



# Drinking Water Filters

Healthy water, healthy life.



# Clean, healthy, great-tasting water anytime, anywhere.



Doulton<sup>®</sup> provide customers, whatever their situation, with top quality, UK manufactured water filters that perform consistently every time and gives them clean, healthy,

great-tasting water anytime, anywhere.

# Brand

Doulton<sup>®</sup> water filters have now been manufactured continuously in the UK for more than 185 years. In the 19th Century, the River Thames was London's main water supply... and sewer. Henry Doulton discovered that

filtering water through a porous ceramic could stop people becoming sick from cholera and other water-borne diseases.

Doulton

Fairey Industrial Ceramics Limited (FICL) is the sole manufacturer of the world famous range of Doulton® ceramic drinking water filters. All ceramic water filter products are manufactured in FICL's factory based in North Staffordshire, UK, the traditional home of the ceramic industry in England.

# Quality

In general, the smaller the pore size of a filter and the more complicated the path the water takes through the filter medium, the more effective it is at removing particles from water. A ceramic has a small and complex pore structure, making it an ideal filter medium.

The pore structure of Doulton® ceramic drinking water filters is accurately controlled. This expertise gives the candles the highly consistent pore structure necessary to remove a wide range of water borne contaminants over the life of the filter.

All stages of FICL's drinking water filter production process adhere to the stringent BS EN ISO 9001 guality standards. FICL holds the coveted NSF<sup>®</sup> and WRAS certificates, demonstrating that our drinking water filters have passed the highest international testing standards.

Our high quality standards are why the Doulton<sup>®</sup> brand name is so well known and respected for use in home water filtration systems around the world. Customers can, as a result of our exacting standards, expect the same high quality from our filters every time they are used.



# Performance

Millions of ceramic filter candles are produced annually, which sell to 140 countries worldwide. This global success is because Doulton<sup>®</sup> drinking water filters are so versatile - they will do a job on any water supply:

- Highly effective barrier to particles and pathogens a pore structure down to 0.2 microns to offer maximum protection
- Long Life / Long term value the filters may be cleaned, when used on turbid water, which allows re-use and gives 6-12 months life
- Natural the ceramic is made from 100% natural earths and uses coconut shell carbon



- Minerals maintained the filters do not remove those minerals from the water which are beneficial to health
- Enhanced anti-bacterial properties FICL's ceramics contain trace elements of silver to inhibit microbiological growth within the ceramic element
- Multi-stage filtration in one cartridge other filter media can be put inside the ceramic filter candle. Activated carbon can be incorporated to remove chlorine, or an ion exchange media to remove heavy metals such as lead

## Price

Bottled water is expensive to buy, produces a lot of plastic waste, and the carbon footprint of transporting those bottles of water is enormous.



### Healthy water that doesn't cost the Earth

Installing a filter system offers a much greener as well as cheaper alternative way of drinking good quality water.

# Continuing the revolution in Ceramic Filtration Technology.

# Filter Grades

Doulton<sup>®</sup> ceramic filter elements are available in 6 grades. The grade you ultimately choose will depend on which contaminants you want to remove from the water.

At the heart of every Doulton® water filter candle is a Sterasyl® silver impregnated ceramic microfilter.

The incorporation of silver locked within the ceramic structure inhibits the growth of bacteria on the filter, eliminating the need for boiling.

By incorporating activated carbon in the form of granular carbon or carbon block, the Sterasyl® ceramic can also be produced in Super Sterasyl<sup>®</sup>, Supercarb<sup>®</sup> and Chlorasyl<sup>®</sup> grades which combine the advantages of ceramic and carbon treatment within a single filter element.

At the top end of the product range the ATC Super Sterasyl® and Ultracarb<sup>®</sup> candles have an additional ion exchange media which reduces Lead and other harmful heavy metals.

The Supercarb SI<sup>®</sup> and Ultracarb SI<sup>®</sup> candles also incorporate a slow release scale inhibitor to reduce the unwanted effects of scale build-up.



