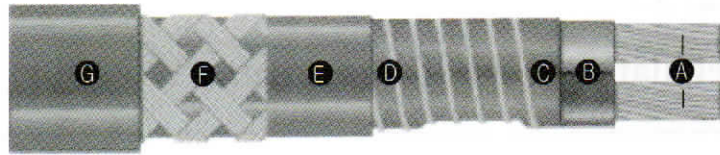


Heating Cable

2-2. Power Limiting Heating Cable

HPL

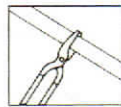
High Temperature Power-Limiting



- Power Limiting
- Parallel, Cut to Length in Field
- Low Energy Cost
- No Inrush at Any Ambient
- Industrial / Process and Commercial / Construction Applications
- Flexible to Most Any Configuration
- Fluoropolymer Jacket
- Maximum Exposure Temperature, Power Off, 500°F (260°C)
- Steam Cleanable on Process Equipment Up to 190 PSIG (Power Off)
- 5, 10, 15 and 20 W/Ft.
- 110 - 120, 208 - 277 and 480 Volt

Description

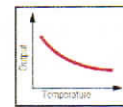
Chromalox HPL High-Temperature Power Limiting Heating Cable is a proven, reliable solution for industrial process temperature maintenance and freeze protection. HPL features a parallel heating core that produces powerlimiting thermal output over its entire length. Using a single power point, you can easily configure and install a heat tracing system as short as several feet or as long as 780 feet right in the field. System design only requires that you match the HPL cable thermal output to the heat loss of your piping system.



Cut to Length
in Field



High
Temperature



Power
Limiting

HPL is flexible at most ambient temperatures and can be wrapped around piping and complex fittings. It is rugged, easy to monitor and maintain temperature, and has zero inrush at start-up. With 500°F (260°C) fluoropolymer electrical insulation over-jacketing, HPL has outstanding electrical and thermal properties, and is well suited for most chemically hostile environments. An extensive range of wattages and voltages are available immediately from Chromalox stock.

Features

- Durable, non-aging fluoropolymer jacket ensure long service life and can be used in some hostile environments.
- Flexible, easy to install on most equipment and delivers long-term reliable performance.
- Eliminates the need for oversized wiring or switchgear.
- Accurate temperature, reliable electric heat that can be consistently controlled and easily monitored.
- Safe and rugged.
- Parallel circuitry allows cut-to-length.
- High performance, rated to withstand up to 500°F saturated steam (190 psig) temperature (power off).
- Low profile, uses standard size thermal insulation on piping and process equipment.
- Chromalox termination, splice, tee and end seal kits reduce installation time.

Construction

- A** Twin 12 AWG Copper Buss Wires — Provide reliable, consistent electrical current.

- B** PFA Insulation Jacket — Electrically insulates buss wires.
- C** Pairing Jacket — Secures two buss wires together and provides wrapping surface for Nichrome wire.
- D** Power Limiting Wire — Alloy construction power limiting element.
- E** PFA Insulation — Rugged outer sheath protects heating cable, assures longer service life, and provides protection against environmental application hazards.
- F** Tinned Copper Braid — Plated copper braid increases robust construction, provides ground path and provides additional protection in any location. Suffix "C" in model number.
- G** PFA Overjacket (optional) — Fluoropolymer overjacket, over the braid, provides protection from most aqueous and chemically corrosive solutions. Suffix "T" in model number.

Approvals

UL Listed for ordinary areas.
CSA Certified for ordinary and:

