

# CRYPTOCLEAR PLUS Food and Beverage

Filter Cartridges



CRYPTOCLEAR PLUS pleated filter cartridges have been designed specifically for the removal of *Cryptosporidium parvum* and *Giardia intestinalis* from water in the food, beverage and healthcare industries.

Extensive research, including live oocyst challenge has resulted in a graded density filtration medium that maximizes loading capacity of the filters whilst accurately defining particle and oocyst retention under a variety of operating conditions.

CRYPTOCLEAR PLUS cartridges can be repeatedly sanitized using hot water, steam and a wide range of chemicals.

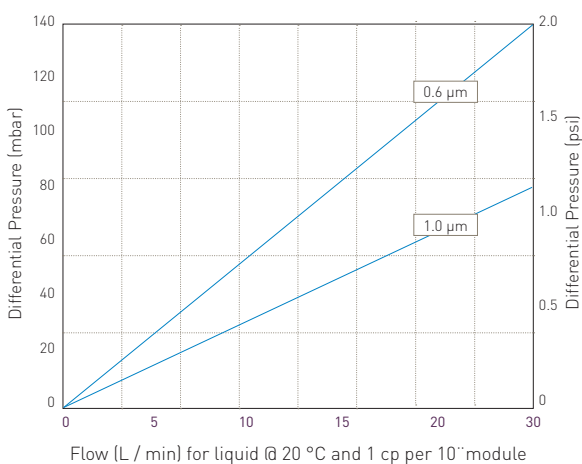
## Features

- Specifically designed for the reduction of *Cryptosporidium parvum* oocysts
- Graded density polypropylene pleated media, optimized for dirt holding capacity and oocyst retention
- 0.6 and 1.0 micron retention ratings

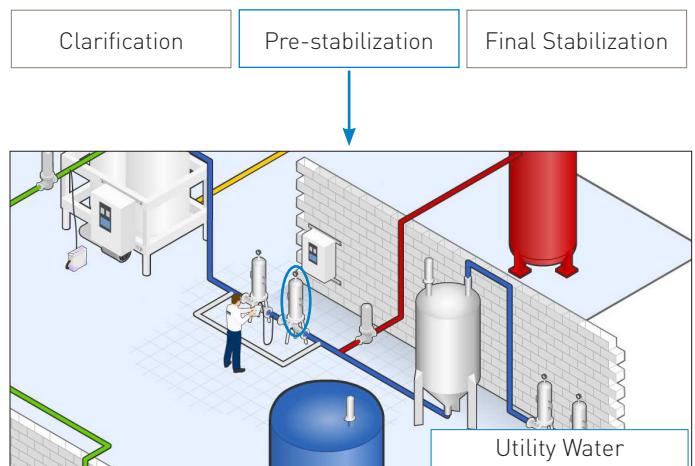
## Benefits

- Assured performance to reduce the threat of *Cryptosporidium* infection
- Extended lifetime to blockage under high particle loading conditions
- Flexibility to optimize the filtration in-line with the facility requirements for *Cryptosporidium* control

## Performance Characteristics



## Filtration Stage



## Specifications

### Materials of Construction

■ Filtration Media:	Polypropylene
■ Upstream Support:	Polypropylene
■ Downstream Support:	Polypropylene
■ Inner Support Core:	Polypropylene
■ Outer Protection Cage:	Polypropylene
■ End Caps:	Polypropylene
■ End Cap Insert:	316L Stainless Steel
■ Standard o-rings:	Silicone

### Food Contact Compliance

Materials conform to the relevant requirements of FDA 21 CFR Part 177, current EC1935 / 2004 and current USP Plastics Class VI - 121 °C. CRYPTOCLEAR PLUS is listed as a WRAS Approved Product.  
*WRAS - Water Regulations Advisory Scheme BS6920 Test of Effect on Water Quality.*



### Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature °C	°F	Max Forward dP (bar)	(psi)
20	68	5.0	72.5
40	104	4.0	58.0
60	140	3.0	43.5
80	176	2.0	29.0
90	194	1.0	14.5
>100 (steam)	>212 (steam)	0.3	4.0

### Effective Filtration Area (EFA)

10" (250 mm) Up to 0.57 m<sup>2</sup> (6.13 ft<sup>2</sup>)

### Cleaning and Sterilization

CRYPTOCLEAR PLUS cartridges can be repeatedly steam sterilized in-situ or autoclaved at up to 142 °C (287.6 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

### Manufacturing Traceability

Each filter cartridge displays the product name, product code and lot number. Additionally, each module displays a unique serial number providing full manufacturing traceability.

### Retention Characteristics

The removal efficiencies of CRYPTOCLEAR PLUS cartridges have been determined from tests conducted by Thames Water Utilities Limited on live *Cryptosporidium oocysts*.

Product	Micron	Retention
CRYPTOCLEAR PLUS	0.6	>99.997%
CRYPTOCLEAR PLUS	1.0	>99.3%

## Ordering information

ZCCP



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Code	Length (Nominal)
1	10" (250 mm)
2	20" (500 mm)
3	30" (750 mm)
4	40" (1000 mm)

Code	Micron
.60	0.6 µm
1.0	1.00 µm

Code	End Cap (10 inch)
C	BF / 226 Bayonet
D	Fin / 222
E	Flat Top / 222
G	Recess / 222
R	BF / 222 Bayonet

VSH & HSL  
HOUSING RANGE  
AVAILABLE