

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



Process Filtration



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 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

Process Filtration PP-TF

PRODUCT SPECIFICATIONS

Product Specifications

Nominal Retention Rates

Filtration Surface

Maximum Differential Pressure

Recommended Surface Load for continuous operation (10" element)

Recommended Surface Load for Temporary Operation (10" element)

Dirt Holding Capacity

| • 1 μm, 3 μm, 5 μm, 10 μm, 15 μm, 25 μm, 50 μm | | | | | |
|--|-----------------------|--|--|--|--|
| • 0,5 m ² per 250 mm element (10") | | | | | |
| Operating temperature Differential pressure | | | | | |
| [°C / °F] [bar / psi] | | | | | |
| 32 / 90 | 5,5 / 80 | | | | |
| 66 / 150 | 3,4 / 50 | | | | |
| 82 / 180 | 1,4 / 20 | | | | |
| Liquid: | Surface Load [hl / h] | | | | |
| Water | 8 | | | | |
| Liquid: | Surface Load [hl / h] | | | | |
| Water | max. 20 | | | | |
| | | | | | |

345 g @ 1 µm

320 g @ 3 µm

350 g @ 5 μm

360 g @ 10 µm

380 g @ 15 µm

420 g @ 25 μm

440 g @ 50 μm

1 µm

 $3 \mu m$

5 µm

10 µm

15 μm

25 µm

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**

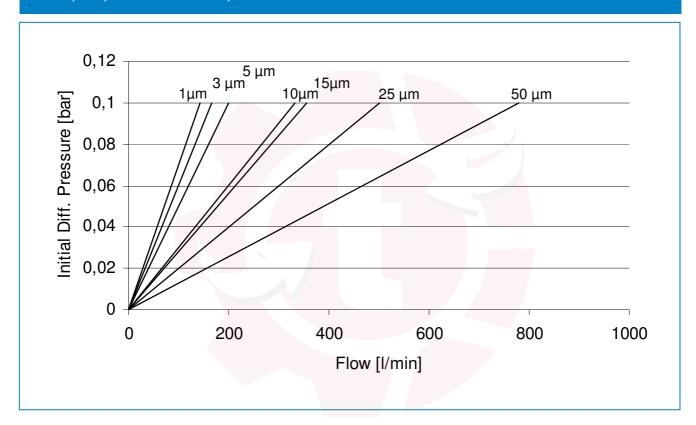
| Filter Materials | | CFR Title | | |
|-------------------|--------------------|-----------------|--|--|
| Filter Material: | Polypropylene | 177.1520 | | |
| Upstream Support: | Polypropylene | 177.1520 | | |
| Downstream Suppor | t: Polypropylene | 177.1520 | | |
| Outer Guard: | Polypropylene | 177.1520 | | |
| 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 | 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 surfaceactive 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





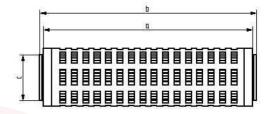
TEINCO INDUSTRIAL



AVAILABLE END CAP CONFIGURATIONS

| | Dimensior | ns (DOE co | nnection): |
|--|------------------|------------|------------|
|--|------------------|------------|------------|

| DOE | | | | | | |
|------|-----|-------|-----|-------|------|------|
| Size | а | | b | | С | |
| | 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.

TEINCO

Technical alterations reserved 04/2009

For information on integrity test equipment or integrity test services,
 please contact your Donaldson Sales Engineer

