

PRODUCT
CATALOGUE

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— Filtrations Technik —

FRP Tank

- Inner layer HDPE Food Grade
- Fiberglass 600 te, stronger & better pressure
- Co efficient & safety factor
- 2,5" and 4" engineering plastic threaded main hole 6" Alluminium alloy flange



TANK SPECIFICATION

high durability and quality assurance

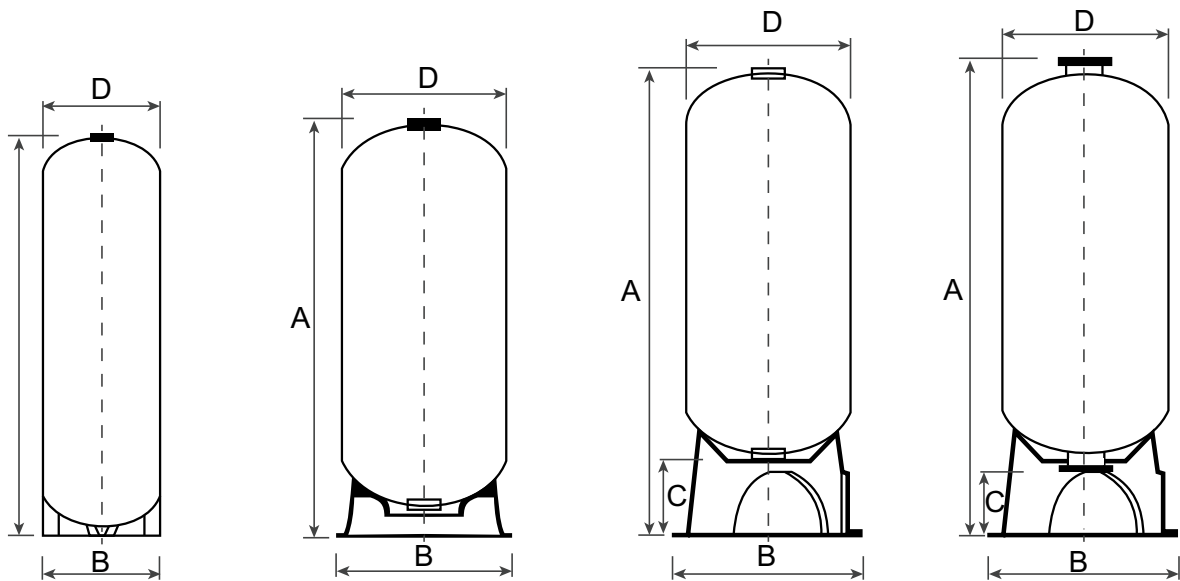


No	Model	Nominal dimension	Opening		Volume		Base	Dimension			
			Top	Bottom	litre	Gallon		A (mm)	B (mm)	C (mm)	D (mm)
1	05x17	130*432	2.5"-8NPSM	/	4	0.1	Standard	437	Φ136	/	Φ130
2	05x20	130*508	2.5"-8NPSM	/	4.7	0.2	Standard	513	Φ136	/	Φ130
3	06x13	150*330	2.5"-8NPSM	/	4.9	1.3	Standard	335	Φ161	/	Φ155
4	06x17	150*432	2.5"-8NPSM	/	6.7	1.8	Standard	437	Φ161	/	Φ155
5	06x35	150*890	2.5"-8NPSM	/	15	4.0	Standard	896	Φ161	/	Φ155
6	07x13	180*330	2.5"-8NPSM	/	6.3	1.7	Standard	335	Φ188	/	Φ180
7	07x17	180*432	2.5"-8NPSM	/	8.6	2.3	Standard	437	Φ188	/	Φ180
8	07x35	180*890	2.5"-8NPSM	/	20.1	5.3	Standard	895	Φ188	/	Φ180
9	07x44	180*1110	2.5"-8NPSM	/	24.5	6.5	Standard	1125	Φ188	/	Φ180
10	08x13	200*330	2.5"-8NPSM	/	8.5	2.2	Standard	335	Φ216	/	Φ207
11	08x17	200*432	2.5"-8NPSM	/	10.9	2.9	Standard	437	Φ216	/	Φ207
12	08x24	200*610	2.5"-8NPSM	/	15.9	4.2	Standard	616	Φ216	/	Φ207
13	08x35	200*890	2.5"-8NPSM	/	25	6.6	Standard	895	Φ216	/	Φ207
14	08x44	200*1120	2.5"-8NPSM	/	32.6	8.6	Standard	1125	Φ216	/	Φ207
15	09x17	230*432	2.5"-8NPSM	/	13.8	3.6	Standard	437	Φ240	/	Φ231
16	09x35	230*890	2.5"-8NPSM	/	32.1	8.5	Standard	895	Φ240	/	Φ232
17	09x42	230*1068	2.5"-8NPSM	/	38.4	10.1	Standard	1073	Φ240	/	Φ233
18	09x48	230*1220	2.5"-8NPSM	/	44.3	11.7	Standard	1225	Φ240	/	Φ231
19	10x17	250*432	2.5"-8NPSM	/	16.7	4.4	Standard	437	Φ266	/	Φ258
20	10x19	250*484	2.5"-8NPSM	/	19.3	5.1	Standard	488	Φ266	/	Φ258
21	10x24	250*610	2.5"-8NPSM	/	25.2	6.7	Standard	616	Φ266	/	Φ258
22	10x35	250*890	2.5"-8NPSM	/	39.4	10.4	Standard	895	Φ266	/	Φ258
23	10x44	250*1119	2.5"-8NPSM	/	51	13.5	Standard	1124	Φ266	/	Φ258
24	10x54	250*1373	2.5"-8NPSM	/	63.5	16.8	Standard	1378	Φ266	/	Φ258
25	12x48	300*1220	2.5"-8NPSM	/	78.9	20.8	Standard	1230	Φ318	/	Φ307
26	12x52	300*1320	2.5"-8NPSM	/	85.9	22.7	Standard	1330	Φ318	/	Φ307
27	12x65	300*1650	2.5"-8NPSM	/	109.1	28.8	Standard	1660	Φ318	/	Φ307
28	13x44	330*1117	2.5"-8NPSM	/	83.1	22.0	Standard	1127	Φ343	/	Φ334
29	13x54	330*1370	2.5"-8NPSM	/	104.3	27.6	Standard	1380	Φ343	/	Φ334
30	14x52	350*1320	2.5"-8NPSM	/	115.4	30.5	Standard	1325	Φ369	/	Φ359
31	14x52	350*1320	4"-8UN	/	115.4	30.5	Standard	1325	Φ369	/	Φ359
32	14x65	350*1650	2.5"-8NPSM	/	147	38.8	Standard	1655	Φ369	/	Φ359
33	14x65	350*1650	4"-8UN	/	147	38.8	Standard	1655	Φ369	/	Φ359
34	14x65	350*1650	4"-8UN	4"-8UN	147	38.8	Tripod	1870	Φ370	220	Φ359
35	16x52	400*1320	2.5"-8NPSM	/	150	39.6	Standard	1325	Φ420	/	Φ409
36	16x52	400*1320	4"-8UN	/	150	39.6	Standard	1325	Φ420	/	Φ409
37	16x65	400*1650	2.5"-8NPSM	/	191.3	50.5	Standard	1655	Φ420	/	Φ409
38	16x65	400*1650	4"-8UN	/	191.3	50.5	Standard	1655	Φ420	/	Φ409
39	16x65	400*1650	4"-8UN	4"-8UN	191.3	50.5	Tripod	1870	Φ420	220	Φ409
40	18x36	450*914	4"-8UN	/	124.9	33.0	Round	934	Φ451	/	Φ462
41	18x53	450*1346	4"-8UN	/	193.6	51.1	Round	1366	Φ451	/	Φ462
42	18x65	450*1650	4"-8UN	/	242.3	64.0	Round	1670	Φ451	/	Φ462
43	18x65	450*1650	4"-8UN	4"-8UN	242.3	64.0	Tripod	1873	Φ480	223	Φ462
44	20x69	500*1752	4"-8UN	/	310.4	82.0	Round	1772	Φ523	/	Φ513
45	20x69	500*1752	4"-8UN	4"-8UN	310.4	82.0	Tripod	1997	Φ535	245	Φ513
46	21x36	550*915	4"-8UN	/	168.2	44.4	Round	935	Φ532	/	Φ539
47	21x53	550*1346	4"-8UN	/	262.4	69.3	Round	1366	Φ532	/	Φ539
48	21x62	550*1575	4"-8UN	/	312.7	82.6	Round	1595	Φ532	/	Φ539
49	21x62	550*1575	4"-8UN	4"-8UN	312.7	82.6	Tripod	1823	Φ555	248	Φ539
50	24x65	600*1650	4"-8UN	/	426.5	112.7	Round	1670	Φ612	/	Φ613

