

DAS SERIES, PHOSPHATE HEATERS					
WATTS	VOLTS	HOT ZONE In./(mm.)	OVERALL LENGTH In./(mm.)	MODEL NUMBER	SHIP WGT. Lbs./(kg.)
1000	120	7	11	DAS1111-P4	17
	240	(180)	(280)	DAS1211-P4	(8)
2000	240	12	17	DAS2217-P4	20
	480	(305)	(430)	DAS2417-P4	(9)
3000	240	18	23	DAS3223-P4	24
	480	(460)	(585)	DAS3423-P4	(11)
3500	240	21	29	DAS3.5229-P4	30
	480	(535)	(735)	DAS3.5429-P4	(14)
4000	240	28	35	DAS4235-P4	36
	480	(710)	(890)	DAS4435-P4	(16)
5000	240	33	41	DAS5241-P4	42
	480	(840)	(1040)	DAS5441-P4	(19)
6000	240	39	47	DAS6247-P4	48
	480	(990)	(1195)	DAS6447-P4	(22)
8000	240	49	59	DAS8259-P4	58
	480	(1245)	(1500)	DAS8459-P4	(27)
10000	240	62	71	DAS10271-P4	64
	480	(1575)	(1805)	DAS10471-P4	(30)

Other configurations available, consult factory.

DAS Series, Features and Benefits

SUPERIOR CHEMICAL RESISTANCE: For use in iron, zinc and manganese phosphate tanks.

EXTREMELY RUGGED CONSTRUCTION: Schedule 40, heavy wall, 316 stainless steel sheath withstands scaling better than traditional heaters.

OUTSTANDING PERFORMANCE: Low watt densities of 23 watts per square inch (3.5 w/cm²) helps to minimize scaling while only utilizing the space required for a full watt density heater.

CORROSION RESISTANT HEAD: Rugged cast steel terminal enclosure with 3-foot (.9m) flexible PVC liquid tight conduit.

SAFETY FEATURES:

- Grounded construction.
- Thermal protector built in. Replaceable P4 protector standard.
- Non-floating construction.

CERTIFICATIONS: CE (except 600 volts).

SIZES: 1,000 watts to 10,000 watts.

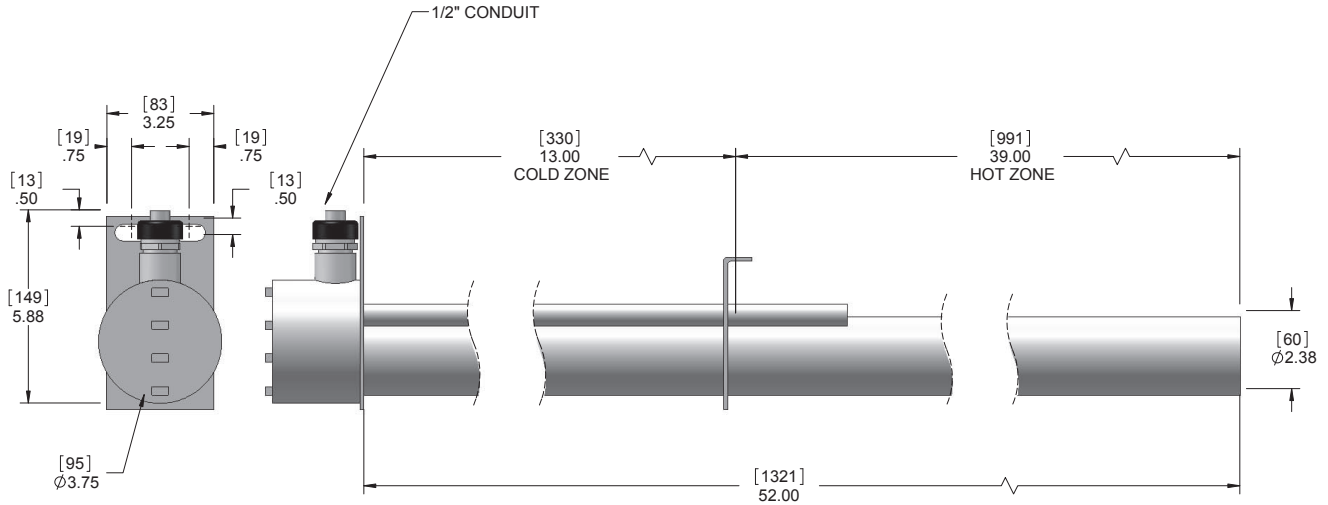
VOLTAGES: 120 to 600 volts. Single phase standard, three phase available.

OPTIONS AVAILABLE (consult factory):

- Thermal protectors: Replaceable high temperature fuses or resettable P2 bi-metal switches in two temperature ranges.
- Special configurations and lengths.
- Longer wire and conduit lengths.
- Temperature and level controls sized to match the heater.

NOTE: Do not use in any aluminum reactive alkaline solutions.

DIMENSIONS



SINGLE TUBE METAL OVER THE SIDE PHOSPHATE HEATER ORDERING INFORMATION

Series	Wattage	Voltage	Length (in.)	Options	Type of Protector	Wire and Conduit Length								
<p>DAS</p> <p>no designator = single phase power (standard) -3 = three phase power</p>	<p>1 = 1000 2 = 2000 3 = 3000 3.5 = 3500 4 = 4000 5 = 5000 6 = 6000 8 = 8000 10 = 10000</p>	<p>1 = 120 2 = 240 3 = 380 4 = 480 5 = 415 6 = 600 7 = 400 8 = 208 9 = 220 0 = 200</p>	<p>11 = 1kW 17 = 2kW 23 = 3kW 29 = 3.5kW 35 = 4kW 41 = 5kW 47 = 6kW 59 = 8kW 71 = 10kW specify custom lengths, not to exceed tank depth</p>		<p>Replaceable Protector</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">-P4 (std)</td> <td>for solutions up to 230°F</td> </tr> <tr> <td>-P5</td> <td>for 230° - 300°F solutions</td> </tr> </table> <p>Resettable Protector (additional control components required)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">-P6</td> <td>for solutions up to 230°F</td> </tr> <tr> <td>-P7</td> <td>for 230° - 300°F solutions</td> </tr> </table>	-P4 (std)	for solutions up to 230°F	-P5	for 230° - 300°F solutions	-P6	for solutions up to 230°F	-P7	for 230° - 300°F solutions	<p>no designator = 36" length standard specify variations from standard Ex: -X84 = 84"</p>
-P4 (std)	for solutions up to 230°F													
-P5	for 230° - 300°F solutions													
-P6	for solutions up to 230°F													
-P7	for 230° - 300°F solutions													

1 inch = 25.4mm

ORDERING EXAMPLE:

DAS4235-P4

Over-the-side phosphate heater, 4,000 watts, 240 volt, 35" overall length, P4 protector.

