

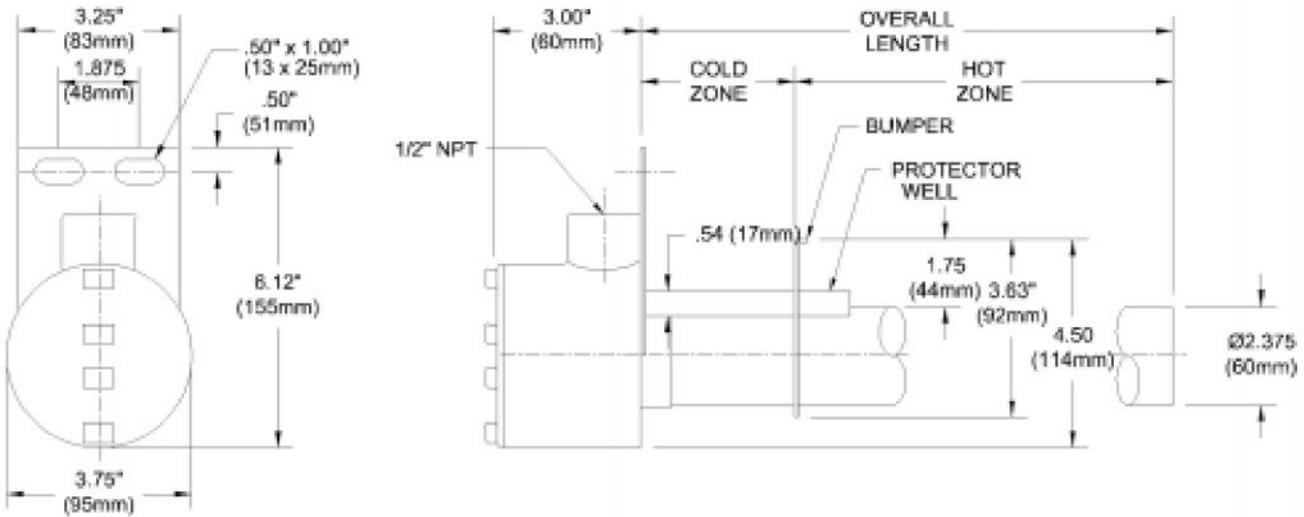
DAS SERIES, PHOSPHATE HEATERS					
WATTS	VOLTS	HOT ZONE In./(mm.)	OVERALL LENGTH In./(mm.)	MODEL NUMBER	SHIP WGT. Lbs./(kg.)
1000	120	7	11	DAS1111-PIM	17
	240	(180)	(280)	DAS1211-PIM	(8)
2000	240	12	17	DAS2217-PIM	20
	480	(305)	(430)	DAS2417-PIM	(9)
3000	240	18	23	DAS3223-PIM	24
	480	(460)	(585)	DAS3423-PIM	(11)
3500	240	21	29	DAS3.5229-PIM	30
	480	(535)	(735)	DAS3.5429-PIM	(14)
4000	240	28	35	DAS4235-PIM	36
	480	(710)	(890)	DAS4435-PIM	(16)
5000	240	33	41	DAS5241-PIM	42
	480	(840)	(1040)	DAS5441-PIM	(19)
6000	240	39	47	DAS6247-PIM	48
	480	(990)	(1320)	DAS6447-PIM	(22)
8000	240	49	59	DAS8259-PIM	58
	480	(1245)	(1500)	DAS8459-PIM	(27)
10000	240	62	71	DAS10271-PIM	64
	480	(1575)	(1900)	DAS10471-PIM	(30)

Other configurations available, consult factory.

Product 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 PIM fuse standard.
 - Non-floating construction.
- ◆ **CERTIFICATIONS:** CE.
- ◆ **SIZES:** 1,000 watts to 10,000 watts.
- ◆ **VOLTAGES:** 120, 240 or 480 volts. 208, 380, 415, 600 and other voltages available. Single phase standard, three phase available.
- ◆ **OPTIONS AVAILABLE (consult factory):**
 - Thermal protectors: Replaceable high temperature fuses or resettable PII 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	Options	Type of Fuse	Wire and Conduit Length													
<p>1 = 1000 2 = 2000 3 = 3000 3.5 = 3500 4 = 4000 5 = 5000 6 = 6000 8 = 8000 10 = 10000</p> <p style="text-align: center;">DAS</p>	<p>1 = 120 2 = 240 4 = 480 -208- = 208 -277- = 277 -380- = 380 -415- = 415 -600- = 600</p>	<p>11 = 1kW 17 = 2kW 23 = 3kW 29 = 3.5kW 35 = 4kW 41 = 5kW 47 = 6kW 59 = 8kW 71 = 10kW</p> <p>specify custom lengths, not to exceed tank depth</p>	<p>-X = any special configuration not called out in the part number (specify in clear text) no designator = single phase power (standard) -3 = three phase power</p>	<p>no designator = 36" length standard specify variations from standard Ex: -X84 = 84"</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Replaceable Fuse</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;">-PIM (std)</td> <td>for solutions up to 230°F</td> </tr> <tr> <td>-PIH</td> <td>for 230° - 300°F solutions</td> </tr> <tr> <th colspan="2" style="text-align: center;">Resettable Fuse</th> </tr> <tr> <td colspan="2" style="text-align: center;">(additional control components required)</td> </tr> <tr> <td>-PIIM</td> <td>for solutions up to 230°F</td> </tr> <tr> <td>-PIIH</td> <td>for 230° - 300°F solutions</td> </tr> </tbody> </table>	Replaceable Fuse		-PIM (std)	for solutions up to 230°F	-PIH	for 230° - 300°F solutions	Resettable Fuse		(additional control components required)		-PIIM	for solutions up to 230°F	-PIIH	for 230° - 300°F solutions	<p>no designator = 36" length standard specify variations from standard Ex: -X84 = 84"</p>
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ORDERING EXAMPLE:

DAS4235-PIM

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

**PROCESS
TECHNOLOGY**

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