



Donaldson.  
FILTRATION SOLUTIONS

# Process Filtration From Pure to Sterile

PP-FC

## MAIN FEATURES & BENEFITS:

- Developed for the cost-effective prefiltration of liquids
- High dirt holding capacity at low differential pressure
- High flow rate
- Highly resistant construction



## INDUSTRIES:



- Food & Beverage



- Chemical



- Engineering



- Industrial Water Supply



- Environmental

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Donaldson.  
**Ultrafilter**

## PRODUCT DESCRIPTION

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The Donaldson PP-FC is the latest development in nominal rated spun bonded filter element design. Produced with an integral support core for strength and high void volume, these elements excel against similarly rated elements in terms of life and cost effectiveness. The superior structure remains integral even under severe operating conditions and is less prone to the media migration and breakthrough often found on other unsupported spun bonded

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Polypropylene fibres are blown continuously onto a central moulded support core, without the need for binders, resins or lubricants. This results in a one piece construction that is resistant to unloading and media shedding. True depth filtration results from the closely controlled fibre production in manufacturing, and also the process environment which ensures a consistent and reliable high quality element.

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The nominal rated PP-FC depth filter is designed and developed as prefilter for coarse contaminations and as cost effective final filter.

**Typical applications for PP-FC filter elements include:**

### Purification of chemicals

- Acids
- Bases
- Complexing agents
- Alcohols, Aldehydes
- Etchants
- Chlorinated and fluorinated solvents
- Esters and Ketones
- Photolithographic Liquids

### Purification of Food and Beverage

#### Products

- Water
- Mineral Water
- Soft Drinks
- Beer
- Wine
- Spirits

### Purification and Filtration

- Cosmetics
- Oils
- Lubricants
- Paints and dyes
- Jet Printer Inks

## PRODUCT SPECIFICATIONS

### Product Specifications

**Nominal Retention Rates:**

- 1 µm, 5 µm, 10 µm, 20 µm, 30 µm, 50 µm, 75 µm, 100 µm, 150 µm

**Recommended Filter Element Change**

- 1,5 bar (Differential Pressure)

**Maximum Differential Pressure  
(Forward Flow)**

Operating Temperature [°C / °F]	Max. Differential Pressure [bar / psi]
20 / 68	4,0 / 58
30 / 86	3,5 / 50
40 / 104	2,5 / 36
50 / 122	1,5 / 22
70 / 158	0,5 / 7
80 / 176	0,25 / 3.5
100 / 212	0 / 0

**Collapse Pressure**

- 9,5 bar [137 psi] @ 30 °C [86 °F]
- 3,0 bar [43 psi] @ 70 °C [158 °F]

