Pipe Trace Solutions

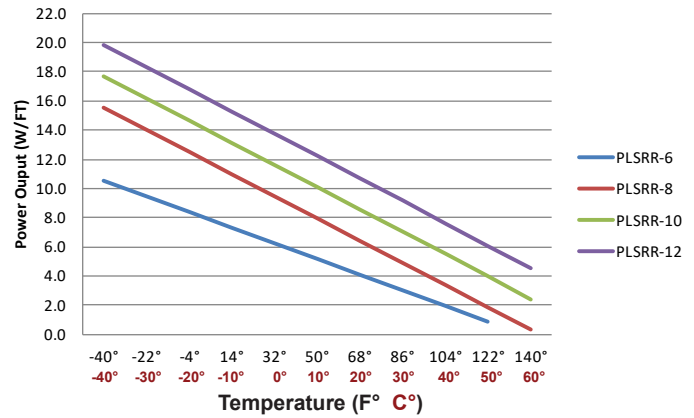## SELF-REGULATING HEAT TRACE CABLE

PLSRR Heat Trace Cable Data Sheet

PLSRR self-regulating heat cable is the cable of choice for standard pipe trace applications. The cable features a flexible, UV-stabilized thermoplastic elastomer overjacket that protects the carbon core for wet applications and exposure to the sun. The parallel heating cable is designed for a variety of industrial applications and environments, including hazardous and nonhazardous areas, and can be used for plastic or metal pipe freeze protection and temperature maintenance. (Features a NON-PRORATED 10-year warranty.)

Technical Data for PLSRR Heat Cable

Service voltage	110-120 V, 208-277 V
Maximum maintain or continuous exposure temperature (power on)	+149°F (65°C)
Maximum intermittent exposure temperature 1,000 hours (power on/off)	+185°F (85°C)
Minimum installation temp.	-40°F (-40°C)
Protective braid resistance	<18.2Ω/km
Bus wire gauge	16 AWG
Approvals	cULus; hazardous, CSA, ATEX, IECEx
Warranty	10 years (Not prorated)
Certifications	Class I, Div.2 Groups A, B, C, D Class II, Div.2 Groups E, F, G Class III

Power Output Curves
Watts per Foot vs. Temperature

Maximum Length (feet) vs Circuit Breaker Size

Cable	Startup Temp.	120 V				240 V			
Breaker Size		15A	20A	30A	40A	15A	20A	30A	40A
PLSRR-6-1 and PLSRR-6-2	50°F (+10°C)	230	270	270	270	460	540	540	540
	32°F (0°C)	230	270	270	270	460	540	540	540
	14°F (-10°C)	180	210	270	270	360	420	540	540
	0°F (-18°C)	140	190	270	270	285	380	540	540
	-20°F (-29°C)	125	165	250	270	250	330	500	540
	-40°F (-40°C)	110	145	220	270	220	295	440	540
PLSRR-8-1 and PLSRR-8-2	50°F (+10°C)	150	200	210	210	300	400	420	420
	32°F (0°C)	150	200	210	210	300	400	420	420
	14°F (-10°C)	140	150	205	210	280	300	410	420
	0°F (-18°C)	100	130	200	210	200	265	400	420
	-20°F (-29°C)	85	115	175	210	175	235	350	420
	-40°F (-40°C)	80	105	155	210	155	210	315	420
PLSRR-10-1 and PLSRR-10-2	50°F (+10°C)	120	160	180	180	240	315	360	360
	32°F (0°C)	105	140	170	180	210	280	340	360
	14°F (-10°C)	95	125	165	180	190	250	330	360
	0°F (-18°C)	80	110	160	180	160	215	325	360
	-20°F (-29°C)	70	95	140	180	145	190	285	360
	-40°F (-40°C)	60	85	125	170	125	170	255	340
PLSRR-12-1 and PLSRR-12-2	50°F (+10°C)	80	140	150	150	160	270	310	310
	32°F (0°C)	75	130	145	150	150	260	290	310
	14°F (-10°C)	70	115	142	150	140	230	285	310
	0°F (-18°C)	60	80	140	150	120	160	280	310
	-20°F (-29°C)	50	65	110	150	105	140	225	310
	-40°F (-40°C)	45	60	90	140	90	125	190	280

Approvals:

ORDERING INFORMATION

PLSRR- ☐ - ☐ - ☐   For example: PLSRR-8-2-CR

Outer jacket
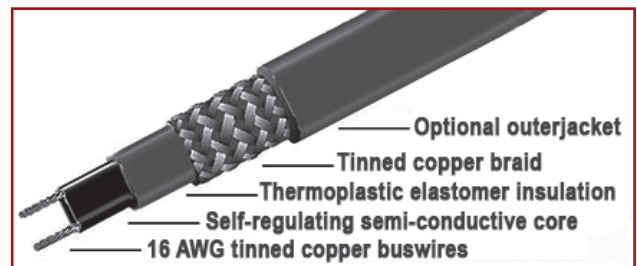C=Tinned copper braid (no outer jacket)
R=Thermoplastic
T=Fluoropolymer

Supply Voltage
1=110-120VAC; 2=208-277 VAC

Output Power (at 40°F)

Example: PLSRR-8-2-CR =
8 watt, 208-277 V, Thermoplastic outer jacket

Cutaway view of ProLine self-regulating heat cable.

