

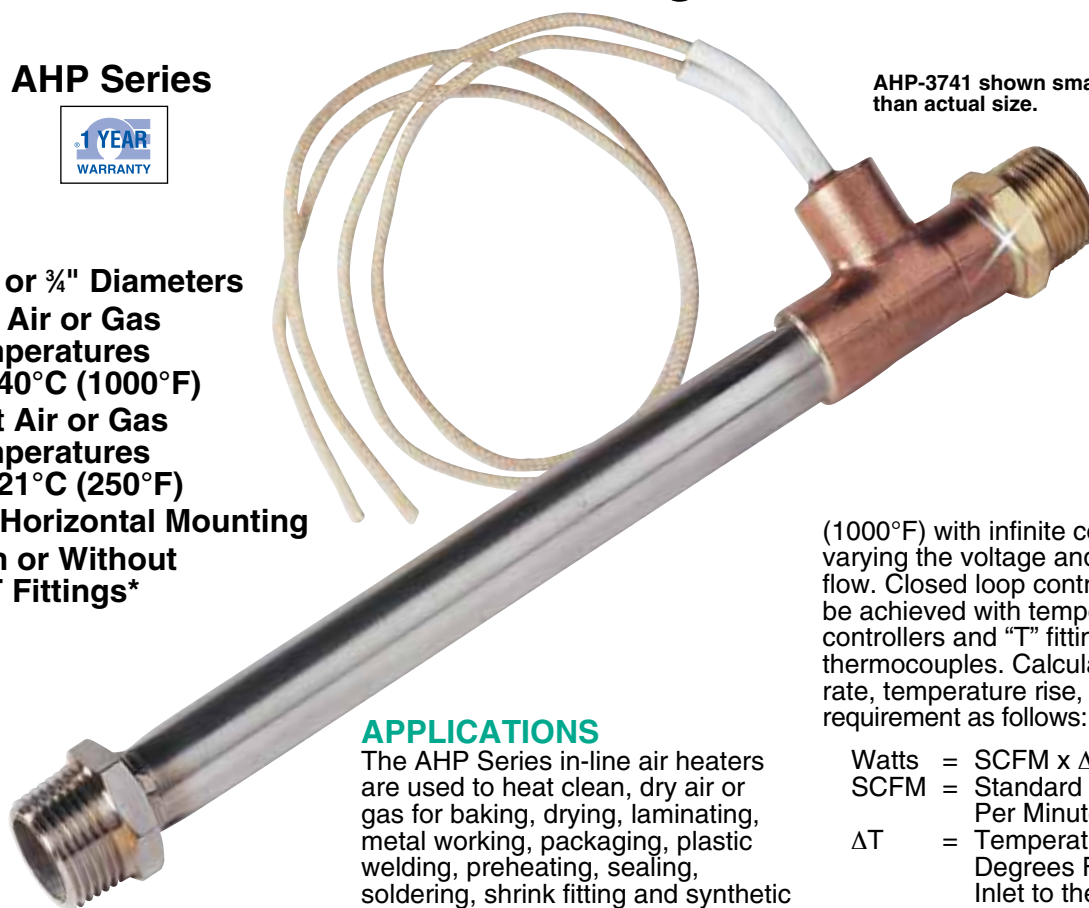
## “T” TYPE AIR PROCESS HEATERS

### For In-Line Air and Gas Heating

#### AHP Series



- ✓ ⅜, ½ or ¾" Diameters
- ✓ Exit Air or Gas Temperatures to 540°C (1000°F)
- ✓ Inlet Air or Gas Temperatures to 121°C (250°F)
- ✓ For Horizontal Mounting
- ✓ With or Without NPT Fittings\*



AHP-3741 shown smaller than actual size.

#### APPLICATIONS

The AHP Series in-line air heaters are used to heat clean, dry air or gas for baking, drying, laminating, metal working, packaging, plastic welding, preheating, sealing, soldering, shrink fitting and synthetic fabric sewing.

