

PRODUCT DATA SHEET

Ultrafiltration-Basic

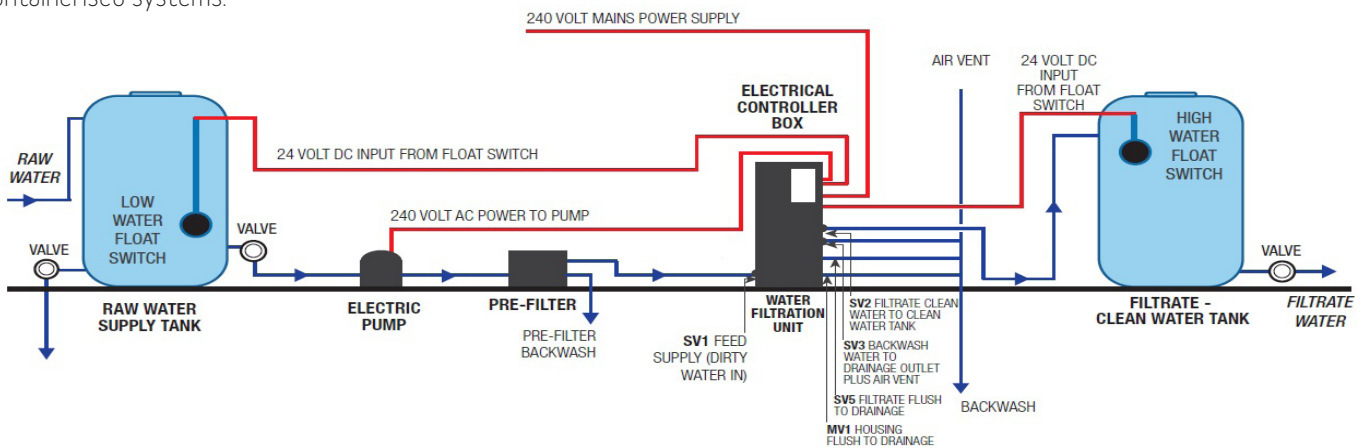
water | wastewater | sewage



OVERVIEW

The Ultrafiltration (UF-B) plants are designed to treat surface water, tertiary treated effluent, storm water and waste water to achieve potable/process water or may be used as pre-treatment to reverse osmosis. They treat a wide range of highly variable waters with <50 NTU of turbidity and <100 mg/L of suspended solids.

The standard treatment process includes optional pre filtration (500 micron screen filter), Ultrafiltration process and automatic backwashing for membrane cleaning. Additional pre or post UF treatment steps may be added to suit feed or filtered water requirements such as iron removal, pH correction or sterilisation. The MAK UF plants are available as skid mounted units or containerised systems.



STANDARD SPECIFICATIONS

Parameter	Units	UF-B-20	UF-B-40	UF-B-60	UF-B-80
Filtrate Flow Rate (varies according to feed water quality)	m ³ /day	20	40	60	80
Filtrate Recovery Rate	%	90 – 98% (varies according to feed water quality)			
Membrane Type	-	Outside in, dead end			
Filtrate Turbidity	NTU	<0.1 (typical)			
Raw Water Turbidity (max)	NTU	<50			
Raw Water TSS (max)	mg/L	<100			
Feed pH range	pH	6 – 9 (exposure to chlorine or chloramines is not recommended in feeds below pH 6.5)			
Allowable pH range for chemical cleaning (by others)	pH	2 - 10			
Raw Water Temperature	°C	15 ~ 35			
Ambient Design Temperature	°C	5 ~ 45 (-15 ~ 50 for insulated containerized system)			
Feed-Pre Screen Requirements	micron	500 or finer (unscreened or coarsely screened raw water may reduce membrane operating life)			
Feed Water Inlet Pressure (min)	kPa	100 kPa			
Feed Water Inlet Pressure (Max)	kPa	200 kPa (recommend <150)			
Filtrate Discharge Pressure Drop	kPa	~30			
Backwash Discharge Pressure Drop	kPa	~20			
Power Supply	-	AC 110/240 V, 1 Phase, 50/60 Hz			
Power Consumption	kW	0.5	0.5	0.5	0.5
No. Containers (Optional)	-	1 x 10'	1 x 10'	1 x 10'	1 x 10'

STANDARD INCLUSIONS + OPTIONS

✓ = Standard Supply o = Optional Supply - = Not Applicable

Equipment	UF-B-20	UF-B-40	UF-B-60	UF-B-80
Skid Mounted Plant & Equipment	✓	✓	✓	✓
Flow Control Valve	✓	✓	✓	✓
UF Feed Pump	o	o	o	o
Pre-filtration – Manual 500 Micron Screen	o	o	o	o
Automatic Membrane Backwash System	✓	✓	✓	✓
Control System with LCD graphic display	✓	✓	✓	✓
Containerized system, c/w A/C & Lights	o	o	o	o
Container Insulation (walls & ceiling)	o	o	o	o
Container non-slip floor coverings	o	o	o	o
Additional UV Sterilisation	o	o	o	o
Filtrate Distribution Pump Set	o	o	o	o

Instrumentation	Standard Package
Pressure Gauges	✓
Pressure Transmitters	o
Flow Sensor	o
Turbidity Transmitter	o
Float Switches (Feed/Filtrate, Tanks)	o

MODEL SELECTION

- 020** 20 m3/day permeate flow rate
- 040** 40 m3/day permeate flow rate
- 060** 60 m3/day permeate flow rate
- 080** 80 m3/day permeate flow rate



UF-B

OPTIONS

- CX** Containerised system
- FP** UF Feed pump
- SF** 500 Micron screen filter
- UV** UV sterilisation
- DPS** Filtrate distribution pump set

NEED A QUOTE?

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