TANK SPECIFICATION

high durability and quality assurance

No	Model	Nominal dimension	Opening		Volume		Base	Dimension			
			Top	Bottom	Litre	Gallon		A (mm)	B (mm)	C (mm)	D (mm)
51	24x65	600*1650	4"-8UN	4"-8UN	426.5	112.7	Tripod	1898	Φ610	248	Φ613
52	24x72	600*1830	4"-8UN	/	477.5	126.2	Round	1850	Φ612	/	Φ613
53	24x72	600*1830	4"-8UN	4"-8UN	477.5	126.2	Tripod	2080	Φ610	248	Φ613
54	30x65	750*1650	4"-8UN	/	645.7	170.6	Round	1700	Φ762	/	Φ766
55	30x65	750*1650	4"-8UN	4"-8UN	645.7	170.6	Tripod	1880	Φ762	228	Φ766
56	30x72	750*1830	4"-8UN	/	725.9	191.8	Round	1880	Φ762	/	Φ766
57	30x72	750*1830	4"-8UN	4"-8UN	725.9	191.8	Tripod	2078	Φ762	228	Φ766
58	30x72	750*1980	6"-FLG	6"-FLG	736.2	194.5	Tripod	2245	Φ815	265	Φ770
59	36x65	900*1650	4"-8UN	/	914.6	241.6	Round	1700	Φ910	/	Φ919
60	36x65	900*1650	4"-8UN	4"-8UN	914.6	241.6	Tripod	1879	Φ900	228	Φ919
61	36x72	900*1830	4"-8UN	/	1030.2	272.2	Round	1880	Φ910	/	Φ919
62	36x72	900*1830	4"-8UN	4"-8UN	1030.2	272.2	Tripod	2058	Φ900	228	Φ919
63	36x72	900*1980	6"-FLG	6"-FLG	1045.2	276.1	Tripod	2240	Φ920	257	Φ920
64	40x65	1000*1650	4"-8UN	4"-8UN	1148.8	303.5	Tripod	1980	Φ1010	329	Φ1010
65	40x65	1000*1800	6"-FLG	6"-FLG	1139.9	301.2	Tripod	2060	Φ1010	262	Φ1010
66	40x79	1000*2006	4"-8UN	4"-8UN	1338.3	353.6	Tripod	2335	Φ1010	329	Φ1010
67	40x79	1000*2156	6"-FLG	6"-FLG	1328.4	351.0	Tripod	2418	Φ1010	262	Φ1010
68	42x72	1100*1830	6"-FLG	6"-FLG	1431.2	378.1	Tripod	2093	Φ1070	263	Φ1080
69	48x72	1200*1830	6"-FLG	6"-FLG	1786.2	471.9	Tripod	2121	Φ1200	291	Φ1220
70	60x79	1500*2007	6"-FLG	6"-FLG	3086.3	815.4	Tripod	2300	Φ1500	294	Φ1512
71	63x67	1600*1702	6"-FLG	6"-FLG	2629.8	694.8	Tripod	1996	Φ1620	294	Φ1604
72	63x86	1600*2184	6"-FLG	6"-FLG	3424.5	904.8	Tripod	2478	Φ1620	294	Φ1604
73	72x79	1800*2007	6"-FLG	6"-FLG	4819.4	1273.3	Tripod	2300	Φ1800	294	Φ1856
74	80x79	2000*2007	6"-FLG	6"-FLG	4819.4	1273.3	Tripod	2300	Φ2000	294	Φ2036



8"-16"
2.5" 8-NPSM
Standard base

18"-36"
2.5" 8-NPSM
Round base

14"-40"
4"-8UN
Tripod base

30"-80"
6" - FLG

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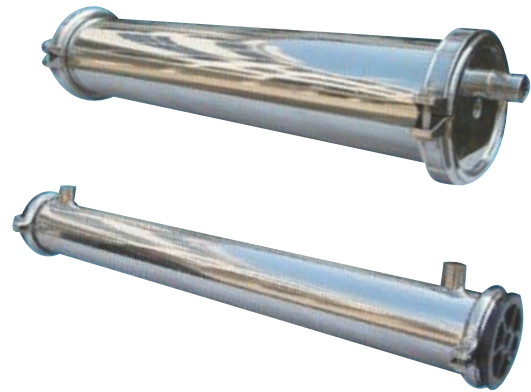
PRESSURE VESSEL



Pressure Vessel

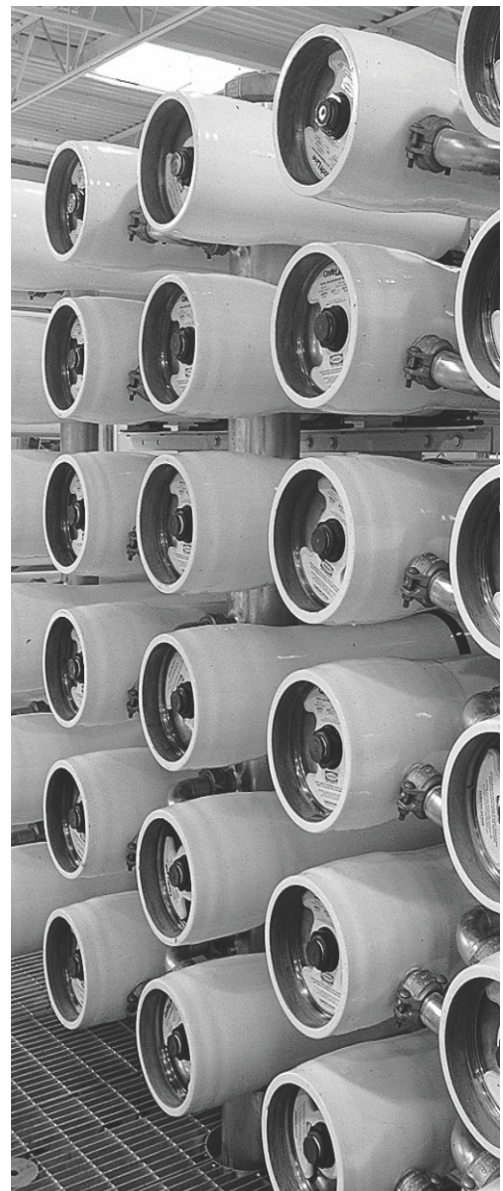
STAINLESS STEEL PRESSURE VESSEL

- Complete series : 2.5" , 4" and 8"
- Material stainless steel 304 and 316 are available
- Both end port and side port are available
- Seamless housing nad with seam housing for option
- Maximum operating pressure 300 PSI (17 Bar)
- Not affected by UV rays or sunlight
- Can with stand high temperature, up to 200° F
- Capable of supporting process piping
- Designed for direct connection to most style of RO element



FRP PRESSURE VESSEL

- FRP Pressure Vessel is the membrane housing made in FRP materila, including 8", 4", 2.5" series, available as End port and Side port.
- Popular used in Electron, Electric Power, Metallurgy, Chemical, Food & Drinking Water.
- Desalination, waste water treatment and so on.
- Available pressure : 300 PSI, 450 PSI, 600 PSI, 800 PSI, 1000 PSI and 1200 PSI.
- Applicable to most standar membranes, such as DOW, Hydranautics, Filmtec, GE Osmonics, CSM, Toray, IGNE, Lewabrane.

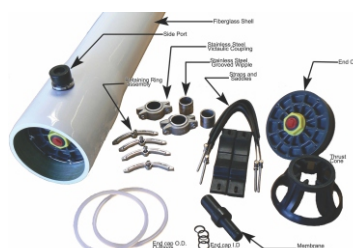


TANK SPECIFICATIONS :

Material	Pressure Type	Type	Size	Element
FRP	300	End Port	2.5 "	1
SS 304	450	Side Port	4 "	2
SS 316	600	Multi Port	8 "	3
	1000			4
	1200			5
				6

SPECIFICATION

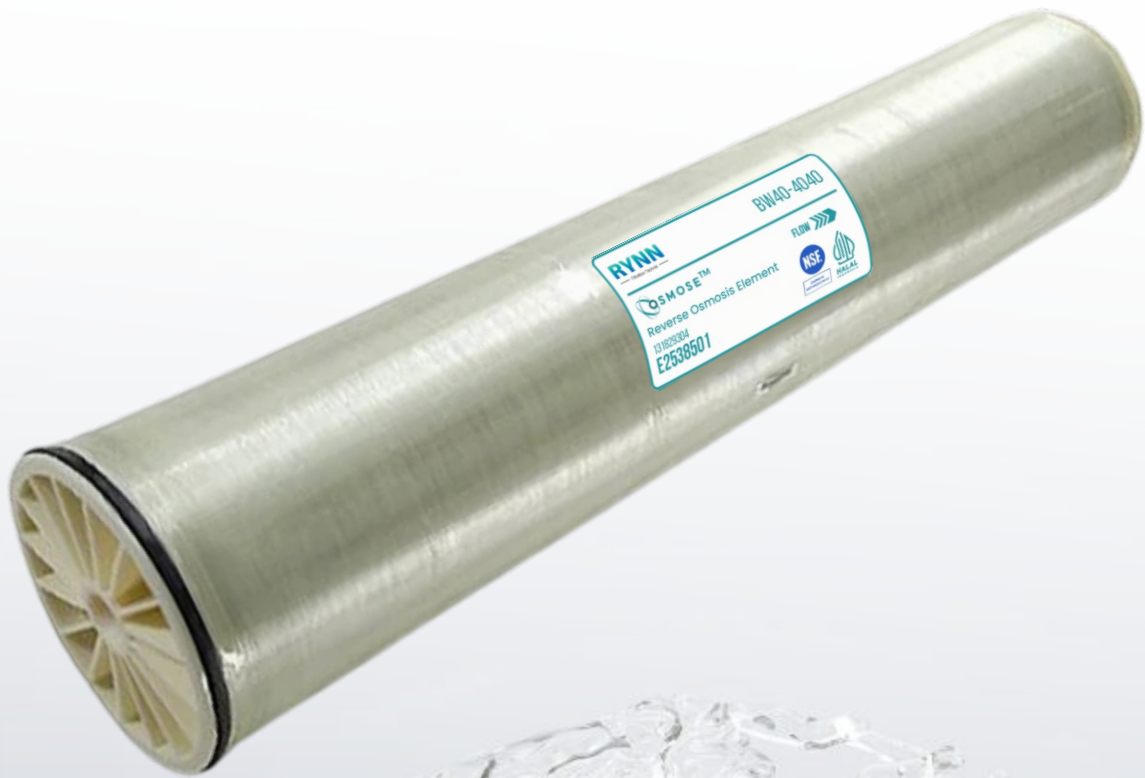
- High strength & light weight
- Non-corrosive / low maintenance
- Electrically non-conductive
- Easy to assemble and erect
- Attractive appearance