AHP series air process heaters provide hot air and gas up to 540°C

(1000°F) with infinite control by varying the voltage and/or the air flow. Closed loop control can also be achieved with temperature controllers and “T” fittings to mount thermocouples. Calculate the flow rate, temperature rise, or power requirement as follows:

$$\begin{aligned} \text{Watts} &= \text{SCFM} \times \Delta T / 3 \\ \text{SCFM} &= \text{Standard Cubic Feet Per Minute} \\ \Delta T &= \text{Temperature Rise in Degrees F from the Inlet to the Outlet} \end{aligned}$$

Maximum flow rates are given in the table below. For minimum flow rates, see table on page 120.

#### To Order

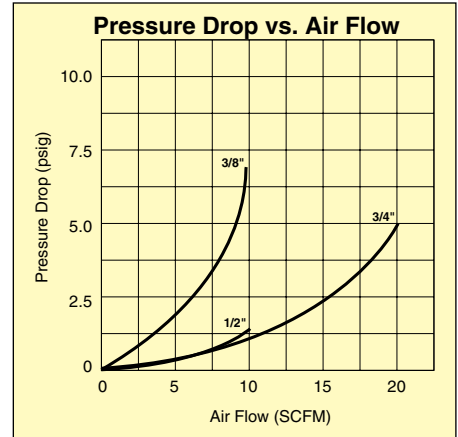
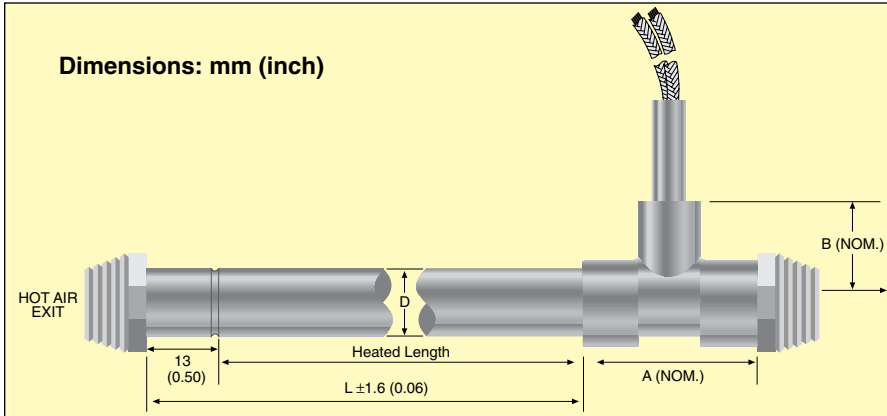
Model Number	Volts	Watts	Heated Length mm (inch)	Watts/Inch†	Maximum CFM	Diameter mm (inch)	NPT Fitting	Weight g (lb)
<b>120 Vac Models</b>								
AHP-3741	120	200	889 (3½)	57	8	10 (⅜)	¼"	82 (0.18)
AHP-5051	120	400	114 (4½)	88	10	13 (½)	⅜"	113 (0.25)
AHP-7561	120	750	140 (5½)	136	20	19 (¾)	¾"	308 (0.68)
<b>120/240 Vac Models**</b>								
AHP-3742	120	50	889 (3½)	14	8	10 (⅜)	¼"	82 (0.18)
	240	200	889 (3½)	57	8			
AHP-5052	120	100	114.3 (4½)	22	10	13 (½)	⅜"	113 (0.25)
	240	400	114.3 (4½)	80	10			
AHP-7562	120	190	139.7 (5½)	34	20	19 (¾)	¾"	308 (0.68)
	240	750	139.7 (5½)	136	20			

\* Note: To order heaters without NPT fittings add suffix “-NF” to model number, price for heaters without fittings is an additional cost for AHP-374 Series, for AHP-505 Series, and for AHP-756 Series.

