

## ULTRA VIOLET TREATMENT UNITS



Model	Max Flow Rate (L/Hr)	Max Temp °C	Max Operating Pressure (Bar)	UV Lamp		Lamp Life (hrs)
				Size (W)	Dose (mW sec/cm <sup>2</sup> )	
Dallas Plus UV	200	35	4	9	50,000	10,000
Three-in-One	500	35	4	9	50,000	10,000
Triple UV 10"	700	35	4	18	50,000	10,000
Triple UV 20"	1800	35	4	18	50,000	10,000

Where there is risk of viral or bacteriological contamination treatment by Ultra Violet is the effective way to ensure safe, pure water. Ultra Violet is a well established and effective technique for water sterilization, the water passing through an enclosed chamber where it is exposed to Ultra Violet light. This process protects against legionella, salmonella and salmonella typhosa, faecal coliform, staphylococcus, bacteriophage, e-coli, influenza, poliomyelitis, hepatitis, streptococcus and dysentery bacilli and is a simple and economical method for providing clean potable water. Standard UV units available include:-

### Dallas Plus UV

The Dallas Plus UV sterilizer provides treatment for small flow rate domestic applications. UV sterilization is carried out inside a specially designed chamber, a separately mounted control module being provided for connection of the unit to the power source. The unit is designed for in-line connection to the water supply, with hose connectors and wall brackets for simple and convenient under-sink installation. It is recommended for use with a dual multibody for sediment and activated carbon filtration pre-treatment.

### Three-in-One UV

A specially designed housing provides both pre-treatment and UV sterilization inside a single 10" Standard filter body. Treatment includes pre-filtration for the removal of sediment, odour and organic chemicals through a wound yarn sediment/carbon core cartridge followed by UV post-treatment to give pure, pleasant tasting, potable, crystal clear water. Features of the unit include a control module with indicator light and mounting bracket and it can be connected either in-line or to a tap using a tap connection kit.

### Triple UV

The ultimate domestic Ultra Violet treatment unit where increased pre-treatment is required. The unit combines a high capacity Ultra Violet unit with standard integrated control module incorporated into the filter body connected in series with two additional filter bodies to provide sediment and activated carbon pre-treatment. The Triple UV includes all features of the Three-in-One and can also be mounted either in-line or tap connected. Combined with the recommended cartridge specification of a first stage 5micron Sediment cartridge and second stage Carbon cartridge it provides exceptional treated water quality.

All UV units are provided with a control unit featuring a "power on" indicator and an LED monitor which changes colour to indicate correct UV operation. Additional safety features include connections for a solenoid valve (not supplied) to stop flow in the event of lamp failure and a built in flow restrictor to ensure the design flow capacity is not exceeded.

## MANUAL WATER SOFTENER



Manual water softeners are designed for small scale water softening applications, the unit including two filter bodies, one containing an ion exchange resin cartridge and the other regeneration salt. Regeneration is effected by rotation of a three way valve which directs the water flow to the salt body thus passing concentrated salt solution through the resin. The unit is designed to operate with raw water <250ppm TDS at a maximum flow rate of 200l/hr and resin softening capacity is approx 300,000ppm. For raw water hardness of 100ppm CaCO<sub>3</sub> output between regenerations is about 3000 litres, actual capacity being proportional to the prevailing hardness level.

AVAILABLE FROM NB. Contents herein are not warranted. The right is reserved to amend specifications without notice. DT112D-08/07



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# So~Safe



## DATA SHEET

## Water Purification Products

Clear, pure water is one of the most important requirements for good health, though many domestic supplies, even from municipal sources, do not reach accepted standards of quality. Simple, effective and economical water treatment is therefore becoming increasingly important, a requirement the So~Safe range of products have been specifically designed to fulfill. So~Safe is one of the world's leading manufacturers of domestic filtration equipment offering a complete range of filter bodies and cartridges to provide treatment for most common water conditions. The products are proven over millions of applications world-wide and are the ideal solution for the majority of small-scale treatment applications where there is a requirement for clear, pure and safe water.

### FILTER CARTRIDGES



#### SEDIMENT REMOVAL

**Wound Polypropylene Yarn:** The standard cartridge for removal of sediment and particles down to the specified mesh size. Suitable for solvents, oils, acids, alkalis and brine as well as other potable liquids. Available in 0.5, 1, 5, 25 and 50 micron meshes.

**Double Density Polypropylene Yarn:** Double wound yarn to provide 10 micron first stage and 1 micron second stage filtration. This achieves three times the filtration capacity of a standard cartridge and is suitable for lower flow, higher turbidity applications.

**Spun Polypropylene:** The spun melded polypropylene fibres provide a homogenous material structure and are ideal for ultra-pure filtration applications to 1 micron where leaching of filter material must be avoided.