PLSRR Dimensions and Bend Radius

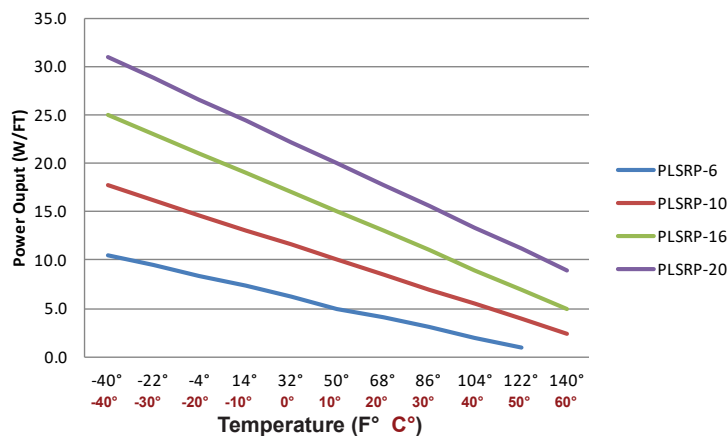| Type	Dimensions	Minimum Bend Radius
PLSRR-C	11.0 x 4.4 mm	1-inch (26 mm)
PLSRR-CR	12.6 x 6.0 mm	1.4 inches (36 mm)
PLSRR-CT	12.0 x 5.4 mm	1.25 inches (32 mm)

PLSRP Medium Temp Heat Trace Cable

PLSRP heat cable is an industrial grade self-regulating heat cable designed for pipe trace applications. The cable features a flexible outer jacket and durable carbon core, providing consistent performance, long lifespan, and easy installation in cold temperatures.

Technical Data for PLSRP Heat Cable	
Service voltage	110-120 V, 208-277 V
Maximum maintain or continuous exposure temperature (power on)	+230°F (110°C)
Maximum intermittent exposure temperature 1,000 hours (power on/off)	+275°F (135°C)
Minimum installation temperature	-40°F (-40°C)
Protective braid resistance	<18.2Ω/km
Bus wire gauge	16 AWG
Approvals	ATEX (hazardous), CE, IECEx (hazardous)
Warranty	10 years

Power Output Curves
Watts per Foot vs. Temperature

Maximum Length (feet) vs Circuit Breaker Size

Cable	Startup Temp.	120 V				240 V			
Breaker Size		15A	20A	30A	40A	15A	20A	30A	40A
PLSRP-6-1 and PLSRP-6-2	50°F (+10°C)	195	195	195	195	390	390	390	390
	32°F (0°C)	195	195	195	195	390	390	390	390
	14°F (-10°C)	195	195	195	195	370	390	390	390
	0°F (-18°C)	170	185	195	195	340	370	390	390
	-20°F (-29°C)	160	170	195	195	320	340	390	390
	-40°F (-40°C)	150	160	170	195	300	320	370	390
PLSRP-10-1 and PLSRP-10-2	50°F (+10°C)	100	130	195	195	200	265	390	390
	32°F (0°C)	95	120	185	195	190	240	370	390
	14°F (-10°C)	90	110	175	195	180	220	350	390
	0°F (-18°C)	80	105	160	195	160	210	320	390
	-20°F (-29°C)	70	95	145	195	145	195	295	390
	-40°F (-40°C)	65	90	135	180	135	180	275	365
PLSRP-16-1 and PLSRP-16-2	50°F (+10°C)	75	100	150	200	160	210	320	340
	32°F (0°C)	70	90	140	190	140	190	280	340
	14°F (-10°C)	65	85	130	170	135	175	260	340
	0°F (-18°C)	60	80	120	160	125	170	255	340
	-20°F (-29°C)	55	70	110	145	115	155	235	315
	-40°F (-40°C)	50	65	100	135	110	145	220	290
PLSRP-20-1 and PLSRP-20-2	50°F (+10°C)	60	80	120	160	120	160	240	320
	32°F (0°C)	55	75	110	150	110	150	220	300
	14°F (-10°C)	50	70	100	135	100	140	200	270
	0°F (-18°C)	45	60	95	125	95	125	190	255
	-20°F (-29°C)	40	55	85	115	85	115	175	235
	-40°F (-40°C)	40	55	80	110	80	110	165	220

