

CLEAL® POROUSFINE PP, PET, PES, PSU, PTFE & hPTFE Pleated Filters



POROUSFINE Materials of Construction:

- **Medium:** Defined by product designation
- **Irrigation and support:** Polypropylene
- **Core, Cage & End Caps:** Polypropylene
- **Seal material:** NBR, Silicone, Fluoro rubber, Fluoro polymer or EPT Elastomer
- **Adaptor insert:** 316 stainless steel if required for steam sterilization duty

POROUSFINE Features, Advantages and Benefits:

- **Excellent Chemical Compatibility.** Polypropylene construction provides excellent chemical resistance.
- **High quality fusion bonded construction.** Ensures low extractables and high integrity
- **Special polypropylene fibres.** JNC fibre expertise produces highly stable media with uniform pore structure and exceptional stability, eliminating rating drift, fibre release and particle unloading.
- **Integrity testable.** All grades (PP at low pressure) are integrity testable after wetting enabling confirmation of cartridge integrity before and after use if necessary, demonstrating high quality construction and integrity. Note hydrophobic grades require low surface tension wetting fluid (e.g. alcohol or 60/40 IPA/water).for testing and subsequent rinsing before use with aqueous fluids.
- **Low Clean Pressure Drop.** JNC fibre and media technology and design expertise ensures low initial differential pressure and extended filter life.

POROUSFINE Specifications

- **Max Operating Temperature:** 80°C (176°F) all grades *
- * Limit specifications are for general guidance only and users must check suitability for their own process conditions.
- **Steam Sterilisation:** 30 mins at 121°C (250°F) all grades except hydrophilic hPTFE
- **Maximum Differential Pressure:** 3.5 bard (50psid) @ 20°C (68°F) all grades
- **Media Area:** Typically 0.6m² (6.5ft²) depending on grade, PSU & PP 5-150 micron 0.56m² (6ft²) per 250mm, (10") length

CLEAL® POROUSFINE PP and PET Ordering Guide

e.g. SOE PF-010E75 25x70x315

Cartridge Code	Micron Rating 99.9% (µm)	Adaptor	Seal	Inside Diameter mm (in)	Outside Diameter mm (in)	Length mm (in)
PFN- (sub mi- cron PP)	002 (0.3) 004 (0.5) 006 (0.6) 010 (0.8)	G0 Gasket DOE E3 Code 3 M3 Code 0 E7 Code 7 M8 Code 8	1 NBR Rubber 2 Silicone Rubber 3 Fluoro Rubber 4 Fluoro-Polymer 5 EPT Rubber	☐	☒	☒
				DOE 28 (1.1")	DOE 70 (2.76")	250 9.9" 496 19.5" 742 29.2" 988 38.9"
PF- (PP - Polypro- pylene)	006 (0.6) 010 (1) 030 (3) 050 (5) 070 (7) 100 (10) 150 (15)			SOE 25 (0.98")	SOE 70 (2.76")	Please re- fer to SOE Length Table 2 on Page 23
EP- (PET - Polyester)	030 (3) 040 (4)					

POROUSFINE Media Filters

POROUSFINE PP and PET filters incorporate JNC manufactured polypropylene and polyester pleated fibre media respectively. POROUSFINE PFN offers excellent flow rates and needs no prewetting, achieving hydrophilicity through a special production process using JNC polymer and fibre know-how.

POROUSFINE Membrane Filters

POROUSFINE PES (Polyethersulphone), PSU (Polysulphone), PTFE (Polytetrafluoroethylene) and hydrophilic hPTFE (Surface Modified Polytetrafluoroethylene) filters all incorporate pleated microporous membrane.

Media Retention Ratings & Flow Data

Grade	Micron Rating μm 99.9%	Specific Pressure Drop (mbar/lpm/ cP/250mm)	Specific Pressure Drop (psid/ gpm/ cP/10")
PFN-002	0.3	6.0	0.33
PFN-004	0.5	4.0	0.22
PFN-006	0.6	2.7	0.15
PFN-010	0.8	1.3	0.07
PF-006	0.6	6.7	0.37
PF-010	1	4.0	0.22
PF-030	3	2.0	0.11
PF-050	5	1.3	0.07
PF-070	7	1.0	0.05
PF-100	10	0.7	0.04
PF-150	15	0.5	0.03
EP30	3	2.8	0.15
EP40	4	1.3	0.07



Membrane Retention Ratings & Flow Data

Grade	Microbial Rating μm	Specific Pressure Drop (mbar/lpm/ cP/250mm)	Specific Pressure Drop (psid/ gpm/ cP/10")
PF-A10	0.1	21	1.15
PF-A20	0.2	7.5	0.41
PF-A45	0.45	6	0.33
PF-S10	0.1	16	0.88
PF-S20	0.2	6	0.33
PF-S45	0.45	3	0.16
PF-T10	0.1	11	0.60
PF-T20	0.2	8	0.44
PF-T45	0.45	4	0.22
PF-01T	1	3	0.16
PF-H10	0.1	14	0.77
PF-H20	0.2	13	0.71
PF-H45	0.45	6	0.33

CLEAR[®] POROUSFINE Membrane Ordering Guide

e.g. SOE PF-A20E75 25x70x315

Cartridge Code	Microbial Micron Rating (μm)	Adaptor	Seal	Inside Diameter mm (in)	Outside Diameter mm (in)	Length mm (in)
PF-A (PES)	10 (0.10) 20 (0.20) 45 (0.45)	G0 Gasket DOE E3 Code 3 M3 Code 0 E7 Code 7 M8 Code 8	1 NBR Rubber 2 Silicone Rubber 3 Fluoro Rubber 4 Fluoro-Polymer 5 EPT Rubber	☐	☒	☒
PF-S (PSU)	10 (0.10) 20 (0.20) 45 (0.45)			DOE 28 (1.1")	DOE 70 (2.76")	250 9.9" 496 19.5" 742 29.2" 988 38.9"
PF-T (PTFE)	10 (0.10) 20 (0.20) 45 (0.45)			SOE 25 (0.98")	SOE 70 (2.76")	Please refer to SOE Length Table 2 on Page 23
PF-01T	01T (1.0)					
PF-H (hPTFE)	10 (0.10) 20 (0.20) 45 (0.45)					