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MEMBRANE



Advanced Brackish Water RO Membrane

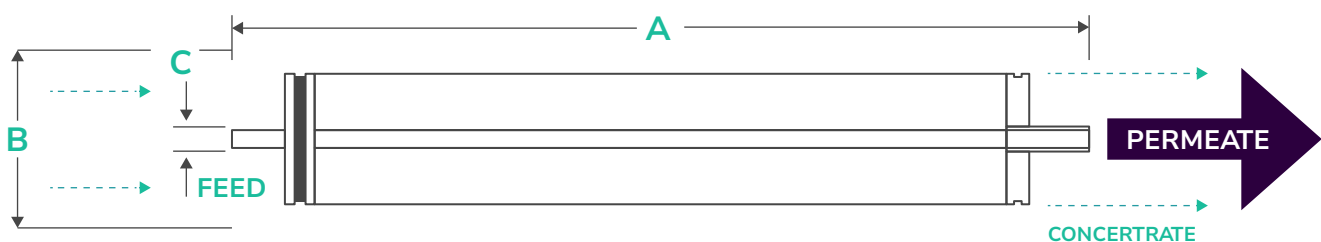
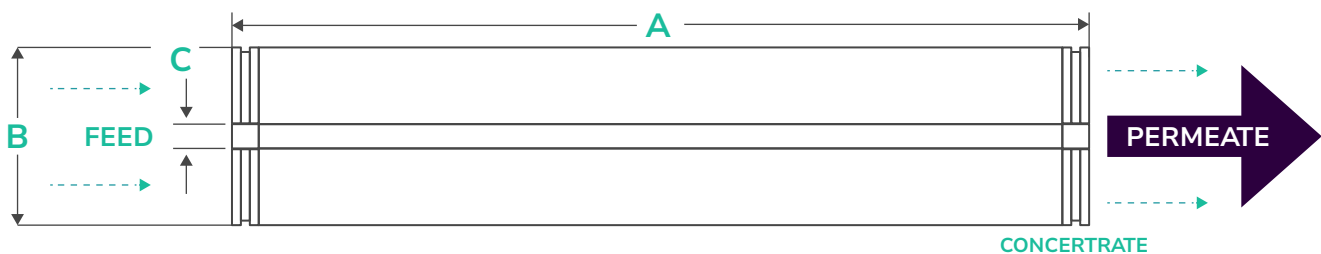
High Rejection | High Flow

Delivering industry-leading performance for demanding water treatment applications, this membrane element combines superior salt rejection and high permeate flow to ensure long-term reliability and efficiency in brackish water reverse osmosis systems.

Product	Active Area ft ² (m ²)	Feed Spacer (mill)	Permeate Flow gpd (m ³ /day)	Salt Rejection (%)
Osmose BW80-400	400 (37)	28	11.000 (42)	99.7 % (99.6% minimum)
Osmose BW80-400-34	400 (37)	34	11.000 (42)	99.7 % (99.6% minimum)
Osmose BW40-4040	94 (8.7)	28	2700 (10.2)	99.7 % (99.6% minimum)
Osmose BW40-4040 MAX	94 (8.7)	28	3200 (12.1)	99.7 % (99.6% minimum)

Performance Test Condition

NaCl solution	1500 ppm
Applied Pressure	225 psig (15.5 Bar)
Operating Temperature	25° F (77° F)
Permeate Recovery	15%
Range	6.5 - 7.0



Advanced Sea Water RO Membrane

High Rejection | High Flow

Delivering industry-leading performance for demanding water treatment applications, this membrane element combines superior salt rejection and high permeate flow to ensure long-term reliability and efficiency in sea water reverse osmosis systems.

Product	Active Area ft ² (m ²)	Feed Spacer (mill)	Permeate Flow gpd (m ³ /day)	Salt Rejection (%)
Osmose SW80-400 PRO	400 (37)	28	7.500 (26.5)	99.8 % (99.7% minimum)
Osmose SW40-4040 PRO	94 (8.7)	28	2700 (10.2)	99.8 % (99.7% minimum)

Performance Test Condition

NaCl solution	32.000 ppm
Applied Pressure	800 psig (55 Bar)
Operating Temperature	25° F (77° F)
Permeate Recovery	8%
Range	6.5 - 7.0



Advanced Ultra Low Energy RO Membrane

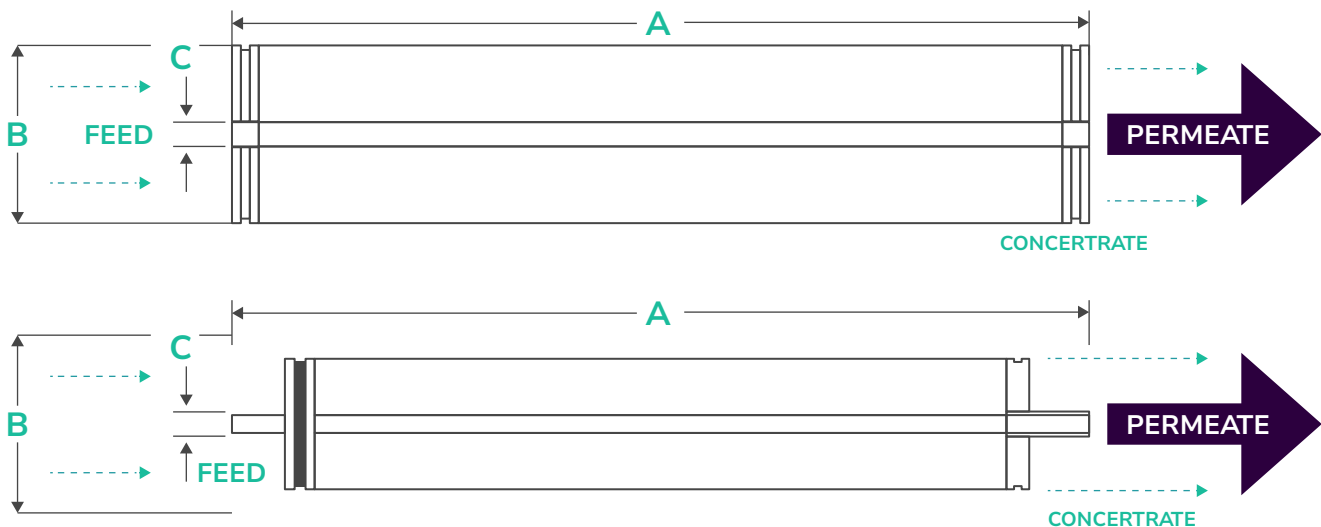
High Rejection | High Flow | Low Energy

Delivering industry-leading performance for demanding water treatment applications, this membrane element combines superior salt rejection, high permeate flow, and low energy consumption to ensure long-term reliability and efficiency in brackish water reverse osmosis systems.

Product	Active Area ft ² (m ²)	Feed Spacer (mill)	Permeate Flow gpd (m ³ /day)	Salt Rejection (%)
Osmose ULE80-400	400 (37)	28	10.500 (40)	99.6 % (99.5% minimum)
Osmose ULE40-4040	94 (8.7)	28	2700 (10.2)	99.6 % (99.5% minimum)

Performance Test Condition

NaCl solution	1500 ppm
Applied Pressure	150 psig (10.3 Bar)
Operating Temperature	25° F (77° F)
Permeate Recovery	15%
Range	6.5 - 7.0



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MBR



ZX-015-MBR

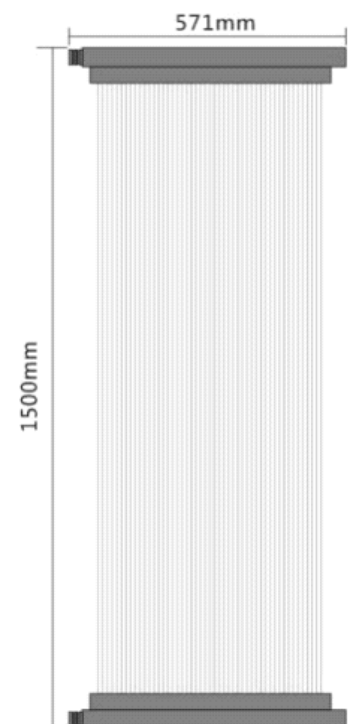
Membrane Bio Reactor (MBR) MBR is a hybrid wastewater treatment technology that combines biological treatment by activated sludge and physical treatment by membrane filtration. Compared to conventional activated sludge treatment, MBR and particularly HYDRAsub® produces high quality permeate water suitable for RO treatment and reduces the footprint drastically by elimination of sedimentation tank and operation at higher Mixed Liquor Suspended Solids (MLSS).

Filtration Performance	Water Output Index
TSS	≤1mg/L
Turbidity	≤1NTU
COD _{cr}	Removal rate depends on the bio-chemical performance & designed sludge concentration
NH ₃ -H	(Instant removal rate ≤30% without bio-chemical)

Specification

Technical Parameters	Water Output Index
Filtering Direction	Outside-in
Membrane Material	Reinforced PVDF
Precision	0.1 micron
Membrane Area	15m ²
Membrane ID/OD	1.0mm/ 2.2mm
Size	571mm×1500mm×45mm
Jopint Size	Ø27mm

Component	Material
Hollow Fiber Membrane	Reinforced PVDF
Sealing Compound	Epoxy Resins + Polyurethane (PU)
Housing	ABS



Using Conditions

Item	Limit	Remark
PH range	5 - 9 (2-12 When Washing)	Neutral PH is better for bacterial culture
Particle Diameter	<2mm	Prevent sharp particle to strach membrane
Oil & Grease	≤2mg/L	Prevent membrane fouling / sharp flux decrease
Hardness	≤150mg/L	Prevent membrane scalling

