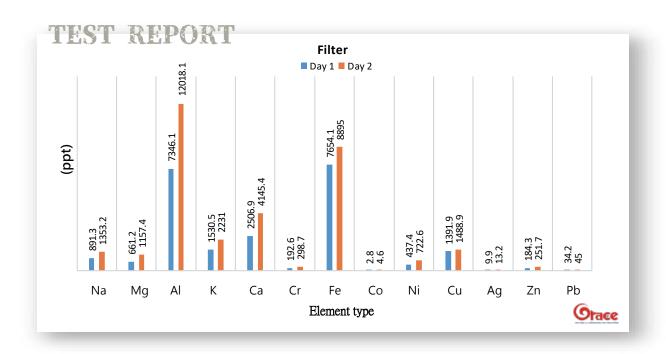
100 + 80 + 60 + 40 + 20 +					
499		1499	24	199	
1000 1500 2000 2500	mbar mbar mbar mbar mbar		11.4 18.8 26.5 34.5	ml/min ml/min ml/min ml/min ml/min ml/min	

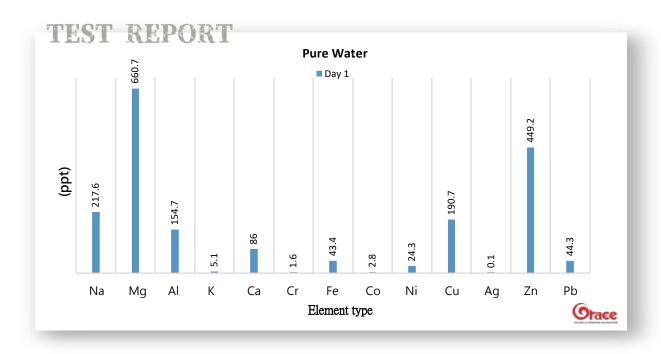




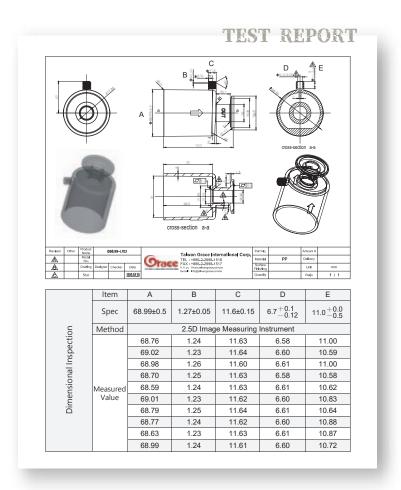
ICP-MS

Range: ptt = parts per trillion





2.5D Image Measuring Instrument





XRF Analyzer

- Determine the elemental composition of metallic materials
- Fast and precise analysis

ALTER LOCAL	32 TI	TOP	22 100
	BLA BLA	PER N	100
100	N. P. H. L.	1 N	3.70

Composition	Standard (%) Composition	Result (%)	Error (±)	Remark
С	≦0.08	0	0	
Si	≦1.00	0	0	
Mn	≦2.00	1.57	0.24	
Р	≦0.045	0	0	
S	≦0.03	0	0	
N	≦0.11	0	0	
Cr	16.00-18.50	16.93	0.30	
Ni	10.00-14.00	9.85	0.38	
Мо	2.00-3.00	2.13	0.09	
Fe	-	68.66	0.54	
Cu	-	0.252	0.112	
	cting Result	SUS316	-	







Flow Rate and Differential Pressure Measurement

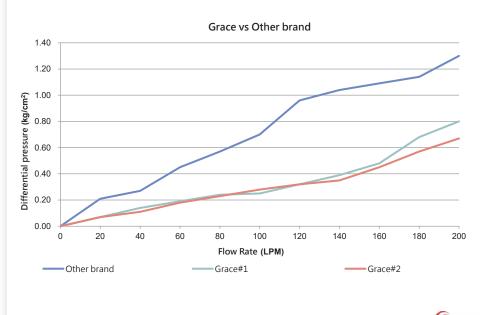
Flow Rate Range: 20 ~ 1700LPM

Pressure Range: 1 ~ 4kg/cm²

TEST REPORT

■ Comparison Sheet of Flow Rate and Differential Pressure Measurement

Sample	Other brand		Grace #1			Grace #2			
Flow Rate	Before	After	Diferrential Pressure	Before	After	Diferrential Pressure	Before	After	Diferrential Pressure
LPM	kg/cm²	kg/cm²	kg/cm²	kg/cm²	kg/cm²	kg/cm²	kg/cm²	kg/cm²	kg/cm²
0	0.26	0.26	0.00	0.26	0.26	0.00	0.25	0.25	0.00
20	0.47	0.26	0.21	0.33	0.26	0.07	0.33	0.26	0.07
40	0.54	0.27	0.27	0.41	0.27	0.14	0.38	0.27	0.11
60	0.73	0.28	0.45	0.47	0.28	0.19	0.46	0.28	0.18
80	0.85	0.28	0.57	0.53	0.29	0.24	0.51	0.28	0.23
100	1.00	0.30	0.70	0.55	0.30	0.25	0.58	0.30	0.28
120	1.29	0.33	0.96	0.64	0.32	0.32	0.63	0.31	0.32
140	1.39	0.35	1.04	0.72	0.33	0.39	0.68	0.33	0.35
160	1.44	0.35	1.09	0.85	0.37	0.48	0.8	0.35	0.45
180	1.51	0.37	1.14	1.1	0.42	0.68	0.97	0.4	0.57
200	1.71	0.41	1.30	1.25	0.45	0.80	1.09	0.42	0.67





Membrane Pleated Filter Cartridges

 US imported support layer, could support the main filtration media efficiently

Will not be influenced by external factors such as pressure & pressure difference, which will cause uneven use of the filtration area, unstable flow, short life and trapping

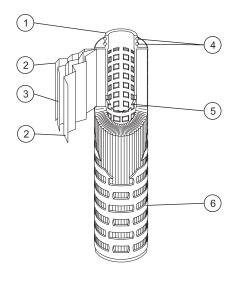
impurities

No fiber release, In compliance with FDA 21 CFR regulation

- All plastic components are in accordance with FDA 21 CFR regulation
- Compliant with EU RoHS regulation
- Class 1,000 & Class 10,000 Clean Room Production



Length	5, 10, 20, 30, 40, 50, 60, 70 inch
Outside Diameter	Ø65mm, Ø69mm, Ø83mm
End Cap	DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin
Gasket/O-ring	Silicone, EPDM, Viton, Teflon Encapsulated Viton, Teflon
Applications	RO/DI Process, Ink, Etchants, Developers, Chemicals, Cosmetics, Medicine Filtration, Process Gases, Food & Beverage



No.	Description
1	End Caps
2	Support Layer
3	Main Filter
4	O - ring
5	Core
6	Cage











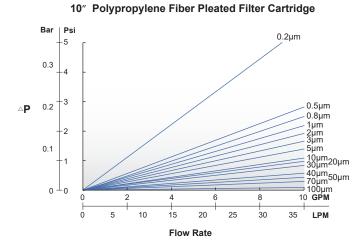
2-222 Flat

2-226 Flat

2-226 Fin

*** POLYPROPYLENE**

- Nano Microfiber Filter media
- With uniform pore size distribution, which can maintain low pressure difference and stable flow for a long time, and extend the service life.
- Support material and main filter material are specially processed to ensure no fiber release
- Non-Toxic Test passed
- Endotoxin Test passed
- USP Oxidizable Substances Test passed

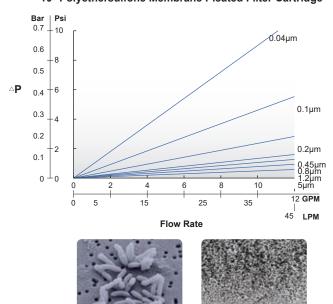


Filter Media	Polypropylene
Micron Rating	0.2, 0.5, 0.8, 1, 2, 3, 5, 10, 20, 30, 40, 50, 70, 100 μm
Operation Data	

* POLYETHERSULFONE

- Asymmetric pore size filter, Imported from Germany.
 Outer loose& Inner close. Funnel structure, uniform pore size distribution, specialized in high efficiency filtration field
- USP XX II 87 \ 88 Biological test passed
- 1 x 10⁷ CFU/cm² Bacterial Retention Test passed
- Non-Toxic Test passed
- Endotoxin Test passed
- USP Oxidizable Substances Test passed
- Bubble Point Test passed
- Integrity Test passed
- Temperature Tolerance Test (135°C steam sterilization, 30minutes cycles) can still keep the complete filtration efficiency

10" Polyethersulfone Membrane Pleated Filter Cartridge





Filter Media	Polyethersulfone
Micron Rating	0.04, 0.1, 0.2, 0.45, 0.8, 1.2, 5 μm
Operation Data	△P : 4.8 bar at 25°C, 1.4 bar at 80°C

