



Donaldson
FILTRATION SOLUTIONS

Process Filtration From Pure to Sterile

PP100 C

MAIN FEATURES & BENEFITS:

- Absolute removal of Cryptosporidium and Giardia
- Tapered pore structure for longer service life
- Highly durable Polypropylene construction
- Excellent flow rate
- Approved for Food Contact Use acc. to CFR Title 21 & 1935/2004/EC



INDUSTRIES:



- Mineral Water



- Soft Drinks



- Dairies



- Breweries



- Wineries



- Environmental

Donaldson[®]
Ultrafilter

PRODUCT DESCRIPTION

The Donaldson PP100 C was specifically developed for maximum safety, performance and economics in protecting bottled water and soft drinks from Cryptosporidium and Giardia contamination.

The Donaldson PP100 C filter has been tested and approved per NSF Standard 53 as an absolute barrier to Cryptosporidium and Giardia in potable and drinking water applications. It also complies with the CDC/EPA recommendation for using absolute-rated 1 µm filters to control Cryptosporidium in drinking water.

The 1 µm absolute-rated, Donaldson PP100 C pleated filter element provides unmatched filtration performance. It contains a self-bonded microfiber filter medium composed of multiple layers of successively finer fibres and smaller pores. This highly porous, tapered pore structure provides superior flow rates and high throughputs, while maintaining an extraordinary dirt holding capacity. The filter's rugged, all-Polypropylene construction withstands everyday hydraulic challenges in bottling applications.

The Donaldson PP100 C was specifically designed for the following applications:

Cryptosporidium control in:

- Bottled Water
- Mineral Water
- Spring Water
- Table Water
- Process Water
- Ingredient Water
- Potable Water

Filtration of Food and Beverages products

- Soft Drinks
- Beer
- Wine
- Spirits
- Syrups

PRODUCT SPECIFICATIONS

Product Specifications

Absolute Retention Rate*

- 1 µm absolute: > 99,98 % for particles of 1 µm (β – value > 5000)

Filtration Surface

- 0,5 m² per 250 mm element (10")

Maximum Differential Pressure

Operating temperature [°C / °F]	Differential pressure [bar / psi]
38 / 100	5,5 / 80
66 / 150	4,1 / 60
82 / 180	2,1 / 30

Cumulative Steaming Time**

- 121°C (250° F), Saturated Steam: > 100 cycles (30 minutes)

**The removal ratings given in this chart represent actual dynamic measurements obtained from a controlled laboratory tests using latex spheres in deionised water at a flow rate of 7,6 l/m (2 gpm) per 10" element. The particle retention efficiencies were determined with a state-of-the-art liquid particle counter that can accurately measure particles down to 0,3 µm.*

*** Figures are based on lab tests to evaluate steaming resistance. Filter elements need to be checked in actual use. Contact Donaldson for recommended Autoclaving/Steaming procedures.*

MATERIAL COMPLIANCE EU

The Donaldson PP100 C filter element meets the guideline for Food Contact Use as given in **European Regulation (EC) Number 1935/2004**. All polymeric components (Polypropylene) meet the requirements of EU Directive 2002/72/EC relating to plastic materials and articles intended to come into contact with foodstuffs (excluding O-rings).

Migration tests have been carried out in simulants after flushing or in flow conditions.

For specific details on the O-rings, please contact your Donaldson Sales Engineer.

MATERIAL COMPLIANCE USA

All components of the PP100 C filter element are FDA listed for food contact use in the **Code of Federal Regulations (CFR), Title 21**

Filter Materials		CFR Title
Filter Material:	Polypropylene	177.1520
Upstream Support:	Polypropylene	177.1520
Downstream Support:	Polypropylene	177.1520
Outer Guard:	Polypropylene	177.1520
Core:	Polypropylene	177.1520
End Caps:	Polypropylene	177.1520
O-Rings:	EPDM	177.2600
Alternatively:	Silicone	177.2600
	Buna N	177.2600
	PTFE over silicone	177.1550
	PTFE over viton	177.1550
Sealing Method:	Thermal Bonding	

All products have been inspected and released by Quality Assurance as having met the following requirements:

- All filters are fabricated without the use of binders, adhesives, additives or surface-active agents.
- All filters show no migration of filter medium and is non-fibre releasing.
- All filter components based on plastics are non-toxic and are certified bio-safe in accordance with current USP Class VI Tests for Plastic.
- Bacterial endotoxin levels in aqueous extracts of PP100 C filter elements are less than 0,5 EU/ml, as determined using the limulus amebocyte lysate (LAL) test.