ZX-020-MBR

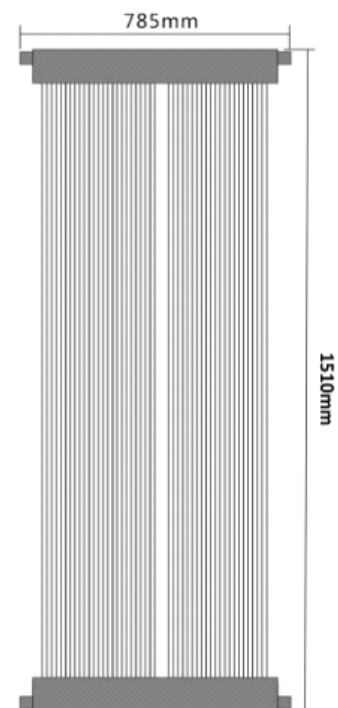
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Filtration Performance	Water Output Index
TSS	≤1mg/L
Turbidity	≤1
CODcr	Removal rate depends on the bio-chemical performance & designed sludge concentration
NH3-H	(Instant removal rate ≤30% without bio-chemical)

Specification

Technical Parameters	Water Output Index
Filtering Direction	Outside-in
Membrane Material	Reinforced Modified PVDF
Precision	0.1 micron
Membrane Area	20m ²
Membrane ID/OD	1.0mm/ 2.2mm
Size	785mm×1510mm×40mm
Jopint Size	DN32

Component	Material
Hollow Fiber Membrane	Reinforced Modified PVDF
Sealing Compound	Epoxy Resins + Polyurethane (PU)
Housing	ABS



Using Conditions

Item	Limit	Remark
PH range	5 - 9 (2-12 When Washing)	Neutral PH is better for bacterial culture
Particle Diameter	<2mm	Prevent sharp particle to strach membrane
Oil & Grease	≤2mg/L	Prevent membrane fouling / sharp flux decrease
Hardness	≤150mg/L	Prevent membrane scalling

ZX-025-MBR

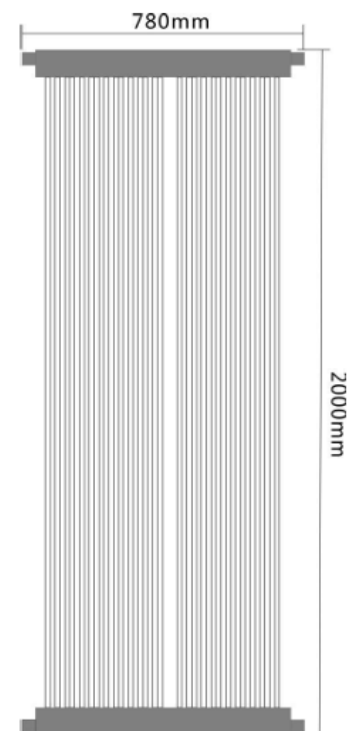
Membrane Bio Reactor (MBR) MBR is a hybrid wastewater treatment technology that combines biological treatment by activated sludge and physical treatment by membrane filtration. Compared to conventional activated sludge treatment, MBR and particularly HYDRAsub® produces high quality permeate water suitable for RO treatment and reduces the footprint drastically by elimination of sedimentation tank and operation at higher Mixed Liquor Suspended Solids (MLSS).

Filtration Performance	Water Output Index
TSS	≤1mg/L
Turbidity	≤1
CODcr	Removal rate depends on the bio-chemical performance & designed sludge concentration of the system
NH3-H	(Instant removal rate of membranes ≤30% without bio-chemical)

Specification

Technical Parameters	Water Output Index
Filtering Direction	Outside-in
Membrane Material	Modified PVDF + Lining
Precision	0.1 micron
Membrane Area	25m ²
Membrane ID/OD	1.0mm/ 2.2mm
Size	785mm×2000mm×40mm
Jopint Size	DN25

Component	Material
Hollow Fiber Membrane	Modified PVDF + Lining
Sealing Compound	Epoxy Resins + Polyurethane (PU)
Housing	ABS



Using Conditions

Item	Limit	Remark
PH range	5 - 9 (1-12 When Washing)	Neutral PH is better for bacterial culture
Particle Diameter	<2mm	Prevent sharp particles to scratch membrane
Oil & Grease	≤2mg/L	Prevent membrane fouling/sharp flux decrease
Hardness	≤150mg/L	Prevent membrane scalling
Total Iron	≤1mg/L	Prevent membrane scalling
Sludge Concentration	≤12000mg/L	Prevent sharp flux decrease

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ULTRAFILTRATION



The Global Leader in Ultrafiltration (UF) Technology

HFPC-27 is an inside-out feed, Hollow Fiber, PVC ultrafiltration membrane.

UltraPure™ comprised of trusted products with a proven performance record when addressing a wide range of filtration challenges, UltraPure™ helps customer easily leverage complementary technologies to build efficient and robust solutions tailored to specific applications.

UltraPure™ ultrafiltration (UF) hollow-fiber membranes are designed with a robust life expectancy, hollow fiber UF membrane module has one of the industry's highest mechanical strength and chemical resistance (oxidation, pH), and effectively removes suspended solids and microorganisms such as pathogens for various water purification applications.

Key Feature:

- UltraPure PVC membrane material is highly resistance to chlorine and strong acids, result on long term membrane performance and high reliability.
- 27 m² membrane surface area.
- 0.01 Micron nominal pore diameter, effectively removes bacteria, viruses,organics, silt, colloids and particles.
- Inside-out flow configuration for superior performance, increases the membrane surface area, thus improving the permeability.

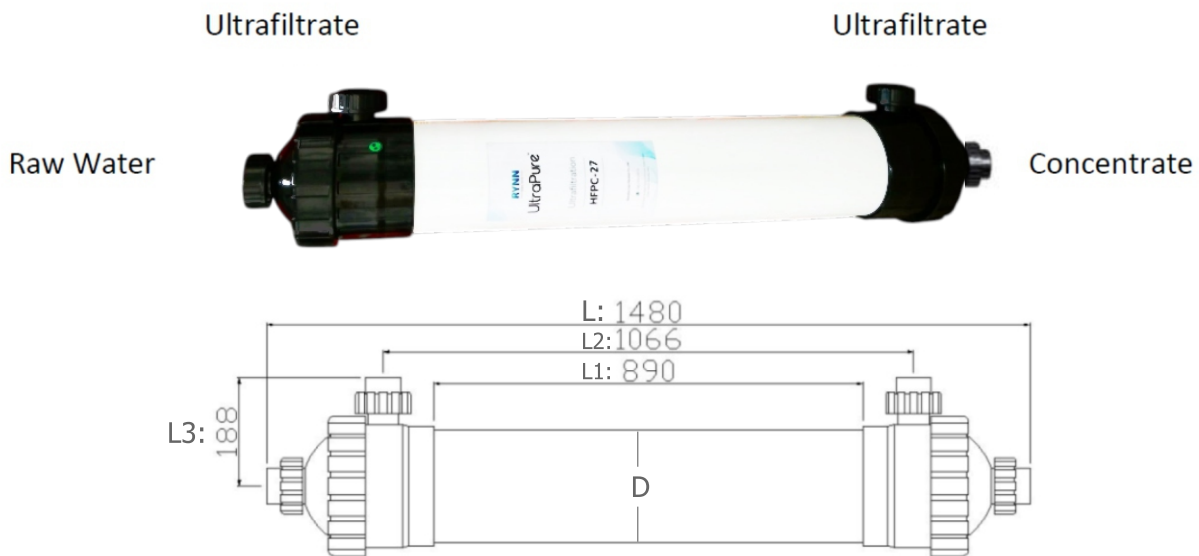
UltraPure™ HFPC-27 will consistently deliver the highest quality effluent water.

Membrane Characteristic	Unit	Value
Filtration type		Inside-out
Membrane material		PVC (Polyvinyl Chloride)
Outer membrane surface area	M ² (ft ²)	27 (290)
Nominal pore size	µm	0.01
MWCO	Dalton	100K
ID/DO	mm	1.0 / 1,8
Dimension	mm	D200/1480
Connector size		DN 40 union

Membrane Performance	Value
Suspended substances, particles >1µm	Removal Rate >99%
SDI	<3
Turbidity	≤ 1 NTU
TOC / COD	Removal Rate: 0-25%
Bacteria/Viruses	Removal Rate >4log

*Feed water turbidity < 25 ntu

Attention : Bacterial & viruses removal rate just an experimental datum, which cannot be the basis for sterile water production. When used for drinking water production or other condition which strict requirement for bacteria removal



Typical Properties

	Membrane	Area	Volume	Weight
Type	m ²	ft ²	M3/H	kg/lbs
Inside-out	27	290	0.9-2.7	32/68

Component Material

Component	Material
Membrane	modified PVC
Sealing	epoxy resins
Housing	UPVC

Dimensions

Product	Units	Length				Diameter
		L	L1	L2	L3	D
HFPC-27	SI(mm)	1480	890	1066	188	200

Suggested Operating Conditions

	Units
Pure Water Flux	7000 L/H (0,15 Mpa, 25 °C)
Designed Flux	35-100L/m ² .hr (0,15 MPa, 25 °C)
Suggested Working Pressure	≤ 0,2 MPa
Maximum Transmembrane Pressure	0,2 Mpa
Maximum Backwashing Pressure	0,2 MPa
Maximum Working Temperature	45 °C
pH Range	Working: 4-10; Washing: 2-12
Operating Mode	Cross Flow or Dead End
Backwashing Flow Rate	100-150 L/m ² .hr
Backwashing Frequency	Every 30-60 min
Backwashing Duration	30-60 s
CEB Frequency	0-4 times per day
CEB Duration	5-10 min
CIP Frequency	Every 1-3 months
Washing Chemical	
Sterillization	15 ppm Sodium Hypochlorite
Organic Pollution Washing	0,2% Sodium Hypochlorite + 0,1% Sodium Hydroxide
Inorganic Pollution Washing	1-2% Citric Acid/0,2% Hydrochloric Acid

UltraPure™ Ultrafiltration Modules can be used for a wide variety of treatment applications as: drinking water, industrial process water, pretreatment for RO system, municipal wastewaters, surface water, and seawater.

The Global Leader in Ultrafiltration (UF) Technology

HFPC30 is an inside-out feed, Hollow Fiber, PVC ultrafiltration membrane.