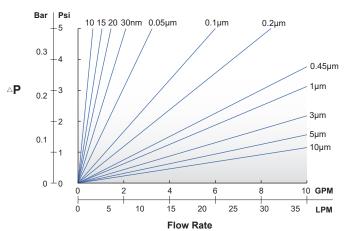
* HYDROPHOBIC PTFE

- Biaxially stretched microporous membrane enable the uniform pore size distribution, micron rating consistency, and keep the filtration efficiency & life time
- Resistant to solvents and highly corrosive liquids
- Water Resistant, effectively prevent the material from getting wet or bacterial infections
- Stable Filtration Performance, (135°C steam sterilization, 30minutes cycles) still keep the integrity filter efficiency
- Pre-Wet available based on requirement
- Asymmetric pore size filter, Imported from Germany. Outer loose& Inner close. Funnel structure, uniform pore size distribution, specialized in high efficiency filtration field
- USP XX II 87 \ 88 Biological test passed
- 1 x 10⁷ CFU/cm² Bacterial Retention Test passed
- Non-Toxic Test passed
- Endotoxin Test passed
- USP Oxidizable Substances Test passed
- Bubble Point Test passed
- Integrity Test passed

* HYDROPHILIC PTFE

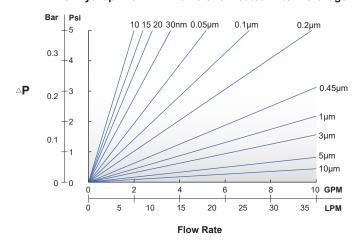
- Biaxially stretched microporous membrane enable the uniform pore size distribution, micron rating consistency, and keep the filtration efficiency & life time
- Resistant to solvents and highly corrosive liquids.
- Specially processed before factory-out, convert the material to hydrophilic, requiring no special treatment before use.
- Stable Filtration Performance, (135°C steam sterilization, 30minutes cycles) still keep the integrity filter efficiency.
- Bubble Point Test passed
- Integrity Test passed

10" Hydrophobic PTFE Membrane Pleated Filter Cartridge



Filter Media	Hydrophobic PTFE
Micron Rating	10, 15, 20, 30nm 0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm
Operation Data	△P : 4.8 bar at 25°C, 2.1 bar at 90°C

10" Hydrophilic PTFE Membrane Pleated Filter Cartridge

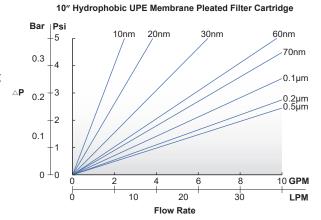


Filter Media	Hydrophilic PTFE
Micron Rating	10, 15, 20, 30nm 0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm
Operation Data	△P: 4.8 bar at 25°C, 2.1 bar at 90°C

₩ UPE

- Porous polyethylene membrane
- High Flow, High Efficiency, Nano-grade filter element

Filter Media	UPE		
Micron Rating	10, 20, 30, 60, 70 nm, 0.1, 0.2, 0.5 μm		
Operation Data	△P: 3.4 bar at 25°C. 2.1 bar at 90°C		



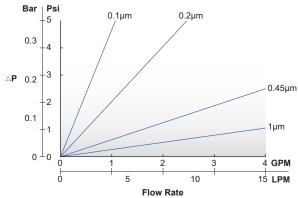
* PVDF

Excellent chemical compatibility, Acid/Alkali/Solvent resistant

Requiring no special treatment(ex, Pre-Wet) before use

Filter Media	PVDF
Micron Rating	0.1, 0.2, 0.45, 1 μm
Operation Data	△P: 4.8 bar at 25°C. 2.1 bar at 90°C

10" PVDF Membrane Pleated Filter Cartridge

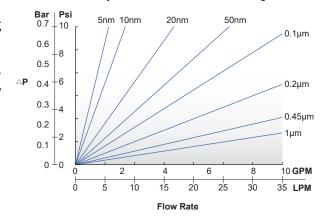


* NYLON

- Hydrophilic, High filtration efficiency and strong mechanical stability
- Stable Filtration Performance, (135°C steam sterilization, 30minutes cycles) still keep the integrity filter efficiency

Filter Media	Nylon
Micron Rating	5, 10, 20, 50 nm 0.1, 0.2, 0.45, 1 μm
Operation Data	△P: 4.8 bar at 25°C, 2.1 bar at 90°C

10" Nylon Membrane Pleated Filter Cartridge

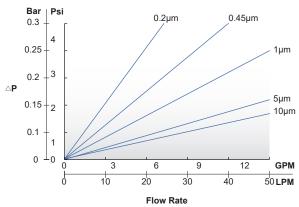


*** GLASS FIBER**

- Excellent chemical compatibility and high dirt holding capacity
- Remove disturbed soft impurities effectively

Filter Media	Glass Fiber
Micron Rating	0.2, 0.45, 1, 5, 10 μm
Operation Data	△P : 4.8 bar at 25°C, 2.1 bar at 90°C

10" Glass Fiber Pleated Filter Cartridge



Nano Pleated Filter Cartridges

- Nano grade filtration media
- Filter media with well distributed pore sizes remain flow rate steadily
- Integrity Test passed
- Class 1,000 Clean Room Production
- Can be flushed, dried and packaged in Class 100 Clean Room

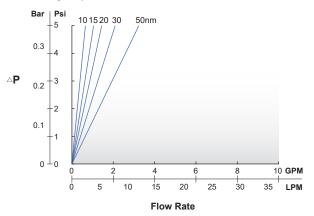


Length	5, 10, 20, 30, 40, 50, 60, 70 inch
Outside Diameter	Ø65mm, Ø69mm, Ø83mm
End Cap	DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin
Gasket/O-ring	Silicone, EPDM, Viton, Teflon Encapsulated Viton, Teflon
Applications	Electronics, Food & Beverage, Medicine Filtration, Chemicals, Water Treatment

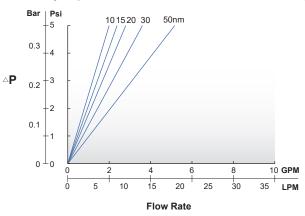
***** PTFE

Filter Media	Hydrophobic PTFE
Micron Rating	10, 15, 20, 30, 50 nm
Operation Data	∧P · 4 8 har at 25°C 2 1 har at 90°C

10" Hydrophobic PTFE Membrane Pleated Filter Cartridge



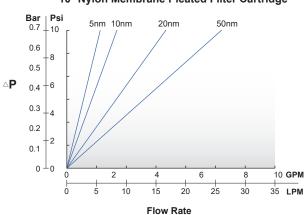
10" Hydrophilic PTFE Membrane Pleated Filter Cartridge



*** NYLON**

Filter Media	Nylon
Micron Rating	5, 10, 20, 50 nm
Operation Data	ΔP : 4.8 bar at 25°C, 2.1 bar at 90°C

10" Nylon Membrane Pleated Filter Cartridge



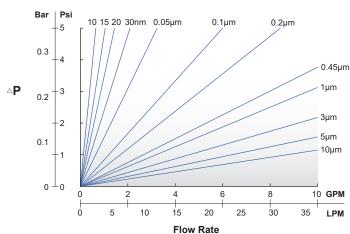


ALL PFA Filter Cartridges

- Filter is constucted of PTFE membrane and PFA parts
- Designed for high temperature, high corrosion & non-dissolution process
- Bubble Point Test passed
- Integrity Test passed

Filter Media	Hydrophobic PTFE / Hydrophilic PTFE
Material	Support Layer: PTFE Cage, Core, End Caps: PFA O-ring:Teflon encapsulated Viton
Micron Rating	10, 15, 20, 30 nm 0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm
Length	4, 10, 20, 30 inch, Other Customized Sizes
Outside Diameter	Ø69mm, Ø83mm
End Cap	2-222 Flat
Operation Data	△P : 5.0 bar at 25°C, 0.5 bar at 180°C
Applications	Etchants, Fine Chemicals



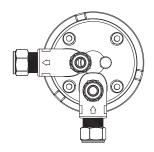


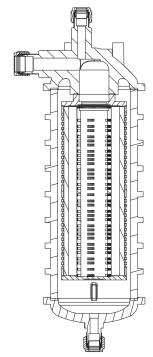
ALL PFA Filter Cartridges for Chemicals

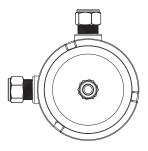
Material	PFA
Filter Media	Hydrophilic PTFE
Inlet/Outlet	3/4" 、1" Swagelok
Vent/Drain	1/2" Swagelok
Micron Rating	0.03 \ 0.05 \ 0.1 \ 0.2μm
Max. Working Temperature	180°C
Operation Data	△P : 5.8 bar at 25°C, 0.97 bar at 180°C
Applications	Etchants, Fine Chemicals, High temperature corrosion process