*Steam sterilization is not recommended.*

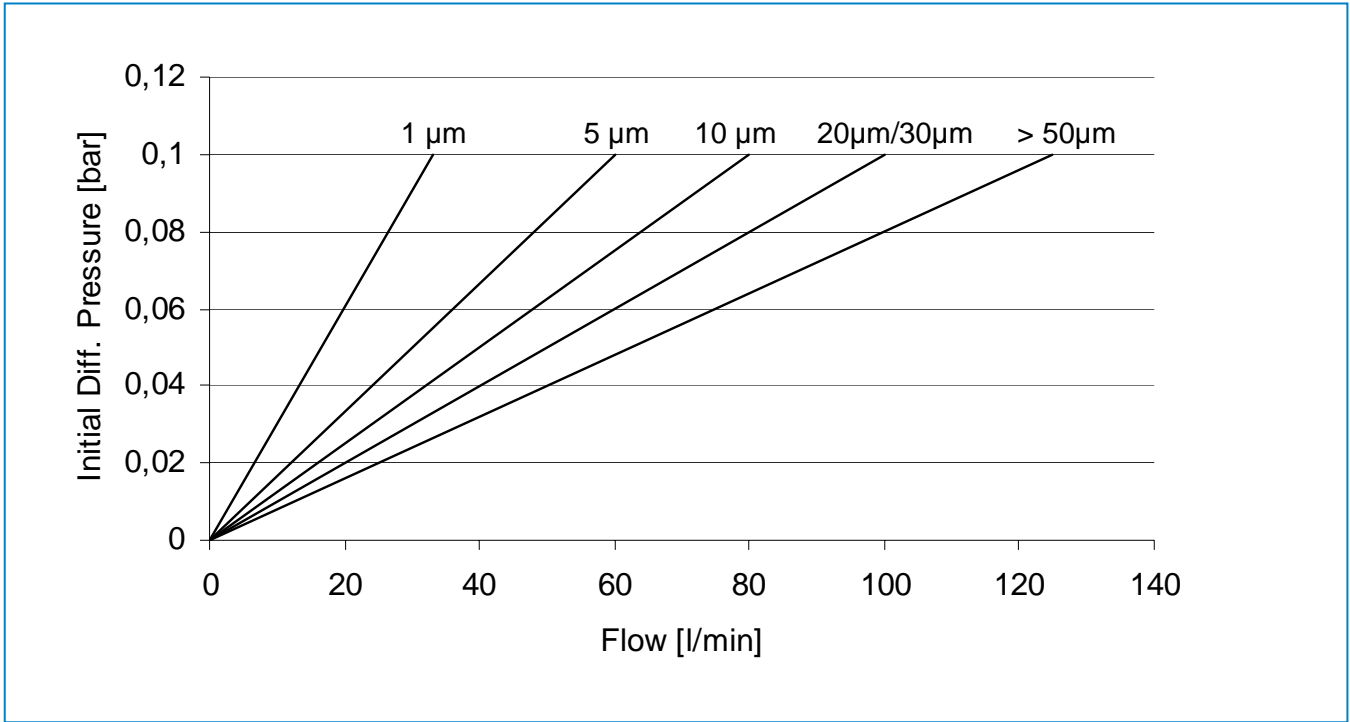
## MATERIAL COMPLIANCE

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

Filter Materials		CFR Title
<b>Filter Matrix:</b>	Polypropylene	177.1520
<b>Upstream Support:</b>	Polypropylene	177.1520
<b>Downstream Support:</b>	Polypropylene	177.1520
<b>Outer Gard:</b>	Polypropylene	177.1520
<b>Core:</b>	Polypropylene	177.1520
<b>End Caps:</b>	Polypropylene	177.1520
<b>O-Rings:</b>	EPDM	177.2600
<b>Alternatively:</b>	Silicone	177.2600
	Buna N	177.2600
	PTFE over silicone	177.1550
	PTFE over viton	177.1550

FLOW CHARACTERISTICS

PP-FC, 10", Deionised water, 20°C

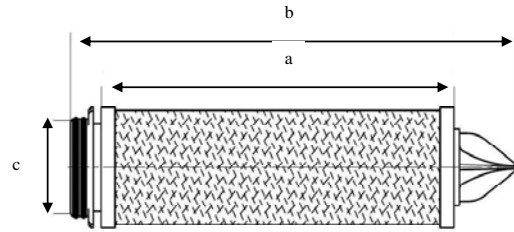


AVAILABLE END CAP CONFIGURATIONS

Dimensions (Code 7 connection):

CODE 7						
Size	a		b		c	
	mm	inch	mm	inch	mm	inch
10"	250	9,84	315	12,40	56,5	2,22
20"	500	19,68	585	22,24	56,5	2,22
30"	750	29,53	815	32,08	56,5	2,22
40"	1017	40,04	1085	42,71	56,5	2,22

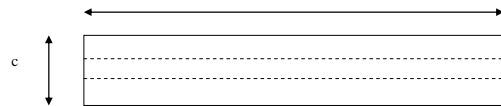
CODE 7: 2 x 226 o-rings, bayonet 2 locking tabs, locating fin



Dimensions (DOE connection):

DOE						
Size	a		b		c	
	mm	inch	mm	inch	mm	inch
10"	251	9,88	251	9,88	64	2,52
20"	508	20,00	508	20,00	64	2,52
30"	762	30,00	762	30,00	64	2,52
40"	1016	40,00	1016	40,00	64	2,52

No end caps, no gaskets



Technical alterations reserved 04/2009

- For information on integrity test equipment or integrity test services, please contact your Donaldson Sales Engineer and visit our website at [www.donaldson.com](http://www.donaldson.com)!

