

LP, LF, LS, & LT Series

PRODUCT DATA SHEET

Metal Bottom Heater

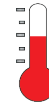
Durable, efficient chemical heater

For use in most aqueous alkaline solutions

Low watt density design saves space & ensures long life

Vapor resistant, flame retardant polypropylene terminal enclosure

Grounded construction and built in thermal protector



Up to 180°C (82°F)



1,000 watts to 12,000 watts



120 to 600 Volts
600V on 4,500W or lower only



Steel, 304 stainless steel, 316 stainless steel and titanium.



cULus (except steel and 600 volts)

L SERIES, METAL L-SHAPED HEATERS

WATTS	VOLTS	HORIZ. In./(mm)	STD. VERT.* In./(mm)	STEEL	304	316	TITANIUM	SHIP WGT. Lbs./(kg)	
					SS	SS			
1000	120	13	15	LP1113Q-R**	LF1113Q-R**	LS1113Q-R**	LT1113Q-R**	10	
	240	(330)	(381)	LP1213Q-R**	LF1213Q-R**	LS1213Q-R**	LT1213Q-R**	(4.5)	
2000	120	17	19	LP2117Q-R**	LF2117Q-R**	LS2117Q-R**	LT2117Q-R**	11	
	240	(432)	(483)	LP2217Q-R**	LF2217Q-R**	LS2217Q-R**	LT2217Q-R**	(5)	
	480			LP2417Q-R**	LF2417Q-R**	LS2417Q-R**	LT2417Q-R**		
3000	240	22	25	LP3222Q-R**	LF3222Q-R**	LS3222Q-R**	LT3222Q-R**	12	
	480	(559)	(635)	LP3422Q-R**	LF3422Q-R**	LS3422Q-R**	LT3422Q-R**	(5.4)	
	4000	240	26	25	LP4226Q-R**	LF4226Q-R**	LS4226Q-R**	LT4226Q-R**	13
4000	480	(660)	(635)	LP4426Q-R**	LF4426Q-R**	LS4426Q-R**	LT4426Q-R**	(5.9)	
	5000	240	31	37	LP5231Q-R**	LF5231Q-R**	LS5231Q-R**	LT5231Q-R**	14
	480	(787)	(940)	LP5431Q-R**	LF5431Q-R**	LS5431Q-R**	LT5431Q-R**	(6.4)	
6000	240	36	50	LP6236Q-R**	LF6236Q-R**	LS6236Q-R**	LT6236Q-R**	15	
	480	(914)	(1270)	LP6436Q-R**	LF6436Q-R**	LS6436Q-R**	LT6436Q-R**	(6.8)	
8000	240	44	50	LP8244Q-R**	LF8244Q-R**	LS8244Q-R**	LT8244Q-R**	18	
	480	(1118)	(1270)	LP8444Q-R**	LF8444Q-R**	LS8444Q-R**	LT8444Q-R**	(8.2)	
9000	240	50	50	LP9250Q-R**	LF9250Q-R**	LS9250Q-R**	LT9250Q-R**	20	
	480	(1270)	(1270)	LP9450Q-R**	LF9450Q-R**	LS9450Q-R**	LT9450Q-R**	(9.1)	
10000	240	55	50	LP10255Q-R**	LF10255Q-R**	LS10255Q-R**	LT10255Q-R**	22	
	480	(1397)	(1270)	LP10455Q-R**	LF10455Q-R**	LS10455Q-R**	LT10455Q-R**	(10)	
12000	240	64	50	LP12264Q-R**	LF12264Q-R**	LS12264Q-R**	LT12264Q-R**	25	
	480	(1626)	(1270)	LP12464Q-R**	LF12464Q-R**	LS12464Q-R**	LT12464Q-R**	(11.3)	