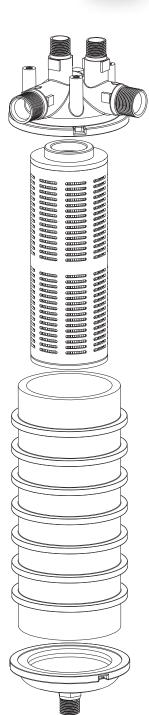










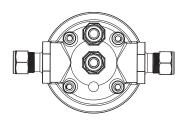


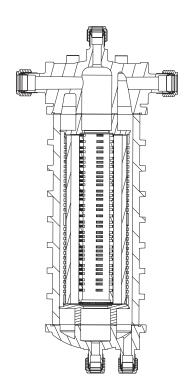
ALL PFA Filter Cartridges for Chemicals

Material	PFA
Filter Media	Hydrophilic PTFE
Inlet/Outlet	3/4"、1" Swagelok
Vent/Drain	1/2" Swagelok
Micron Rating	0.03 \ 0.05 \ 0.1 \ 0.2μm
Max. Working Temperature	180°C
Operation Data	△P: 5.8 bar at 25°C, 0.97 bar at 180°C
Applications	Etchants, Fine Chemicals, High temperature corrosion process

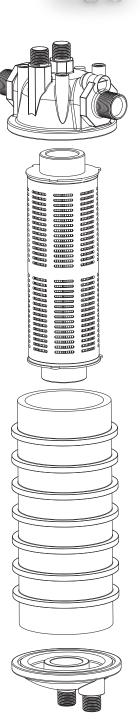










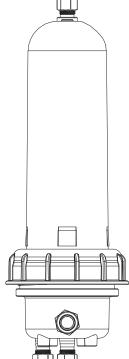


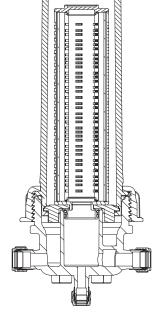


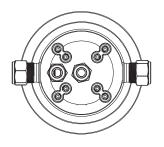
ALL PFA Filter Housings

Material	PFA
Specification	10 inch
Inlet/Outlet	1" Swagelok
Vent/Drain	1/2" Swagelok
Operation Data	8.0 bar at 25°C



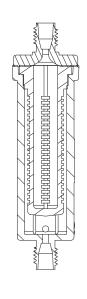






ALL PFA In-Line Gas Filter Cartridges

Filter Media	PTFE
Inlet/Outlet	1/8" In/Out Swagelok
Micron Rating	0.003μm for gas
Operation Data	7.0 bar at 20°C





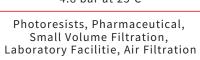
Stainless Steel In-Line Gas Filter Cartridges

Material	316L SUS
Inlet/Outlet	1/4", 3/8", 1/2", 3/4" Swagelok
Micron Rating	0.003μm for gas
Operation Data	7.0 bar at 20°C

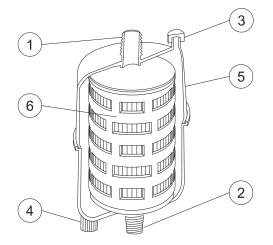


Capsule Filters

Filter Media	Polypropylene, Polyethersulfone, Nylon, PTFE, PVDF, Glass Fiber
Size	Ø72 x 96 mm, Ø72 x 155 mm
Port Size	1/4", 3/8", 1/2" NPTM 1/4", 3/8", 1/2" Swagelok Other Customized Sizes
Micron Rating	10, 15, 20, 30, 40, 50 nm 0.1, 0.2, 0.45, 0.6, 0.8, 1, 2, 3, 5, 10, 20, 30, 40, 70 μm
Operating Data	4.8 bar at 25°C
Applications	Photoresists, Pharmaceutical,







No.	Description
1	Inlet
2	Outlet
3	Vent
4	Drain
5	Cage
6	Filter Cartridge



1/4" Swagelok



3/8" Swagelok



1/2" Swagelok



1/4" NPT



3/8" NPT



1/2" NPT

Photoresist Filters

Filter Media	Polypropylene, Polyethersulfone, UPE, Nylon, PTFE, PVDF, All PFA
Port Size	1/8" , 1/4" , Ø8mm Swagelok Other Customized Sizes
Micron Rating	10, 15, 20, 30 nm 0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm
Operating Data	4.0 bar at 25°C
Applications	Photoresist, TFT-LCD









Quick Release(Short)



8 mm



1/4" Swagelok



Semiconductor Grade Connector



All PFA



Quick Release



Syringe Filter

Filter Cartridges for Chemicals

Filter Media	Polypropylene, Polyethersulfone, Nylon, PTFE, PVDF, All PFA
Port Size	1/8" , 1/4" , Ø8mm Swagelok Other Customized Sizes
Micron Rating	10, 15, 20, 30 nm 0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm
Operating Data	4.0 bar at 25℃
Applications	Photoresist, CD-ROM Process



Photochemical Dummy Filter

 Quick changing design without any tooling to decrease down time



Photoresist Dummy Filter

- Suitable for miniature photoresist-viscosity pump equipment, small size and quick replacement for easy operation
- HDPE material composition

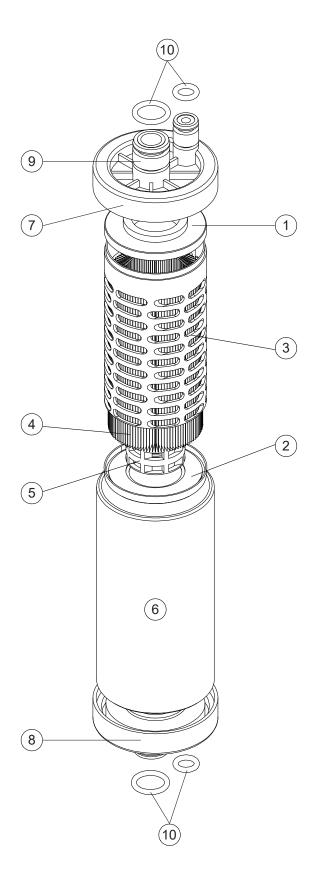


Photochemical Dispense Filter

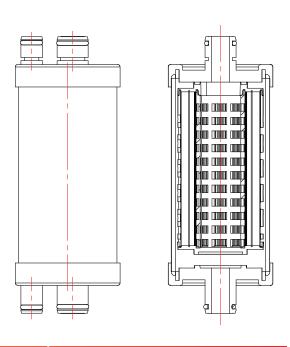
- Applying to photoresist coating developing equipment
- Filter direction for top in & top out



Photoresist Filter



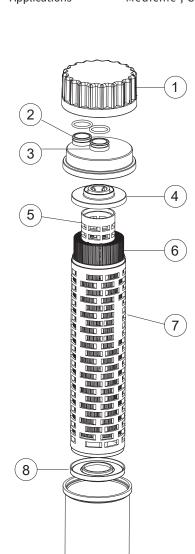




Description
End Cap
End Cap
Filter Cartridge
Filter Media
Core
Cage
In Cap
Out Cap
Сар
O - ring

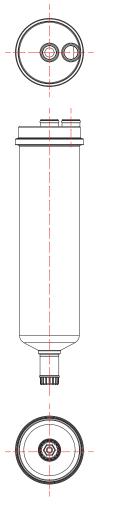
Quick-Change Capsule Filter Cartridges

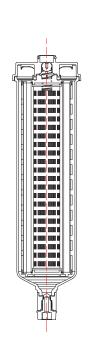
Filter Media	Polypropylene, Polyethersulfone, Nylon, PTFE, Glass Fiber
Micron Rating	0.1, 0.2, 0.45, 0.8, 1, 3, 5, 10, 15, 20, 30 μm
Operating Data	△P : 4.8 bar at 25°C
Applications	Medicine . Gel. Slurry Filtration. Laboratory Facilitie



(9)

(10)





No.	Description
1	Top Cover
2	Inlet
3	Outlet
4	End Cap
5	Core
6	Filter Media
7	Filter Cartridge
8	End Cap
9	Cage
10	Vent



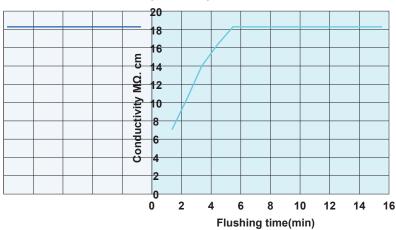
Ultra pure DI Water Purifier

- Effective removal of metal ions in ultrapure water
- Ensuring the output stability of ultrapure water

Filter Media	Semiconductor Grade Ion Exchange Resin
Material	Polypropylene
Max. Working Temperature	40°C
Operating Data	0.3 MPa / 20°C

