

DUO2P-4520 High Flow Filtration System



DUO2P-4520 high-flow dual-stage cartridge filtration systems use industry standard 4.5" x 20" injection moulded filter housings mounted on a stainless-steel wall bracket. Systems are supplied configured with filter cartridges to suit specific applications.

DUO2P 4520-SS: The most versatile cartridge choice for sediment removal is a high capacity sediment filter rated at $10\mu m$ followed by a $5\mu m$ sediment filter cartridge.

DUO2P 4520-SC: For drinking water use. Cartridges are $5\mu m$ or $10\mu m$ sediment filter and a $10\mu m$ carbon block to remove taste and odours.

DUO2P 4520-SAgC: Recommended for most drinking water applications where sediment removal and a measure of bacterial control is required. Cartridges choices are a 5μ m or 10μ m sediment filter followed by a 10μ m silver impregnated activated carbon cartridge

DUO2P 4520-SE: For hard or high-mineral content water, use sediment and anti-scale EVOLET cartridge or Carbon/EVOLET or silver-carbon EVOLET.

DUO2P 4520-PTDI: For applications requiring deionised water directly from a potable mains feedwater supply. Feedwater is treated through a silver impregnated activated carbon cartridge followed by a mixed-bed deionisation cartridge with final water quality monitored.

Systems are pressure rated to 550kPa (80psi) and provide high flow rates (40-60 lpm) according to the filter type used. Connection port threads are 1" BSPF standard plumbing thread and the dual place bracket makes for simple installation.



Spun or melt-blown polypropylene filters are widely used for feedwater that has a low to moderate sediment content. They are available as standard or graded density types and minimise pressure drop across the filtration media while providing high flow rates.

Polypropylene cartridges are available with 1, 5, 10, 20 and $50\mu m$ ratings, in single or gradient density formats



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Pleated sediment filters are used with high sediment feedwaters and where limited element washing is advantageous. The filter is made in a pleated sheet with an inner core and ultrasonically welded end caps. High pleat count and a rigid inner core reflect the quality and long in-service life of this filter type.

Pleated cartridges are available with 1, 5, 10, 20 and 50µm ratings.



Carbon block filters are used to remove chlorine, tastes, odours and some colour forming contaminants. The carbon block cartridge is manufactured by either extrusion or compression moulding to provide mechanical filtration, ionic and physical adsorption. These filters have an integrated post filter rated to $10\mu m$ to prevent carbon fine release.



Silver impregnated carbon block filters are made by impregnating activated carbon media with colloidal silver and permanently bonding the two together. This technology has provided a new range of filters with both dechlorination and bacteriostatic capability. These silver impregnated carbon filters offer the same dechlorination, taste and odour reduction capacity as standard carbon block filters but provide a longer in-service life and a measure of microbial control.



EVOLET scale control media is a chemical free alternative to conventional water softeners and has been designed to protect plumbing and equipment from hard water scale formation. **EVOLET** media does not require regeneration, does not require salt, does not require backwashing, and has a long in-service life. Water supplies with >50ppm T. Hardness are regarded as Hard and form scale on wetted surfaces, reducing efficiency of boilers, plumbing pipework, valves and taps.



Deionisation cartridges were developed for use in the production of low conductivity water for use in pharmaceutical and medical applications, Laboratories, cosmetics and electronics applications. They are convenient and cost effective wherever low TOC and low conductivity/TDS water is required on-line. Service flow rates to 5lpm with peak flow to 10lpm.



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Filter Housing Assemblies

ROtek large diameter plastic single filter cartridge housings are used for high flow filtration applications or when multi-cartridge cluster housings are not appropriate. Housings are made of FDA approved reinforced polypropylene for durability, strength and chemical compatibility and take industry standard 4.5" diameter filter elements.



For commercial and industrial users, these housings are rated at temperatures from +2 to +40°C and pressures from 0 to 90 psi (0-620kPa bar) with thick walls and multiple strengthening ribs. Leak proof sealing is achieved by cap compression against a top seated "O" ring of a conventional circular profile type. All caps have a pressure relief button and wall mounting brackets in single, double or triple configurations. Head and sump are FDA approved and moulded from Polypropylene (sump) and ABS (head); the pressure relief valve is s/s, EPDM, and PP while the "O" ring is Buna N as standard.

Models	
DUO2P 4520-SS	Dual stage sediment filtration (high suspended solids)
DUO2P-4520-SC	Sediment and carbon filtration (typical mains water)
DUO2P-4520-SAgC	Sediment, bacteriostatic silver/carbon filtration (typical tank water)
DUO2P-4520-SE	Sediment filtration, anti-scale treatment (for hard water sources)
DUO2P-4520-AgCE	Silver/carbon filtration, anti-scale treatment (for hard water sources)
DUO2P-4520-PTDI	Silver/carbon filtration pre-treatment with deionisation & monitor