ORDERING INFORMATION

PLSRP- ☐ - ☐ - ☐   For example: PLSRP-10-2-CT
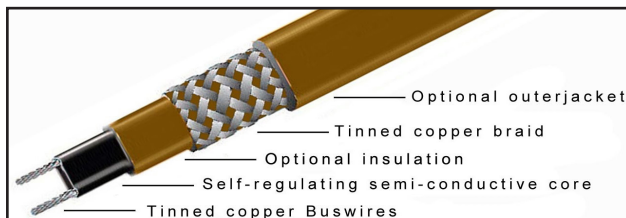
Outer jacket
T=Fluoropolymer

Supply Voltage
1=110-120VAC; 2=208-277 VAC

Output Power (at 40°F)

Example: PLSRP-10-2-CT =
10 watt, 208-277 V, Fluoropolymer outer jacket

NOTE: This product is a special order item. Please contact ProLine for more details.

Cutaway view of PLSRP self-regulating heat trace cable.

PLSRP Dimensions and Bend Radius

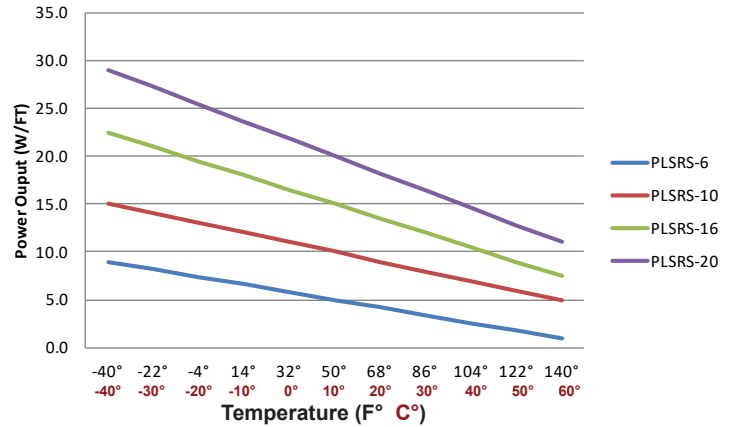| Type	Dimensions	Minimum Bend Radius
PLSRP-CT	12.4 x 4.8 mm	1.10 inches (28 mm)

Approvals:

PLSRS High Temp Heat Trace Cable

PLSRS is an industrial grade self-regulating heat cable is designed for pipe trace applications. The cable features a flexible outer jacket and durable carbon core, providing consistent performance, long lifespan, and easy installation in cold temperatures.

Technical Data for PLSRS Heat Cable

Service voltage	110-120 V, 208-277 V
Maximum maintain or continuous exposure temperature (power on)	+248°F (120°C)
Maximum intermittent exposure temperature 1,000 hours (power on/off)	+392°F (200°C)
Minimum installation temperature	-40°F (-40°C)
Protective braid resistance	<18.2Ω/km
Bus wire gauge	16 AWG
Approvals	ATEX (hazardous), CE, IECEx (hazardous)
Warranty	10 years

Power Output Curves
Watts per Foot vs. Temperature
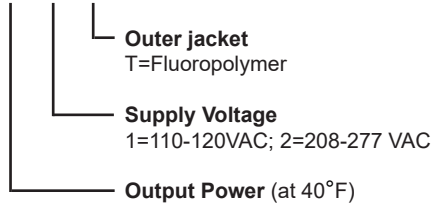

PLSRS Dimensions and Bend Radius

Type	Dimensions	Minimum Bend Radius
PLSRS-CT	12.4 x 4.8 mm	1.10 inches (28 mm)

ORDERING INFORMATION

PLSRS- ☐ - ☐ - ☐   For example: PLSRS-10-2-CT

Outer jacket
T=Fluoropolymer

Supply Voltage
1=110-120VAC; 2=208-277 VAC
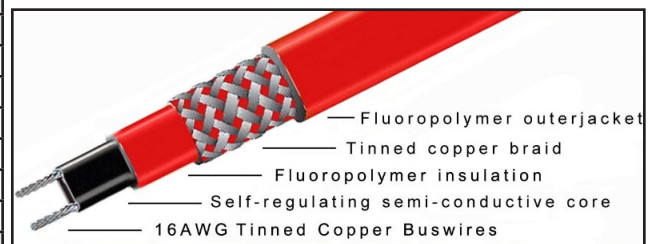
Output Power (at 40°F)

Example: PLSRS-10-2-CT =
10 watt, 208-277 V, Fluoropolymer outer jacket

NOTE: This product is a special order item. Please contact ProLine for more details.