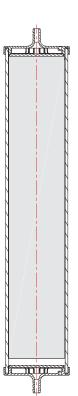


Downstream conductivity recovery time

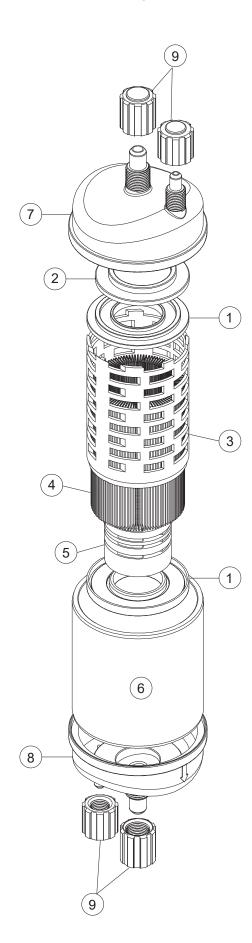


— Ultra-pure water background

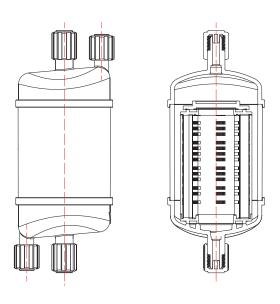
Downstream ultra-pure water background



CMP Series Capsule Filter



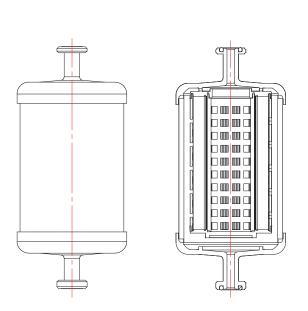




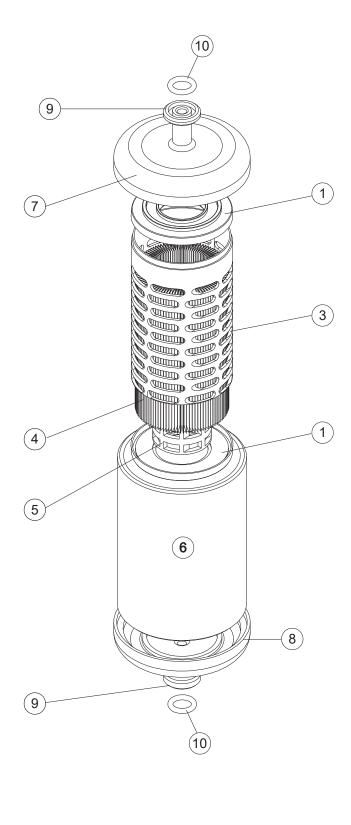
No.	Description
1	End Cap
2	End Cap
3	Filter Cartridge
4	Filter Media
5	Core
6	Cage
7	In Cap
8	Out Cap
9	Cap



CMP Series Capsule Filter



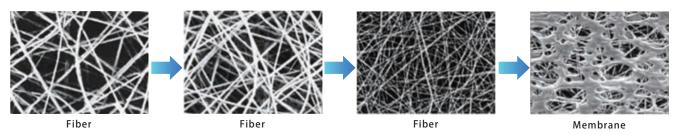
No.	Description
1	End Cap
2	End Cap
3	Filter Cartridge
4	Filter Media
5	Core
6	Cage
7	In Cap
8	Out Cap
9	Cap
10	O - ring



CMP Series Pleated Filter Cartridges

- CMP pleated filter cartridge adopts multiple layers of different micron filter media, with progressive cascading to achieve the effect of layered filtration and precise filtration
- Outer loose & inner dense fiber structure to increse the capacity and extend the service life, enhance the interception capacity of different particle sizes
- To use membrane media with stable welding enable better filtration efficiency by avoiding bridging
- Customized by different demand







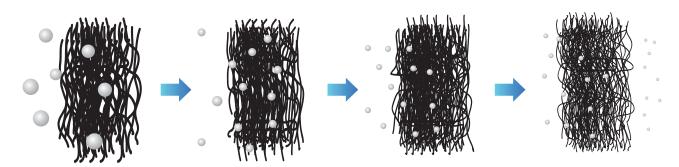
No.	Description
1	Inflow Support Layer
2	10μm
3	5μm
4	1μm
5	0.5μm
6	Outflow Support Layer

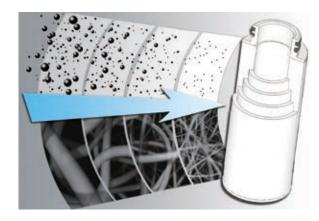
Material	Polypropylene
Length	10, 20, 30 inch
Micron Rating	0.1, 0.2, 0.5, 0.8, 1, 3, 5, 7, 9, 11, 13, 15 μm
End Cap	2-222 Flat
Operating Data	△P : 4.8 bar at 25°C
Applications	CMP Process

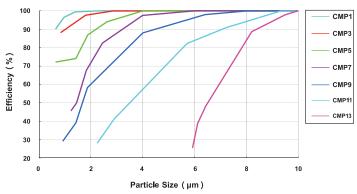
CMP Series Melt-Blown Filter Cartridges

- Catch particles effictively and ensure stable efficiency by multi-layers' structure
- High dirt holding capacity and longer service life caused by deep structure
- Melt-blowing polymer technology with firmed fibers leads to precision filtration result
- Through the particles efficiency and capture the larger CMP slurry ones accurately
- NSF/ANSI 42 certified









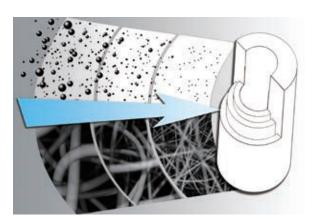
Material	Polypropylene
Length	10, 20, 30 inch
Micron Rating	1, 3, 5, 7, 9, 11, 13 μm
End Cap	2-222 Flat
Operating Data	△P : 4.8 bar at 25°C
Applications	CMP Process



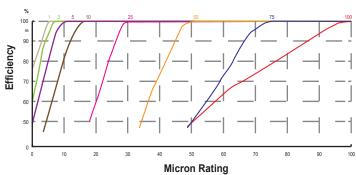
Melt-Blown Filter Cartridges

The standard three layer-filter is manufacture with PP material, which is melted and injected in the process. The outer layer is loose and each layer becomes tighter, this structure can seize particle from different sizes. This melt blown filter usability make them the ideal pre-filters for most industrial process.

- Produced by fine PP fibers. Presenting great filtration efficiency
- 3 layer design enhances dirt capacity while maintain the life time
- Filter surface and inner layer are applied treatment to keep fibers from falling
- Stable structure design keeps the contaminant from release
- 100% Polypropylene material, no adhesive is used, fine chemical compatibility
- PP material is FDA CFR Title 21 compliant
- NSF/ANSI 42 certified



Performance Data for Industrial Melt Blown Filter



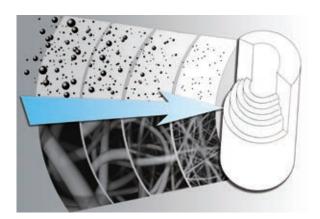
Material	Polypropylene
Length	5, 6, 9.75, 10, 19.5, 20, 29.25, 29.5, 30, 39, 40 inch and Customization
Micron Rating	1, 5, 10, 25, 50, 75, 100 μm
End Cap	DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin
Operating Data	△P: 3.0 bar at 25°C, 2.0 bar at 40°C, 1.0 bar at 60°C
Applications	PCB, Electroplating, Reverse Osmosis Pretreatment, Reclaimed Water Treatment, Chemical and Petrochemical Processing, Food and Beverage

Industrial Melt-Blown Filter Cartridges

Four-layer structure design. It is formed by spinning at high temperature and pressure after the Polypropylene is melted. The structure is loose outside and dense inside, which can evenly capture different sizes particles in the filter cartridge. With excellent filtration efficiency and dirt holding capacity. It can maintain stable flow, differential pressure and long service life. The fiber structure is stable to ensure filtration quality and applicable to precision industrial processes.



- Produced by fine PP fibers. Presenting great filtration efficiency
- 4 layer design enhances dirt capacity while maintain the life time
- Filter surface and inner layer are applied treatment to keep fibers from falling
- Stable structure design keeps the contaminant from release
- 100% Polypropylene material, no adhesive is used, fine chemical compatibility
- PP material is FDA CFR Title 21 compliant
- NSF/ANSI 42 certified



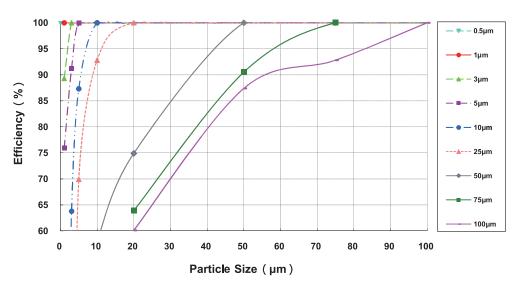
Material	Polypropylene
Length	5, 6, 9.75, 10, 19.5, 20, 29.25, 29.5, 30, 39, 40 inch and Customization
Micron Rating	0.5, 1, 5, 10, 25, 50, 75, 100 μm
End Cap	DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin
Operating Data	△P: 3.0 bar at 25°C, 2.0 bar at 50°C, 1.0 bar at 70°C
Applications	PCB, Electroplating, Reverse Osmosis Pretreatment, Reclaimed Water Treatment, Chemical and Petrochemical Processing, Food and Beverage

Absolute-Rated Filter Cartridges

The fibers are tightly interwoven and fixed from the outside to the inside, and particles will not be released due to the pump pressure or high pressure difference. Filtration efficiency up to 99% and applicable to industries with strict process.



