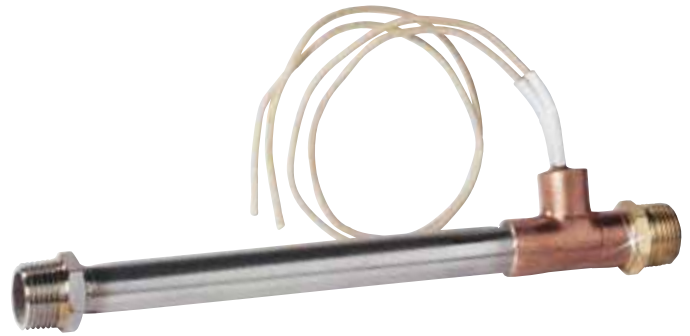


## AHP Series

INSTRUCTION  
SHEET

M2157/0517

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### GENERAL DESCRIPTION

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. Outlet temperatures are varied by adjusting the voltage and/or the air flow. Closed loop control can also be achieved with temperature controllers and "T" fittings to mount thermocouples. Consult tables below to determine maximum and minimum recommended flow rates.

Calculate the flow rate, temperature rise, or power requirement as follows:

$$\text{Watts} = \text{SCFM} \times \Delta T / 3$$

SCFM = Standard Cubic Feet per Minute

$\Delta T$  = Temperature Rise in Degrees F from the Inlet to the Outlet

The cold air entry should always be at the termination end of the heater. Do not run without proper air flow. Controls should be used to prevent operation of the heater without air flow, i.e. and air flow switch. Incoming air should be filtered prior to passing through the heater and be free of moisture, condensation or other contaminants.

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 (¾)	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>20/240 Vac Models**</b>								
AHP-3742	120	50	889 (3½)	14	8	10 (¾)	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			

\* Indicates watts per inch of heated length. The watts per inch of heated length can be changed by reducing the operating voltage or by ordering a custom made heater.

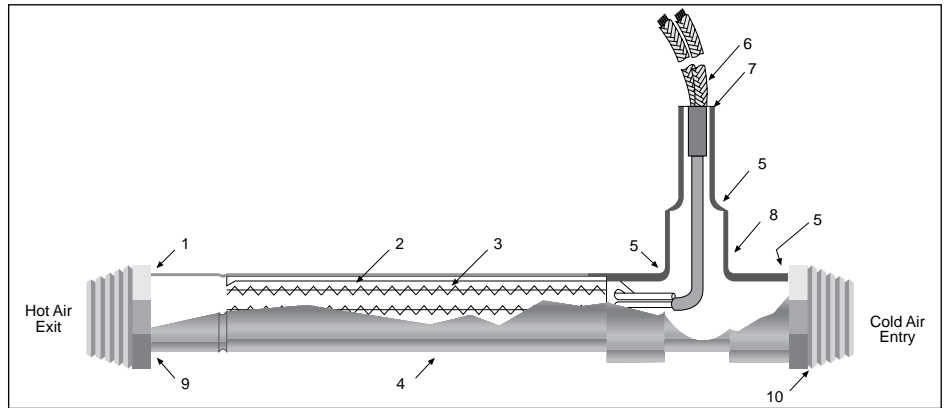
\*\* These air heaters can be operated on either 120 or 240V. Specifications are shown for operation on both 120 and 240V.

### Specifications

Pressure Rating:	80PSIG
Wattage Tolerance:	+5,-10% or better at the voltage specified
Maximum Outlet Temperature:	1000°F
Maximum Inlet Temperature:	250°F

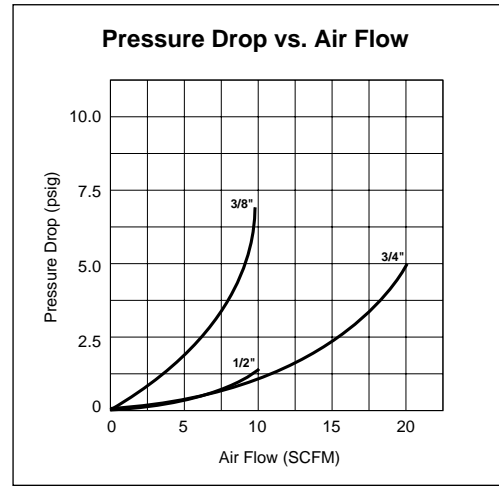
## Construction

1. Optional stainless steel bushing
2. Ceramic coil support
3. Resistance element
4. Stainless steel sheath
5. Silver solder
6. Fiberglass insulated leads
7. Epoxy seal
8. Copper tee
9. Heliarc weld
10. Optional brass bushing



## Maximum Watts Per Linear Inch of Heated Length

Minimum CFM Required	1/2" Diameter	3/8" 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



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The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC., warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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## RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY RETURNS**, please have the following information available BEFORE contacting OMEGA.

1. Purchase order number which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY RETURNS**, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA.

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords customers the latest technology and engineering.

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