# Filter Performance

Verified by independent laboratories

<b>Candle Grade 49mmø</b> Selection of the most appropriate grade of candle allows filter performance to be matched to the requirements of the local water conditions.		Sterasyl <sup>®</sup> Silver impregnated	Super Sterasyl® Sterasyl® microfilter	ATC Super Sterasyl® Sterasyl® microfilter	Supercarb <sup>®</sup> Sterasyl <sup>®</sup> microfilter	Chlorasyl® Sterasyl® microfilter	Ultracarb® Sterasyl® microfilter
		ceramic microfilter	plus granular activated carbon	plus granular activated carbon and lead removal media	plus carbon block core	plus carbon block core	plus carbon block core and lead removal media
Filtration Rating (% particulate filtration	on efficiency)		50 				
	Absolute (defined as >99.99%)	0.9 micron	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	0.5 to 0.8 micron
Working Pressure (for pressure filter	use)						
	Minimum	10 psi	10 psi	N/A	10 psi	10 psi	10 psi
	Maximum	125 psi	125 psi	N/A	125 psi	125 psi	125 psi
Working Parameters							
	Working temperature range	5 - 30 (°C)	5 - 30 (°C)	5 - 30 (°C)	5 - 30 (°C)	5 - 30 (°C)	5 - 30 (°C)
	Working ph range	5.5 - 9.5	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	No
	Recommended change frequency	12 months	6 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	3.7	3.3
	US gallons per minute	1.33	1.2	N/A	1	1	0.9
To achieve maximum performance	Litres per minute	N/A	1.5	1.2 l/hr under gravity	1.9	1.9	1.9
	US gallons per minute	N/A	0.4	0.3 g/hr under gravity	0.5	0.5	0.5
Capacity							
Before replacement to	Litres	10,000	2000	1500	3800	3800	2300
guarantee performance	US gallons	2600	535	400	1000	1000	600
Quality Approval	NSF certified version available	YES+	NO	NO	YES+	No	YES+
	WRAS approved	YES	YES	NO	YES	No	YES
	Turbidity reduction to NSF std. 53	>98%	>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%	>99.99%
% Cyst Removal	Cryptosporidium	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%	>99.99%
	Giardia	>99.99%	>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%	NO DATA	>85%
Herbicides	Atrazine @ 1.2ppb presence	N/A	NO DATA	NO DATA	>85%	NO DATA	>85%
Phenols	TCP @ 1.2ppb presence	N/A	NO DATA	NO DATA	>50%	NO DATA	>50%
Polyaromatic Hydrocarbons	PAHs @ 0.2ppb presence	N/A	NO DATA	NO DATA	>95%	NO DATA	>95%
Trihalomethanes	Chloroform @ 150ppb presence	N/A	NO DATA	NO DATA	>50%	NO DATA	>50%
Inorganics Removal							
Free Chlorine Removal	2mg cl/l challenge	N/A	Under Gravity >95%	>95% under gravity	>97%	>97% (1000 USG)	>96%
			Under Pressure >50%		NSF Class 1 std. 42		NSF Class 1 std. 42
Monochloramine Reduction	3mg cl/l challenge	N/A	N/A	N/A	N/A	95% (600 USG)	N/A
Lead Removal	@ pH 6.5 after 2,244L	N/A	N/A	>94% under gravity	N/A	No	>99.3% NSF std. 53
	@ pH 8.5 after 2,244L	N/A	N/A	N/A	N/A	No	99.2% NSF std. 53
Scale Inhibition		Slow release scale	inhibition available wi	th Ultracarb SI® and S	Supercarb SI <sup>®</sup> ceram	ic filter candles.	

\* NSF certified replacement elements are Doulton Sterasyl<sup>®</sup>, Doulton<sup>®</sup> Supercarb<sup>®</sup> and Doulton<sup>®</sup> Ultracarb<sup>®</sup> as verified by testing in HIP Inline and QT Inline systems.

# Filter elements Ceramic technology you can trust.

# Candle or Cartridge format?

There are two ceramic filter formats: Candle and Cartridge. The format you need will depend on the type of filter housing you are using and the flow rate you require.

## Candle

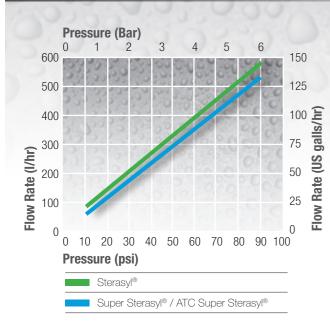
Candles have a domed end and a plastic mount on the top to fix them into the filter housing. All Doulton® filter housings use candle format filter elements.

Other sizes can be manufactured to individual customer specifications.