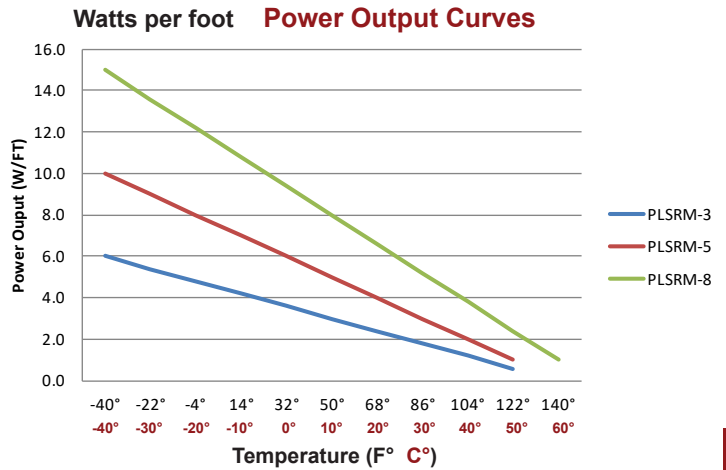*ProLine's PLSRS self-regulating pipe trace cable.*

- Fluoropolymer outerjacket
- Tinned copper braid
- Fluoropolymer insulation
- Self-regulating semi-conductive core
- 16AWG Tinned Copper Buswires

Approvals:

Maximum Length (feet) vs Circuit Breaker Size

Cable	Startup Temp.	120 V				240 V			
Breaker Size		15A	20A	30A	40A	15A	20A	30A	40A
PLSRS-6-1 and PLSRS-6-2	50°F (+10°C)	180	240	360	385	360	480	720	765
	32°F (0°C)	180	240	360	385	360	480	720	765
	14°F (-10°C)	170	220	340	385	340	440	680	765
	0°F (-18°C)	160	210	320	385	315	420	625	765
	-20°F (-29°C)	150	200	305	385	300	395	595	765
	-40°F (-40°C)	145	195	290	385	285	380	570	765
PLSRS-10-1 and PLSRS-10-2	50°F (+10°C)	110	145	220	270	220	295	440	540
	32°F (0°C)	110	145	220	270	220	295	440	540
	14°F (-10°C)	100	140	205	265	200	280	410	540
	0°F (-18°C)	95	130	195	260	195	260	385	540
	-20°F (-29°C)	95	125	190	250	195	250	370	540
	-40°F (-40°C)	90	120	180	240	175	240	355	540
PLSRS-16-1 and PLSRS-16-2	50°F (+10°C)	75	100	160	160	140	200	315	315
	32°F (0°C)	75	100	160	160	140	200	315	315
	14°F (-10°C)	70	100	160	160	135	200	315	315
	0°F (-18°C)	65	95	150	160	130	175	275	315
	-20°F (-29°C)	60	90	145	160	125	165	260	315
	-40°F (-40°C)	55	85	135	160	120	155	245	315
PLSRS-20-1 and PLSRS-20-2	50°F (+10°C)	55	85	130	140	115	155	245	275
	32°F (0°C)	55	85	130	140	115	155	245	275
	14°F (-10°C)	50	80	125	140	100	140	220	275
	0°F (-18°C)	50	80	120	140	100	140	215	275
	-20°F (-29°C)	45	75	115	140	90	130	205	275
	-40°F (-40°C)	45	70	110	140	90	125	190	265

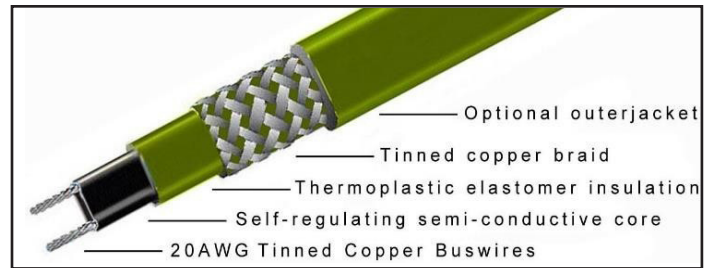# PLSRM Heat Trace Cable Data Sheet

PLSRM self-regulating heat cable is designed for pipe trace applications. The cable provides safe, reliable heat tracing for freeze protection or temperature maintenance of pipes, valves, and flanges, etc. PLSRM heat cable is suitable for use on small diameter plastic or metal pipes and instrument tubing in residential and light commercial applications. The heat cable features a flexible outer jacket and durable carbon core, providing consistent performance, long lifespan, and easy installation in cold temperatures.

