

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)	(1320)	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)	(1900)	DAS10471-P4	(30)

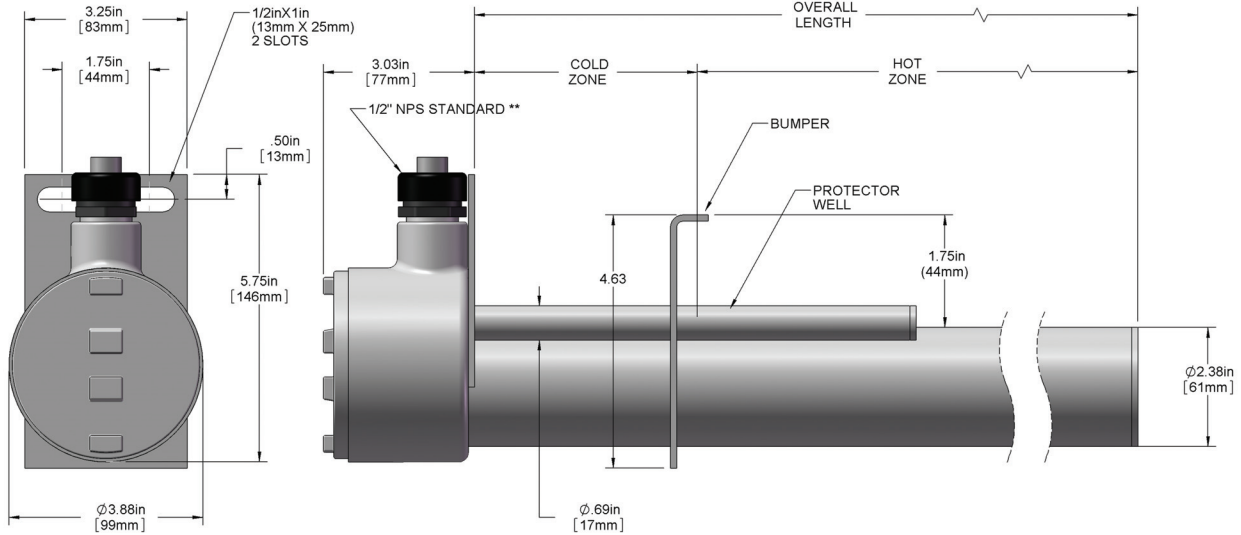
Other configurations available, consult factory.

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 P4 fuse 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

** 3/4" NPS FOR SINGLE PHASE 26 FLA & GREATER
OR THREE PHASE 16 FLA & GREATER



SINGLE TUBE METAL OVER THE SIDE PHOSPHATE HEATER ORDERING INFORMATION

Series	Wattage	Voltage	Length (in.)	Options	Type of Fuse	Wire and Conduit Length
1 = 1000 2 = 2000 3 = 3000 3.5 = 3500 4 = 4000 5 = 5000 6 = 6000 8 = 8000 10 = 10000 DAS	1 = 120 2 = 240 3 = 380 4 = 480 5 = 415 6 = 600 7 = 400 8 = 208 9 = 220 0 = 200	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	no designator = single phase power (standard) -3 = three phase power	Replaceable Protector -P4 (std) for solutions up to 230°F -P5 for 230° - 300°F solutions Resettable Protector (additional control components required) -P6 for solutions up to 230°F -P7 for 230° - 300°F solutions	no designator = 36" length standard specify variations from standard Ex: -X84 = 84"	

1 inch = 25.4mm

ORDERING EXAMPLE:

DAS4235-P4

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