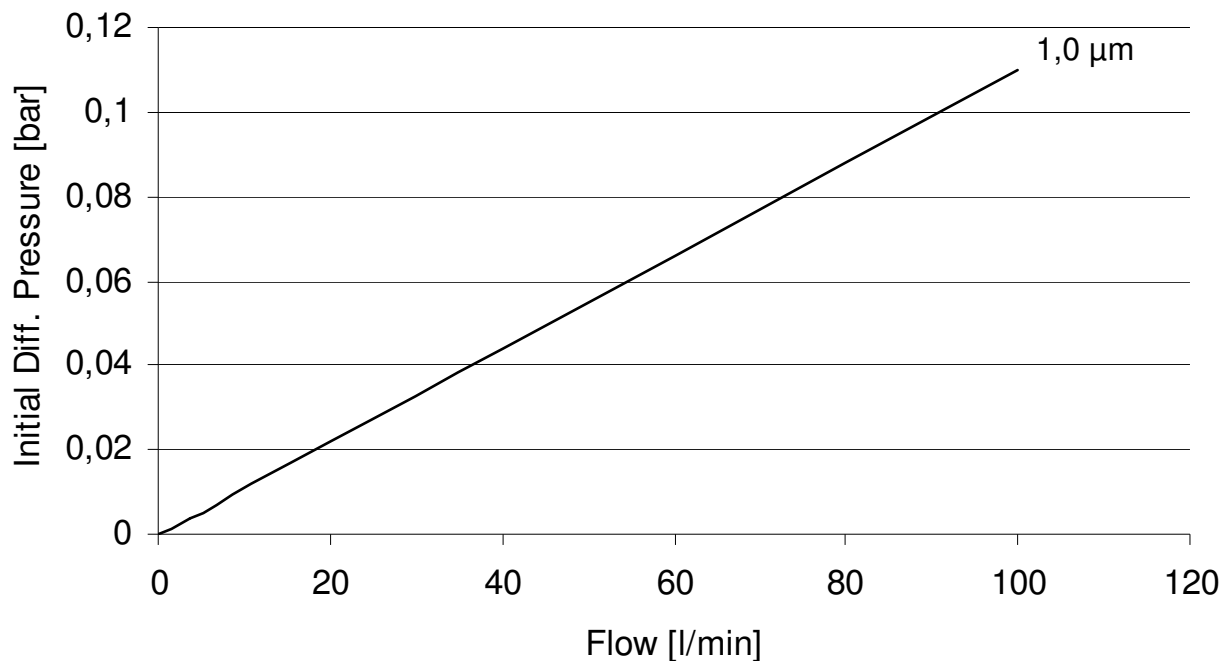
BACTERIAL RETENTION

The Filter type PP100 C (1 µm absolute) has been tested and approved per NSF Standard 53 as an absolute barrier to Cryptosporidium and Giardia in potable and drinking water applications. It also complies with the CDC/EPA recommendation for using absolute-rated filters to control Cryptosporidium in drinking water.

Filter Grade	Microorganism	Efficiency
1,0 µm	Cryptosporidium	> 99,95 %

FLOW CHARACTERISTICS

PP100 C, 10", Deionised water, 25°C

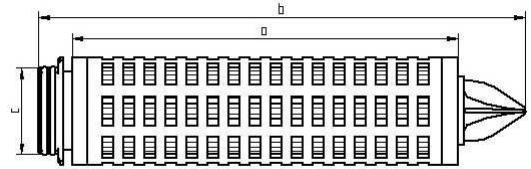


AVAILABLE END CAP CONFIGURATIONS

Dimensions (CODE7 connection):

CODE 7						
Size	a		b		c	
	mm	inch	mm	inc	mm	Inch
10"	250	9,84	315	12,40	56,5	2,22
20"	500	19,68	565	22,24	56,5	2,22
30"	750	29,53	815	32,08	56,5	2,22

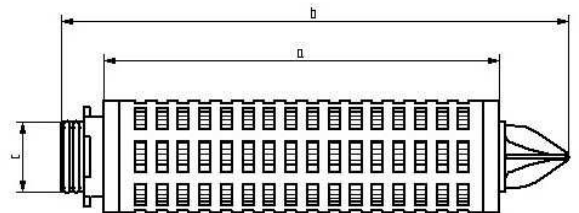
CODE 7: 2 x 226 o-rings, bayonet 2 locking tabs, locating fin



Dimensions (P9 connection):

CODE 9						
Size	a		b		c	
	mm	inch	mm	inch	mm	Inch
10"	250	9,84	320	12,59	44	1,73
20"	500	19,68	570	22,44	44	1,73
30"	750	29,53	820	32,28	44	1,73

P9: 2 x 222 o-rings, bayonet 3 locking tabs, locating fin



Other end cap configurations on request.

Technical alterations reserved 04/2009

- Integrity test of this element to be done by DOP Test.
- For information on integrity test equipment or test services, please contact your Donaldson Sales Engineer

(Rev02 – 07/10)