**Pleated Polypropylene:** Made from pleated polypropylene, these cartridges are ideal for high flow potable water applications due to the enlarged filtration surface area. They provide fine sediment filtration to 0.2 micron and are ideal for final polishing filtration before UV treatment.

## BACTERIA REMOVAL

**Ceramic:** The finely pored ceramic diatomaceous material provides ultra-filtration to 0.4 micron for the removal of fine particles and is particularly suitable for the removal of micro-organisms and bacteria thus reducing the risk of water borne diseases. Particles are retained on the cartridge surface, which can be cleaned by scrubbing.

**Iodinated Resin:** The cartridge uses specially formulated iodinated resin combined with granulated activated carbon for removal of tastes and odours as well as bacteria. A 5 micron polypropylene post treatment filter is also included.

## TASTE/ODOUR/CHEMICAL REMOVAL

**Granular Activated Carbon:** A granular activated carbon filter using acid washed coconut shell based carbon and suitable for the removal of chlorine, organic chemicals, insecticides, pesticides and herbicides as well as unpleasant taste and odours. A 1 micron polypropylene post treatment sediment filter is also included.

**Silver Granular Activated Carbon:** For similar applications to Carbon cartridges, though with silver impregnation to inhibit bacterial growth for uses where bacteria is a concern. A 5 micron polypropylene post treatment filter is also included.

**Dual Sediment/Carbon:** A standard polypropylene sediment cartridge combined with a carbon core providing two-stage filtration for the removal of particles, chlorine, organic chemicals, taste and odours. Available in 1 micron and 5 micron specifications.

**Cation Resin:** A food-grade resin filled cartridge with an integral 1 micron post-treatment screening filter for small-scale water softening application by ion exchange. Cartridges are provided with a manual regeneration kit which uses common table salt. Resin softening capacity is 50,000ppm and the volume of softened water will depend upon raw water hardness. For a hardness of 100ppm CaCO<sub>3</sub> capacity is approx 500 litres, capacities being proportional to the hardness level. For optimal operation it is recommended that the softener cartridge is used in a twin body configuration with a 5 micron first stage pre-filter.

**Anion Resin:** A food-grade anion resin filter cartridge for deionization and de-mineralisation with an integral 1 micron post-treatment screening filter. Manual regeneration kits for use with sodium hydroxide/caustic soda are provided and capacities and operation is similar to water softening cartridges.

**Activated Alumina:** A non-regenerable cartridge for the removal of Fluoride, Arsenic and heavy metals including Lead and Copper using Activated Alumina media. The spherical ball media structure provides for efficient absorption by maximizing contact time and is effective in reducing fluoride levels.

Ref No.	Size	Type	Application	Mesh (micron)	Size DxH (mm)	Max Flow (L/hr)	Max Temp	Service Life (Months)	Service Capacity
WPP10	10"	Wound Polypropylene Yarn	Sediment	0.5,1	62x250	500	50°C	6	
WPP10	10"	Wound Polypropylene Yarn	Sediment	5,25,50	62x250	1,000	50°C	6	
WPP20	20"	Wound Polypropylene Yarn	Sediment	0.5,1	62x510	1,000	50°C	6	
WPP20	20"	Wound Polypropylene Yarn	Sediment	5,25	62x510	2,000	50°C	6	
SPP10	10"	Spun Polypropylene	Sediment	1	63x250	500	60°C	6	
SPP20	20"	Spun Polypropylene	Sediment	1	63x510	1,000	60°C	6	
WPP10G	10"	Double Density Wound Yarn	Sediment	10/1	65x250	500	50°C	6	
WB10	10"	Pleated Polypropylene	Bacteria, Sediment	0.35,0.2	63x250	500	60°C	6	
CRE10	10"	Ceramic	Bacteria Cysts and Sediment	0.4	50x250	400	50°C	6	
IR10	10"	Iodinated Resin	Bacteria, taste and odour	1	75x250	300	40°C	6	5,000L
GAC10	10"	Granular Activated Carbon	Most organic chemicals, chlorine, insecticides, pesticides, herbicides, taste and odour	1	75x250	500	50°C	6	12,000L
GAC20	20"	Granular Activated Carbon	Most organic chemicals, chlorine, insecticides, pesticides, herbicides, taste and odour	1	75x250	1,000	50°C	6	25,000L
SGAC10	10"	Silver Granular Activated Carbon	Most organic chemicals, chlorine, insecticides, pesticides, herbicides, taste and odour Inhibits growth of bacteria within the filter	5	75x250	400	50°C	12	37,500L
DPC10	10"	Dual Sediment/Carbon Core	Sediment, taste and odour	1	65x250	400	50°C	6	10,000L
DPC20	20"	Dual Sediment/Carbon Core	Sediment, taste and odour	1	65x510	1000	50°C	6	20,000L
WS10	10"	Cation Resin	Softening	1	75x250	200	50°C	12	50,000ppm
DA10	10"	Anion Resin	Deionizing	1	75x250	80	50°C	12	50,000ppm
AA10	10"	Activated Alumina	Fluorides, arsenic, heavy metals	20	75x250	400	50°C	3-4	10,000ppm
AA20	20"	Activated Alumina	Fluorides, arsenic, heavy metals	20	75x510	900	50°C	3-4	20,000ppm

