



Donaldson.
FILTRATION SOLUTIONS

Process Filtration From Pure to Sterile

(P)-PP

MAIN FEATURES & BENEFITS:

- Extremely durable Polypropylene construction
- Outstanding flow rate
- Extremely high dirt holding capacity
- Multi-Layer filter media
- Approved for Food Contact Use acc. to CFR Title 21 & EEC/1935/2004



INDUSTRIES:



- Food and Beverage



- Chemical



- Pharmaceutical



- Biotech



- Environmental

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Donaldson®
Ultrafilter

PRODUCT DESCRIPTION

Donaldson (P)-PP filters are nominal rated depth type filters constructed of 100 % Polypropylene. They contain a graded density Polypropylene microfiber filter medium that provides a tapered pore structure. (P)-PP filters deliver outstanding flow rates and high throughput, with nominal submicron particulate retention and high dirt holding capacity. Their all-Polypropylene construction provides broad chemical compatibility and low extractable levels in a wide range of fluids and applications.

The (P)-PP filter's Polypropylene media is made from a process which produces a self-bonded structure comprised of multiple layers of successively finer fibres and smaller pores. This state-of-the-art design results in a highly porous, tapered pore structure consistent of a controlled absolute rated inner layer and several outer prefilter layers which substantially increase the dirt holding capacity.

All components meet the EU and USA requirements for Food Contact Use in accordance with **CFR (Code of Federal Regulations) Title 21** and **EEC/1935/2004**. (P)-PP has passed the USP Class VI tests for plastics. The filter element is manufactured in accordance with the manufacturing requirements, has no migration of filter media, is non-fibre releasing and is thermally welded without the use of binders or other chemical additives.

The nominal rated (P)-PP depth filter is designed and developed as prefilter for coarse contaminations and as cost effective final filter. Typical applications for (P)-PP filter elements include:

Purification of Food and Beverage products

- Bottled Water
- Soft Drinks
- Beer
- Wine
- Spirits
- Syrups

Purification and Filtration of

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

Purification of Chemicals

- Acids
- Bases
- Alcohols, Aldehydes
- Esters and Ketones
- Photolithographic Liquids

PRODUCT SPECIFICATIONS

Product Specifications

Nominal Retention Rates

- 0,4 µm, 1 µm, 3 µm, 5 µm, 10 µm, 30 µm

Filtration Surface

- 0,5 m² per 250 mm element (10")

Maximum Differential Pressure
Operating temperature

[°C / °F]

38 / 100

66 / 150

82 / 180

Differential pressure

[bar / psi]

5,5 / 80

4,1 / 60

2,1 / 30

Cumulative Steaming Time*

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

**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 (P)-PP 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 has been carried out in stimulant 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 (P)-PP filter element are FDA listed for food contact use in the **Code of Federal Regulations (CFR), Title 21**