Technical Data for PLSRM Heat Cable

Service voltage	110-120 V, 208-277 V
Maximum maintain or continuous exposure temperature (power on)	+149°F (65°C)
Maximum intermittent exposure temperature 1,000 hours (power on/off)	+185°F (85°C)
Minimum installation temperature	-40°F (-40°C)
Protective braid resistance	<18.2Ω/km
Bus wire gauge	20 AWG
Approvals	cETLus
Warranty	2 years

Watts per foot Power Output Curves

Power output curves chart: Power Output (W/FT) vs Temperature (F° C°), with PLSRM-3, PLSRM-5, PLSRM-8 curves.

PLSRM Dimension and Bend Radius

Type	Dimensions	Minimum Bend Radius
PLSRM-C	6.7 x 4.1 mm	.99-inch (25 mm)
PLSRM-CR	8.3 x 5.7 mm	1.3 inches (34 mm)

- Optional outerjacket
- Tinned copper braid
- Thermoplastic elastomer insulation
- Self-regulating semi-conductive core
- 20AWG Tinned Copper Buswires

Cutaway view of PLSRM self-regulating heat trace cable.

Maximum Length (feet) vs Circuit Breaker Size

Heat Cable	Startup Temp.	120 V				240 V			
Breaker Size		15A	20A	30A	40A	15A	20A	30A	40A
PLSRM-3-1 and PLSRM-3-2	50°F (+10°C)	160	160	160	160	320	320	320	320
	32°F (0°C)	160	160	160	160	320	320	320	320
	14°F (-10°C)	130	160	160	160	260	320	320	320
	0°F (-18°C)	120	140	160	160	240	280	320	320
	-20°F (-29°C)	107	133	160	160	214	266	320	320
	-40°F (-40°C)	93	120	160	160	186	240	320	320
PLSRM-5-1 and PLSRM-5-2	50°F (+10°C)	127	133	133	133	254	266	266	266
	32°F (0°C)	127	133	133	133	254	266	266	266
	14°F (-10°C)	105	120	133	133	210	240	266	266
	0°F (-18°C)	93	113	133	133	186	226	266	266
	-20°F (-29°C)	80	107	120	133	160	214	240	266
	-40°F (-40°C)	67	93	105	133	134	186	210	266
PLSRM-8-1 and PLSRS-8-2	50°F (+10°C)	87	113	113	113	174	226	226	226
	32°F (0°C)	87	113	113	113	174	226	226	226
	14°F (-10°C)	80	90	113	113	160	180	226	226
	0°F (-18°C)	69	80	105	113	138	160	210	226
	-20°F (-29°C)	63	73	95	113	126	146	190	226
	-40°F (-40°C)	53	67	80	113	106	134	160	226

ORDERING INFORMATION

PLSRM- ☐ - ☐ - ☐   For example: PLSRM-5-2-CR

Outer jacket
C=Tinned copper braid (no outer jacket)
R=Thermoplastic

Supply Voltage
1=110-120VAC; 2=208-277 VAC

Output Power (at 40°F)

Example: PLSRM-5-2-CR =
5 watt, 208-277 V, Thermoplastic outer jacket

NOTE: This product is a special order item. Please contact ProLine for more details.

ETL LISTED

Why ProLine Heat Trace Cable?

ProLine self-regulating heat cable features a more flexible outer jacket and more durable carbon core than other leading brands of self-reg cable. These features provide more consistent performance, longer lifespan, and easier installation in cold temperatures.

Key Features of ProLine Self-regulating Heat Cable vs. Other Cable Brands

Outer Jacket Quality

Typical Self-regulating Heat Cable

The outer jacket of typical self-reg cable tends to "bubble" or separate from the cable core when the cable is manipulated for turns. These irregularities create stress points on the cable that can result in water reaching the core, leading to erratic heating and eventual cable failure.
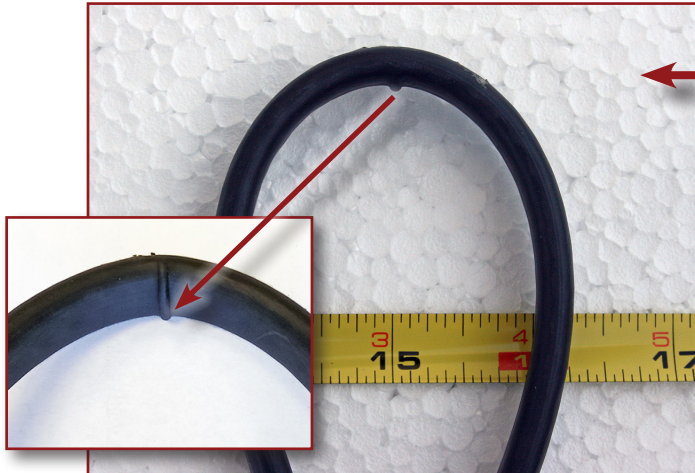
Other Leading Brands of Self-regulating Cable

The outer jacket of most self-regulating heat cable separates from the core at a typical bend radius of 2 inches.

