# Flotrex* PN

*FACT SHEET*

## Pleated filters with polypropylene microfiber media

**Figure 1: Flotrex PN Filters**

## Description and Use

The Flotrex PN (FPN) microfiber filters (Figure 1) offer an economical filtration solution to protect final filters. The all polypropylene construction of the FPN filters provides superior chemical compatibility. The gradient density, thermally bonded polypropylene media has excellent dirt holding capacities and reliable retention characteristics. FPN filters do not contain any adhesives or additives as sleeve and end caps are thermally bonded.

## Typical Applications

FPN filters are an economical alternative to membrane filters in a broad range of applications, Including:

- Filtration of liquid polymers, coatings, and inks
- Filtration of bulk chemicals
- Beer trap filtration
- Post Carbon bed and DI bed filtration
- Pre-filtration to protect expensive final filters

## General Properties

Flotrex PN filters are available in the following nominal pore size micron rating: 0.2 0.45, 1, 2, 3, 5, 10 and 30 µm. Tables 1, 2, 3, and 4 show further details on materials of construction, dimensions, operational limits, and flow performance.

**Table 1: Materials of Construction**

| | |
|---|---|
| **Filtration Media** | Polypropylene Microfiber |
| **Support Layers** | Polypropylene Microfiber |
| **Core and Cage** | Polypropylene |
| **Endcaps and Adapters** | Polypropylene |

**Table 2: Dimensions**

| Filter Model | Nominal O.D. | Nominal I.D. | Effective Filtration Area |
|---|---|---|---|
| FPN92 | 2.75” (70 mm) | 1.25” (31mm) | 4.8 $ft^2$ (0.45$m^2$) |
| FPN94 | 2.75” (70 mm) | 1.25” (31mm) | 5.5 $ft^2$ (0.51$m^2$) |
| FPN03, FPN05 | 2.75” (70 mm) | 1.25” (31mm) | 5.5 $ft^2$ (0.51$m^2$) |
| FPN01, FPN02 | 2.75” (70 mm) | 1.25” (31mm) | 6.4 $ft^2$ (0.59$m^2$) |
| FPN10, FPN30 | 2.75” (70 mm) | 1.25” (31mm) | 7.3 $ft^2$ (0.68$m^2$) |

**Table 3: Operational Limits**

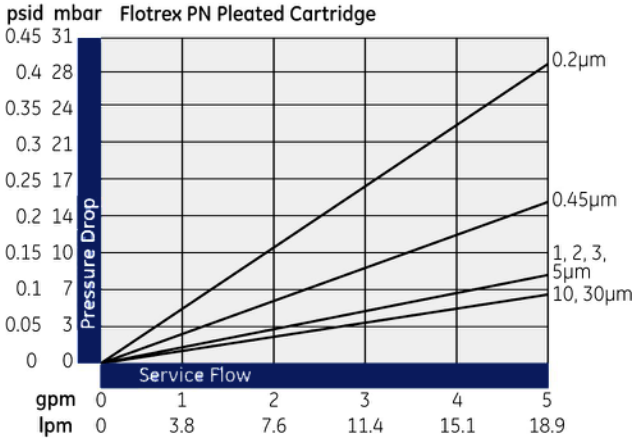
| | |
|---|---|
| **Maximum Forward Differential Pressure** | 60 psi (4.1 bar) at 70ºF (21ºC) |
| **Maximum Reverse Differential Pressure** | 30 psi (2.1 bar) at 70ºF (21ºC) |
| **Maximum Operating Temperature** | 180ºF (82ºC) at 10 psid (0.69 bar) in water |

## Additional Information

- Flotrex PN filters may be autoclaved or in situ steam sterilized (up to 257°F [125°C], 30-minute cycles) for a maximum accumulated exposure of 10 hours. Alternately, the filters may be sanitized with compatible chemical agents.
- Veolia certifies that the material contained in its Flotrex PN pleated filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact Veolia technical services. Flotrex PN filters meet the test criteria for USP class VI-121°C Plastics.
- Aqueous extracts from Flotrex PN filters contain less that 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues.
- Veolia filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your Veolia distributor for more information.
- Table 5 provides additional ordering information.

**Table 4: Flow Performance in Clean Water[1]**

## Storage and Handling




[1] Data based on 10" length filter

**Table 5: Ordering Information**

| Type | Nominal Micron Rating | Nominal Cartridge Length | End #1 Adapter | End #2 Adapter | Elastomer Material |
|---|---|---|---|---|---|
| FPN | 92 = 0.2 µm<br>94 = 0.45 µm<br>01 = 1.0 µm<br>02 = 2.0 µm<br>03 = 3.0 µm<br>05 = 5.0 µm<br>10 = 10.0 µm<br>30 = 30,0 µm<br><br>**Example: FPN921AAE** | 1 = 10 inch (25 cm)<br>2 = 20 inch (51 cm)<br>3 = 30 inch (76 cm)<br>4 = 40 inch (102 cm) | A = Open End Gasket<br>B = 120 O-Ring<br>C = 213 O-Ring<br>E = 222 O-Ring<br>F = 226 O-Ring<br>J = 020 O-Ring<br>Q = 222 O-Ring Stainless Steel Insert[2]<br>Z = 226 O-Ring Stainless Steel Insert[2] | A = Open End Gasket<br>B = 120 O-Ring<br>C = 213 O-Ring<br>G = Closed End Cap<br>H = Fin Adapter | B = Buna-N<br>E = EPDM<br>S = Silicone<br>T = Teflon[3]<br>V = Viton[3] |

[2]Q or Z Adapters normally require G or H adapters
[3]Teflon and Viton (trademarks of The Chemours Company)

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