UltraPure™ comprised of trusted products with a proven performance record when addressing a wide range of filtration challenges, UltraPure™ helps customer easily leverage complementary technologies to build efficient and robust solutions tailored to specific applications.

UltraPure™ ultrafiltration (UF) hollow-fiber membranes are designed with a robust life expectancy, hollow fiber UF membrane module has one of the industry's highest mechanical strength and chemical resistance (oxidation, pH), and effectively removes suspended solids and microorganisms such as pathogens for various water purification applications.

Key Feature:

- UltraPure PVC membrane material is highly resistance to chlorine and strong acids, result on long term membrane performance and high reliability.
- 30 m2 membrane surface area.
- 0.01 Micron nominal pore diameter, effectively removes bacteria, viruses,organics, silt, colloids and particles.
- Outside-In flow configuration for superior performance, increases the membrane surface area, thus improving the permeability.

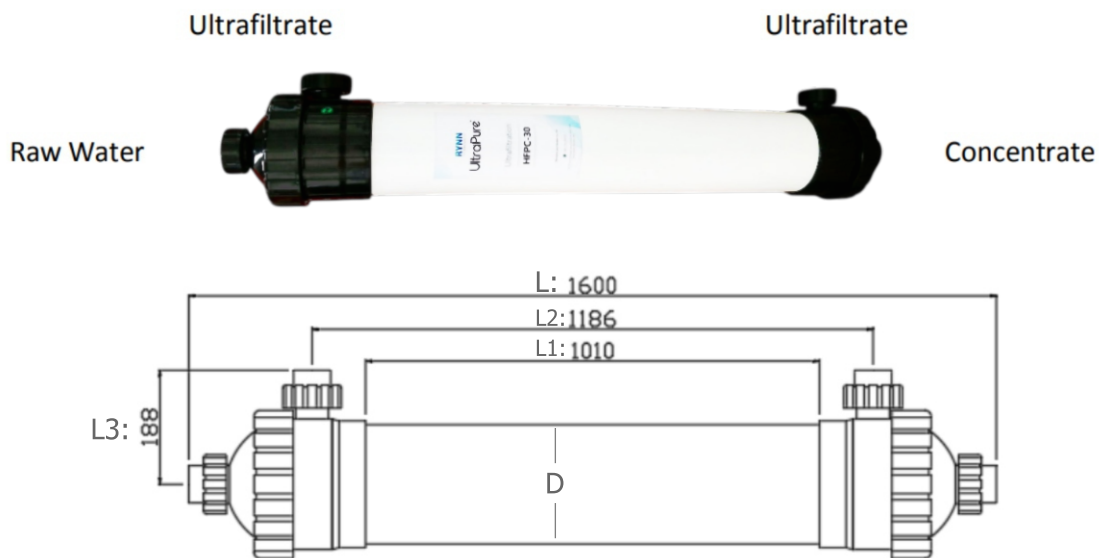
UltraPure™ HFPC30 will consistently deliver the highest quality effluent water.

Membrane Characteristic	Unit	Value
Filtration Type		Outside-In
Membrane Material		PVC (Polyvinyl Chloride)
Outer Membrane Surface Area	M2(ft2)	30 (322)
Nominal Pore Size	µm	0.01
MWCO	Dalton	100K
ID/DO	mm	1.0 / 1,8
Dimension	mm	D200*1600
Connector Size		DN 40 union

Membrane Performance	Value
Suspended substances, particles >1µm	Removal Rate >99%
SDI	<3
Turbidity	< 1 NTU
TOC / COD	Removal Rate: 0-25%
Bacteria/Viruses	Removal Rate >4log

*Feed water turbidity < 25 ntu

Attention : Bacterial & viruses removal rate just an experimental datum, which cannot be the basis for sterile water production. When used for drinking water production or other condition which strict requirement for bacteria removal



Typical Properties

	Membrane	Area	Volume	Weight
Type	m ²	ft ²	M3/H	kg/lbs
Outside-In	30	322	1.0-3.0	36/79

Component Material

Component	Material
Membrane	modified PVC
Sealing	epoxy resins
Housing	UPVC

Dimensions

Product	Units	Length				Diameter
		L	L1	L2	L3	D
HFPC-30	SI(mm)	1600	1010	1186	188	200

Suggested Operating Conditions

	Units
Pure Water Flux	7500 L/H (0,15 Mpa, 25 °C)
Designed Flux	40-120L/m ² .hr (0,15 MPa, 25 °C)
Suggested Working Pressure	≤ 0,2 MPa
Maximum Transmembrane Pressure	0,2 Mpa
Maximum Backwashing Pressure	0,2 MPa
Maximum Working Temperature	45 °C
pH Range	Working: 4-10; Washing: 2-12
Operating Mode	Cross Flow or Dead End
Backwashing Flow Rate	100-150 L/m ² .hr
Backwasing Frequency	Every 30-60 min
Backwashing Duration	30-60 s
CEB Frequency	0-4 times per day
CEB Duration	5-10 min
CIP Frequency	Every 1-3 months
Washing Chemical	
Sterillization	15 ppm Sodium Hypochlorite
Organic Pollution Washing	0,2% Sodium Hypochlorite + 0,1% Sodium Hydroxide
Inorganic Pollution Washing	1-2% Citric Acid/0,2% Hydrochloric Acid

UltraPure™ Ultrafiltration Modules can be used for a wide variety of treatment applications as: drinking water, industrial process water, pretreatment for RO system, municipal wastewaters, surface water, and seawater.

The Global Leader in Ultrafiltration (UF) Technology

HFP 80 is an outside-in feed, hollow fiber, PVDF ultrafiltration membrane.

UltraPure™ comprised of trusted products with a proven performance record when addressing a wide range of filtration challenges, UltraPure™ helps customer easily leverage complementary technologies to build efficient and robust solutions tailored to specific applications.

UltraPure™ ultrafiltration (UF) hollow-fiber membranes are designed with a robust life expectancy, hollow fiber UF membrane module has one of the industry's highest mechanical strength and chemical resistance (oxidation, pH), and effectively removes suspended solids and microorganisms such as pathogens for various water purification applications.

Key Feature:

- UltraPure PVDF membrane material is highly resistance to chlorine and strong acids, result on long term membrane performance and high reliability.
- 80 m2 membrane surface area.
- 0.01 Micron nominal pore diameter, effectively removes bacteria, viruses,organics, silt, colloids and particles.
- Outside-In flow configuration for superior performance, increases the membrane surface area, thus improving the permeability.

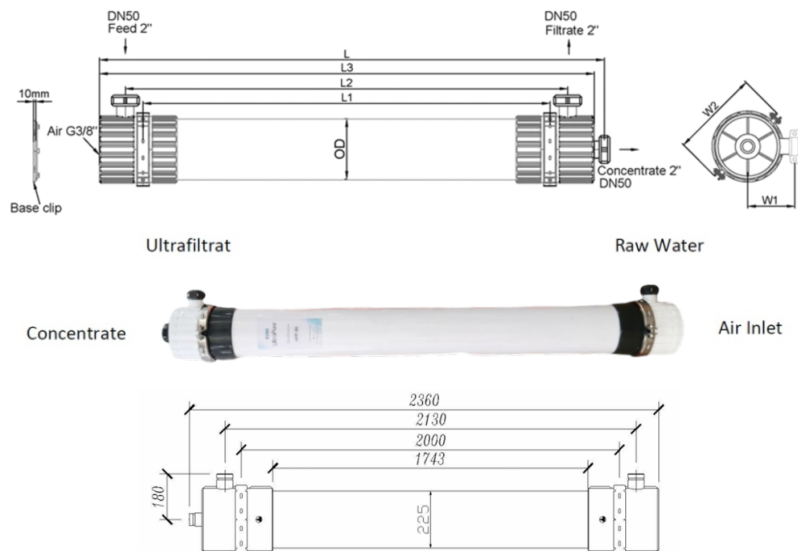
UltraPure™ HFP 80 will consistently deliver the highest quality effluent water.

Membrane Characteristic	Unit	Value
Filtration Type		Outside-In
Membrane Material		PVDF (Polyvinylidene fluoride)
Outer Membrane Surface Area	M2(ft2)	80(861)
Nominal Pore Size	µm	0.01
MWCO	Dalton	200K
ID/DO	mm	0,8/1,3
Dimension	mm	D225*2360
Connector Size		DN 50 Clamping Air Inlet
Air Pipe	mm	10

Membrane Performance	Value
Suspended substances, particles >1µm	Removal Rate >99%
SDI	<3
Turbidity	≤1 NTU
TOC / COD	Removal Rate: 0-30%
Bacteria/Viruses	Removal Rate >4log

*Feed water turbidity <25NTU

Attention : Bacterial & viruses removal rate just an experimental datum, which cannot be the basis for sterile water production. When used for drinking water production or other condition which strict requirement for bacteria removal



Typical Properties

	Membrane	Area	Volume	Weight
Type	m ²	ft ²	M ³ /H	kg/lbs
Outside-in	80	861	3,2-9,6	80/177

Component Material

Component	Material
Membrane	modified PVDF
Sealing	epoxy resins
Housing	UPVC

Dimensions

Product	Units	Length				Diameter	Width	
		L	L1	L2	L3	D	W1	W2
HFP-80	SI (mm)	2360	2000	2130	1743	225	180	342
	US (inchi)	92,91	78,74	83,85	68,26	8,9	7,1	13,5

Suggested Operating Conditions

	Units
Pure Water Flux	11400 L/H (0,15 MPa, 25°C)
Designed Flux	40-120L/m ² .hr (0,15 MPa, 25°C)
Suggested Working Pressure	≤ 0,2 MPa
Maximum Transmembrane Pressure	0,15 Mpa
Maximum Backwashing Pressure	0,15 MPa
Air Washing Volume	0,1-0,15 N m ³ /m ² .hr
Air Washing Pressure	≤ 0,1 MPa
Maximum Working Temperature	45 °C
pH Range	Working: 4-10; Washing: 2-12
Operating Mode	Cross Flow or Dead End
Backwashing Flow Rate	100-150 L/m ² .hr
Backwasing Frequency	Every 30-60 min
Backwashing Duration	30-60 s
CEB Frequency	0-4 times per day
CEB Duration	5-10 min
CIP Frequency	Every 1-3 months
Washing Chemical	
Sterillization	15 ppm Sodium Hypochlorite
Organic Pollution Washing	0,2% Sodium Hypochlorite + 0,1% Sodium Hydroxide
Inorganic Pollution Washing	1-2% Citric Acid/0,2% Hydrochloric Acid

UltraPure™ Ultrafiltration Modules can be used for a wide variety of treatment applications as: drinking water, industrial process water, pretreatment for RO system, municipal wastewaters, surface water, and seawater.

