Process Filtration
From Pure to Sterile

PP-TF

MAIN FEATURES & BENEFITS:

- Extremely high dirt holding capacity
- Excellent flow rate
- Regenerable
- Highly robust construction
- Approved for Food Contact Use acc. to CFR Title 21 & 1935/2004/EC

INDUSTRIES:

- Industrial Water

- Chemical

- Food and Beverage

- Bottled Water

- Environmental

PRODUCT DESCRIPTION

Donaldson PP-TF filters are nominal rated depth type filters constructed of 100 % Polypropylene. PP-TF filters deliver outstanding flow rates and high throughput, with nominal 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.

This extremely durable design maintains consistent porosity and impurity retention throughout its service life without shedding or unloading contaminations.

All components meet the EU and USA requirements for Food Contact Use in accordance with **CFR (Code of Federal Regulations) Title 21** and **1935/2004/EC**. PP-TF 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 PP-TF depth filter is designed and developed as prefilter with high dirt hold capacity for coarse contaminations and particles. Typical applications for PP-TF filter elements include:

Purification of Food and Beverage (pre) products

- Well Water
- Tap Water
- Mineral Water
- Soft Drinks

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

- 1 µm, 3 µm, 5 µm, 10 µm, 15 µm, 25 µm, 50 µm

Filtration Surface

- 0,5 m^2 per 250 mm element (10")

Maximum Differential Pressure

Operating temperature [°C / °F]	Differential pressure [bar / psi]
32 / 90	5,5 / 80
66 / 150	3,4 / 50
82 / 180	1,4 / 20

Recommended Surface Load for continuous operation (10" element)

Liquid:	Surface Load [hl / h]
Water	8

Recommended Surface Load for Temporary Operation (10" element)

Liquid:	Surface Load [hl / h]
Water	max. 20

Dirt Holding Capacity

Nominal Retention Rate Element	Dirt Holding Capacity @ Particle Size
1 µm	345 g @ 1 µm
3 µm	320 g @ 3 µm
5 µm	350 g @ 5 µm
10 µm	360 g @ 10 µm
15 µm	380 g @ 15 µm
25 µm	420 g @ 25 µm
50 µm	440 g @ 50 µm

MATERIAL COMPLIANCE EU

The Donaldson PP-TF 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 simulant 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 PP-TF filter element are FDA listed for food contact use in the **Code of Federal Regulations (CFR), Title 21**

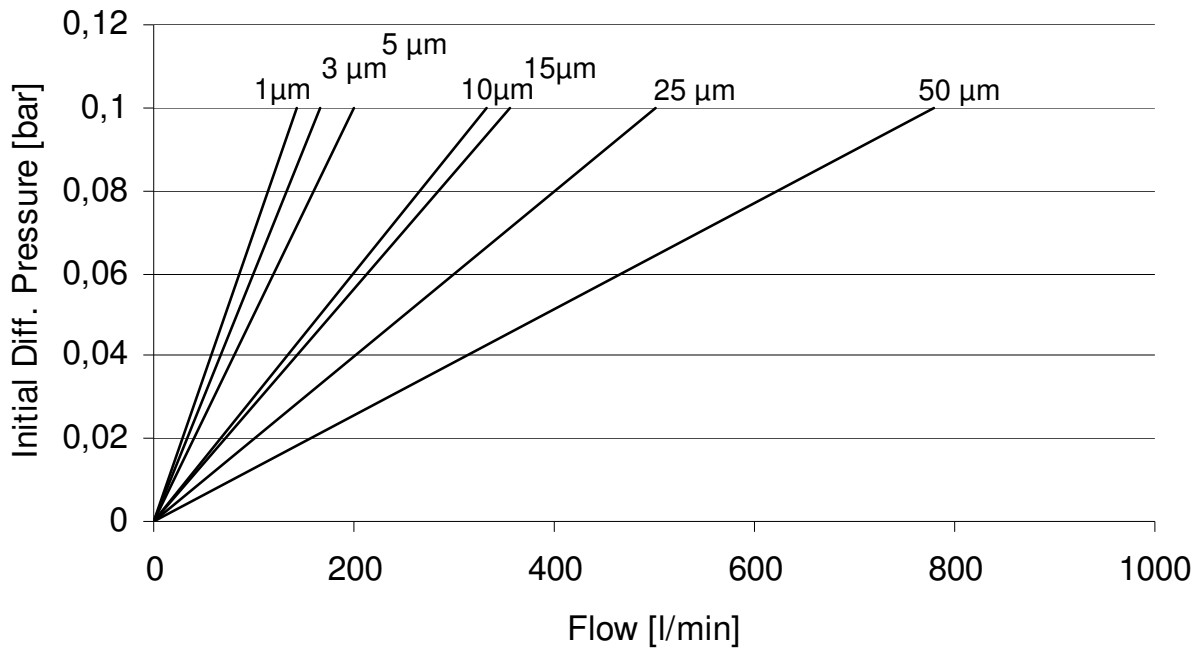
Filter Materials		CFR Title
Filter Material:	Polypropylene	177.1520
Upstream Support:	Polypropylene	177.1520
Downstream Support:	Polypropylene	177.1520
Outer Guard:	Polypropylene	177.1520
Core:	Polypropylene	177.1520
End Caps:	Polypropylene	177.1520
Gaskets:	EPDM	177.2600
Alternatively:	Silicone	177.2600
	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 PP-TF filter cartridges are less than 0,5 EU/ml, as determined using the limulus amebocyte lysate (LAL) test.

FLOW CHARACTERISTICS

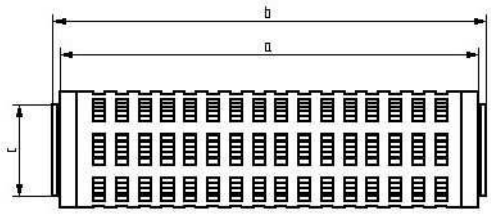
PP-TF, 10”, Deionised Water, 25°C



AVAILABLE END CAP CONFIGURATIONS

Dimensions (DOE connection):

DOE						
Size	a		b		c	
	mm	inch	mm	inch	mm	Inch
10”	242	9,52	252	9,92	45,5	1,79
20”	500	19,68	508	20,00	45,5	1,79
30”	754	29,68	762	30,00	45,5	1,79



No end caps, gaskets on each side.