- State of the art Japan microfiber technology can reach up to 99% filtration efficiency
- Progressive pore structure, high particle capacity
- Rigid structure keeps the contaminant from release
- Capture flexible particles
- 100% Polypropylene material, no adhesive is used, fine chemical compatibility
- PP material is FDA CFR Title 21 compliant
- NSF/ANSI 42 certified



Material	Polypropylene
Length	5, 6, 9.75, 10, 19.5, 20, 29.25, 29.5, 30, 39, 40 inch and Customization
Micron Rating	0.5, 1, 3, 5, 10, 25, 50, 75, 100 μm
End Cap	DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin
Operating Data	△P: 4.0 bar at 25°C, 2.0 bar at 60°C, 1.0 bar at 80°C
Applications	Flexible Particles Involving Process, Electroplating, Chemical and Petrochemical Processing, High Temperature and Pressure Manufacturing Process

Activated Carbon Filter Cartridges

We select the high quality carbon, using $300\sim500^{\circ}$ C thermal activation to open the pores and exposing it to temperature $800\sim1100^{\circ}$ C to clear the products of chemical reaction. The process improves the absorption ability of the activated carbon filter cartridges.

☀ CCT-Carbon Block Filter Cartridge

- CCT is manufactured using both granular and powdered activated carbon
- It is well suited for removing impurities from large-scale water systems
- CCT are ideal in the removal of organic contamination



★ CCP-Carbon Impregnated Cellulose Filter Cartridge

- CCP is made of activated carbon fiber
- The production procedure keeps the carbon powder from releasing
- The performance of petroleum gases, vapors absorption and filtration is excellent; CCP is usually used in electroplating process



★ CCW-Granular Carbon PP String Wound Filter Cartridge

- The outer layer of PP string blocks the particles out as pre filtration
- The middle layer of granular activated carbon performs great absorption
- The inner layer of PP string is the last stage of filtration
- (BET, N_2) $\geq 1000 \text{ m}^2/\text{g}$



★ GDC-Custom-made Pleated Cellulose Carbon Filter Cartridge

- Import American activated carbon fiber to make the carbon filter
- Various connections and sizes can be customized
- Can be produced into pleated and spiral winding styles



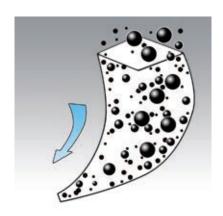
Length

Nominal Type: 10, 20, 30, 40 inch High-Flow Large Size: 10, 20 inch

String-Wound Filter Cartridges

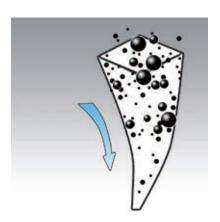
The unique diamond winding pattern can block large particles on the outer layer while capture small particles on the inner layer, which provides great contamination absorption. The special treatment on the filter surface serves to prevent fibers from releasing.







The whole element offer great filtration efficiency. Filtration area is large, extending the lifetime.



Other Brand

Contaminants are clogged on outer string layer. Filtration area is small, lifetime is short.

Material	Polypropylene, Bleached Cotton, Glass Fiber
Central Core	PP, SUS304, SUS316
Length	9.75, 10, 19.5, 20, 29.25, 29.5, 30, 39, 40 inch and Customization
Micron Rating	1, 5, 10, 20, 30, 50, 75, 100, 150 μm
End Cap	DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin
Polypropylene Type Applications	PCB, Electroplating, Chemical and Petrochemical Processing, Reclaimed Water Treatment, Food and Beverage
Bleached Cotton Type Solvent, Ultrasonic cleaning, Chemical and Petrochemical Proces Applications Beverage Industry, High Temperature Process, Steam Filtration	
Glass Fiber Type Under 250°C of High Temperature Filtration Applications	

Large Size Filter Cartridges

- Featured with bigger outer diameter, exhibiting large filtration area and supplying longer service life
- Recommended to use with plastic big filter housings



Type	Melt Blown, String Wound, High Flow Rate Pleated, Activated Carbon
Length	10, 20 inch
Micron Rating	0.5, 1, 5, 10, 25, 50, 100 μm
Flow Rate	10 ~ 40 GPM Base on selection of filter element
Applications	PCW, Pre RO/DI, Chemical Processing, Household Water Filtration, Waste Water Treatment

High-Flow Pleated Filter Cartridges

- Manufactured by high quality polymer media, the cartridges exhibit highly effective retention efficiency, reach up to 90%
- Pleated surface results in great filtration area, low pressure drop and high flow capacity, extends service life and makes the cartridge one of the most economic options in water treatment
- Free of additives and binders due to special processing avoid organic releasing and suitable for various filtration system
- Enable to be washed and reused, saving operation and cleaning cost



Material	Polypropylene, Polyester
Length	5, 10, 20, 30, 40 inch and Customization
Micron Rating	0.5, 1, 5, 10, 20, 30, 50, 100 μm
End Cap DOE, 2-222 Flat, 2-222 Fin, 2-226 Flat, 2-226 Fin	
Operating Data △P: 3.0 bar at 25°C, 2.4 bar at 50°C	
Applications	PCW. Pre RO/DL Chemical Processing

334 Series High-Flow Filter Cartridges

- High surface area design provides superior flow rate and high dirt holding capacity, resulting in better cost-saving solutions
- Plastic materials in compliance with EU RoHS regulations



Filter Media	Polypropylene	Polyethersulfone	PTFE	SUS
Micron Rating	0.2, 0.5, 0.8, 1, 3, 5, 10, 20, 30, 40, 50, 70, 100 μm	0.04, 0.1, 0.2, 0.45, 0.6, 0.8, 1.2 μm	0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm	1, 2, 3, 5, 10, 20, 30, 50, 70, 100 μm
O-ring	EPDM, Viton, Teflon Encapsulated Viton			
Operating Data	ΛP · 4 8 har at 25°C 3 4 har at 50°C 1 4 har at 80°C			

Operating Data

△P: 4.8 bar at 25°C, 3.4 bar at 50°C, 1.4 bar at 80°C

233 Series High-Flow Filter Cartridges

- Maximum flow rate up to 300 ~ 500 LPM
- Patent no# M555248



Filter Media	Polypropylene	Polyethersulfone	Hydrophobic PTFE	Hydrophilic PTFE
Micron Rating	0.2, 0.5, 0.8, 1, 3, 5, 10, 20, 30, 40, 50, 70, 100 μm	0.04, 0.1, 0.2, 0.45, 0.6, 0.8, 1.2 μm	0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm	0.05, 0.1, 0.2, 0.45, 1, 3, 5, 10 μm
O-ring	EPDM, Viton, Teflon Encapsulated Viton			
Operating Data	△P : 4.8 bar at 25°C. 3.4 bar at 50°C. 1.4 bar at 80°C			

Jumbo Pleated Filter Cartridges

- Large filtration area handles larger flow rate, which can reduce volume and quantity of the filter housing and minimize the installation space.
- For high flow filtration systems and lower down the cost and risk on the replacement.
- Excellent formula of filter ensures flow rate and differential pressure of the system remain stable.
- End caps with automatic bonding. No by-pass issue when used under high pressure and high differential pressure conditions for long.
- PP core strengthens the supporting structure. Cage is integrally one-piece and thickening molding. Thickness is 3mm and overall structure is increased by 2 times, which can deal with various complex filtration conditions without deformation.