# Element & Grade Availability

Grade	Candle 7" Candle	10" Candle	Cartridge Slimline	Imperial
Sterasyl®	~	~	~	~
Super Sterasyl®	<b>v</b>	<b>v</b>		<b>v</b>
ATC Super Sterasyl®	<b>v</b>	<b>v</b>		~
Supercarb®		<b>~</b>	<ul> <li></li> </ul>	~
Chlorasyl®		<b>v</b>		
Ultracarb®		<b>v</b>	<b>v</b>	<b>v</b>

# Typical Candle Flow Rates 49mmØ



# Ceramic filter candles are available in: 2 standard diameters: Slimline: 2 inches/49 mm. Imperial: 23/4 inches/67mm 2 standard lengths: 7 inches/177mm 10 inches/254mm.

1/4 inch BSP threaded mount, available in two lengths: Long mount: 1 1/2 inch/36mm The type of mount as well as the length and diameter



100

80

70

60

50

40

30

20

10

0

(US galls/hr)

Rate (

Flow

# Cartridae

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

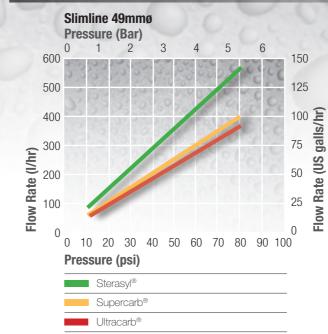
Cartridges are manufactured at a standard length of 9 3/4"/248mm and two standard diameters: Slimline: 2 inches/49mm Imperial: 23/4 inches/67mm



### Water treatment cartridges Water treatment cartridges allow the removal of additional contaminants from your drinking water.

They are compatible with the under-counter and counter-top range of housings and can also be used in the DUO™ housing alongside your choice of ceramic filter candle.

# Typical Cartridge Flow Rates



# Candles are manufactured as standard with a Short mount: 34 inch/19mm.

400

350

250

200

**Flow Rate (I/hr)** 100 20 0

Pressure (psi)

of the candle will be dictated by the filter housing.



0 10 20 30 40 50 60 70 80 90 100

Supercarb® unrestricted flow

Ultracarb<sup>®</sup> unrestricted flow

NSF<sup>®</sup> restricted flow

# Sediment & Particle Pre Filter

In areas of high sediment, this pre filter will remove sediment and particles down to 5 microns in size.

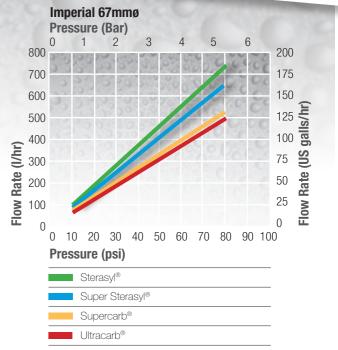
# Cleansoft<sup>™</sup> Pre Filter

Protect against the damaging effects of hard water by using the Cleansoft™ limescale reduction cartridge. This will reduce hardness in drinking water and the unpleasant 'chalky' taste that hard water can have.

# Fluoride Pre Filter

The fluoride reduction cartridge reduces unwanted naturally occurring and added fluoride to safe levels in your mains supplied drinking water.





# Filter housings A solution for every situation.

# Under-counter Inline filters

Designed to be fitted to the mains cold water pipe underneath the kitchen counter and are highly robust as they are under water pressure all the time.



HIP/Sterasyl<sup>®</sup> Inline HIP/Supercarb<sup>®</sup> Inline HIP/Ultracarb<sup>®</sup> Inline NSF

Material	Food Grade Plastic
Connections	3/8 inch push fit inlet & outlet suitable for 3/8 inch flexible plastic pipe
Number of filter candles	1
Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short threaded mount
Compatible candles	
*Flow Rate	80 US galls/hour (300 l/hour)





Material	Food Grade Plastic		
Connections	3/8 inch push fit inlet & outlet suitable for 3/8 inch flexible plastic pipe		
Number of filter elements	1 Ceramic Filter Candle 1 Pre Filter Water Treatment Cartridge		
Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short threaded mount		
Compatible candles			
*Flow Rate	80 US galls/hour (300 l/hour)		



Material

Connections

Number of filter ca

	Stainless Steel
	3/8 inch push fit inlet & outlet suitable for 3/8 inch flexible plastic pipe
Indles	1
-	10 in the second distribution in the second