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— Filtrations Technik —

UV LAMP

UV-LUX

DISINFECTION TECHNOLOGY



Parameters

Description

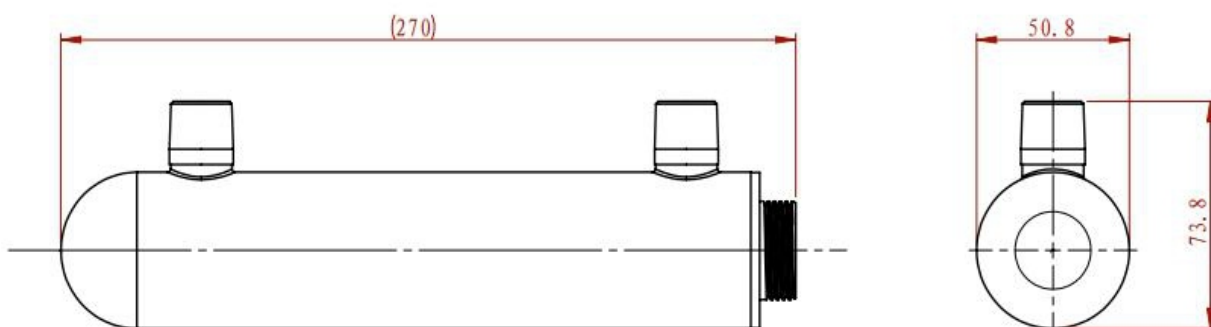
UV Model	BIO-A
Flow rate	1GPM
Lamp Wattage	11W/ea.
Lamp Life	9000-12000Hours
Lamp Brand	Heraeus
Lamp Qty	1PCS
Power Supply	220V 50Hz
UV Chamber Size	270mm*50.8mm*73.8mm
Inlet/Outlet Size	1/2" Male NPT
Material of UV Chamber	SS304
Ballast	Shows the lamp's serving time (365 Days) and accumulated working time of the ballast
Water Temperature	5°C-40°C
Working Pressure	0-0.8Mpa

Operating Environment

Indoor Us

Ambient Temperature	5°C-40°C
Ambient Humidity	<80%

Drawing of UV Chamber



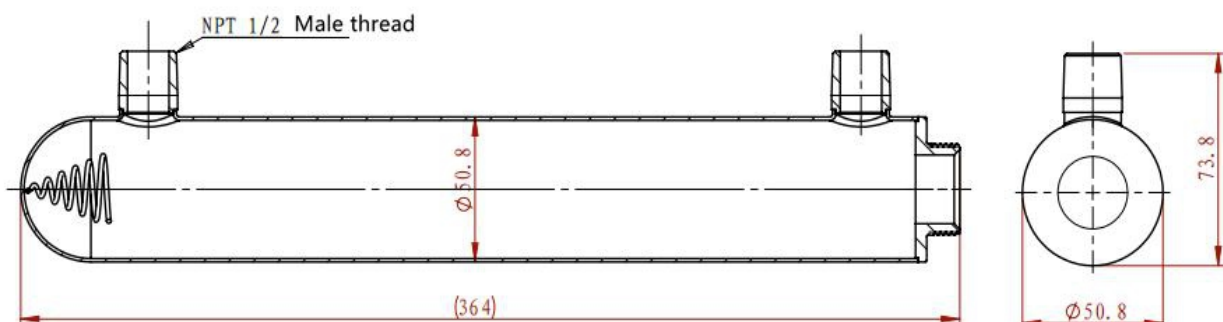
Parameters

Description

UV Model	BIO-B
Flow rate	2GPM
Lamp Wattage	14W/ea.
Lamp Life	9000-12000Hours
Lamp Brand	Heraeus
Lamp Qty	1PCS
Power Supply	220V 50Hz
UV Chamber Size	364mm*50.8mm*73.8mm
Inlet/Outlet Size	1/2" Male NPT
Material of UV Chamber	SS304
Ballast	Shows the lamp's serving time (365 Days) and accumulated working time of the ballast
Water Temperature	5°C-40°C
Working Pressure	0-0.8Mpa

Operating Environment	Indoor Us
Ambient Temperature	5°C-40°C
Ambient Humidity	<80%

Drawing of UV Chamber



Parameters

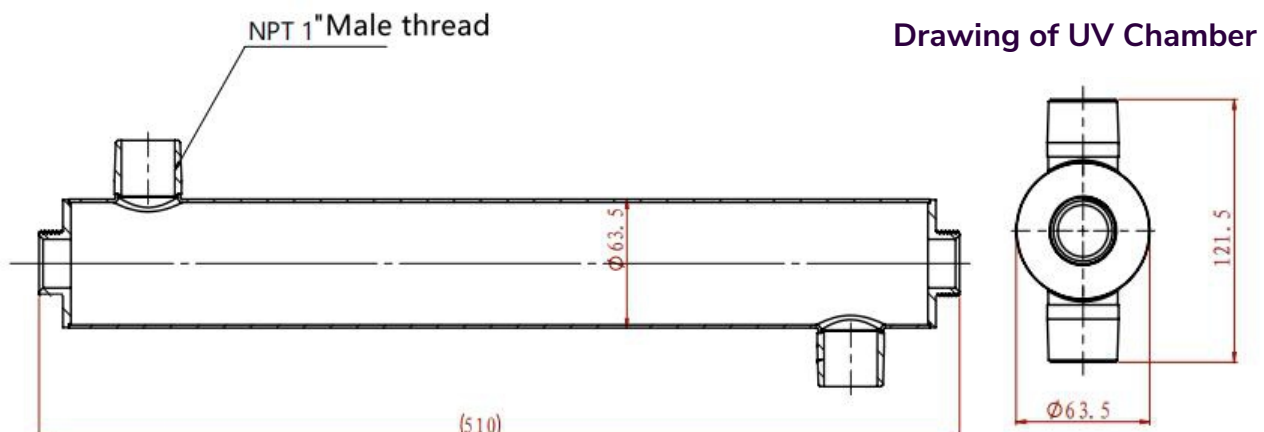
Description

UV Model	BIO-C
Flow rate	6GPM
Lamp Wattage	21W/ea.
Lamp Life	9000-12000Hours
Lamp Brand	Heraeus
Lamp Qty	1PCS
Power Supply	220V 50Hz
UV Chamber Size	510mm*63.5mm*121.5mm
Inlet/Outlet Size	1" Male NPT
Material of UV Chamber	SS304
Ballast	Shows the lamp's serving time (365 Days) and accumulated working time of the ballast
Water Temperature	5°C-40°C
Working Pressure	0-0.8Mpa

Operating Environment

Indoor Us

Ambient Temperature	5°C-40°C
Ambient Humidity	<80%



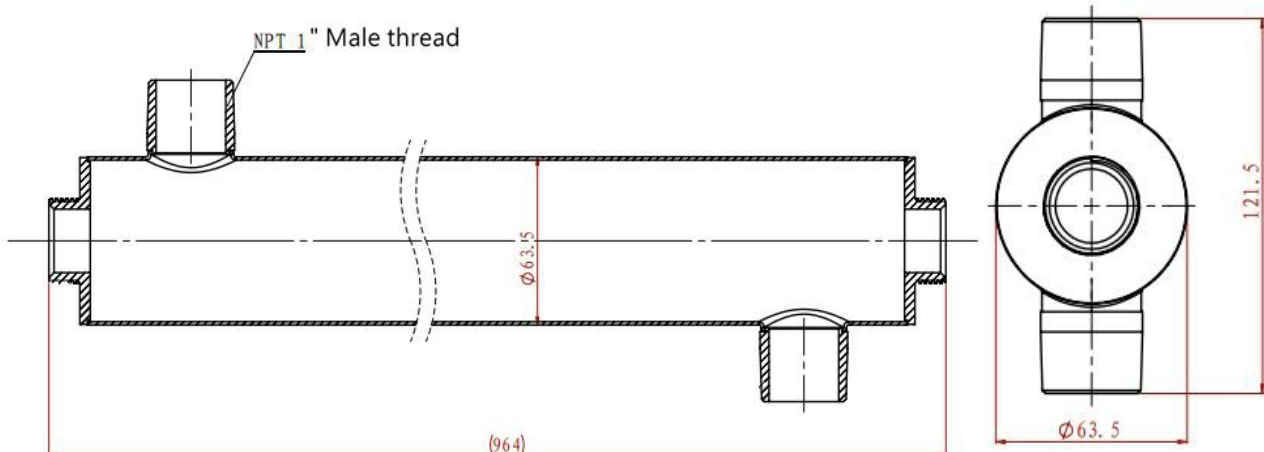
Parameters

Description

UV Model	BIO-D
Flow rate	12GPM
Lamp Wattage	39W/ea.
Lamp Life	9000-12000Hours
Lamp Brand	Heraeus
Lamp Qty	1PCS
Power Supply	220V 50Hz
UV Chamber Size	964mm*63.5mm*121.5mm
Inlet/Outlet Size	1" Male NPT
Material of UV Chamber	SS304
Ballast	Shows the lamp's serving time (365 Days) and accumulated working time of the ballast
Water Temperature	5°C-40°C
Working Pressure	0-0.8Mpa