## FILTER BODIES



Type	Max Operating Pressure	Max Temp	Weight (kg)	Size DxH (mm)	Connection
10" Clear Housing	5 Bar	50°C	1.1	130x320	3/4" NPT
10" Blue Housing	8 Bar	65°C	1.1	130x320	3/4" NPT
20" Clear Housing	5 Bar	50°C	2.5	140x520	3/4" NPT
20" Blue Housing	8 Bar	65°C	2.5	140x570	3/4" NPT

Filter bodies are manufactured from strong non-corroding and inert polypropylene plastic and feature a simple screwed filter housing and push button air bleed. Mounting options include in-line to an incoming supply or tap connected, a special tap connection kit, including a swivel outlet faucet and tap connection hose with diverter valve, being available as an accessory. Various filter body alternatives are available as follows:

### STANDARD BODIES

Available for either 10" or 20" cartridge sizes. Two body housing options are available, either transparent or blue, and mounting brackets are available as an accessory if required. Bodies are sold without cartridges, these being selected according to application.

### MULTIBODIES

Multibody arrangements are available for series filtration using 10" or 20" bodies in either twin or triple connection configuration. All units are provided with a mounting bracket as standard though without cartridges. Suggested cartridge combinations for domestic supply are as follows:-

**Dual Body** - 5 micron Wound Yarn sediment cartridge first stage and Granular Activated Carbon cartridge second stage.

**Triple Body** - 25 micron Wound Yarn sediment cartridge first stage, 5 micron Wound Yarn sediment cartridge second stage and Granular Activated Carbon cartridge third stage.

### COUNTER TOPS

The units are supplied as kits complete with all accessories necessary for tap connection, two options being available as follows:-

**Regular** - Includes a 10" Standard transparent housing body with base mount, 5 micron Sediment cartridge, outlet faucet and rubber bulb type tap connector.

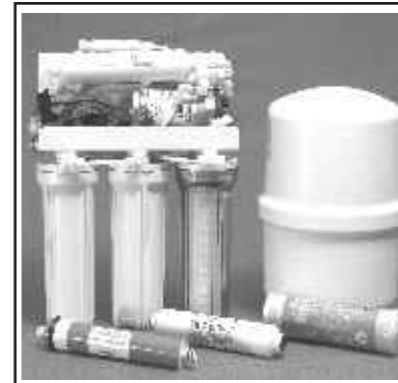
**Deluxe** - Includes a special slim-line white filter body with inverted housing for simplified cartridge replacement, Dual Sediment/Carbon cartridge, and a tap connection kit including chromed swivel faucet and tap connector hose with brass diverter valve.

## CERAMIC TAP FILTER



The Ceramic Tap filter is designed for on-demand purification of municipal water and is supplied with suitable fittings for quick and easy attachment to the kitchen faucet. It features a unique high efficiency ceramic cartridge providing 4-stage treatment including ceramic filtration for removal of fine suspended solids to 0.9 micron, carbon block filtration for removal of unpleasant taste and odour, calcium sulfite balls to balance pH for a crisp, refreshing taste and finally anti-bacterial nano-silver purification for removal of bacteria and polishing to 0.01 micron. The cartridge is washable and can last for up to 6 months in regular use.

## REVERSE OSMOSIS TREATMENT UNITS



Reverse Osmosis is a treatment process for the removal of all dissolved solids and bacteria to provide totally pure water by pressurization through a semi permeable membrane. The unique So-Safe RO Water Purifier combines the benefits of this process with four other stages of treatment to provide totally pure water for domestic and small-scale applications. These include First stage sediment filtration by pre-treatment through a 5micron sediment cartridge, Second stage Granular Activated Carbon cartridge treatment to remove taste and odour, Third stage Carbon Block cartridge treatment to polish the water, Fourth stage Reverse Osmosis using a low-pressure composite thin film membrane and Fifth stage inline Carbon treatment to remove any remaining taste or odour. Other features include an in-built feed pump, a pressure switch for pump control and a 15L feed tank for automatic on-demand supply.

Model	Daily Output	Water Recovery	Salt Rejection	Max Input TDS	Max Chlorine Level	Max Temp	Feed Water Pressure	Dimensions
SSRO75	250L	15%	>95%	2000ppm	0.5ppm	35°C	1.5-6Bar	200x365x480
SSRO150	500L							230x370x470