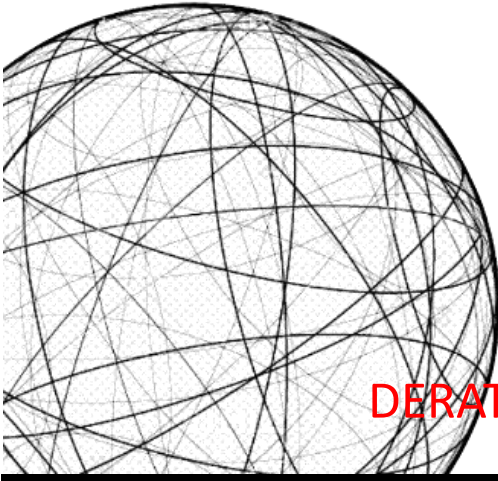




Metal heater

DERATED SINGLE METAL OVER THE SIDE HEATER

Low watt density, durable, efficient metal heaters for concentrated alkaline or caustic solutions. Available in Steel, 304 Stainless Steel, 316 Stainless Steel, and Titanium.



Heater



Volts:
120 to 480 Volts



Watts:
2000 to
5,000
watts



Certification:
cULus listed (except
steel). CE compliant
(except 600 volts)

FEATURES

For use in most aqueous alkaline solutions and rinse tanks. Check solution recommendation chart with your chemical supplier for proper sheath material selection.

Heavy wall metal sheaths available in: steel, 304 stainless steel, 316 stainless steel, titanium.

Watt densities up to 18 watts per square inch (2.8 w/cm²) ensure long service life.

Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit.

Temperature and level controls sized to match the heater.

Lower watt densities for highly viscous solutions.

NOTE: Intended for vertical installation only.

