

Medical Sterile Filters



16 models specifically designed and manufactured to exceed the requirements for medical gas pipeline systems

The nano F-Series¹ range of medical sterile filters are manufactured from cast aluminum alloy providing enhanced strength and feature an E-Coat[™] finish for optimum corrosion protection.

This range encompasses 16 filters with connections from 1/4" to 3" and rated flows from 15 to 1500 scfm. The modular design allows close coupling of filters to simplify installation and maintenance.

This unique design includes elements with stainless steel end caps for compatibility with autoclave sterilization. Each element is 100% integrity tested and provided with an Air Sterilization Certificate to guarantee the highest downstream air quality.

100% integrity tested elements

Tested and validated to international standards, elements are guaranteed for a minimum of 100 sterilization cycles at 248°F.



Applications Include:

Dental

Medical

Veterinary

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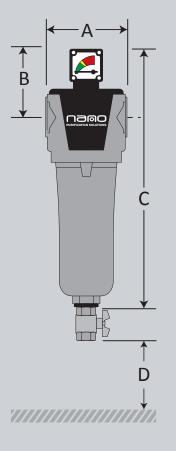
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Technical Specification

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Filter Model	Inlet & Outlet Connections	Maximum Rated Flow ⁽¹⁾		Dimensions (inches)				Approximate Weight		Replacement Element kit	
	NPT	scfm	Nm³/h	Α	В	С	D	lbs	kg	Part Number	
NMS 0015	1/4"	15	25.5	1.97	0.71	5.98	2.95	1.1	0.5	E0015 MS	
NMS 0025	1/4"	25	42.5	2.75	0.98	7.52	3.35	1.8	0.8	E0035 MS	
NMS 0035	3/8″	35	59.5	2.75	0.98	7.52	3.74	1.8	0.8	E0035 MS	
NMS 0050	1/2"	50	85	2.75	0.98	9.13	5.31	2.0	0.9	E0050 MS	
NMS 0070	1/2"	70	119	3.94	1.38	10.87	6.1	4.4	2.0	E0085 MS	
NMS 0085	3/4"	85	144	3.94	1.38	10.87	6.1	4.4	2.0	E0085 MS	
NMS 0175	1"	175	297	3.94	1.38	15.59	8.86	5.3	2.4	E0175 MS	
NMS 0280	1 ¼"	280	476	4.8	1.65	18.11	12.6	7.3	3.3	E0325 MS	
NMS 0325	1 ½"	325	550	4.8	1.65	18.11	12.6	7.3	3.3	E0325 MS	
NMS 0400	1 ½"	400	680	5.75	2.05	18.98	12.8	10.8	4.9	E0450 MS	
NMS 0450	2″	450	765	5.75	2.05	18.98	12.8	10.8	4.9	E0450 MS	
NMS 0700	2″	700	1190	5.75	2.05	30.9	24.8	15.4	7.0	E0700 MS	
NMS 0850	2 ½"	850	1445	8.27	2.6	23.42	16.14	21.1	9.6	E1000 MS	
NMS 1000	3″	1000	1700	8.27	2.6	23.42	16.14	21.1	9.6	E1000 MS	
NMS 1250	3″	1250	2125	8.27	2.6	32.09	24.8	25.5	11.6	E1250 MS	
NMS 1500	3"	1500	2550	8.27	2.6	38.39	30.91	28.8	13.1	E1500 MS	

(1) At 100 psig. For all other pressures, refer to the pressure correction factor table below.



element grade	N	15
DOP efficiency ⁽²⁾	>99.9	999%
particle removal	0.01 r	nicron
maximum recommended operating temperature	248°F	120°C
maximum autoclave temperature (3)	273°F	134°C
maximum design operating pressure	232 psig	16 barg
element pressure drop - clean	1.5 psi	100 mbar
element pressure drop - recommended replacement	6.0 psi	400 mbar

(2) As specified in HTM 02-01 medical gas pipeline systems. (3) Applies to the element ONLY.

pressure correction factors

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

technical notes

1	Filter housings are manufactured from cast aluminum alloy with E-Coat™ finish.
2	Pre-filtration is required. Contact support@n-psi.com for upstream filtration recommendations.
3	Inlet and outlet connections are NPT threaded to ANSI B2.1
4	Pop up differential pressure indicators (NDP50) are fitted to models NMS 0025 to NMS 0050. Differential pressure indicators (NDP1500) are fitted to models NMS 0070 to NMS 1500.
5	Manual drain valve fitted to all models.
6	Element end caps are stainless steel.
7	Elements may be steam sterilized up to 100 times . New elements must be steam sterilized prior to use.
8	Air flow through the filter element is from outside to inside.
9	Elements are not designed for use in water or oil saturated conditions.
10	Filter elements must be replaced every 6 months or 1000 hours, whichever occurs first.