

Derated Single Metal Over the Side Heaters

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



FEATURES

For use in most aqueous alkaline solutions, plating and phosphate 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.

| | |
|--------------------------------------|---|
| <p>Temperature: Up to 180 °C</p> | <p>120 to 600 volts, 600V on 4,500W or lower only</p> |
| <p>Watts: 500 to 6,000 watts</p> | <p>cULus listed (except steel). CE compliant (except 600 volts)</p> |

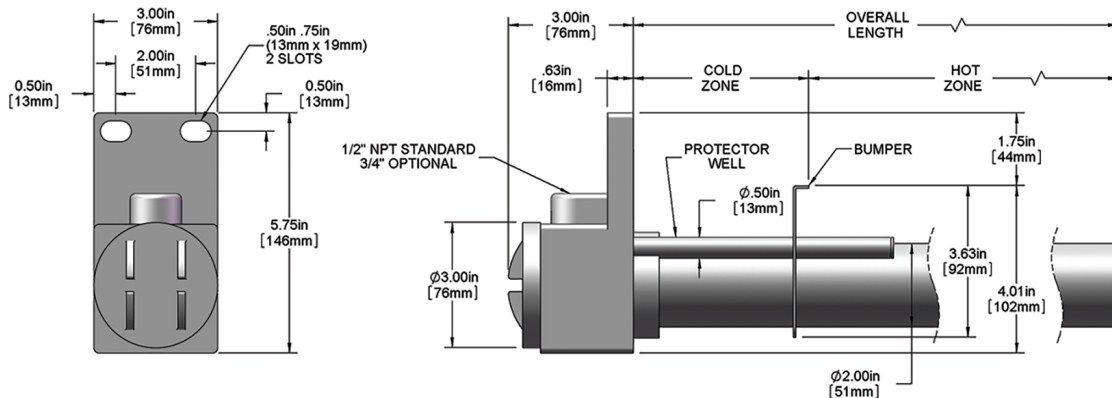
| D SERIES, DERATED METAL HEATERS | | | | | | | | | |
|---------------------------------|-------|----------------------|----------------------------|--------------|--------------|--------------|--------------|----------|-----------------------|
| WATTS | VOLTS | HOT ZONE In./(mm) | OVERALL LENGTH In./(mm) | 304 SS | | | 316 SS | TITANIUM | SHIP WGT. Lbs./kg) |
| | | | | STEEL | 304 SS | 316 SS | TITANIUM | | |
| 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) | |
| 1000 | 240 | 10 | 17 | DP1217-**- | DF1217-**- | DS1217-**- | DT1217-**- | 10 | |
| | 480 | (254) | (432) | DP1417-**- | DF1417-**- | DS1417-**- | DT1417-**- | (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) | |
| 2000 | 240 | 20 | 29 | DP2229-**- | DF2229-**- | DS2229-**- | DT2229-**- | 13 | |
| | 480 | (508) | (737) | DP2429-**- | DF2429-**- | DS2429-**- | DT2429-**- | (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) | |
| 3000 | 240 | 30 | 40 | DP3240-**- | DF3240-**- | DS3240-**- | DT3240-**- | 17 | |
| | 480 | (762) | (1016) | DP3440-**- | DF3440-**- | DS3440-**- | DT3440-**- | (7.7) | |
| 4000 | 240 | 37 | 47 | DP4247-**- | DF4247-**- | DS4247-**- | DT4247-**- | 23 | |
| | 480 | (940) | (1194) | DP4447-**- | DF4447-**- | DS4447-**- | DT4447-**- | (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) | |
| 5000 | 240 | 49 | 59 | DP5259-**- | DF5259-**- | DS5259-**- | DT5259-**- | 25 | |
| | 480 | (1245) | (1499) | DP5459-**- | DF5459-**- | DS5459-**- | DT5459-**- | (11.3) | |
| 6000 | 240 | 58 | 68 | DP6268-**- | DF6268-**- | DS6268-**- | DT6268-**- | 28 | |
| | 480 | (1473) | (1727) | DP6468-**- | DF6468-**- | DS6468-**- | DT6468-**- | (12.7) | |

Derated Single Metal Over the Side Heaters

SPECIFICATIONS

| | |
|-------------------|---|
| Wattages | 500 Watts to 6,000 Watts |
| Voltages | 120 volts to 600 volts, (600V on 4,500W or lower only) |
| Temperature Range | Up to 180°C (82°F) |
| 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 up to 180°C (82°F). 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 | | | |