\*\* These air heaters can be operated on either 120 or 240V. Specifications are shown for operation on both 120 and 240V.

† Indicates watts per inch of heated length. Use the table above to determine minimum required flow rates. The watts per inch of heated length can be changed by reducing the operating voltage or by ordering a custom made heater.

Ordering Example: AHP-3741/120, 200 W, 120 Vac “T” Type in-line air/gas heater.



**Dimensions: mm (inch)**

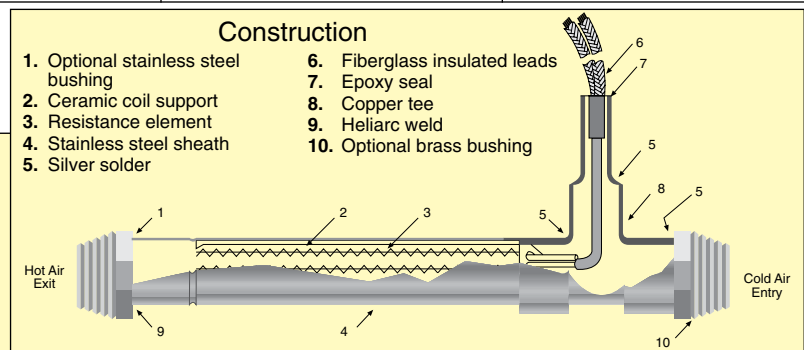
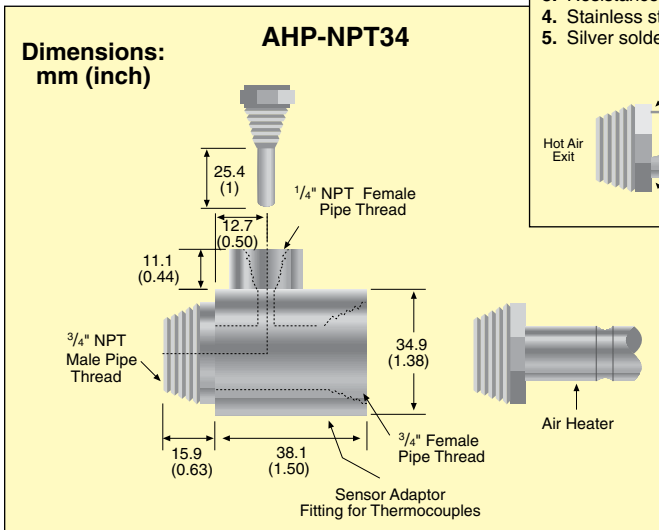
Series	Diameter	Heated Length	L	A	B
AHP-374	9.5 (3/8)	89 (3 1/2)	101.6 (4)	33.3 (1 1/16)	7.9 (5/16)
AHP-505	12.7 (1/2)	114 (4 1/2)	127.0 (5)	34.9 (1 3/8)	19 (3/4)
AHP-756	19.1 (3/4)	140 (5 1/2)	152.4 (6)	61.9 (2 3/16)	41.3 (1 5/8)

**SPECIFICATIONS**

**Pressure Rating:** 80 psig  
**Wattage Tolerance:** +5, -10% or better at the voltage specified  
**Leads:** 0.3 m L (1') fiberglass insulated leads

**Maximum Watts Per Linear Inch of Heated Length**

Minimum CFM Required	3/8" Diameter	1/2" Diameter	3/4" Diameter
1	60	80	120
2	60	80	120
4	100	100	120
6	150	150	150
8	200	200	200
10	-	250	250
15	-	-	375
20	-	-	500



**Thermocouple T-Fitting**

The AHP-NPT34 fitting can be used with subminiature thermocouple probes (see omega.com) and with stainless steel compression fittings (model SSLK-18-14) to monitor temperature at the outlet of the AHP-756 Series heaters.

**Ordering Example:** AHP-NPT34, thermocouple t-fitting.

**Model Number**  
**AHP-NPT34**