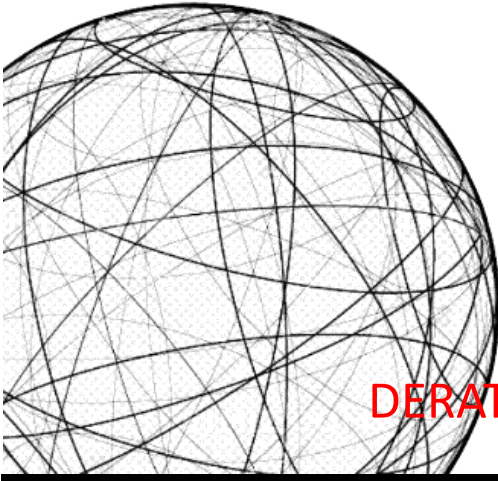
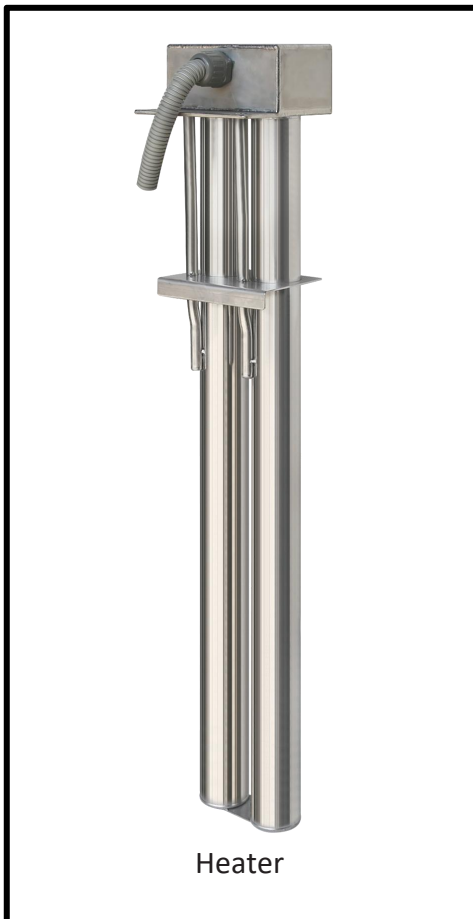




## Stainless steel heater

### 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:  
500 to  
6,500  
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/cm<sup>2</sup>) 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.

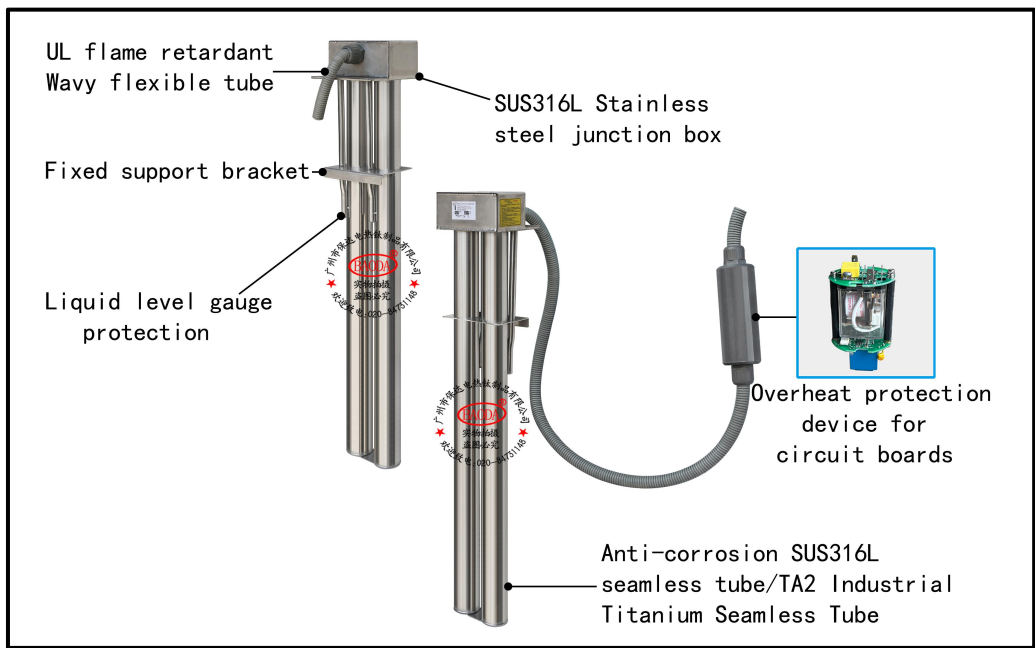
| D SERIES, DERATED METAL HEATERS |       |                       |                             |              |              |              |              |                         |
|---------------------------------|-------|-----------------------|-----------------------------|--------------|--------------|--------------|--------------|-----------------------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

# Explosion proof stainless steel heater

## SPECIFICATIONS

|                 |                                                                                                                                                     |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Wattages        | 500 Watts to 6000 Watts                                                                                                                             |
| Voltages        | 120 Volts to 480 Volts                                                                                                                              |
| Options         | Special configurations & lengths<br>Longer wire and conduit lengths<br>All metal welded junction box                                                |
| Safety Features | Grounded construction<br><br>Thermal protector built in.<br>Replaceable PI protector<br>standard for solutions.<br><br>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) | <b>Replaceable Fuse</b>          | 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     |                            | <b>Resettable Fuse</b>           |                                                 |
|                          | 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       |                            |                                  |                                                 |