filter heater packages

FEATURES

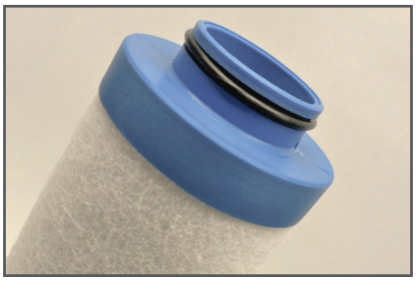
- specifically designed for both industrial and breathing air applications providing efficient filtration and precise temperature control between 68°F and 248°F
- uses open wound heating coil and high accuracy output temperature sensor to react quickly to changes in pressure and flow ensuring a consistent temperature across a wide range of operating conditions
- compact solid state temperature controller monitors the exact outlet temperature using a bi-metallic thermometer and displays the results on an optional temperature gauge
- fast response to flow and temperature variations
- applications include breathing air, manufacturing and military

modular housing design

filter design allows for additional filtration stages and temperature gauge

0.01 micron filtration

available with or without pre-filtration to ensure process air is treated prior to entering the heater



nano-purification solutions
charlotte, north carolina
united states

nano-purification solutions
new bethlehem, pennsylvania
united states

nano-purification solutions
st. catharines, ontario
canada

nano-purification solutions
gateshead, tyne and wear
united kingdom

nano-purification solutions
krefeld, germany

tel: 704.897.2182
fax: 704.897.2183
email: support@n-psi.com
web: www.n-psi.com

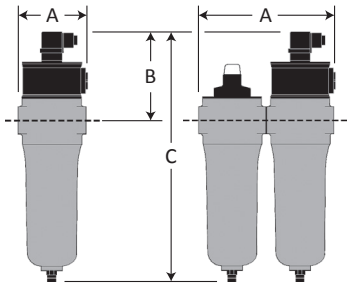
SPECIFICATIONS

model	inlet & outlet	rated flow (1)		supply voltage	dimensions (inches)			approx. weight	replacement element
	NPT	scfm	Nm³/h	1Ph/50-60Hz	A	B	C	lbs	
heater									
NH 27 A1	3/8"	27	46	115 VAC	3.5	5.1	13.3	2.2	-
NH 27 A2	3/8"	27	46	230 VAC	3.5	5.1	13.3	2.2	-
NH 27 B1	½"	27	46	115 VAC	3.5	5.1	13.3	2.2	-
NH 27 B2	½"	27	46	230 VAC	3.5	5.1	13.3	2.2	-
heater + temperature gauge									
NTH 27 A1	3/8"	27	46	115 VAC	6.9	5.1	13.3	2.9	-
NTH 27 A2	3/8"	27	46	230 VAC	6.9	5.1	13.3	2.9	-
NTH 27 B1	½"	27	46	115 VAC	6.9	5.1	13.3	2.9	-
NTH 27 B2	½"	27	46	230 VAC	6.9	5.1	13.3	2.9	-
filter + heater									
NFH 27 A1	3/8"	27	46	115 VAC	5.4	5.1	13.3	5.0	E 27 M01
NFH 27 A2	3/8"	27	46	230 VAC	5.4	5.1	13.3	5.0	E 27 M01
NFH 27 B1	½"	27	46	115 VAC	5.4	5.1	13.3	5.0	E 27 M01
NFH 27 B2	½"	27	46	230 VAC	5.4	5.1	13.3	5.0	E 27 M01
filter + heater + temperature gauge									
NFTH 27 A1	3/8"	27	46	115 VAC	8.9	5.1	13.3	5.8	E 27 M01
NFTH 27 A2	3/8"	27	46	230 VAC	8.9	5.1	13.3	5.8	E 27 M01
NFTH 27 B1	½"	27	46	115 VAC	8.9	5.1	13.3	5.8	E 27 M01
NFTH 27 B2	½"	27	46	230 VAC	8.9	5.1	13.3	5.8	E 27 M01

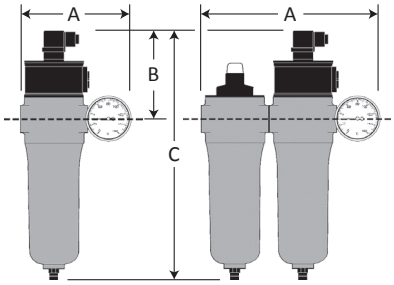
specifications	
minimum operating flow	1.7 scfm
design operating pressure	22 to 232 psig
automatic float drain (filter)	NDK 0050
semi-automatic drain (heater)	NSDK 175
power rating	1.5 kW
input temperature range	-4 to 248°F
controlled output temperature range	60 to 248°F
electrical connection	DIN

element performance (2)	M01
maximum particle size (ISO class) (3)	1
maximum oil content (ISO class) (3)	0.1
particle removal	0.01 micron
max oil carry over at 68°F	0.01 ppm or mg/m³
recommended operating temperature range	35 to 212°F
design operating temperature range	35 to 248°F
maximum element life	12 months or 8000 hours

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



NH NFH



NTH NFTH

(1) at 100 psig. For all other pressures, refer to the pressure correction factors above

(2) applies to filter & heater packages (NFH & NFTH) only. Filters are required for all applications containing liquids or aerosols

(3) per ISO 8573.1:2001 (E)

(4) when used in breathing air application, product is to be installed downstream of a suitable breathing air purifier (consult nano). Product does not remove gases such as CO or CO_2

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

MEMBER OF CAGI Compressed Air & Gas Institute

©2021 Air and Gas Solutions LLC
publication ref. n-psi-F5-HEATER2021-00-us