Operating Environment	Indoor Us
Ambient Temperature	5°C-40°C
Ambient Humidity	<80%

Drawing of UV Chamber



Parameters

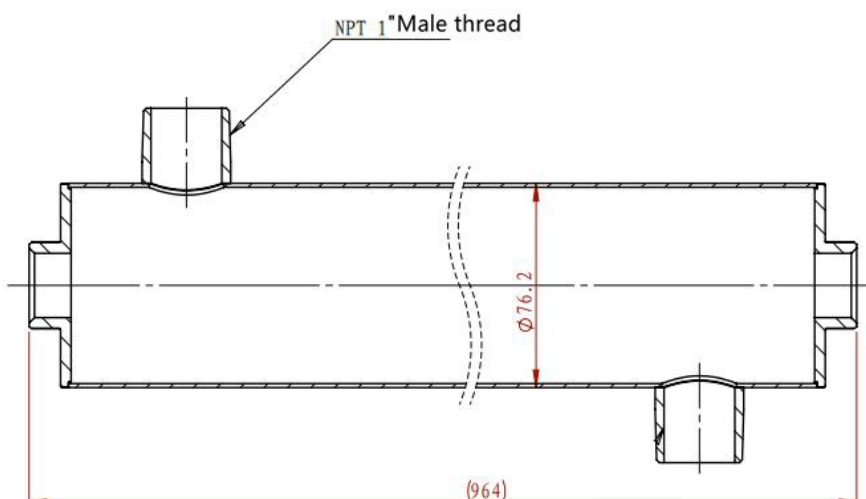
Description

UV Model	BIO-E
Flow rate	6 m ³ /h
Lamp Wattage	80W
Lamp Life	9000-12000Hours
Lamp Brand	Heraeus
Lamp Qty	1PCS
Power Supply	220V 50Hz
UV Chamber Size	964mm*76.2mm*132.2mm
Inlet/Outlet Size	1" Male NPT
Material of UV Chamber	SS304
Ballast	Shows the lamp's serving time (365 Days) and accumulated working time of the ballast
Water Temperature	5°C-40°C
Working Pressure	0-0.8Mpa

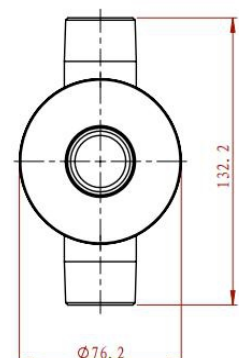
Operating Environment

Indoor Us

Ambient Temperature	5°C-40°C
Ambient Humidity	<80%



Drawing of UV Chamber



RYNN

— Filtrations Technik —

LEWATIT



Strong Acid Cation Exchange Resins

Lewatit® C249

Product Matrix	Styrene/DVB gel
Ionic Form	Na+
Bead Size (mm) (hd)	HD: 0.4-1.25
Total Capacity (eq/l) min.	2.0
Volume Change (%) max.	10 (Na ⁺ → H ⁺)
Water Retention (%)	45-48
Applications	Water treatment, demineralization



Lewatit® MonoPlus S108

Product Matrix	Styrene/DVB gel
Ionic Form	Na+
Bead Size (mm) (hd)	MD: 0.62 (+/- 0.05)
Total Capacity (eq/l) min.	2.2
Volume Change (%) max.	10 (Na ⁺ → H ⁺)
Water Retention (%)	41-46
Applications	Demineralization



Lewatit® MonoPlus M500

Product Matrix	Styrene/DVB gel
Ionic Form	Cl-
Bead Size (mm) (hd)	HD: 0.62 (0.05)
Total Capacity (eq/l) min.	1.3
Volume Change (%) max.	1,3 (OH ⁻ → Cl ⁻)
Water Retention (%)	48-5
Applications	Demineralization



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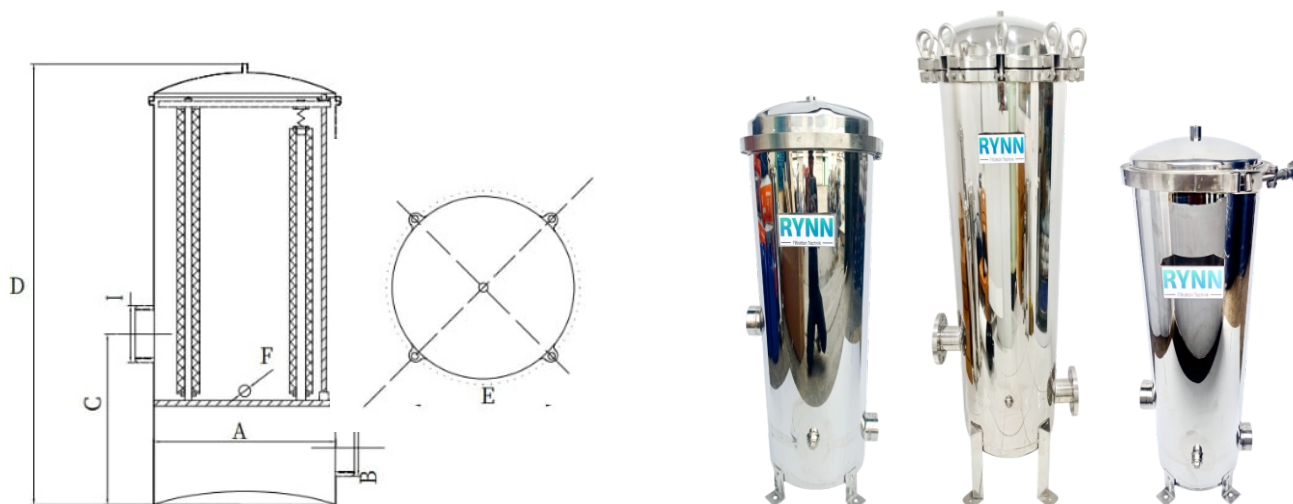
— Filtrations Technik —

HOUSING CARTRIDGE



TC - CLAMP MODEL

TC - Clamp Cartridge Filter Housing



TYPE	A	B	C	D	E	F	I	J
3 x 20"	Ø165	50	190	670	135	1/2"	1"	1"
5 x 20"	Ø200	50	190	670	161	1/2"	1.5"	1.5"
5 x 30"	Ø200	50	190	915	161	1/2"	1.5"	1.5"
5 x 40"	Ø200	50	190	1200	161	1/2"	1.5"	1.5"
7 x 20"	Ø230	80	350	745	182	1/2"	1.5"	1.5"
7 x 30"	Ø230	80	350	990	182	1/2"	1.5"	1.5"
7 x 40"	Ø230	80	350	1275	182	1/2"	1.5"	1.5"
10 x 20"	Ø303	90	350	790	234	1/2"	2"	2"
10 x 30"	Ø303	90	350	1040	234	1/2"	2"	2"
10 x 40"	Ø303	90	350	1300	234	1/2"	2"	2"

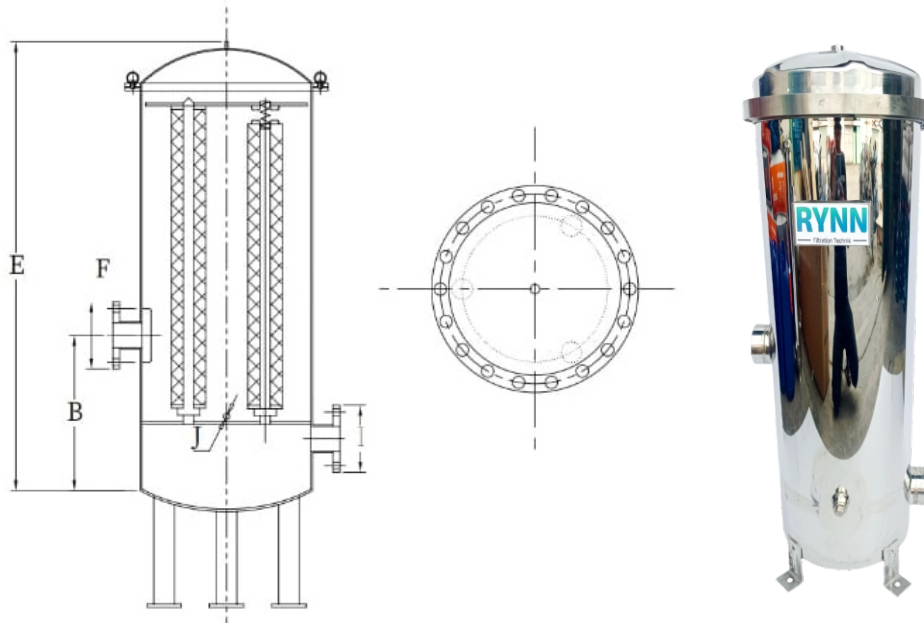
High Flow Cartridge Filter Housing :

- HFC-20-0
- HFC-20-05
- HFC-20-10
- HFC-40-01
- HFC-40-05



QUICK OPEN FLANGE

Quick Open Flange Cartridge Filter Housing



TYPE	ELEMENT	A	B	C	D	E	F	I	J
10 x 40"	10	Ø300	350	150	360	1350	2"	2"	1/2"
15 x 40"	15	Ø350	350	150	410	1400	2"	2"	1/2"
20 x 40"	19	Ø400	350	150	460	1440	DN50	DN50	1/2"
25 x 40"	25	Ø450	350	150	510	1445	DN65	DN65	1/2"
30 x 40"	30	Ø500	450	150	560	1447	DN80	DN80	1/2"
35 x 40"	36	Ø550	450	150	610	1490	DN80	DN80	1/2"
40 x 40"	40	Ø600	450	150	660	1570	DN100	DN100	1/2"
50 x 40"	50	Ø650	450	150	710	1580	DN100	DN100	1/2"
60 x 40"	60	Ø700	450	150	760	1590	DN100	DN100	1/2"
75 x 40"	75	Ø750	450	150	810	1610	DN100	DN100	1/2"
80 x 40"	80	Ø800	450	150	860	1630	DN100	DN100	1/2"
90 x 40"	90	Ø850	450	200	910	1700	DN100	DN100	1/2"
100 x 40"	100	Ø1000	450	200	1060	1700	DN100	DN100	1/2"

MULTI PORT VALVE	TYPE	BASE	IN / OUT	RISER				
	F56 A	2.5 "	1 "	3/4 "				
	F56 D	4 "	2 "	1.5 "				
	F56 D1	4 "	2 "	1.5 "				
					Side - Mounted	Top - Mounted	Connector for Side - Mounted	F56E3

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— Filtrations Technik —

CARTRIDGE FILTER



Cartridge Filter

Polyfin Filtration Cartridges are constructed of thermally bonded polypropylene microfibers to ensure high efficiency throughput for longer filtration life.