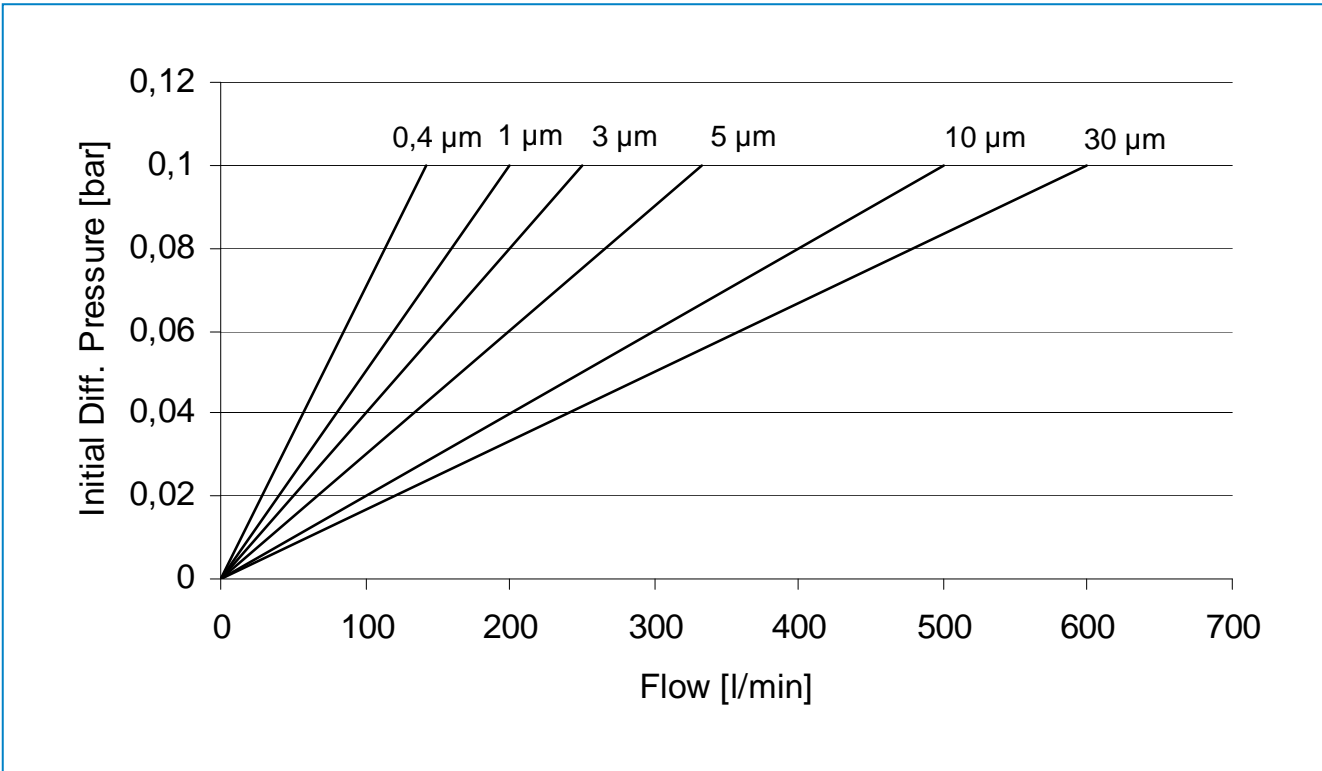
Filter Materials	CFR Title
Filter Material:	Polypropylene 177.1520
Upstream Support:	Polypropylene 177.1520
Downstream Support:	Polypropylene 177.1520
Outer Guard:	Polypropylene 177.1520
Core:	Polypropylene 177.1520
End Caps:	Polypropylene 177.1520
O-Rings:	EPDM 177.2600
Alternatively:	Silicone 177.2600
	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:

