sterile air membrane filters

FEATURES

- pharmaceutical grade process filters for critical processes requiring integrity validation
- high efficiency and low pressure drop
- provide effective performance for absolute validated filtration in compressed air or gas prior to incidental product contact.
- encompasses 6 models with connections from ½" to 3" NPT and rated flows from 55 to 702 scfm
- specifically designed to absolute particulate and bacteria retention in sterile environments
- exceeds Safe Quality Food (SQF) Air Quality Standard
- ideally suited for pharmaceutical protocols where documentation and integrity are critical
- applications include pharmaceuticals, biotechnology, food processing, beverage, dairy and hospitals

PTFE membrane filtration

housed in a polypropylene element incorporates a positive double o-ring click-lock seal and is 100% integrity tested

SS housings

fabricated from polished 304 or 316 stainless steel for critical air and gas applications

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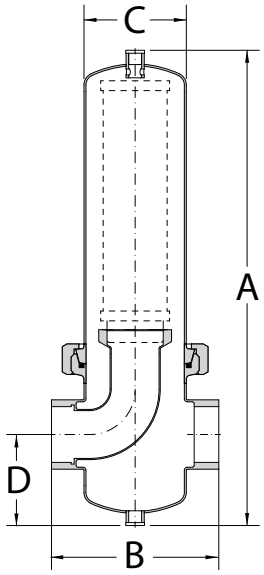
SPECIFICATIONS

filter model	inlet & outlet	rated flow (1)		dimensions (inches)				approx. weight	replacement element
	NPT	scfm	Nm³/h	A	B (2)	C	D	lbs	
PF 0085 SM-N	½"	55	93	9.45	4.25	2.76	2.24	4.6	E 102 SM
PF 0120 SM-N	¾"	60	102	9.45	4.92	2.76	2.24	5.1	E 102 SM
PF 0170 SM-N	1"	102	173	11.40	4.92	3.35	2.78	7.3	E 105 SM
PF 0460 SM-N	2"	235	399	19.02	6.70	4.10	3.64	12.1	E 110 SM
PF 0850 SM-N	2 ½"	468	795	29.53	7.17	4.10	3.80	15.2	E 120 SM
PF 1150 SM-N	3"	702	1193	40.04	7.17	4.10	3.96	19.4	E 130 SM

specifications	standard	optional
design operating pressure range	0 to 232 psig	-
inlet & outlet connections	NPT (F)	tri-clamp sanitary
drain & vent connections	¼" BSPP	-
filter housing material	1.4301 quality 304 stainless steel	1.4404 quality 316L stainless steel
filter housing polishing	passivated & polished to grade Ra <1.6 um	-
filter housing seals	aseptic EPDM	consult factory

element performance	
particle removal (at 100% PTFE membrane)	0.01 micron
continuous operating temperature range	35 to 140°F
maximum sterilizing temperature (3)	257°F
media material	hydrophobic PTFE membrane
media support & end cap material	polypropylene
element to housing connection	positive click lock with dual silicone o-rings

pressure correction factors									
operating pressure (psig)	60	70	85	100	115	145	175	205	232
correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51



(1) at 100 psig. For all other pressures, refer to the pressure correction factors above
(2) +/- 0.118"
(3) at 30 psia for 20 minutes. Apples to element only
(4) validation documents available upon request
(5) not for use in air or gas streams containing water or oil
(6) all materials conform to 21CFR Part 177 of the US code of Federal Regulations and USP Class VI Biological test for plastics
(7) air flow from outside to inside
(8) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182

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