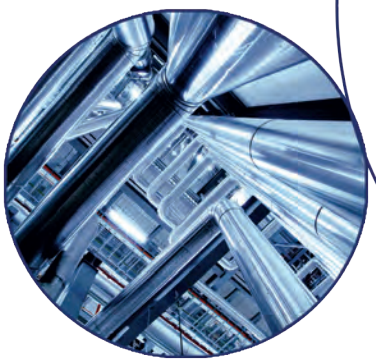

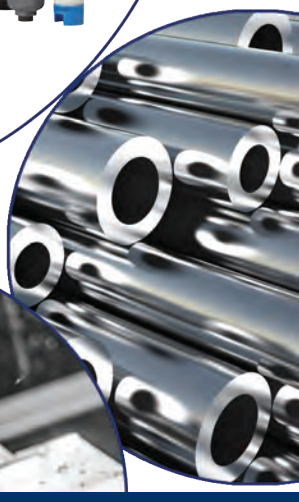

performance validated compressed air & gas filters

flow capacity: 8 to 1500 scfm (13 to 2550 Nm^3/hr)

“nano filtration products are built to perform.”

an industrial machinery distributor - northeastern US

Having a well designed compressed air system with suitable air treatment and filtration is important, but so is monitoring and maintaining that system. Over the ten-year life of an air compressor the cost of energy to run the system far outweighs the capital investment of buying it. Maintenance costs account for only 7% of the total costs yet this is a crucial activity for maximizing the energy efficiency of any compressed air system.

Repeated exposure to oil, vapor and particulate matter can, over time, cause the filter elements to become clogged. This creates an increase in pressure drop compromising not only performance but also resulting in an increase in energy cost.

nano F[1] validated compressed air & gas filters

- clean and oil-free compressed air designed to exceed the ISO 8573-1 (ISO 12500) standards for compressed air quality
- improved filtration for your compressor room or point of use application
- reliable and efficient liquid and particulate removal with low pressure drop
- space saving design - no tie rod allows easy bowl removal
- five element grades from 25 to 0.01 micron
- a comprehensive range of accessories for every application

optimized filtration

Every 10 psig of pressure drop represents a 5% decrease in compressor energy costs. It is vital to observe a scheduled maintenance program which includes the replacement of filter elements. (Source: Carbon Trust)

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BENEFITS

energy efficient

- low pressure drop

performance standards

- designed to exceed the ISO 8573-1 standards for compressed air purity and the ISO 12500 series international standard for compressed air filter testing
- range carries CRN (Canadian Registration Numbers) for approved use in every province of Canada
- designed in accordance with ASME pressure vessel standards

independent validation

- filtration performance is validated and tested by independent laboratories in accordance with international filtration standards
- manufactured in ISO 9001 approved facilities
- independently validated to ISO 12500 (ask us for a copy of test report and validation support material)

built to last

- backed by a 1 year element (grades M1 to M25) and a 10 year housing warranty
- 100% tested for pressure leaks
- fine coalescing filters are 100% tested for aerosol integrity

optimized design

- optimized performance assured through extensive Computer Aided Design technology, finite element analysis and computational fluid dynamics
- e-coat surface treatment and external powder paint finish provide optimum corrosion resistance
- pressure die cast housing
- low annular location ring prevents element vibration, improves stability in reverse flow (dust removal) applications & improves drainage
- provides uniform air flow, resulting in lower differential pressure & improved filtration & flow dynamics
- full feature design including dP indicators and gauges and automatic drains with manual override

HOW IT WORKS

A as a coalescing filter, air enters the filter head and turns downward into the double o-ring sealed element

B compressed air migrates through the various levels of filtration media where particulate is trapped and small aerosols are coalesced into larger droplets

C the irregular stranded borosilicate glass fiber media, the unique drain layer and novel lower end cap assist in removing the unwanted moisture to the lower quiet zone in the housing

D the standard, automatic zero-loss float operated drain is robust and includes a mesh screen and manual override to provide trouble-free operation and easy maintenance

E clean air exists the housing on the way to finer filtration, a dryer or process depending upon the desired cleanliness of the compressed air