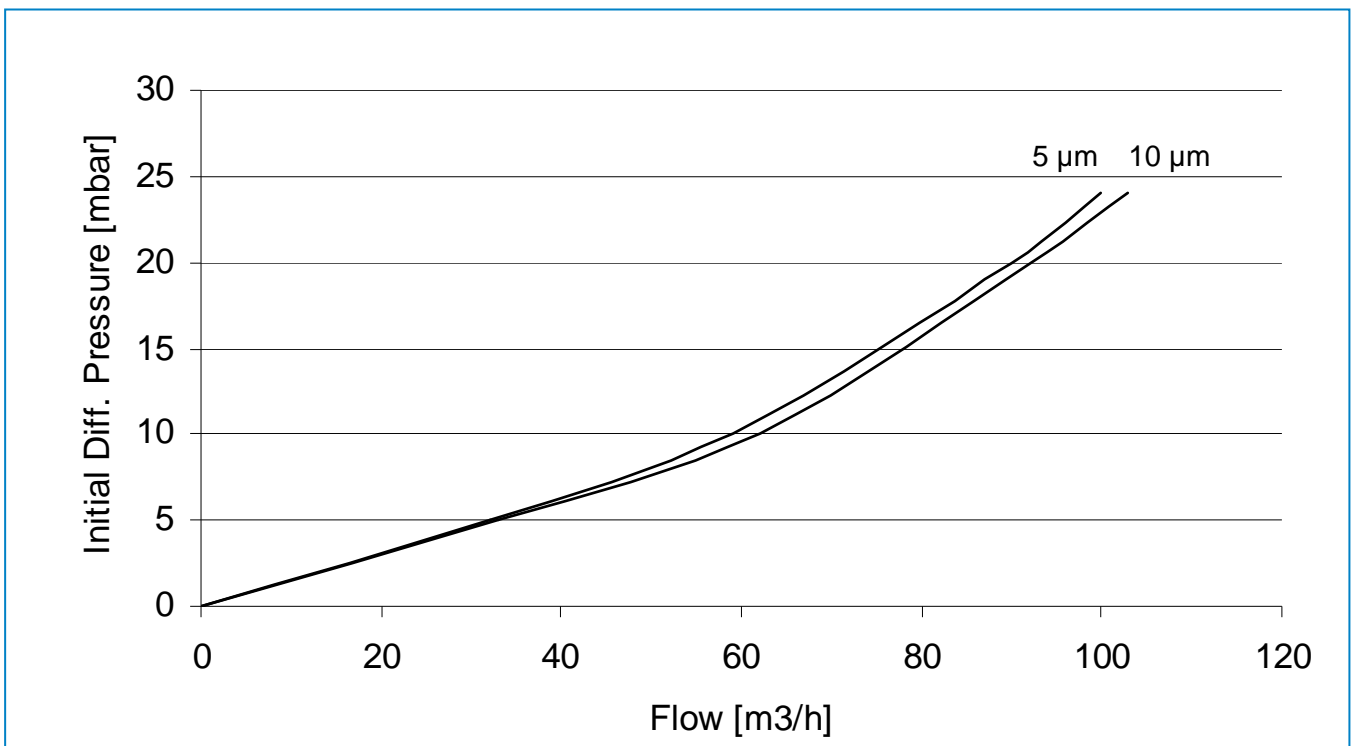
- All filters are fabricated without the use of binders, adhesives, additives or surface-active agents.
- All filters show no migration of filter medium and is non-fibre releasing.
- All filter components based on plastics are non-toxic and are certified bio-safe in accordance with current USP Class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

FLOW CHARACTERISTICS

(P)-PP, 10", Deionised water, 25°C



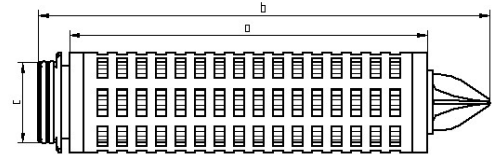
(P)-PP, 10", air, 25°C, 1 bar absolute



AVAILABLE END CAP CONFIGURATIONS

Dimensions (CODE 7 connection):

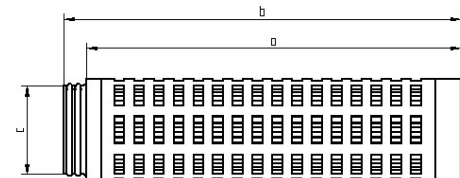
CODE 7						
Size	a		b		c	
	mm	inch	mm	inch	mm	Inch
10"	250	9,84	315	12,40	56,5	2,22
20"	500	19,68	565	22,24	56,5	2,22
30"	750	29,53	815	32,08	56,5	2,22



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

Dimensions (uf plug connection):

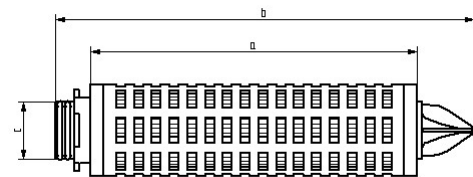
uf-plug connection						
Size	a		b		c	
	mm	inch	mm	inch	mm	inch
10/30	254	10	270	10,63	61	2,40
20/30	510	20	526	20,63	61	2,40
30/30	764	30	780	30,63	61	2,40



uf: plug connection with integrated reinforcement metal ring and flat end cap.

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

- For information on integrity test equipment or integrity test services, please contact your Donaldson Sales Engineer and visit our website at www.donaldson.com!

(Rev02 – 07/10)