Filter Media	Polypropylene, Polyester, Glass Fiber, Stainless Steel
Length	20, 40, 60 inch and Customization
Micron Rating	0.2, 0.5, 1, 5, 10, 20, 40, 50, 70, 100 μm
Flow Rate	20":40 CMH , 40":85 CMH ,60":110 CMH
Operating Data	△P : 4.8 bar at 25°C
Applications	Pre RO/DI, PCW , Recycled Water, High-Flow Filtration, Petrochemical Processing

7000 Serise High-Flow Filter Cartridges

- Large filtration area processes larger flow rate, which can reduce volume and quantity of the filter housing and minimize the installation space
- Suitable for high flow filtration systems, and lower down the cost and risk on the replacement
- Excellent support and diversion design ensures flow rate and differential pressure of the system remain stable

End caps made by automatic welding machine. No by-pass issue when used under high pressure and high differential pressure conditions for long-term



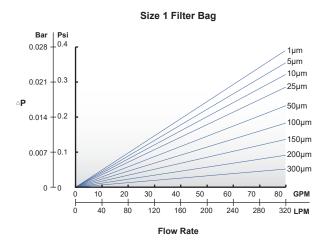
Filter Media	Polypropylene
Length	40, 60 inch
Micron Rating	1, 3, 5, 10, 20, 30, 40, 70 μm
Flow Rate	40": 75 CMH , 60": 110 CMH
Operating Data	△P : 4.8 bar at 25°C
Applications	Pre RO/DI, PCW, Recycled Water, High-Flow Filtration, Petrochemical Processing

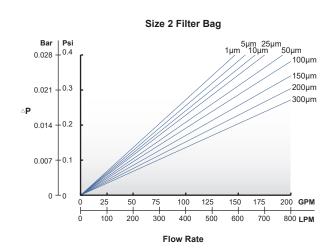
Liquid Filter Bags

Filter Media	PP, PET, Nylon, Teflon, Nomex, Different kinds of woven, non-woven fabric, oil-absorbing fabric, activated carbon
Top Ring PP, PET, Nylon, Galvanized Steel, Stainless	
Ring Type	FSI, EATON and Others
Seam	Sewn, Welded
Micron Rating	0.5 ~ 1000 μm
Size	#1 (Ø17.8 cm × 42 cm, Q: 20 CMH) #2 (Ø17.8 cm × 81 cm, Q: 45 CMH) #3 (Ø10.1 cm × 23 cm, Q: 4.5 CMH) #4 (Ø10.1 cm × 38 cm, Q: 10 CMH) X100 Series (Ø15 cm × 52 cm) U Series (Ø11.8 cm × 52 cm) BP Series (Ø22 cm × 43 cm)

Y Series (\emptyset 20 cm \times 33 cm) Others







Bag Type High Flow Filter Cartridges

The insert moulding design of handle can solve the problem of liquid leakage from the gap between oring and handle which can be seen on usual design

Filter Media	Polypropylene, Polyester
Micron Rating	0.2, 0.5, 1, 5, 10, 20, 30, 50 μm
Seal	EPDM, Viton
Operating Data	△P : 4.8 bar at 25°C, 1.4 bar at 50°C

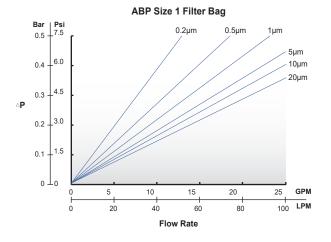


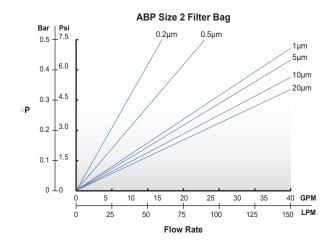
High Performance Liquid Filter Bags

- The innovative welding technology applies the main layer of the pleated filter cartridge to the filter bag, replacing the traditional stacking type to improve the filter efficiency, increase the flow rate by 20% and reduce the pressure difference by 35%. Easier to install and greatly reduce the disposal cost.
- The main layer Using melt-blown ultra-fine nanofiber as the main layer, which improves the efficiency by 95% ~ 99.9%.
- The progressive pore size can increase the dirt capacity of the filter bag, keep the pressure difference rising steadily, and extend the service life
- The raw material PP complies with FDA CFR Title 21, which is safe and secure
- Customized formula can be provided to satisfy user's requirement



Filtration Efficiency						
Туре	0.2 μm	0.5 μm	1 μm	5 μm	10 μm	20 μm
ABP02	95	98	99	99.9	-	-
ABP05	85	95	98	99	>99.9	-
ABP1	80	90	95	98	99	>99.9
ABP5	-	80	90	95	98	99
ABP10	-	-	80	90	95	98
ABP20	-	-	-	80	90	95





Filter Clothes

Filter Media	PP, PET, Nylon, 吸油棉, 活性碳布
Туре	Non-Woven, Woven, Brushed Woven, Woven Mesh
Micron Rating	0.5 ~ 1000 μm



Stainless Steel Filter Cartridges

- To Analyze metallic element by XRF
- To Analyze by bubble point test



Material	SUS304, SUS316, SUS316L
Length	5, 10, 20, 30, 40 inch and Customization
Micron Rating	0.5 ~ 1000 μm
Media Type	Plain Weave, Dutch Twill Weave, Plain Dutch Weave, Dutch Twill Weave, Metal Fiber Non-wove, 3/5 layers Sintered Mesh
End Caps	DOE, 2-222, 2-226 and others
Max. Operating Temperature	250°C
Max. Operating Pressure	5 ~ 150 bar (according to spec)
Applications	CPF, CPL, Petrochemical Processing, Acid/Alkali, High Density Treatment, Steam Filtration, Beverage Industry

Sintered Metal Filter Cartridges

Sintered Metal Filter Cartridges



Material	SUS304, SUS316, SUS316L, Titanium, Nickel, Copper and Others
Length	5, 10, 20, 30, 40 inch and Customization
Micron Rating	0.5 ~ 200 μm
Filter Type	Filter Cartridges, Filter Disks, Filter sheets
End Caps	DOE, 2-222, 2-226 and others
Max. Operating Temperature	250°C
Max. Operating Pressure	5 ~ 150 bar (according to spec)
Applications	Petrochemical Processing, Chemical Fiber Industry, Steam Filtration, Beverage Industry

Stainless Steel Single-Cartridge Filter Housings

Filter Length	5, 10, 20, 30, 40 inch φ145mm: 10, 20 inch
Material	SUS304, SUS316
In/Outlet	³ /4", 1" NPTF, 1 ¹ /2" Flange
Closure Type	Ring-nut Closure, V-Clamp Closure
Flow Rate	1 ~ 10 CMH Flowrate may vary according to different model & element type
Filter Type	DOE, 2-222 Flat, 2-222 Fin
Max. Pressure	Ring-nut Closure: 5 bar V-Clamp Closure: 7 bar
Applications	Circulating Filtration System, PCW. Chemical Processing



Stainless Steel Sanitary Filter Housings

Filter Length	10, 20, 30, 40 inch
Number of Cartridges	1, 2 ~ 6, 7 ~ 8, 9 or more round
Material	SUS304, SUS316, SUS316L
In/Outlet	1 ~ 6 inch Sanitary Clamp
Finish	Mechanical Polishing 400 mesh
Max. Pressure	7 bar Higher pressure housings can be made on demand
Applications	Pharmaceutical, Beverage Industry, Chemical Processing, Ultrapure Water Filtration



Top-Loading High Pressure Bag Filter Housings

The top cover improves sealing and reduces the possibility of liquid bypass

Filter Size	#1 Bag, #2 Bag
Material	SUS304, SUS316, SUS316L
In/Outlet	2", 2 ½" Flange
Flow Rate	#1 Bag Filter Housing: 0~20CMH #2 Bag Filter Housing: 0~45CMH Flowrate may vary according to different element type
Max. Pressure	10 bar
Applications	High Temperature, Pressure and Density Manufacturing Process



Stainless Steel Cartridge Filter Housings











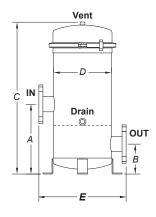








Filter Length	5, 10, 20, 30, 40 inch
Number of Cartridges	3 ~ 7 round
Material	SUS304, SUS316, SUS316L
In/Outlet	$1,1$ 1 /2 $,2,2$ 1 /2 $,3,4$ inch NPT, BSP, Flange, Clamp, or others
Flow Rate	10":0~ 7 CMH 20":0~14 CMH 30":0~21 CMH 40":0~28 CMH *Above flowrate is based on standard PP melt blown cartridge; Flowrate may vary according to different filter element type
Closure Type	V-Clamp
Max. Pressure	7 bar
Applications	Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Beverage Industry



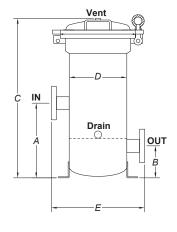
Model	Α	В	С	øD	E
UFC10 3/4	280	120	617	180	300
UFC20 3/4	280	120	882	180	300
UFC30 3/4	280	120	1137	180	300
UFC10 5/7	280	120	611	232	352
UFC20 5/7	280	120	877	232	352
UFC30 5/7	280	120	1132	232	352
UFC40 5/7	280	120	1387	232	352

