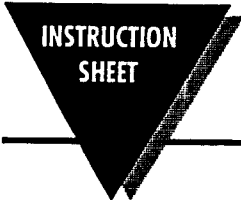
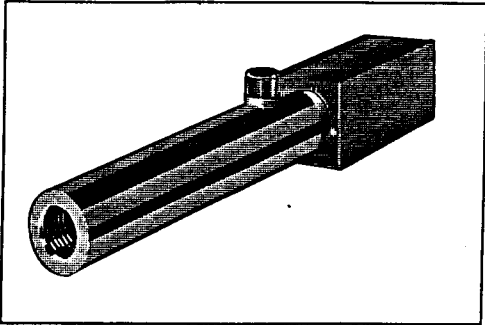




# AHPF Series In-Line Air Heaters



M2022/0495

The OMEGALUX® AHPF Series In-Line Air Heaters are used to heat low flows of air, gas, water or aqueous solutions. Applications include those where clean air is necessary, as in laboratories and environmental testing areas. The stream of air is heated by passing over an enclosed heated surface rather than directly over resistance elements. This method assures that no foreign matter will enter the stream of flow. Outlet temperatures can be controlled by varying the voltage or flow rate, or by using thermocouples and time proportional temperature controllers. 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. an 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 in (mm)	Watts/Inch*	Max CFM	Length in (mm)	Weight lb (kg)
<b>120 VAC Models</b>							
AHPF-061	120	400	4 (102)	91	15	6 (152)	1.00 (0.45)
AHPF-081	120	600	6 (152)	94	15	8 (203)	1.18 (0.54)
AHPF-101	120	1000	8 (203)	120	15	10 (254)	1.37 (0.62)
AHPF-121	120	1200	10 (254)	115	15	12 (305)	1.55 (0.70)
<b>120/240 Volt Models**</b>							
AHPF-062	120	100	4 (102)	23	15	6 (152)	1.00 (0.45)
	240	400	4 (102)	91	15		
AHPF-082	120	150	6 (152)	23	15	8 (203)	1.18 (0.54)
	240	600	6 (152)	94	15		
AHPF-102	120	250	8 (203)	30	15	10 (254)	1.37 (0.62)
	240	1000	8 (203)	120	15		
AHPF-122	120	300	10 (254)	29	15	12 (305)	1.55 (0.70)
	240	1200	10 (254)	115	15		

\*Indicates Watts per inch of heated length.

\*\*These air heaters can be operated on either 120 or 240 Volts. Specifications are shown for either 120 or 240 Volt operation.

### Specifications

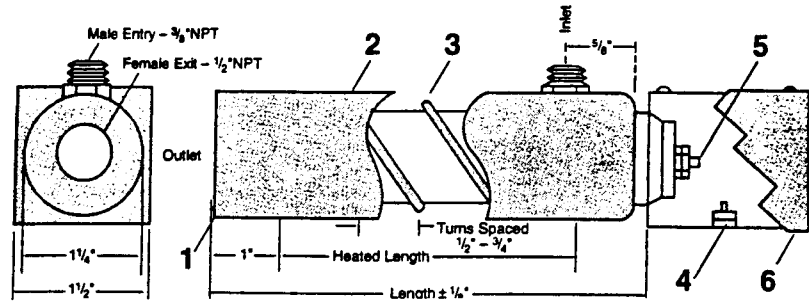
Cross Sectional Area: 0.152 square inches

Pressure Rating: Up to 100 PSIG

Wattage Tolerance: +5, -10% or better at the voltage specified

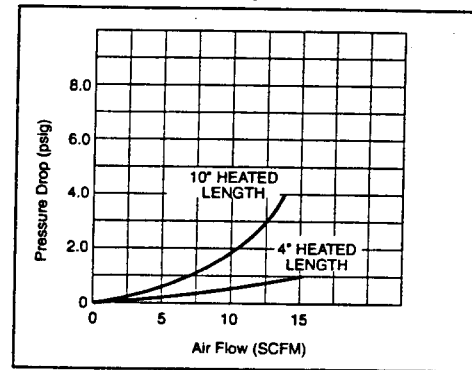
**Construction**

- 1 - Heliarc weld
- 2 - Stainless steel sheath
- 3 - Liquid turbulator wire
- 4 - Ground post
- 5 - Post terminals
- 6 - Connection box  
2 1/2" x 1 1/2" x 1 1/2"



Minimum CFM	Max. Watts/Linear Inch of Heated Length
1	75
2	100
4	150
6	200
8	200
10	250
15	275

**Pressure Drop vs. Air Flow**



**WARRANTY**

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of **13 months** from date of purchase. OMEGA 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 should malfunction, 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. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being 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 which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

OMEGA is glad to offer suggestions on the use of its various products. Nevertheless, OMEGA only warrants that the parts manufactured by it will be as specified and free of defects.

**OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.**

**LIMITATION OF LIABILITY:** The remedies of purchaser set forth herein are exclusive and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

Every precaution for accuracy has been taken in the preparation of this manual; however, OMEGA ENGINEERING, INC. neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the products in accordance with the information contained in the manual.

**SPECIAL CONDITION:** Should this equipment be used in or with any nuclear installation or activity, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.



**Servicing USA and Canada: Call OMEGA Toll Free**

<b>USA</b>	<b>Canada</b>
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Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA™ Customer Service: 1-800-622-2378 / 1-800-622-BEST™ Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN™ TELEX: 996404 EASYLINK: 62968934 CABLE: OMEGA	

**Servicing Europe: United Kingdom Sales and Distribution Center**

25 Swannington Road, Broughton Astley, Leicestershire  
LE9 6TU, England  
Telephone: 44 (1455) 285520 FAX: 44 (1455) 283912

**RETURN REQUESTS / INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING 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.

- FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:
1. P.O. number under 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** REPAIRS OR **CALIBRATION**, consult OMEGA for current repair/calibration charges. Have the following information available BEFORE contacting OMEGA:
1. P.O. number to cover the COST of the repair/calibration,
  2. Model and serial number of product, and
  3. Repair instructions and/or specific problems relative to the product.

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