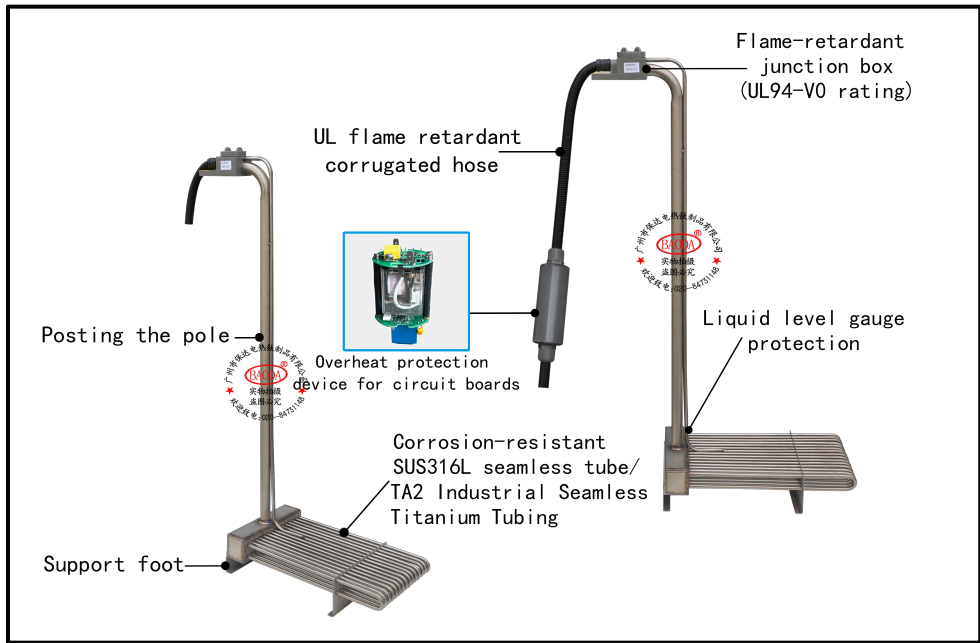
D SERIES, DERATED METAL HEATERS								
WATTS	VOLTS	HOT ZONE In./ (mm)	OVERALL LENGTH In./ (mm)	STEEL	304 SS	316 SS	TITANIUM	SHIP WGT. Lbs./ (kg)
500	120	6	11	DP.5111-.**	DF.5111-.**	DS.5111-.**	DT.5111-.**	7
	240	(152)	(279)	DP.5211-.**	DF.5211-.**	DS.5211-.**	DT.5211-.**	(3.2)
	480	(254)	(432)	DP.5411-.**	DF.5411-.**	DS.5411-.**	DT.5411-.**	(4.5)
1000	240	10	17	DP1217-.**	DF1217-.**	DS1217-.**	DT1217-.**	10
	480	(254)	(432)	DP1417-.**	DF1417-.**	DS1417-.**	DT1417-.**	(4.5)
	960	(254)	(432)	DP1617-.**	DF1617-.**	DS1617-.**	DT1617-.**	(4.5)
1500	240	16	23	DP1.5223-.**	DF1.5223-.**	DS1.5223-.**	DT1.5223-.**	11
	480	(406)	(584)	DP1.5423-.**	DF1.5423-.**	DS1.5423-.**	DT1.5423-.**	(5)
	960	(406)	(584)	DP1.5623-.**	DF1.5623-.**	DS1.5623-.**	DT1.5623-.**	(5)
2000	240	20	29	DP2229-.**	DF2229-.**	DS2229-.**	DT2229-.**	13
	480	(508)	(737)	DP2429-.**	DF2429-.**	DS2429-.**	DT2429-.**	(5.9)
	960	(508)	(737)	DP2629-.**	DF2629-.**	DS2629-.**	DT2629-.**	(5.9)
2500	240	25	35	DP2.5235-.**	DF2.5235-.**	DS2.5235-.**	DT2.5235-.**	15
	480	(635)	(889)	DP2.5435-.**	DF2.5435-.**	DS2.5435-.**	DT2.5435-.**	(6.8)
	960	(635)	(889)	DP2.5635-.**	DF2.5635-.**	DS2.5635-.**	DT2.5635-.**	(6.8)
3000	240	30	40	DP3240-.**	DF3240-.**	DS3240-.**	DT3240-.**	17
	480	(762)	(1016)	DP3440-.**	DF3440-.**	DS3440-.**	DT3440-.**	(7.7)
	960	(762)	(1016)	DP3640-.**	DF3640-.**	DS3640-.**	DT3640-.**	(7.7)
4000	240	37	47	DP4247-.**	DF4247-.**	DS4247-.**	DT4247-.**	23
	480	(940)	(1194)	DP4447-.**	DF4447-.**	DS4447-.**	DT4447-.**	(10.4)
	960	(940)	(1194)	DP4647-.**	DF4647-.**	DS4647-.**	DT4647-.**	(10.4)
4500	240	44	54	DP4.5254-.**	DF4.5254-.**	DS4.5254-.**	DT4.5254-.**	24
	480	(1118)	(1372)	DP4.5454-.**	DF4.5454-.**	DS4.5454-.**	DT4.5454-.**	(10.9)
	960	(1118)	(1372)	DP4.5654-.**	DF4.5654-.**	DS4.5654-.**	DT4.5654-.**	(10.9)
5000	240	49	59	DP5259-.**	DF5259-.**	DS5259-.**	DT5259-.**	25
	480	(1245)	(1499)	DP5459-.**	DF5459-.**	DS5459-.**	DT5459-.**	(11.3)
	960	(1245)	(1499)	DP5659-.**	DF5659-.**	DS5659-.**	DT5659-.**	(11.3)
6000	240	58	68	DP6268-.**	DF6268-.**	DS6268-.**	DT6268-.**	28
	480	(1473)	(1727)	DP6468-.**	DF6468-.**	DS6468-.**	DT6468-.**	(12.7)
	960	(1473)	(1727)	DP6668-.**	DF6668-.**	DS6668-.**	DT6668-.**	(12.7)

Metal heater

SPECIFICATIONS

Wattages	2000 Watts to 5000 Watts
Voltages	120 Volts to 480 Volts
Options	Special configurations & lengths Longer wire and conduit lengths All metal welded junction box
Safety Features	Grounded construction Thermal protector built in. Replaceable PI protector standard for solutions. See chart below for options.

DIMENSIONS



MODEL NUMBER BREAKDOWN

DS	4	4	29	-	P4	-
Series	Wattage	Voltage	Overall Length	Phase	Type of Protector	Wire & Conduit Length
DP = Steel	.5 = 500	1 = 120	11 = .5kW	Blank = single phase (std)	Replaceable Fuse	36" length standard (no designator)
DF = 304 stainless steel	1 = 1000	2 = 240	17 = 1kW	-3 = 3 phase	P1 (std) = solutions up to 180°F	Specify variations from standard Ex: -X84 = 84"
DS = 316 stainless steel	1.5 = 1500	3 = 380	23 = 1.5kW		P4 = solutions up to 230°F	
DT = Titanium	2 = 2000	4 = 480	29 = 2kW		P5 = solutions up to 300°F	
	2.5 = 2500	5 = 415	35 = 2.5kW		Resettable Fuse	
	3 = 3000	6 = 600	40 = 3kW		P2 = solutions up to 180°F	
	4 = 4000	7 = 400	47 = 4kW		P6 = solutions up to 230°F	
	4.5 = 4500	8 = 208	54 = 4.5kW		P7 = solutions up to 180°F	
	5 = 5000	9 = 220	59 = 5kW			
	6 = 6000	0 = 200	60 = 6kW			