vacuum pump protection filters

FEATURES

- designed to protect vacuum pumps from both solid and liquid contamination
- 16 models with connections from 3/8" to 3" NPT and rated flows from 4 to 288 scfm
- modular design allows close coupling of filters to simplify installation and maintenance
- housing manufactured from cast aluminum alloy providing enhanced strength and feature an E-Coat™ finish for optimum corrosion protection
- minimizes pressure drop for optimum energy efficiency
- applications include chemical, dental, food & beverage, laboratories, manufacturing, medical, packaging, paint applications, pharmaceutical pneumatic conveying and printing and paper

proprietary media technology

oleophobic borosilicate glass microfiber media provides exceptional dirt holding and drainage capabilities with a low dP

accessories

manual valve as standard and drain flask available as option

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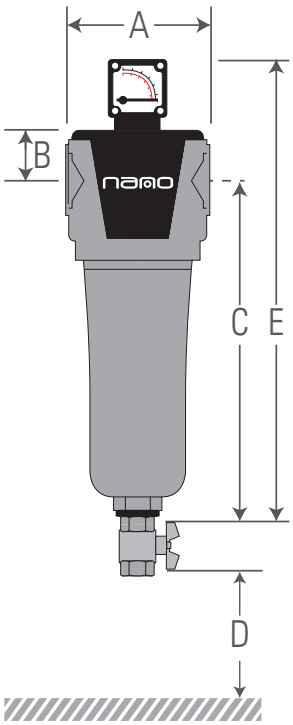
SPECIFICATIONS

filter model	inlet & outlet [1]	exhaust flow rate (vacuum displacement) [2]		dimensions (inches)					approx. weight	replacement element
	NPT/Flg	scfm	Nm^3/h	A	B	C	D	E	lbs	
NPP 0035 (grade)	3/8"	4.1	7	2.76	0.98	6.65	3.00	9.29	1.3	E 0035 (grade)
NPP 0050 (grade)	½"	6.5	11	2.76	0.98	8.31	3.00	10.93	1.5	E 0050 (grade)
NPP 0070 (grade)	½"	11.8	20	3.94	1.34	9.69	3.00	13.82	3.5	E 0090 (grade)
NPP 0085 (grade)	¾"	14.7	25	3.94	1.34	9.69	3.00	13.82	3.5	E 0090 (grade)
NPP 0125 (grade)	¾"	20.6	35	3.94	1.34	14.41	3.00	18.55	4.4	E 0135 (grade)
NPP 0135 (grade)	1"	23.5	40	3.94	1.34	14.41	3.00	18.55	4.4	E 0135 (grade)
NPP 0175 (grade)	1"	29.4	50	3.94	1.34	14.41	3.00	18.55	4.4	E 0175 (grade)
NPP 0280 (grade)	1 ¼"	44.1	75	4.80	1.65	16.50	3.00	20.97	6.2	E 0325 (grade)
NPP 0325 (grade)	1 ½"	50	85	4.80	1.65	16.50	3.00	20.97	6.2	E 0325 (grade)
NPP 0400 (grade)	1 ½"	59	100	5.75	2.05	17.01	3.00	21.85	9.2	E 0450 (grade)
NPP 0450 (grade)	2"	67.5	115	5.75	2.05	17.01	3.00	21.85	9.2	E 0450 (grade)
NPP 0700 (grade)	2"	106	180	5.75	2.05	29.06	3.00	33.91	13.9	E 0700 (grade)
NPP 0850 (grade)	2 ½"	118	200	8.27	2.64	20.94	3.00	26.38	18.7	E 1000 (grade)
NPP 1000 (grade)	3"	138	235	8.27	2.64	20.94	3.00	26.38	18.7	E 1000 (grade)
NPP 1250 (grade)	3"	212	360	8.27	2.64	29.53	3.00	34.96	23.1	E 1250 (grade)
NPP 1500 (grade)	3"	288	490	8.27	2.64	35.75	3.00	41.18	26.4	E 1500 (grade)

specifications	NPP 0035 to 0050	NPP 0070 to 1500
vacuum indicator/gauge	NDV 50	NDV 1500
design operating pressure range	full vacuum to 232 psig	
condensate drain (included) [3]	manual valve	
filter housing material	cast aluminum with E-Coat™ & powder top coat finish	

element performance	PP5	PP1
particle removal	5 micron	1 micron
maximum oil carryover at 68°F (ppm or mg/m^3)	1 mg/m^3	1 mg/m^3
pressure drop - clean	0.3 psid	0.6 psid
pressure drop - recommended replacement	1.5 psid	1.5 psid
recommended operating temperature range	35 to 212°F	
design operating temperature range	35 to 248°F	
flow direction through element	outside to inside	
maximum element life	12 months or 8000 hours	



pressure correction factors									
operating pressure (psia)	14.7	13.0	11.6	10.2	8.7	7.3	5.8	3.3	2.9
operating pressure (inch Hg)	29.9	26.6	23.6	20.7	17.7	14.8	11.8	8.9	5.9
operating pressure (mbar abs)	atm	900	800	700	600	500	400	300	200
operating pressure (Torr)	760	675	600	525	450	375	300	225	150
correction factor	1.00	0.93	0.86	0.79	0.71	0.64	0.57	0.50	0.43

(1) inlet and outlet connections are NPT threaded to ANSI B2.1

(2) free air conditions when operating at atmospheric pressure. For vacuums refer to the vacuum correction factor table above

(3) models NPP 0070 to NPP 1500 can be adapted to use ¼" drains with a reducer. Drain flasks are available for liquid collection for vacuum (or atmospheric pressure) applications only

(4) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182

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