

# 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



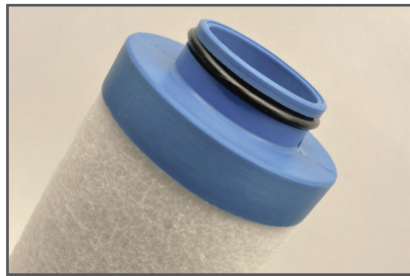
### modular housing design

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



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# SPECIFICATIONS

model	inlet & outlet		rated flow <sup>(1)</sup>		supply voltage	dimensions (inches)			approx. weight	replacement element
	NPT	scfm	Nm <sup>3</sup> /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	1/2"	27	46	115 VAC	3.5	5.1	13.3	2.2	-	
NH 27 B2	1/2"	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	1/2"	27	46	115 VAC	6.9	5.1	13.3	2.9	-	
NTH 27 B2	1/2"	27	46	230 VAC	6.9	5.1 <td 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	1/2"	27	46	115 VAC	5.4	5.1	13.3	5.0	E 27 M01	
NFH 27 B2	1/2"	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	1/2"	27	46	115 VAC	8.9	5.1	13.3	5.8	E 27 M01	
NFTH 27 B2	1/2"	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<sup>(2)</sup>

maximum particle size (ISO class) <sup>(3)</sup>	1
maximum oil content (ISO class) <sup>(3)</sup>	0.1
particle removal	0.01 micron
max oil carry over at 68°F	0.01 ppm or mg/m <sup>3</sup>
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

- (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<sub>2</sub>
- (5) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182