Single phase standard

**PROCESS
TECHNOLOGY**

ISO 9001:2015
WITH DESIGN CERTIFIED

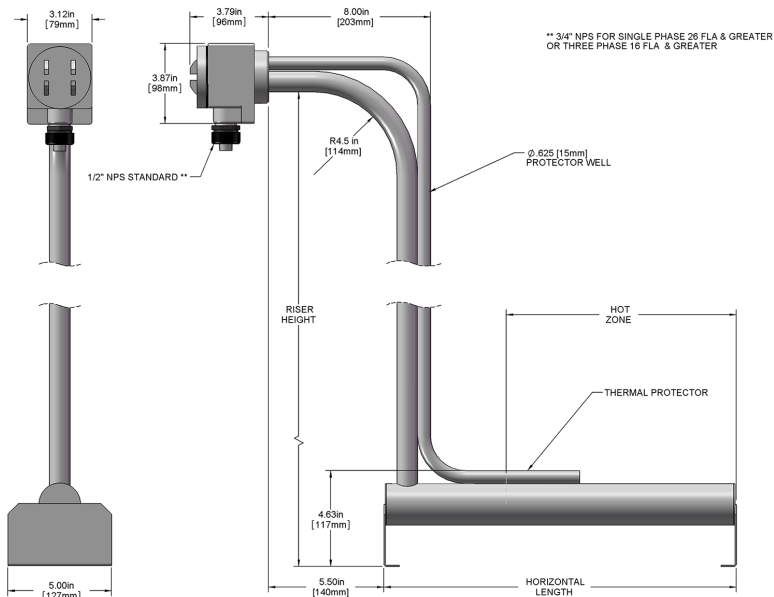
Features & Values

- 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 35 watts per square inch (5.4 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

Specifications

Wattages	1,000 to 12,000 Watts
Voltages	120 to 600 Volts (600V on 4,500W or lower only)
Temperature Range	Up to 180°C (82°F)
Options	<ul style="list-style-type: none"> ▫ Special configurations & lengths ▫ Longer wire and conduit lengths ▫ All metal welded junction box
Safety Features	<ul style="list-style-type: none"> ▫ Grounded construction ▫ Thermal protector built in. Replaceable PI protector standard for solutions up to 180°F (82°C). ▫ See chart below for protector options
Certifications	cULus compliant (except 600V)

Dimensions



Model Number Breakdown

Series	Wattage	Voltage	Horizontal Length (in.)	Mounting Flange	Vertical Length (in.)	Riser Option	Phase	Type of Protector	Wire & Conduit Length
LP = Steel	1 = 1000	1 = 120	13 = 1kW	Q = w/o flange	-R15 = 1kW	Blank = 90° horizontal bend (std)	Blank = single phase (std)	Replaceable Fuse (Type-J TC) P1 (std) = solutions up to 180°F P4 = solutions up to 230°F P5 = solutions up to 300°F Resettable Fuse (Type-J TC) P2 = solutions up to 180°F P6 = solutions up to 230°F P7 = solutions up to 300°F	36" length standard (no designator) Specify variations from standard Ex: -X84 = 84"
LF = 304 stainless steel	2 = 2000	2 = 240	17 = 2kW	Blank = w/ flange	-R19 = 2kW	S = straight riser	-3 = three phase		
LS = 316 stainless steel	3 = 3000	3 = 380	22 = 3kW		-R25 = 3kW				
LT = Titanium	4 = 4000	4 = 480	26 = 4kW		-R25 = 4kW				
	5 = 5000	5 = 415	31 = 5kW		-R37 = 5kW				
	6 = 6000	6 = 600	36 = 6kW		-R50 = 6kW				
	7 = 7000	7 = 400	44 = 8kW		-R50 = 8kW				
	8 = 8000	8 = 208	50 = 9kW		-R50 = 9kW				
	9 = 9000	9 = 220	55 = 10kW		-R50 = 10kW				
	10 = 10000	0 = 200	64 = 12kW		-R50 = 12kW				
	11 = 11000								
12 = 12000									