ProLine Self-regulating Heat Cable

ProLine self-regulating heat cable features a higher quality outer jacket that does not "bubble". This reduces the chances of water seepage and cable failure.

ProLine Radiant Self-regulating Heat Cable

ProLine self-regulating heat cable does not "bubble" at an even tighter bend radius of 1½ inches.

Installation at Low Temperatures

Typical Self-regulating Heat Cable

Typical self-regulating cable has a minimum installation temperature of 32-40°F. This is because the carbon in the cable becomes brittle and can easily break when bent or manipulated at low temperatures.

The outer jacket also becomes stiff, making the securing of cable to the pipes difficult during cold weather installations. The outer jacket tends to "pucker" and pull away from the core when making bends, compromising the cable's integrity and leading to cable failure. Therefore installing most self-regulating heat cable at temperatures below 40°F is not recommended.

ProLine Self-regulating Heat Cable

ProLine self-regulating cable features a higher quality carbon center that is more resilient in low temperatures, thereby allowing the cable to be safely installed at temperatures as low as 0°F.

The higher quality outer jacket also remains flexible at low temperatures, resulting in more reliable performance and easier installation when securing to various pipe trace applications.

ProLine PTBO power connection kit and lighted end seal installed in industrial pipe trace application.

"In all the years I've been installing radiant heating systems, I've noticed that "bubbles" in the outer jacket of the cable almost always result in a point of failure. The superior outer jacket of ProLine's self-reg cable helps to eliminate this problem."

– Eric W., Licensed Contractor

Pre-Assembled Heat Trace Cable

ProLine pre-assembled (pre-terminated) self-regulating heat cable is the premier solution for quick, easy installation for various pipe trace applications. The 120 volt pre-assembled plug-and-play kits come with the option of a standard power cord with or without a GFCI power plug. The termination, power connection, splice, tee, and end seal kit reduces installation time and requires no special skills or tools.

PLSRT-1 120 V Pre-Assembled Heat Cable

ProLine PLSRT-120 pre-assembled self-regulating heating cable is designed for commercial metal and plastic pipe protection and roof and gutter de-icing applications. The 120-volt heating cables are available in 6, 12, 18, 24, 50, 75, 100, 125 and 150-foot lengths, and each comes assembled with a 6-foot power cord and plug. (Optional GFCI plus available.)

PLSRT-1 heating cables may be used on:

- Roofs made from all types of standard roofing materials, including shake, shingle, rubber, tar, wood, metal, and plastic.
- Gutters made from standard materials, including metal and plastic.
- Downspouts made from standard materials, including metal and plastic.

ProLine 120 V pre-terminated self-regulating heat cable.

PLSRT-1 General Specifications (110-120 V)

Nominal cable width	½-inch (12.7 mm)
Nominal cable thickness	.24-inch (6.1 mm)
Bus wire gauge	16 AWG
Circuit breaker size	15 amps
Plug rating	15 amps
Maximum exposure temperature	150°F (65°C)
Minimum installation temperature	-40°F (-40°C)
Voltage rating	110-120 V (For 208-277 V, please call)
Protective braid resistance	< 18.2Ω/km
Cold lead length	6 feet with plug
Electrical classification	Non-hazardous; ordinary areas
Exposure to chemicals	None
Warranty	2-years

General Instructions

Install only in accessible locations; do not install behind walls or where the cable would be hidden.

Do not run the heating cable through walls, ceilings, or floors.

Connect only to ground-fault protected outlets that have been installed in accordance with all prevailing national and local codes and standards and are protected from rain and other water.

General Usage Guidelines

- ProLine Radiant pre-terminated heating cables are not intended for use on flexible vinyl tubing (such as garden hoses).
- The heating cables should not be used inside any pipes.
- PLSRT pre-assembled heat cable is not intended for freeze protection of liquids other than water or for use in locations classified as 'hazardous'.
- Use a minimum of ½-inch fire-resistant, waterproof thermal insulation when installing the PLSRT heat cable on pipes.
- Never use the heat cable on pipes that may exceed 150°F (65°C).
- Do not use an extension cord with the heat cable.

ProLine Radiant 120 V pre-terminated self-regulating heat cable with and without a ground fault circuit interrupter (GFCI).