- Class I, Div. 2, Groups A, B, C, D
- T-Class by Design

Notes

1. Depends on specific model.
2. To be established using the principles of stabilized design.

Heating Cable

HPL

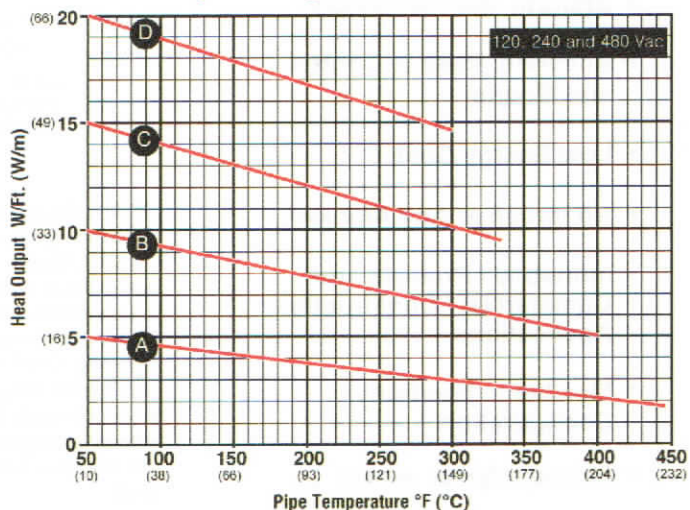
High Temperature Power-Limiting (cont'd.)

Ordering Information

To Order — Complete the Model Number using the Matrix provided.

Model	High Temperature Power Limiting			
HPL	High Temperature, Power Limiting Heating Cable			
	Code	Output (W/Ft.)		
	5	Five		
	10	Ten		
	15	Fifteen		
	20	Twenty		
		Code	Voltage	
		1	110 - 120	
		2	208 - 277	
		4	480	
			Code	Braid and Overcoat Options
			C	Standard tinned-copper metallic braid for additional protection and ground path
			CT	Fluoropolymer corrosion resistant overjacket over braid for hostile/corrosive environments
HPL	5	1	C	Typical Model Number

Thermal Output Ratings on Insulated Metal Pipe¹



A HPL 5-2CT B HPL 10-2CT C HPL 15-2CT D HPL 20-2CT

Note 1 - Thermal output is determined per IEEE 515-2004 Standard for testing design installation, and maintenance of electrical resistance heat tracing section 4.1.11 Method C.

Accessories

Accessories	Model
Power Connection	Heat trace to electrical service connection
Splice & Tee	Connects two or three cables together
End Seal	For terminating cable
Thermostat	Thermostat
To Order	General Application & Installation Accessories such as tape, pipe straps, warning labels, etc., refer to the general application accessories page at the end of this section.

Output Wattage at Alternate Voltages (W/Ft.)

Model	208V	%Change In Output	240V	277V	%Change In Output
HPL5	3.9	-23	5	6.5	+30
HPL10	7.8	-22	10	12.8	+28
HPL15	11.9	-21	15	18.9	+26
HPL20	16.0	-20	20	N/A	N/A

Circuit Breaker Selection (Max. Circuit Lengths in Ft.)

Cable Rating	Ambient temperature at start-up	50°F (10°C) Start-Up (Ft.)					0°F (-18°C) Start-Up (Ft.)					-20°F (-29°C) Start-Up (Ft.)				
		15A	20A	30A	40A	50A	15A	20A	30A	40A	50A	15A	20A	30A	40A	50A
HPL5	50°F (10°C)	260	350	370	370	370	525	685	740	740	740	1050	1370	1480	1480	1480
	0°F (-18°C)	240	325	370	370	370	485	645	740	740	740	970	1290	1480	1480	1480
	-20°F (29°C)	235	315	370	370	370	470	625	740	740	740	940	1250	1480	1480	1480
HPL10	50°F (10°C)	130	175	260	260	260	260	350	525	525	525	520	700	1050	1050	1050
	0°F (-18°C)	120	165	245	260	260	245	325	490	525	525	490	650	980	1050	1050
	-20°F (29°C)	120	160	240	260	260	235	315	475	525	525	470	630	950	1050	1050
HPL15	50°F (10°C)	85	115	175	215	215	185	230	350	430	430	350	460	700	860	860
	0°F (-18°C)	80	110	165	215	215	165	220	325	430	430	330	440	650	860	860
	-20°F (29°C)	80	105	160	215	215	160	215	320	425	430	320	430	640	850	860
HPL20	50°F (10°C)	65	85	130	175	185	130	175	260	350	370	260	350	520	700	740
	0°F (-18°C)	60	85	125	165	185	125	165	250	330	370	250	330	500	660	740
	-20°F (29°C)	60	80	120	160	185	120	160	245	325	370	240	320	490	650	740

NR = Not Required. Maximum circuit length has been reached in a smaller breaker size.

Note — Thermal magnetic circuit breakers are recommended since magnetic circuit breakers could "unintentionally trip" at low temperature.