HIS PUSH-FIT

Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short threaded mount		
Compatible candles			
*Flow Rate	80 US galls/hour (300 l/hour)		

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



Material	Polypropylene		
Connections	1 inch BSP parallel threaded inlet & outlet		
Number of filter candles	6		
Type of filter candle	8 inches long x 1.2 inches in diameter (200 x 32mm) threaded short mount		
Compatible candles			
*Flow Rate	400 US galls/hour (1500 l/hour)		



	QT Supercarb Inline QT Ultracarb Inline		HIS
Material	Food Grade Plastic	Material	Stainless Steel Body,
Connections	3/8 inch push-fit inlet & outlet suitable for		Chromium Plated Brass Head
	connection to flexible plastic pipe	Connections	1/2 inch BSP threaded inlet & outlet
Number of filter candles	1	Number of filter candles	1
Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short threaded mount	Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short threaded mount
Compatible candles		Compatible candles	
*Flow Rate	73 US galls/hour (275 l/hour)	*Flow Rate	80 US galls/hour (300 I/hour)

# Counter-top filters

Situated on the kitchen counter next to the sink, counter-top filters are very popular with people who want very easy access to their water filters.



HCP		
Food Grade Plastic		

Material	Food Grade Plastic		
Connections	Diverter valve fits onto most common threaded kitchen mixer taps		
Number of filter candles	1		
Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short thread		
Compatible candles			
*Flow Rate	80 US galls/hour (300 l/hour)		





# Filter housings Versatile and flexible.

# Wall-mounted filters

Providing easy access, these filters are designed to be wall-mounted in close proximity to the kitchen sink.

Grade				
Sterasyl®	Supercarb®			
Super Sterasyl®	Chlorasyl®			
ATC Super Sterasyl®	Ultracarb®			



Material	Nylon Coated Aluminium		
Connections	1/2 inch BSP threaded inlet & outlet		
Number of filter candles	1		
Type of filter candle	10 inches long x 2 inches in diameter (254 x 49mm) short thread		
Compatible candles			
*Flow Rate	80 US galls/hour (300 l/hour)		

HBA MK1



Connections	1/2 inch BSP threaded inlet & outlet 1 10 inches long x 2 inches in diameter (254 x 49mm) short thread	
Number of filter candles		
Type of filter candle		
Compatible candles		
*Flow Rate	80 US galls/hour (300 l/hour)	

# Outdoor Recreation Water filters

For situations where there is no reliable pressurised mains water supply.



Material	High Density Polypropylene	
Connections	Water is poured manually into the upper chamber	
Number of filter candles	1 or 2 candles	
Type of filter candle	7 inches long x 2 diameter (178 x 49mm) long threaded mount & wing nut	
Compatible candles		
*Flow Rate	0.22 or 0.40 US galls/hour (0.85 or 1.5 I/hour) - depending on number of candles installed	



Material	Food Grade Plastic	Material	Stainless Steel
Connections	Water is poured manually into the upper chamber	Connections	Water is poured manually into the upper chamber
Number of filter candles	2	Number of filter candles	2 candles
Type of filter candle	7 inches long x 2 diameter (178 x 49mm) long thread and wing nut	Type of filter candle	7 inches long x 2 diameter (178 x 49mm) long thread and wing nut
Compatible candles		Compatible candles	
*Flow Rate	0.45 US galls/hour (1.7 l/hour)	*Flow Rate	0.5 US galls/hour (1.7 l/hour)

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**High Efficiency Filter** 99.99% plus filtration of bacteria, cysts and particles\*.

Long-Life / Value for Money Cleanable filter surface for prolonged life.

Anti-Bacterial Action Proprietary system to inhibit microbiological growth on the filter. No boiling required.

**Retains Essential Minerals** Keeps the minerals beneficial to health.

### **No Power Required** Cost effective to run. Protects without power.

MANUFACTURED BY FAIREY INDUSTRIAL CERAMICS LIMITED Lymedale Cross, Lower Milehouse Lane, Newcastle-under-Lyme Staffordshire, ST5 9BT. United Kingdom.

\*Independently tested; see website for full technical and performance specifications and product availability.

State restrictions may limit the availability of certain products in California, lowa and Wisconsin. For product availability in these States please refer to our website:

### www.faireyceramics.com

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