ProLine Cable Selection Guide

Heat Cable	Voltage	Application	Maximum maintain temp	Maximum exposure temp	Output at 40° (watts)	Certification
Self-regulating Heat Cable						
PLSRR	110-120 V 208-277 V	Pipe heating and roof and gutter de-icing in commercial and industrial applications	149° (65°)	185° (85°)	6,8,10,12	Class I, Div.2* Groups A,B,C,D; Class II, Div.2 Groups E, F, G; Class III, T-coded (T5 or T6)
PLSRP	110-120 V 208-277 V	Industrial pipe and tank heating applications	230° (110°)	275° (135°)	6,10,16,20	Class I, Div.2* Groups A,B,C,D; Class II, Div.2 Groups E, F, G; Class III, T-coded (T5 or T6)
PLSRS	110-120 V 208-277 V	Industrial pipe and tank heating applications	248° (120°)	392° (200°)	6,10,16,20	Class I, Div.2* Groups A,B,C,D; Class II, Div.2 Groups E, F, G; Class III, T-coded (T5 or T6)
PLSRM	110-120 V 208-277 V	Residential water pipe heating applications	149° (65°)	185° (85°)	3,5,8	Non-hazardous
Pre-assembled Self-regulating Heat Cable (Pre-terminated)						
PLSRT	110-120 V 208-277 V	Roof and gutter de-icing and metal and plastic pipe protection in commercial and residential applications	149° (65°)	149°F (65°C)	6	Non-hazardous

Pipe Trace Controls

ProLine offers state-of-the-art, custom engineered control panels designed for your specific requirements. ProLine controllers continuously monitor your heat tracing system and provide you with user-settable alarms for temperature, heater current and ground fault current (all independent of the trip levels) to maintain your heat trace system and warn you of potential problems. This advanced heat trace system offers local, group and central computer interfaces.

Features and Benefits Include:

Alarm Outputs and Early Warning Alarm – Alarm alerts users to problems, even when the circuit is not in use.

Modbus® Protocol – Allows easy interfacing with the master controller software and links to PLC and DCS systems.

Statistics Monitoring – Plant-wide Windows-based monitoring software allows users to save energy by monitoring peak demand times. Provides energy monitoring tools through the measured values of heater utilization, power consumption (MWh), and operating costs.

Staggerstart (Power Limiting) – Limits initial startup power.

Proportional Control – Provides tight process temperature control.

Custom Configured Software Interface – Local, remote, or centralized control and monitoring are available, as well as standalone control and multi-point control panels.

Switching Unit Options – Solid state or mechanical.

Easy to read Display – 2x16-character alphanumeric display (field mounted or remote mounted).

Friendly Interface and Easy to read Display – Local and Remote interface choices are available. The Local Interface communicates with a single controller of up to 10 circuits and up to five feet away. The Remote Interface communicates with multiple controllers (up to 30 controllers or 300 circuits), to a maximum of 4,000 feet without repeaters.

RS 485 Serial Port Connections

Load Shedding – A master override input allows for external control for load-shedding or ambient control.

Advanced Control
The advanced features of this controller allow it to handle single-phase to three-phase heat trace applications with switch ratings up to 100A at 600 VAC. Integral user-settable ground fault trip protects the heat trace without costly ground fault breakers. The user-settable ground

fault test function lets you know if ground fault monitoring is functioning properly. The RTD inputs (dual RTD inputs available) have a user-settable fail-safe strategy.

Master Controller Centralized Monitoring
For plant-wide monitoring, the master controller for windows software package provides programming and monitoring for ProLine heat tracing controllers on your PC. Process setpoints and alarm levels are programmed for each heater through the computer keyboard, reducing data entry on large systems. Setpoint programming and configuration functions are password protected. By connecting individual modules or panels together, heat tracing throughout an entire plant can be programmed and monitored from a single location.
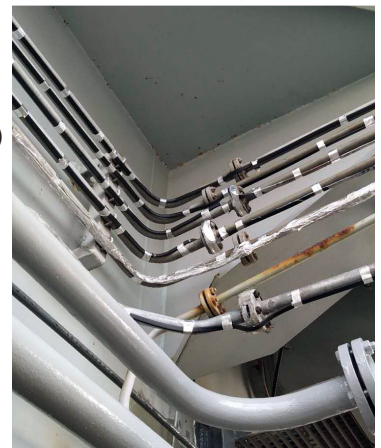
ProLine custom controls

Pipe Tracing Control Options

Self-regulating Heat Trace Cable

In addition to ProLine Radiant's premier self-regulating heat trace cable and professional system design/layout services, users also have several activation device/controller options to ensure optimum performance of the pipe trace system.

WS-115 Outdoor Ambient Sensing Thermostat (WS-115) - The WS-115 ambient sensing thermostat is designed to sample temperature changes in the air. The WS-115 can be used in a wide range of heating applications and can serve as a high limit backup for "sensitive" applications. The NEMA 4X rain-tight enclosure provides adequate protection in most environments. The WS-115 thermostat has a temperature range of 40°F to 110°F and can handle up to 22 amps at 277 VAC.

