

# Flotrex\* PN

## 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 solution for your filtration needs. 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.

### 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  $\mu\text{m}$ . Tables 1, 2, 3 and 4 show further details on materials of construction, dimensions, operational limits and flow performance.

Table 1: Materials of Construction

Description	Material 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 <sup>2</sup> (0.45m <sup>2</sup> )
FPN94	2.75" (70 mm)	1.25" (31mm)	5.5 ft <sup>2</sup> (0.51m <sup>2</sup> )
FPN03, FPN05	2.75" (70 mm)	1.25" (31mm)	5.5 ft <sup>2</sup> (0.51m <sup>2</sup> )
FPN01, FPN02	2.75" (70 mm)	1.25" (31mm)	6.4 ft <sup>2</sup> (0.59m <sup>2</sup> )
FPN10, FPN30	2.75" (70 mm)	1.25" (31mm)	7.3 ft <sup>2</sup> (0.68m <sup>2</sup> )

Table 3: Operational Limits

Description	Operational Limits
Maximum Forward Differential Pressure	60 psi (4.1 bar) at 70°F (21°C)
Maximum Reverse Differential Pressure	30 psi (2.1 bar) at 70°F (21°C)
Maximum Operating Temperature	180°F (82°C) at 10 psid (0.69 bar) in water



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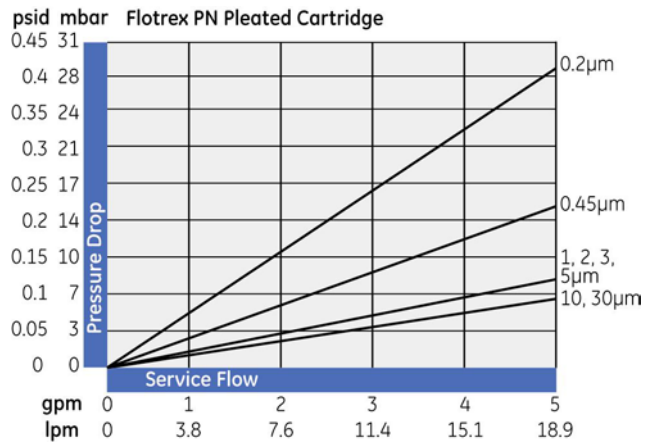
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## Additional Information

- 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.
- GE 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 GE technical services. Flotrex PN filters meet the test criteria for USP class VI-121°C Plastics.
- Aqueous extracts from Flotrex PN filters contain less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues.
- GE 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 GE distributor for more information.
- Table 5 provides additional ordering information.

**Table 4: Flow Performance in Clean Water<sup>1</sup>**



<sup>1</sup> 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 94 = 0.45 µm 01 = 1.0 µm 02 = 2.0 µm 03 = 3.0 µm 05 = 5.0 µm 10 = 10.0 µm 30 = 30.0 µm	1 = 10 inch (25 cm) 2 = 20 inch (51 cm) 3 = 30 inch (76 cm) 4 = 40 inch (102 cm)	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring E = 222 O-Ring F = 226 O-Ring J = 020 O-Ring Q = 222 O-Ring Stainless Steel Insert <sup>2</sup> Z = 226 O-Ring Stainless Steel Insert <sup>2</sup>	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring G = Closed End Cap H = Fin Adapter	B = Buna-N E = EPDM S = Silicone T = Teflon <sup>3</sup> V = Viton <sup>3</sup>
	<b>Example: FPN921AAE</b>				

<sup>2</sup>Q or Z Adapters normally require G or H adapters

<sup>3</sup>Teflon and Viton are registered trademarks of DuPont