Thermally Bonded Polypropylene Micro-Fiber Construction

Material

Polypropylene is a widely used polymer in filtration due to its chemical resistance, durability, and ability to be engineered for specific filtration needs.

Thermal Bonding

This manufacturing process involves using heat to bond the fibers together, creating a strong, uniform structure without the need for adhesives. This results in a consistent pore size and improved filtration efficiency.

Micro-Fiber

The use of micro-fibers increases the surface area of the filter media, enhancing its ability to capture fine particles and contaminants.

FEATURES/BENEFITS

- Higher Filtration Efficiency
- Consistent Flow Rate
- Superior Filtration Performance
- Will Not Impart Taste, Odor, or Color to Water
- Ideal for a Wide Variety of Industrial Filtration

 <p>Meltblown</p>	 <p>Industrial Wound Depth Filter Cartridges</p>	 <p>Cotton Wound Depth Filter Cartridges</p>			
20 " 30 " 40 "	1,5 & 10 micron	20 " 40 "	1 & 5 micron	20 " 40 "	0,45 micron 0,22 micron
 <p>Fibreglass String Wound Depth Filter Cartridges</p>	 <p>Bonded Cartridges</p>	 <p>Stainless Steel Filter Cartridges</p>			
20 " 30 " 40 "	1,5 & 10 micron	20 " 40 "	1 & 5 micron	20 " 40 "	0,45 micron 0,22 micron

PF Series :

MODEL	MAXIMUM DIMENSIONS	NOMINAL MICRON RATING
PF-1001	2.38" x 10" (62mm x 254 mm)	1 Micron
PF-2001	2.38" x 20" (62mm x 508 mm)	1 Micron
PF-3001	2.38" x 30" (62mm x 762 mm)	1 Micron
PF-4001	2.38" x 40" (62mm x 1016 mm)	1 Micron
PF-1003	2.38" x 10" (62mm x 254 mm)	3 Micron
PF-2003	2.38" x 20" (62mm x 508 mm)	3 Micron
PF-3003	2.38" x 30" (62mm x 762 mm)	3 Micron
PF-4003	2.38" x 40" (62mm x 1016 mm)	3 Micron
PF-1005	2.38" x 10" (62mm x 254 mm)	5 Micron
PF-2005	2.38" x 20" (62mm x 508 mm)	5 Micron
PF-3005	2.38" x 30" (62mm x 762 mm)	5 Micron
PF-4005	2.38" x 40" (62mm x 1016 mm)	5 Micron
PF-1010	2.38" x 10" (62mm x 254 mm)	10 Micron
PF-2010	2.38" x 20" (62mm x 508 mm)	10 Micron
PF-3010	2.38" x 30" (62mm x 762 mm)	10 Micron
PF-4010	2.38" x 40" (62mm x 1016 mm)	10 Micron
PF-4020	2.38" x 40" (62mm x 1016 mm)	20 Micron
PF-4025	2.38" x 40" (62mm x 1016 mm)	25 Micron

Temperature Rating – 40 – 175o F (4.4 – 79.4 o C)

NF Series :

MODEL	MAXIMUM DIMENSIONS	NOMINAL MICRON RATING
NF-1001	2.59" x 10" (66mm x 254 mm)	1 Micron
NF-2001	2.59" x 20" (66mm x 508 mm)	1 Micron
NF-3001	2.59" x 30" (66mm x 762 mm)	1 Micron
NF-4001	2.59" x 40" (66mm x 1016 mm)	1 Micron
NF -1003	2.59" x 10" (66mm x 254 mm)	3 Micron
NF -2003	2.59" x 20" (66mm x 508 mm)	3 Micron
NF -3003	2.59" x 30" (66mm x 762 mm)	3 Micron
NF -4003	2.59" x 40" (66mm x 1016 mm)	3 Micron
NF -1005	2.59" x 10" (66mm x 254 mm)	5 Micron
NF -2005	2.59" x 20" (66mm x 508 mm)	5 Micron
NF -3005	2.59" x 30" (66mm x 762 mm)	5 Micron
NF -4005	2.59" x 40" (66mm x 1016 mm)	5 Micron
NF -1010	2.59" x 10" (66mm x 254 mm)	10 Micron
NF -2010	2.59" x 20" (66mm x 508 mm)	10 Micron
NF -3010	2.59" x 30" (66mm x 762 mm)	10 Micron
NF -4010	2.59" x 40" (66mm x 1016 mm)	10 Micron
NF -4020	2.59" x 40" (66mm x 1016 mm)	20 Micron
NF -4025	2.59" x 40" (66mm x 1016 mm)	25 Micron

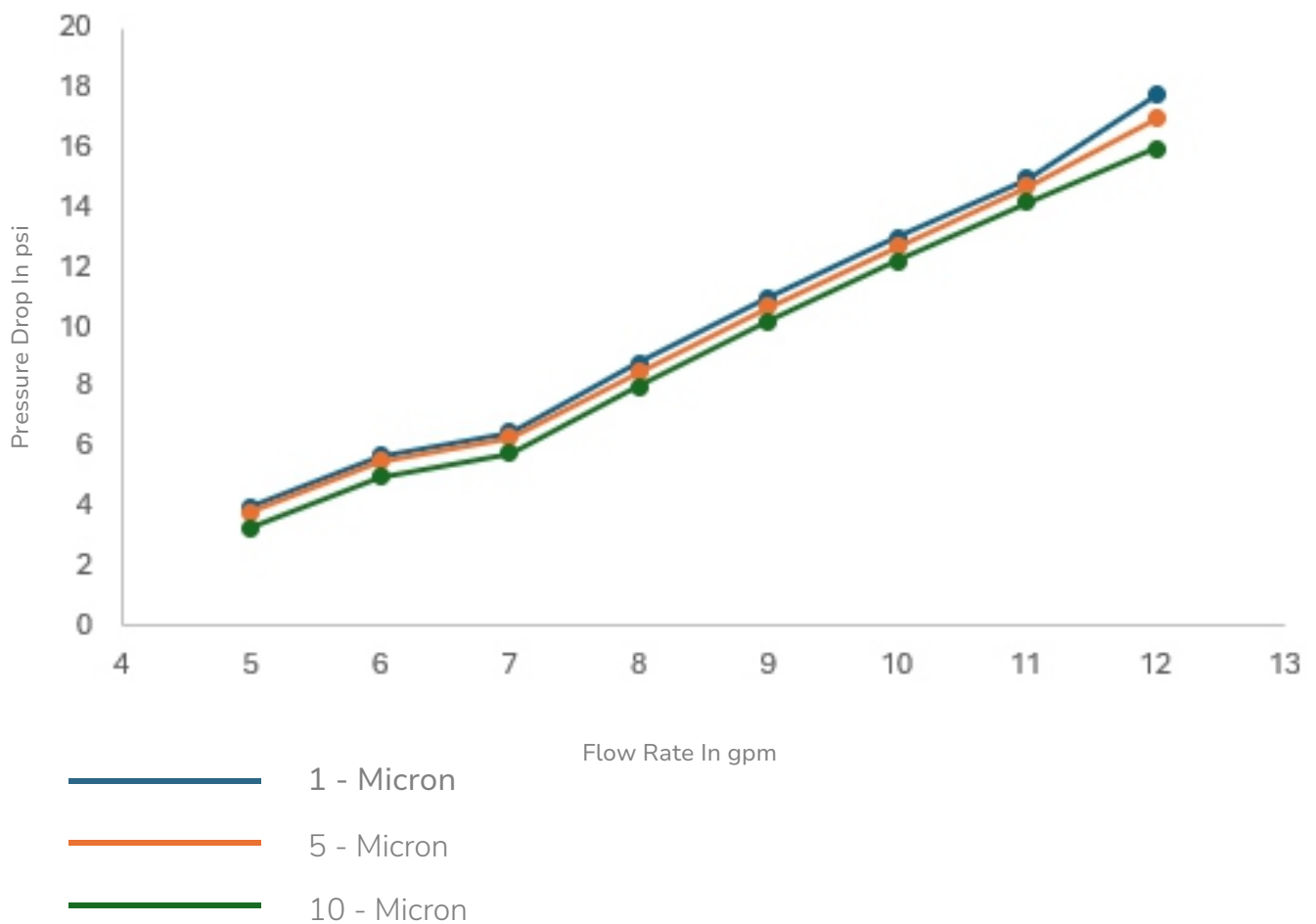
Temperature Rating – 40 – 175o F (4.4 – 79.4 o C)

High Flow cartridge Filter :

- HFC-20-0 ▪ HFC-40-01 ▪ HFC-60-01
- HFC-20-05 ▪ HFC-40-05 ▪ HFC-60-05
- HFC-20-10 ▪ HFC-40-10 ▪ HFC-60-10



Performance Chart



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— Filtrations Technik —

Shenzen Rynn Filtration Co., Ltd

No. 25 Tairan 7th Road, Tianan Community Shatao Street,
Futian District, Shenzhen, PRC