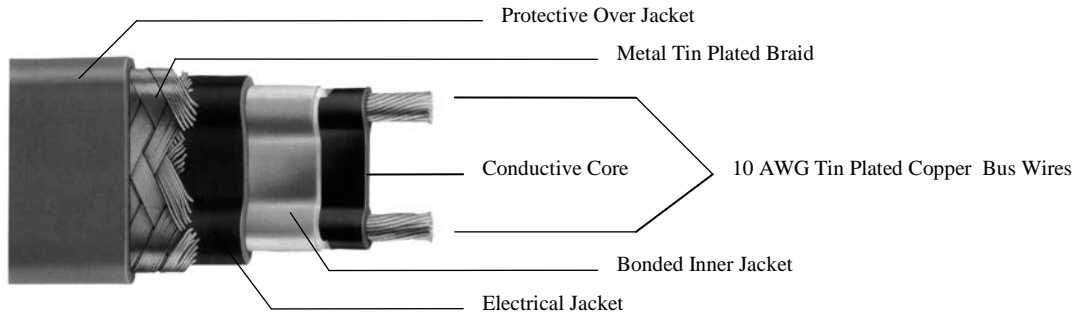


NELSON™ HEAT TRACING SYSTEMS

TYPE LLT LONG LINE SELF-REGULATING HEATER

SPECIFICATION / APPLICATION INSTALLATION



Description:

Nelson Type LLT heater cable is parallel, self regulating with a radiation crosslinked conductive heating core extruded continuously over two parallel 10-gauge bus wires. A primary dielectric jacket is thermally bonded to the heating core to prevent moisture penetration and a secondary dielectric jacket is extruded over the first. Heater construction includes a tinned copper braid and an outer jacket.

Principle of Operation:

The heating core varies power output inversely with temperature at every

point along the heater length, reducing any heat build up at portions of the piping system. This feature also permits the heater to be overlapped without creating hot spots. Reduced power output at higher pipe temperatures reduces energy consumption. Parallel construction permits the heater to be cut to length at any point without changing rated power output.

Application:

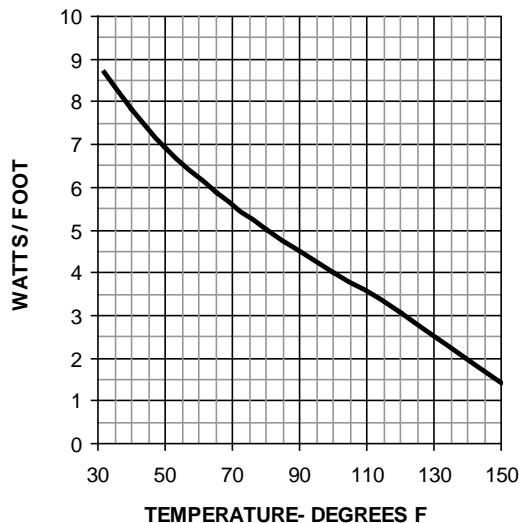
Nelson's LLT heater is an LT heater with extended circuit lengths for longer continuous runs. It can be applied to either metal or plastic

pipes. Typical uses include water freeze protection and low watt density process temperature piping systems such as caustic lines.

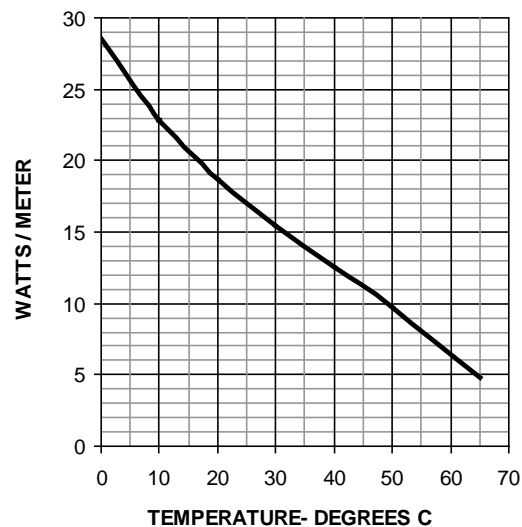
Outer Jacket Options:

—J: Fluoropolymer is used for highly corrosive environments, exposure to oils and solvents and for hazardous area applications.

Power Output W/ft. @ 240v



Power Output W/mtr. @ 240v



Performance and Rating Data:

Catalog numbers: LLT2-JT, LLT2-J			Voltage Multipliers						
	English	Metric	Volts Power	200V	208V	220V	230V	240V	277V
Temperature ratings				0.83	0.87	0.92	0.97	1.00	1.13
Maximum maintain	150°F	65°C							
Maximum intermittent	185°F	85°C							
T-rating	T5*	T5*							
Rated voltage	240VAC	240VAC							
Maximum length	1046 ft.	319 m.							
			Plastic Pipe Power Multipliers						
			Pipe Size	1.0	2.0	3.0	4.0	6.0	8.0
			GT-60	0.65	0.63	0.61	0.60	0.59	0.58
			AT-50	0.94	0.91	0.87	0.86	0.84	0.81

* Electrical equipment T-ratings codes define the maximum surface temperature that equipment will reach. It is used in hazardous (classified) area applications.

Circuit Breaker Selection:

Units	Start-up Temp.	Max. Length (feet) vs. Circuit Breaker Size						
		15A	20A	30A	40A	50A	60A	70A
Feet	40°F	320	424	640	852	1033	1091	1100
	0°F	222	300	444	594	744	894	1050
	-20°F	191	253	382	512	640	770	888
	-40°F	165	215	330	439	548	661	770

Notes

1. Breaker loading must be based on minimum start up temperature, as heater's start-up current increases as temperature decreases.
2. Do not exceed maximum recommended series length for each heater shown. More than one maximum series length may be parallel connected on a breaker- do not exceed maximum total recommended breaker heater length shown in table.
3. Residual current / ground-fault equipment protection for each branch circuit supplying electric heating equipment is recommended in many jurisdictions. Consult your local electrical authority for more details.

Accessories:

ALT-BCL – Aluminum Power Connection kit, includes cable seals for power and end of cable termination

LLT-SS – Under the insulation splice kit

Approvals:

LLT-J



II 2 G Ex e II T5
II 2 D Ex tD A21 T 95°C
KEMA 08 ATEX 0147U



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