

# Challis Ag+ Micro Filter Anti Bacterial Shower Head



**CHALLIS**  
ANTIMICROBIAL



**Over 30,000 Ag+  
showers already in  
NHS Trusts Across the  
UK**

## Challis MicroFilter Shower Head In Line Micro Filtration for Anti Bacterial Protection 24 hours a Day 150 days

### Product characteristics

- Hollow fiber membranes with micro-porous structure made of Polysulfone
- Dead-end Outside/In Filtration
- Integrated Back Flow Preventer to stop back contamination
- Extended membrane area for a high flow (good comfort of use) and a long life time
- High thermal resistance of the vessel material
- Connection for standard shower hose

### Main features

- Pore diameter 0.1 $\mu$
- Rejection > 99.99% for all bacteria
- Max pressure 5 bar (70 psi)
- Max Temperature 70°C
- Life Time 10,000 liters minimum for 3,500 cm<sup>2</sup> (2.8 ft<sup>2</sup>) effective membrane area (**Over 3x as much as comparable filters currently available**)

(for standard E.U Average Drinking Water Quality) Instantaneous Protection

### Applications

For bacteriologic protection on shower water :

- Emergency Use
- Home,
- Healthcare centers (hospital, nursing, dentist),
- Hostels,
- Fitness centers (swimming pool, spa),
- Recreational centers,
- Camping Centers, Cruise ships and Ferries ...

A water contamination with pathogens, even light, can constitute a real sanitary danger, one famous example being Legionella. The most efficient solution is a filtration at the point of use. Challis MicroFilter Shower is a microfiltration membrane cartridge which retains high bacterial charges and thus avoids contamination and its consequences. It secures the water at the point of use and particularly the showers in high dependency areas where the risk is high.

### Bacteria free water shower legionella prevention

The Challis MicroFilter Shower is composed of microfiltration hollow fiber membranes inserted in the shower handset. The membrane pore size of 0.1 micron, that is to say smaller than the smallest micro-organism, allows to obtain the optimal filtration and an increased protection. Legionella bacteria (0.5 - 0.7 micron in size) occurring naturally in surface water, frequently found in shower plumbing and responsible of Legionellosis diseases are rejected. The Challis MicroFilter Shower microfilter membrane is manufactured to the highest of standards. These membranes are NSF61 and ACS (French Health Ministry) approved.

### High flow and Long Working Life

Challis MicroFilter Shower offers the best technological compromise in a shower handset which looks and feels like any familiar handheld one. The water passes from the outside to inside of the hollow fiber membrane (small porous plastic tubes less than one millimeter in diameter) barrier while the suspended matters and bacteria are captured on the membrane surface. The hollow fiber membrane material (Polysulfone) and the outside/ in filtration water circulation offer a high chemical and mechanical durability, an extended filtration membrane area for high flow allowing a good comfort of use and high membrane surface for a long life time, significantly out performing many of the filters currently available.

### Easy installation, instantaneous protection

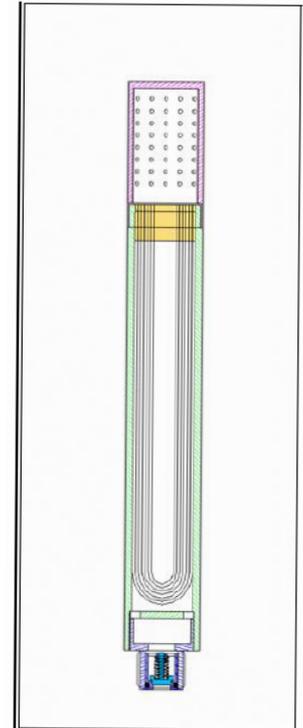
The Challis MicroFilter Shower handset including membrane features universal fitting to simply screw it to any ordinary shower flexible pipe. The complete handset including the filter cartridge is replaceable. The bacteriologic protection starts immediately after installation. Produced flow will decrease but bacteriologic protection is always kept



**Product Code: CWC417**

Technical Document	Technical Data Sheet		
Challis Water Controls Ag+	01/14	Challis MicroFilter Shower Head	MicroFilter for Bacteriologic Filtration-Point of Use Shower head

Challis MicroFilter Shower Head		Characteristics
Hollow finer type		MFXS
Membrane Area	cm <sup>2</sup>	3500
Threshold	µm	0.10
Fiber External Diameter	mm	0.45
Water Flow @ 3 Bar @20°C	L/mn	12
Pressure Drop @ 2 L/min	bar	0.35
Operating Pressures	bar	3-4
Maximum Pressure	bar	5
Maximum Operating Temperature	°C	60
Maximum temperature pointed and 30 mn maximum during the lifetime Micfilter	°C	70
Ph Range	pH	2-14
Life Time on Normalized Municipal	L	10,000
Weight Without Water Inside	gr	125
Length	cm	23.5
Diameter	cm	3.33
Fitting		1/2" BSP
Chlorine resistance test for 12 hours at 25ppm or 300ppm/h		



Challis MicroFilter Shower Head	Materials & Agreements
Materials for vessel, deflector, tip & knob	ABS
Check Valve Materials	POM, Stainless Steel Silicon - NSF61
Hollow Fibre Material	Polysulfone ACS/French Ministry of Health & NSF61 Approval
Resin Material For potting	Polyurethane ACS/French Ministry of Health & NSF61 Approval
Vessel Body Material	ABS



**CHALLIS**  
ANTIMICROBIAL