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FEATURES

double element o-ring

- prevents contaminant bypass

stainless steel cylinders

- provide strength, rigidity & corrosion resistance

spiral wound inner coil

- provides extra strength on larger elements

deep bed filter media

- provides low differential pressure resulting in improved energy efficiency & long element life

hydrophobic & oleophobic

- borosilicate glass microfiber media repels oil & water for improved coalescing performance

anti re-entrainment layer

- optimizes liquid drainage & minimizes differential pressure

"dead stop" bowl feature

- provides full closure without overtightening

ultrasonic seam welded

- ensures element strength & integrity

optimized piston seal

- ensures zero leakage and ease of bowl removal during element replacement

drop-fit, self-locating

- no tie rod simplifies element change out & reduces access requirements for bowl removal

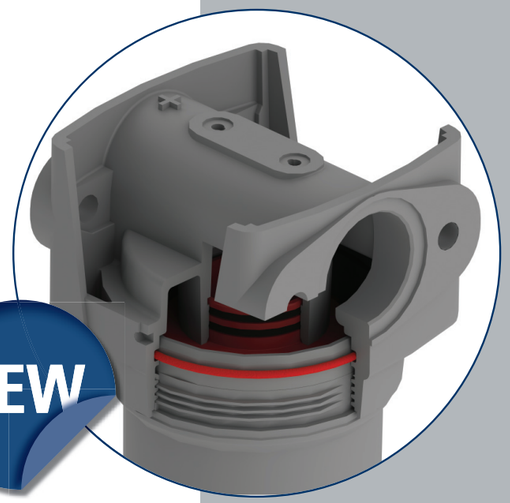
corrosion resistant end caps

- color coded to provide easy & accurate filtration grade identification

outer drainage layer

- compatible with synthetic lubricants & prevents oil carry over

comprehensive range of filter mounting accessories



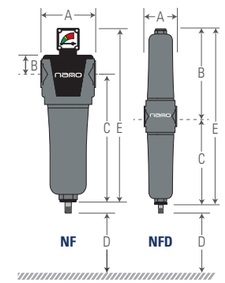
SPECIFICATIONS

filter model	inlet & outlet	rated flow (1)		dimensions (inches)					approx. weight	replacement element
	NPT	scfm	Nm³/hr	A	B	C	D	E	(lbs)	
NF - coalescing, particulate or activated carbon										
NF 0008 (grade)	¼"	8	13	1.93	0.71	5.55	3.00	6.28	0.7	E 0008 (grade)
NF 0015 (grade)	¼"	15	25	1.93	0.71	5.55	3.00	6.28	0.7	E 0015 (grade)
NF 0025 (grade)	¼"	25	42	2.76	0.98	6.77	3.00	9.39	1.3	E 0025 (grade)
NF 0030 (grade)	½"	30	48	2.76	0.98	6.77	3.00	9.39	1.3	E 0030 (grade)
NF 0035 (grade)	⅜"	35	59	2.76	0.98	6.77	3.00	9.39	1.3	E 0035 (grade)
NF 0050 (grade)	½"	50	85	2.76	0.98	8.39	3.00	11.01	1.5	E 0050 (grade)
NF 0070 (grade)	½"	70	119	3.94	1.34	9.69	3.00	13.84	3.5	E 0090 (grade)
NF 0085 (grade)	¾"	85	144	3.94	1.34	9.69	3.00	13.84	3.5	E 0090 (grade)
NF 0090 (grade)	1"	90	153	3.94	1.34	9.69	3.00	13.84	3.5	E 0090 (grade)
NF 0125 (grade)	¾"	125	212	3.94	1.34	14.41	3.00	18.56	4.4	E 0135 (grade)
NF 0135 (grade)	1"	135	229	3.94	1.34	14.41	3.00	18.56	4.4	E 0135 (grade)
NF 0175 (grade)	1"	175	297	3.94	1.34	14.41	3.00	18.56	4.4	E 0175 (grade)
NF 0280 (grade)	1 ¼"	280	476	4.80	1.65	16.54	3.00	21.00	6.2	E 0325 (grade)
NF 0290 (grade)	1 ½"	290	493	4.80	1.65	16.54	3.00	21.00	6.2	E 0325 (grade)
NF 0325 (grade)	1 ½"	325	550	4.80	1.65	16.54	3.00	21.00	6.2	E 0325 (grade)
NF 0400 (grade)	1 ½"	400	680	5.75	2.05	16.89	3.00	21.75	9.2	E 0450 (grade)
NF 0450 (grade)	2"	450	765	5.75	2.05	16.89	3.00	21.75	9.2	E 0450 (grade)
NF 0700 (grade)	2"	700	1190	5.75	2.05	29.13	3.00	33.99	13.9	E 0700 (grade)
NF 0850 (grade)	2 ½"	850	1445	8.27	2.64	20.94	3.00	26.37	18.7	E 1000 (grade)
NF 1000 (grade)	3"	1000	1700	8.27	2.64	20.94	3.00	26.37	18.7	E 1000 (grade)
NF 1250 (grade)	3"	1250	2125	8.27	2.64	29.53	3.00	34.96	23.1	E 1250 (grade)
NF 1500 (grade)	3"	1500	2550	8.27	2.64	35.75	3.00	41.18	26.4	E 1500 (grade)
NFD (duplex) - 0.01 micron coalescing & activated carbon										
NFD 25	¼"	25	42	2.76	6.42	6.26	3.00	12.68	2.0	E 0025 M01DAC
NFD 35	⅜"	35	59	2.76	6.42	6.26	3.00	12.68	2.0	E 0035 M01DAC
NFD 50	½"	50	85	2.76	8.03	7.87	3.00	15.90	2.2	E 0050 M01DAC
NFD 70	½"	70	119	3.94	9.45	9.29	3.00	18.74	5.1	E 0085 M01DAC
NFD 85	¾"	85	144	3.94	9.45	9.29	3.00	18.74	5.1	E 0085 M01DAC
NFD 125	¾"	125	212	3.94	14.17	14.02	3.00	28.19	6.8	E 0135 M01DAC
NFD 135	1"	135	229	3.94	14.17	14.02	3.00	28.19	6.8	E 0135 M01DAC
NFD 175	1"	175	297	3.94	14.17	14.02	3.00	28.19	7.0	E 0175 M01DAC