WS-115R Outdoor Surface Sensing Thermostat (WS-115R) - The WS-115R surface sensing thermostat samples temperature changes in the surface. The sensor is typically used as a line sensing control for pipes, vessels and other types of electric heat tracing applications. Suitable for use in agricultural, industrial and commercial environments. The NEMA 4X rain-tight enclosure provides adequate protection in most environments.

WS-115 and 115R Features

- Rugged weather resistant enclosure made of corrosion resistant materials for long life.

- Stainless steel remote bulb provides rapid response to temperature change.

- Low mass, high surface area of stainless steel coiled sensor provides rapid response to temperature change.

- Large, readily visible dial with 0°F - 120°F temperature range and 40°F - 110°F.

- Multi-positional mounting offers flexibility in either new or existing installations.

- One control for both heating and cooling applications.

- Complies with NEC 547 and NEMA 4X requirements.

Industrial Electronic Thermostat, 120-240V (WS-IET) - The IET is a microprocessor-based temperature controller designed to provide on/off control for commercial heating, cooling, air conditioning and refrigeration applications. Its comprehensive functionality makes the IET is one of the most versatile temperature controls available.

The IET features a lockable front-panel touchpad and a Liquid Crystal Display (LCD) for viewing the temperature and status of other functions. The digital display and keypad allow precise temperature settings.

When not in the programming mode, the display provides a constant readout of the sensor temperature. Annunciators on the liquid crystal display indicate when the relay is energized. The IET is also equipped with diagnostic programs that check for hardware, software or system problems and display different error codes to indicate the problem and its location.

EcoTrace IC Controller A&B Options (with Modbus and without Modbus) - The advanced EcoTrace IC controller is a single-circuit IoT heat trace controller for use in snow melting, freeze protection and temperature maintenance applications. The advanced controller uses its proprietary algorithms to process weather data and adjust the system's power output according to storm conditions. In addition to activating the heating system, the controller's "smart" snow melting capability includes optional preheating, the ability to ignore light storms, and dynamic heating after the storm, all to improve overall system performance and reduce energy use and operating cost. The versatile controller allows the user to choose from a selection of weather-based control algorithms to accommodate a variety of specific applications.

Pipe Trace

Cable Accessories and Connections

Item Code and Description	Components
PLSR-PTBS - Multiple entry square power connection with junction box. (For hazardous locations.)	**A** Up to 3 heating cables connected **B** Silicone-free core seal for easy install **C** Warning label and all necessary installation materials included
PLSR-JHE - End seal kit (For hazardous locations)	**A** Seal plate for main box **B** Main end seal box **C** Grommets
PLSR-JHE-L - Lighted end seal kit (For hazardous locations)	**A** End seal stand and light assembly **B** Insulated and parallel crimps (2) **C** End seal label **D** Core sealer
PLSR-JHS - Inline splice kit (For hazardous locations)	**A** Main box **E** Cover for main box **B** Pressure seal end **C** Grommets **D** Gaskets for main box
PLSR-JHT - Tee splice (For hazardous locations)	**A** Main box **D** Gaskets for main box **B** Pressure seal end **E** Cover for main box **C** Grommets
PLSR10 - Splice / tee kit	**A** Clamp tie **B** Mastic strips (1½" long x 1" wide) **C** Heat-shrinkable tube (8" long x 1" diameter) **D** Heat-shrinkable tube (1" long x ⅛" diameter) **E** Heat-shrinkable tube (1" long x ½" diameter) **F** Uninsulated braid crimp **G** Heat-shrinkable tube for ground **H** Insulated bus wire crimps **I** Black cloth tape (6" long) **J** Heat-shrinkable cap **K** Cable ties
PLSR00 - Power connection kit with single end seal	**A** Black-shrinkable tube (2) (5½" long x ⅛" diameter) **B** Green-shrinkable tube (6" long x ¼" diameter) **C** Black-shrinkable tube (1" long x ½" diameter) **D** Seal fitting and grommet **E** Mounting bracket for piping **F** Gasket **G** Lock nut **H** Grommet **I** Wire nuts (3) **J** Labels (4)
PLSR03 - Fiberglass or aluminum tape	**A** Roll of tape **B** Ten (10) warning labels

Pipe Trace

ProLine Pipe Trace Solutions

ProLine Radiant carries a variety of the industry's most trusted self-regulating heat cable to best serve the demands of industrial and commercial pipe trace applications. In addition to offering premium cable, ProLine also includes unmatched customer services, including system design/layout, installation training and technical support. ProLine is your complete, professional pipe trace solutions partner.