

Filter Elements

Which grade of ceramic filter do I need?

Doulton® and British Berkefeld® ceramic filter elements are available in 5 grades:

- **SterasyI™**
- **Super SterasyI™**
- **ATC Super SterasyI™**
- **Supercarb™**
- **Ultracarb™**

The grade you ultimately choose will depend on which contaminants you want to remove from the water.



	*SterasyI™	*Super SterasyI™	*ATC Super SterasyI™	*Supercarb™	*Ultracarb™
PATHOGENIC BACTERIA, CRYPTOSPORIDIUM, GIARDIA ETC.	✓	✓	✓	✓	✓
PARTICLES DOWN TO 0.5 MICRONS (RUST ETC.)	✓	✓	✓	✓	✓
CHLORINE (IMPROVE TASTE AND ODOUR)	✗	✓	✓	✓	✓
ORGANICS	✗	✓	✓	✓	✓
HEAVY METALS (PRIMARILY LEAD)	✗	✗	✓	✗	✓
SUITABLE FOR USE IN GRAVITY FILTERS	✓	✓	✓	✗	✗

*Please note that these products are not for sale in California. For products that are for sale in California please refer to our website www.faireyceramics.com

Which format of ceramic filter element do I need?

There are three ceramic filter formats: **Candle**, **Cartridge**, and **Rio 2000 module**.

The filter format you need will depend on the type of filter housing you are using and the flow rate you require.

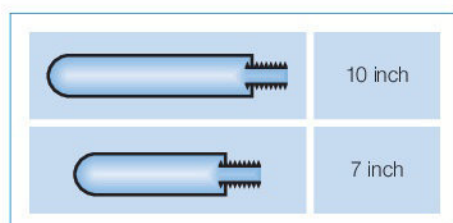
Candle

Candles have a domed end and a plastic mount on the top to fix them into the filter housing. The type of mount as well as the length and diameter of the candle will be dictated by the filter housing.

All Doulton® and British Berkefeld® filter housings use candle format filter elements. Please see Filter Housings section for more details.

Candle Dimensions

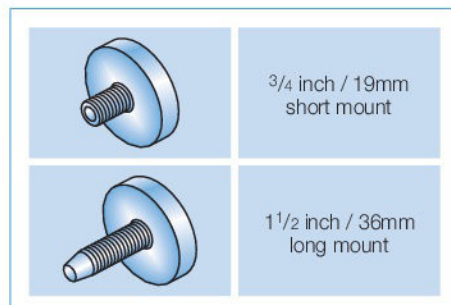
Candles are available in 2 standard lengths: 10 inch and 7 inch. Bespoke lengths can be accommodated subject to minimum runs.



Candles are also available in 2 standard diameters: Slimline (2 inches or 49mm) and Imperial (2 3/4 inches or 67mm).

Candle Mounts

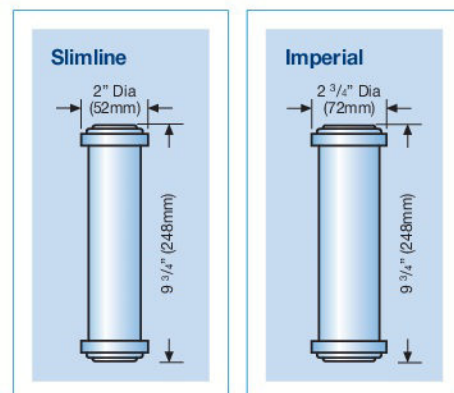
Candles are manufactured as standard with 1/4 inch BSP threaded long or short mounts.



Other types of mount can be manufactured to match specific filter housings. Details are available on request.

Cartridge

Cartridges (OBEs) have a plastic mount and rubber washer at both ends. They are designed to fit industry standard 10 inch filter housings.



Rio 2000 High Flow Module



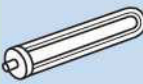
The Rio 2000 is a proprietary module designed to fit an industry standard 10 inch jumbo housing. The module is reusable so that only the 6 incorporated mini Sterasyl® filter candles need to be replaced.

The increased ceramic surface area available for filtration of these multiple candles offers superior flow rates - approximately 1500 litres (390 US gallons) per hour at 4 bar (60 psi) pressure.

The Rio modules are available with or without a Doulton housing.



Filter Performance (verified by independent laboratories)