Stainless Steel High Pressure Cartridge Filter Housings





Filter Length	5, 10, 20, 30, 40 inch
Number of Cartridges	3 ~ 12 round
Material	SUS304, SUS316, SUS316L
In/Outlet	$1,1$ 1 /2, $2,2$ 1 /2, $3,4$ inch NPT, BSP, Flange, Clamp, or others
Flow Rate	10":0~ 7 CMH 20":0~14 CMH 30":0~21 CMH 40":0~28 CMH *Above flowrate is based on standard PP melt blown cartridge; Flowrate may vary according to different filter element type High flow filter is optional to increase the flow and reduce the differential pressure
Closure Type	Swing Bolt
Max. Pressure	10 bar
Applications	Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Beverage Industry



	_	_	_	_	_
Model	Α	В	С	øD	E
UFCG10 3/4	280	120	661	180	300
UFCG20 3/4	280	120	926	180	300
UFCG30 3/4	280	120	1181	180	300
UFCG40 3/4	280	120	1353	181	300
UFCG10 5/7	280	120	664	232	350
UFCG20 5/7	280	120	929	232	350
UFCG30 5/7	280	120	1184	232	350
UFCG40 5/7	280	120	1439	232	350
UFCG10 8/12	600	350	924	306	506
UFCG20 8/12	700	350	1179	306	506
UFCG30 8/12	700	350	1434	306	506
UFCG40 8/12	700	350	1689	306	506

Stainless Steel Bag Filter Housings







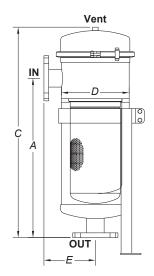




Filter Size	#1, #2, #3, #4
Material	SUS304, SUS316, SUS316L
In/Outlet	1 , 1 1 /2, 2 , 2 1 /2, 3 , 4 inch NPT, BSP, Flange, Clamp and others
Flow Rate	#1: Up to 20 CMH; #2: Up to 45 CMH #3: Up to 4.5 CMH; #4: Up to 10 CMH
Closure Type	V-Clamp
Max. Pressure	7 bar

Applications

Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Automotive, Paints, Inks, Resins and Coatings, Beverage Industry



Model	A	С	øD	E
UFB01	545	727	232	175
UFB02	1000	1182	232	175
UFB03	355	532	180	150
UFB04	490	667	180	150

Stainless Steel High Pressure Bag Filter Housings







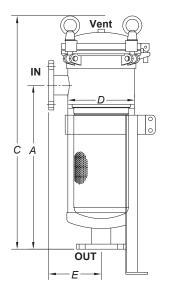




Filter Size	#1, #2, #3, #4
Material	SUS304, SUS316, SUS316L
In/Outlet	$1,1^{1}$ /2 $,2,2^{1}$ /2 $,3,4$ inch NPT, BSP, Flange, Clamp and others
Flow Rate	#1: Up to 20 CMH; #2: Up to 45 CMH #3: Up to 4.5 CMH; #4: Up to 10 CMH
Closure Type	Swing Bolt
Max. Pressure	10 bar
	Reverse Osmosis Pretreatment PCW Filtration Circulating Filtration System

Applications

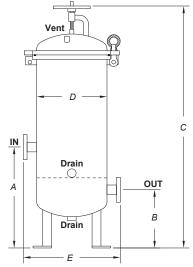
Chemical Processing, Reclaimed Water Treatment,
Automotive, Paints, Inks, Resins and Coatings, Beverage Industry



Model	A	С	øD	E
UFBG01	515	728	210	165
UFBG02	905	1134	210	165
UFBG03	340	532	140	130
UFBG04	450	642	140	130

High-Flow Multi-Cartridge Filter Housings





Model	Α	В	С	ø D	E
UFC20 8/12	700	350	1400	306	506
UFC30 8/12	700	350	1655	306	506
UFC40 8/12	700	350	1905	306	506
UFC20 13/20	700	350	1415	406	606
UFC30 13/20	700	350	1670	406	606
UFC40 13/20	700	350	1920	406	606
UFC20 21/28	700	350	1437	486	686
UFC30 21/28	700	350	1692	486	686
UFC40 21/28	700	350	1942	486	686
UFC20 29/36	700	350	1523	560	760
UFC30 29/36	700	350	1778	560	760
UFC40 29/36	800	400	2028	560	760
UFC20 37/46	800	400	1529	600	800
UFC30 37/46	800	400	1784	600	800
UFC40 37/46	800	400	2034	600	800
UFC20 47/56	850	450	1587	650	850
UFC30 47/56	850	450	1842	650	850
UFC40 47/56	850	450	2092	650	850
UFC20 57/81	950	500	1710	762	962
UFC30 57/81	950	500	1965	762	962
UFC40 57/81	950	500	2215	762	962
UFC20 82/95	1000	550	1895	900	1100
UFC30 82/95	1000	550	2150	900	1100
UFC40 82/95	1000	550	2400	900	1100
UFC20 96/135	1100	600	1985	1000	1200
UFC30 96/135	1100	600	2240	1000	1200
UFC40 96/135	1100	600	2490	1000	1200
UFC20 136/155	1250	650	2090	1100	1300
UFC30 136/155	1250	650	2345	1100	1300
UFC40 136/155	1250	650	2595	1100	1300
UFC20 156/173	1250	650	2095	1220	1400
UFC30 156/173	1250	650	2350	1220	1400
UFC40 156/173	1250	650	2600	1220	1400





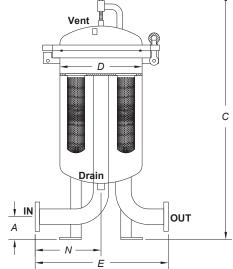




Filter Length	5, 10, 20, 30, 40 inch
Number of Cartridges	9 ~ 200 round
Material	SUS304, SUS316, SUS316L
In/Outlet	2 ~ 15 inch Flange
Flow Rate	0 ~ 1600 CMH Depending on the specification and quantity of the filter cartridge
Max. Pressure	10 bar
Applications	Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Beverage Industry

High-Flow Multi-Bag Filter Housings





Model	Port	Α	С	øD	Е	N
UFB02 2	3" F	108	1410	406	584	254
UFB02 2	4" F	127	1447	406	660	292
UFB02 3	3" F	108	1455	508	686	343
UFB02 3	4" F	127	1492	508	724	343
UFB02 4	3" F	108	1506	560	698	330
UFB02 4	4" F	127	1545	560	737	330
UFB02 4	6" F	152	1616	560	876	356
UFB02 5	3" F	108	1506	560	698	330
UFB02 5	4" F	127	1545	560	737	330
UFB02 5	6" F	152	1635	600	876	356
UFB02 6	3" F	108	1520	600	724	356
UFB02 6	4" F	127	1558	600	763	356
UFB02 6	6" F	152	1635	600	876	356
UFB02 7	3" F	108	1658	762	813	406
UFB02 7	4" F	127	1695	762	864	406
UFB02 7	6" F	152	1772	762	927	406
UFB02 7	8" F	184	1848	762	991	432
UFB02 8	4" F	127	1695	762	864	432
UFB02 8	6" F	152	1772	762	991	432
UFB02 8	8" F	184	1848	762	1047	432
UFB02 9	6" F	152	1880	814	1016	457
UFB02 9	8" F	184	1955	814	1016	457
UFB02 10	6" F	152	1918	864	1092	483
UFB02 10	8" F	184	1993	864	1067	483
UFB02 10	10" F	216	2160	965	1219	533
UFB02 12	8" F	184	2085	965	1130	533
UFB02 12	10" F	216	2160	965	1219	533
UFB02 14	10" F	216	2267	965	1219	533









Filter Size	#1, #2
Number of Filter Bags	2 ~ 50
Material	SUS304, SUS316, SUS316L
In/Outlet	2 ~ 15 inch Flange
Flow Rate	0 ~ 2250 CMH Depending on the specification and quantity of the filter bag
Max. Pressure	10 bar
Applications	Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Automotive, Paints, Inks, Resins and Coatings, Beverage Industry

Stainless Steel High Flow Single-Cartridge Filter Housings

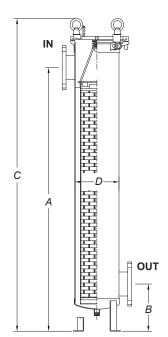








Filter Length	20, 40, 60 inch
Number of Cartridges	Single
Material	SUS304, SUS316, SUS316L
In/Outlet	2, 2 ½, 3, 4 inch NPT, Flange, Clamp and others
Flow Rate	40":0 ~ 85 CMH 60":0 ~ 110 CMH
Max. Pressure	10 bar
Applications	Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Automotive, Paints, Inks, Resins and Coatings, Beverage Industry





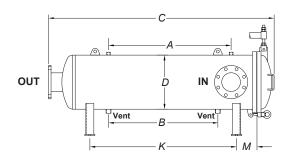
Model	Α	В	С	øD	E
UFL20 1	745	225	979	210	330
UFL40 1	1255	225	1489	210	330
					unit: mm

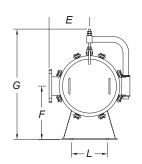
Stainless Steel High Flow Multi-Cartridge Filter Housings