specifications	NF 0008 to NF 0015	NF 0025 to NF 0050	NF 0070 to NF 1500	NFD 25 to NFD 50	NFD 70 to NFD 175
design operating pressure range (psig) (2)	0 to 232	0 to 232	22 to 232	0 to 232	22 to 232
automatic float drain	NDK 0050	NDK 0050	NDK 1500	NDK 0050	NDK 1500
differential pressure indicator / gauge	-	NDP 0050	NDP 1500	-	-

specifications	M25	M5	M1	M01	AC	DAC
maximum particle size (ISO class) (3)	-	3	2	1	-	1
maximum oil content (ISO class) (3)	-	4	2	1	1	1
particle removal (microns)	25	5	1	0.01	-	0.01
max oil carry over at 68°F (ppm or mg/m³)	10	5	0.1	0.01	0.003	0.003
recommended operating temp range (°F)	35 to 176	35 to 176	35 to 176	35 to 176	35 to 77	35 to 77
design operating temperature range (°F)	35 to 176	35 to 176	35 to 176	35 to 176	35 to 122	25 to 122

pressure correction factors									
operating pressure (psig)	58	72	87	100	115	145	174	203	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 factor table above
(2) for pressure below 22 psig, order with a NDK 0050 condensate drain
(3) per ISO 8573.0:2001 (E)
(4) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182

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EXPERIENCE. CUSTOMER. SERVICE.

Leading edge technology and hundreds of years of *experience*. . .nano-purification solutions, your world-class manufacturer of state-of-the-art compressed air and gas solutions to industry.

Our commitment at nano is to work alongside our *customers* and provide unique solutions with the highest quality products to solve your specific challenges.

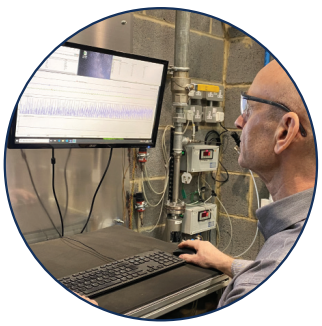
A wealth of experience and leading edge products are only part of the equation. nano recognize that world-class customer *service* is the most important component to any successful business.

DESIGN

Our experienced team of design engineers are always looking for new and unique technologies and products to bring you the highest level of performance and lowest overall operating cost.

RESEARCH & DEVELOPMENT

Our R&D team endeavor to provide solutions that go beyond developing an existing product. They are continually researching new technologies which can provide unique advantages over competitive offerings.



MANUFACTURE

Always reliable, nano F[1] performance validated compressed air & gas filters are manufactured and tested in our state-of-the-art facility to the highest standards of build quality to ensure equipment reliability and high levels of performance.

ENVIRONMENTALLY FRIENDLY

Through both product development and manufacturing, we strive to produce high quality products compliant to both local and global environmental legislation. Reduction of carbon footprint through energy saving products and use of environmentally friendly components are our commitment to you.

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