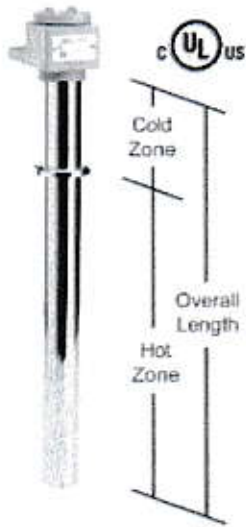


S1 Series: Metal Over-the-Side

SMART ONE IMMERSION HEATERS



S1 SERIES, METAL OVER-THE-SIDE HEATERS							
WATTS	VOLTS	HOT ZONE	OVERALL LENGTH	304 STAINLESS	316 STAINLESS	TITANIUM	SHIP WEIGHT
				MODEL NUMBER	MODEL NUMBER	MODEL NUMBER	
1000	100-120	7	11	S1F1111	S1S1111	S1T1111	7
	200-240	(178)	(279)	S1F1211	S1S1211	S1T1211	(3.2)
2000	100-120	13	17	S1F2117	S1S2117	S1T2117	10
	200-240	(330)	(432)	S1F2217	S1S2217	S1T2217	(4.5)
3000	200-240	18 (457)	23 (584)	S1F3223	S1S3223	S1T3223	11 (5)
4000	200-240	24 (610)	29 (737)	S1F4229	S1S4229	S1T4229	13 (5.9)
5000	200-240	30 (762)	35 (889)	S1F5235	S1S5235	S1T5235	15 (6.8)
6000	200-240	35 (889)	41 (1041)	S1F6241	S1S6241	S1T6241	17 (7.7)
1600	380-480	13 (330)	17 (432)	S1F1.6417	S1S1.6417	S1T1.6417	10 (4.5)
2400	380-480	18 (457)	23 (584)	S1F2.4423	S1S2.4423	S1T2.4423	11 (5)
3200	380-480	24 (610)	29 (737)	S1F3.2429	S1S3.2429	S1T3.2429	13 (5.9)
4000	380-480	30 (762)	35 (889)	S1F4.4435	S1S4.4435	S1T4.4435	15 (6.8)
4800	380-480	35 (889)	41 (1041)	S1F4.8441	S1S4.8441	S1T4.8441	17 (7.7)
5600	380-480	41 (1041)	47 (1194)	S1F5.6447	S1S5.6447	S1T5.6447	23 (10.4)

Single phase standard, add -3 for three phase.

Product Features and Benefits

Long life element:

- Patented PTC heater element lasts longer than conventional heaters
- Will not burn out if run in air
- Will not burn out due to scale or sludge buildup

Safe design:

- Heater self-limits its maximum operating temperature to 432° F (222°C).
- Will not melt tanks when a 1/2" (12mm) minimum distance is maintained
- Overtemperature protection devices are not required
- Safety is built-in, not added on
- Metal-grounded construction (earth ground)
- Non-floating construction

Voltages:

- Heater is not voltage specific. 100 to 480 volts produces the same output
- Specific voltage is required for UL labeling and to determine amp draw
- Heater is field selectable: single or three phase power

Sizes:

- 1,000 watts (1kW) to 12,000 watts (12kW)

Corrosion resistant junction box:

- Vapor tight and flame retardant, IP65 rating
- 80" (2m) flexible, liquid tight electrical cable (cord)

Outstanding performance:

- Watt densities of 26 watts per square inch (4 watts/cm²) ensure long servicelife
- Auto-stabilizing solid state element prevents hot spots and ensures uniform heating
- Maximum solution temperature 300° F (149° C)
- Heater derates itself in highly viscous and high temperature (over 212° F/100° C) solutions
- Consult factory for sizing assistance.

Chemically resistant: For use in most aqueous alkaline, electroplating and rinse solutions.

Available in:

- Steel
- 304 stainless steel
- 316 stainless steel
- titanium

Certifications:

- UL (except steel sheath), CSA and CE