Filter Length	40, 60 inch
Number of Cartridges	2 ~ 19 round
Material	SUS304, SUS316, SUS316L
In/Outlet	4, 5, 6, 8, 14, 16 inch NPT, Flange, Clamp and others
Flow Rate	0 ~ 2200 CMH Depending on the specification and quantity of the filter cartridge
Max. Pressure	7 bar
Applications	Reverse Osmosis Pretreatment, PCW Filtration, Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Automotive, Paints, Inks, Resins and Coatings, Beverage Industry





Model	Α	В	С	øD	E	F	G	K	L	М
UFL40 2	920	820	1693	406	303	400	828	1100	270	150
UFL40 3	920	820	1693	406	303	400	828	1100	270	150
UFL40 4	920	820	1722	486	343	450	918	1100	370	150
UFL40 5	920	820	1778	508	354	450	929	1150	370	150
UFL40 6	920	820	1792	560	380	500	1005	1150	470	150
UFL40 7	920	820	1823	560	400	500	1025	1150	470	150
UFL40 8	920	820	1871	650	425	550	1100	1150	520	150
UFL40 9	920	820	1904	700	500	550	1131	1150	630	200
UFL40 10	920	820	1960	762	531	600	1217	1150	630	200
UFL40 12	920	820	1979	814	557	650	1293	1150	720	200

Titanium Cartridge Filter Housings

Filter Length	10 \ 20 \ 30 inch
Number of Cartridges	1, 3 ~ 7 or more round
Material	Titanium alloy
In/Outlet	NPT, Flange
Flow Rate	10":0~ 7 CMH 20":0~14 CMH 30":0~21 CMH
Closure Type	Swing Bolt
Max. Pressure	7 bar
Applications	Highly Corrosive liquids, Chemical Processing, Electroplating





Titanium Bag Filter Housings

Filter Size	#1, #2
Number of Filter Bags	Single-Bag, Multi-Bag
Material	Titanium alloy
In/Outlet	NPT, Flange
Flow Rate	#1: Up to 20 CMH; #2: Up to 45 CMH
Closure Type	Swing Bolt
Max. Pressure	7 bar
Applications	Highly Corrosive liquids, Chemical Processing, Electroplating



Stainless Steel PTFE Lined Cartridge Filter Housings

Filter Length	10 \ 20 \ 30 inch
Number of Cartridges 1, 3 ~ 7 or more round	
Material	SUS304, SUS316, SUS316L
In/Outlet	Flange
Flow Rate	10":0~ 7 CMH 20":0~ 14 CMH 30":0~21 CMH
Max. Pressure	7 bar
Applications	Semiconductor, Acid-suppling System





Stainless Steel PTFE Lined Bag Filter Housing

Filter Size	#1, #2
Material	SUS304, SUS316, SUS316L
In/Outlet	Flange
Flow Rate	#1: Up to 20 CMH; #2: Up to 45 CMH
Max. Pressure	7 bar
Applications	Semiconductor, Acid-suppling System



PP Bag Filter Housings

- Integral moulding design. Finishing of inside of housing is smooth and easy to clean and maintain.
 Pressure resistance is up to 6 bar
- Seamless welding structure is different from regular drilling and welding process in the industry which reduce pollution on the production
- Brand new sealing design with pressure plate avoids O-ring deformation during rotating threads on the top lid to cause by-pass issue
- Filter bag ring is completely fitted with housing in good tightness which reduce by-pass effectively.

Filter Size	#1 Bag; #2 Bag; #4 Bag
Material	PP
In/Outlet	1 ½", 2", 2 ½" Flange
Closure Type	Swing bolt(Swing bolt in Titanium is optional), Screw style top lid
Flow Rate	#1: Up to 20 CMH #2: Up to 45 CMH #4: Up to 10 CMH
Max. Pressure	6 bar
Applications	PCB Wet Processing Equipment, Chemicals, Circulating Water



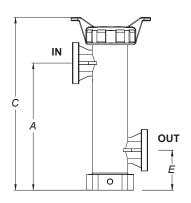


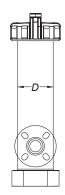












Model	Α	С	øD	E
UFBH01	450	656	230	135
UFBH02	635.5	843	230	152.5
UFBH04	445	605	124	140



UPVC Filter Cartridge Housings



Filter Length	10, 20, 30, 40 inch
Number of Cartridges	5, 9 round
Material	UPVC
In/Outlet	1.5", 2"DIN or ANSI UNION
Closure Type	Swing bolt
Flow Rate	10":0~ 9 CMH 20":0~18 CMH 30":0~27 CMH 40":0~36 CMH *Above flowrate is based on standard PP melt blown cartridge; Flowrate may vary according to different filter element type
Max. Pressure	4 bar
Applications	Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Sea Water Applications





Filter Size	#1 Bag; #2 Bag
Material	UPVC
In/Outlet	2" DIN or ANSI Flange
Closure Type	Swing bolt
Flow Rate	#1: Up to 20 CMH; #2: Up to 45 CMH
Max. Pressure	4 bar
Applications	Circulating Filtration System, Chemical Processing, Reclaimed Water Treatment, Sea Water Applications

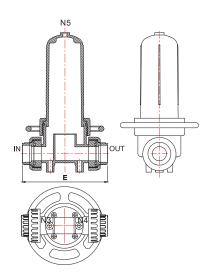
Pure Polypropylene Filter Housings

- Wheel model can be easily disassembled without wrench. Patent No# M560937
- Wrench model saves on-site space, can be used with DOE \
 2-222 \ 2-226 End filter cartridges.
 Patent No# M604233

Filter Length	10 inch
Material	Polypropylene (PP)
In/Outlet	1", 1 1 /2"JIS CPVC Union, 1" NPTF
Flow Rate	Up to 10 CMH Flowrate may vary according to different model & element type
Filter Type	Ø63, Ø69, Ø83 DOE, 2-222 Flat, 2-226 Flat
Color	Translucent White
Max. Pressure	7 bar at 25°C
Applications	Circulating Filtration System, Chemical Processing, Pure Water Purification



₩ Wheel Model

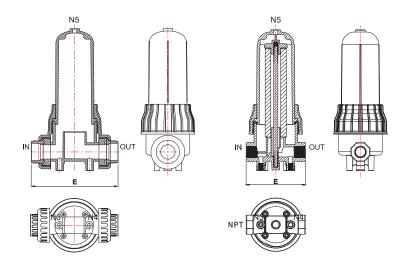


Inlet / Outlet N3/ N4/ N5 E 1" JIS Union 1/4"NPTF 241

 $1\ ^{1}/^{2}$ " JIS Union

1/4"NPTF 243 unit: mm

₩ Wrench Model



Inlet / Outlet	N3/ N4/ N5	E
1" JIS Union	1/4"NPTF	241
1 ½" JIS Union	¹ /4"NPTF	243
1" NPT	1/4"NPTF	167
	•	•.

Plastic Filter Housings

- Central core design to avoid bypass caused by shaking of the filter cartridge and ensure the filtration quality.
- Patent No. M594990 for the design of fixed filter cartridge core.

Filter Length	5, 10, 20 inch
Material	Clear: Styrene Acrylonitrile (SAN), Blue: Polypropylene (PP)
In/Outlet	¹ /4", ¹ /2", ³ /4" NPTF
O-ring Quantity	Single, Double
Flow Rate	Up to 2.5 CMH Flowrate may vary according to different model & element type
Filter Type	Double Open End
Color	Clear, Blue
Max. Pressure	7 bar at 25°C, 2 bar at 40°C
Applications	Circulating Filtration System, Reverse Osmosis Pretreatment, PCW Filtration



Large-Size Plastic Filter Housings

- Central core design to avoid bypass caused by shaking of the filter cartridge and ensure the filtration quality.
- Patent No. M594990 for the design of fixed filter cartridge core.

Filter Length	10, 20 inch
Material	Clear: Polycarbonate (PC), Blue: Polypropylene (PP)
In/Outlet	1", 1 ½" NPTF
O-ring Quantity	Single, Double
Flow Rate	Up to 10 CMH Flowrate may vary according to different model & element type
Filter Type	Double Open End
Color	Clear, Blue
Max. Pressure	7 bar at 25°C, 2 bar at 40°C
Applications	Circulating Filtration System, Reverse Osmosis Pretreatment, PCW Filtration





- 1. Taiwan Grace reserves the right to change information in this catalog without prior notice.
- 2. No material in this catalog may be copied, reproduced, republished in any way.
- Industrial applications are very complex, the contents and product descriptions in this catalog are provided as reference information, not guarantee of all sorts of situations.
- Space 's responsibility and liability shall be limited solely and exclusively to the replacement or the repair of parts manufactured by Orace.
- Grace will not be liable for damage to products caused by incorrect operation, unauthorized alteration, repair.