Candle Grade 49mmø Selection of the most appropriate grade of candle allows filter performance to be matched to the requirements of the local water conditions.			 *Sterasyl™ Silver impregnated ceramic microfilter	 *Super Sterasyl™ Sterasyl microfilter plus granular activated carbon	 *ATC Super Sterasyl™ Sterasyl microfilter plus granular activated carbon and lead removal media	 *Supercarb™ Sterasyl microfilter plus carbon block core	 *Ultracarb™ Sterasyl microfilter plus carbon block core and lead removal media
Filtration Rating (% particulate filtration efficiency)	Absolute (defined as >99.99%)		0.9 micron	0.9 micron	0.9 micron	0.9 micron	0.9 micron
	Nominal (defined as >99.9%)		0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron	0.5 to 0.8 micron
Working Pressure (for pressure filter use)	Minimum		10 psi	10 psi	N/A	10 psi	10 psi
	Maximum		125 psi	125 psi	N/A	125 psi	125 psi
Working Parameters	Working Temperature Range		5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)	5 - 38 (°C)
	Working pH Range		5.5 - 9.5	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5
	Suitable for use in Gravity Filters		YES	YES	YES	NO	NO
	Recommended Change Frequency		12 months	6 months	6 months	6 months	6 months
Flow Rate	Unrestricted Flow at 3 Bar Pressure	Litres per minute	5	4.5	N/A	3.7	3.3
		US gallons per minute	1.33	1.2	N/A	1	0.9
	To achieve maximum performance	Litres per minute	N/A	1.5	1.2 l/hr under gravity	1.9	1.9
		US gallons per minute	N/A	0.4	0.3 g/hr under gravity	0.53	0.53
Capacity	Before replacement to guarantee performance	Litres	10,000	2000	1500	3800	2300
		US gallons	2600	535	400	1000	600
Quality Approval	NSF approved version available		YES*	NO	NO	YES*	YES*
	WRAS approved		YES	YES	NO	YES	YES
	Turbidity reduction to NSF std. 53		>98%	>98%	>98%	>98%	>98%
Pathogenic Organisms	% Bacteria Removal	E. Coli / Cholera / Shigella / Typhoid / Klebsiella Terrigena	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%
	% Cyst Removal	Cryptosporidium	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%
		Giardia	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%
Trace Organics Removal	Insecticides	Lindane @ 0.1ppb presence	N/A	NO DATA	NO DATA	>85%	>85%
	Herbicides	Atrazine @ 1.2ppb presence	N/A	NO DATA	NO DATA	>85%	>85%
	Phenols	TCP @ 1.2ppb presence	N/A	NO DATA	NO DATA	>50%	>50%
	Polyaromatic Hydrocarbons	PAH's @ 0.2ppb presence	N/A	NO DATA	NO DATA	>95%	>95%
	Trihalomethanes	Chloroform @ 150ppb presence	N/A	NO DATA	NO DATA	>50%	>50%
Inorganics Removal	Free Chlorine Removal	2mg cl/l challenge	N/A	Under Gravity >95% Under Pressure >50%	>95% under gravity >94% under gravity	>97% NSF Class 1 std. 42	>96% NSF Class 1 std. 42
	Lead Removal	@ pH 6.5 after 2,244L	N/A	N/A	N/A	N/A	>99.3% NSF std. 53
		@ pH 8.5 after 2,244L	N/A	N/A	N/A	N/A	99.2% NSF std. 53

*Please note that these products are not available for sale in California. For products that are for sale in California please refer to our website www.faireyceramics.com

*NSF approved replacement elements are Doulton Sterasyl®, Doulton Supercarb® and Doulton Ultracarb® as verified by testing in HIP/Inline systems.

Why a ceramic filter?

The small and complex pore structure of Doulton® and British Berkefeld® ceramics makes them an ideal filter medium for drinking water:



High Efficiency Filter:

Doulton® and British Berkefeld® filters are capable of removing more than 99.99% of pathogenic bacteria, disease causing cysts such as Cryptosporidium and Giardia, and particles. See performance data table.



Long Life/Value for Money:

As confirmed by the user instructions supplied with the product, the outer shell of Doulton® and British Berkefeld® ceramic drinking water filters may be cleaned in order to prolong the life of the product. In this way, the filter can be re-used rather than replaced, giving it a much longer life-span than many other products on the market, saving you money. On average, a Doulton® or British Berkefeld® filter candle will remain effective for at least 6 months (depending on usage and water quality) before it will need to be replaced.



Anti-Bacterial Action:

FICL's ceramics contain a proprietary system to inhibit microbiological growth, meaning that there is no need to sterilise Doulton® or British Berkefeld® ceramic filters.



Retains Essential Minerals:

Doulton® and British Berkefeld® ceramic filters keep those minerals in the water, which are beneficial to health.



No Power Required:

Doulton® and British Berkefeld® drinking water filters do not require electricity to function, which means that they are cost-effective to run, are not vulnerable to interruption of power supplies, and can be used where there are no power supplies.

Multistage filtration in one filter cartridge:

Stage 1

Outer Shell - Micro Filtration

Stage 2

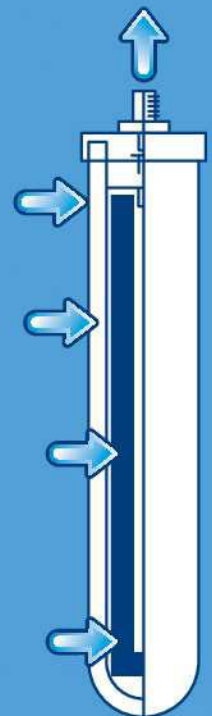
Anti-Bacterial formula within the ceramic matrix inhibits microbiological growth

Stage 3

Activated carbon in the Super Sterasyl™, ATC Super Sterasyl™, Supercarb™ and Ultracarb™ takes out chlorine and organics improving taste and odour

Stage 4

Ultracarb™ and ATC Super Sterasyl™ also contains lead removal media, which takes out toxic lead



Distributed by:

Due to a policy of continuing product development Fairey Industrial Ceramics Limited reserves the right to change any information without prior notice.

Doulton® is a trademark used under licence by Fairey Industrial Ceramics Limited. British Berkefeld® and Sterasyl® are trademarks registered to Fairey Industrial Ceramics Limited.

Due to state regulations, the only products for sale in California, Iowa and Wisconsin are the HIP/Ultracarb® Inline filtration system and Doulton® Ultracarb® replacement filter elements.

www.amgo.com.my