

# Heating Cable

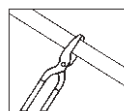
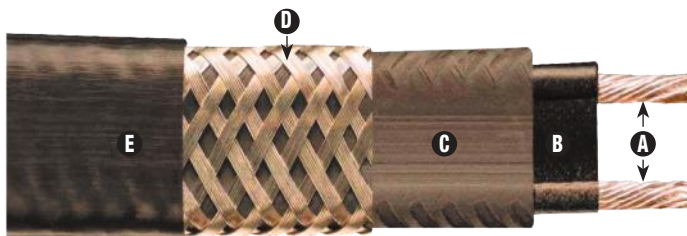
## SRL Self-Regulating Low Temperature

- Self-Regulating, Energy Efficient
- 16 AWG Buss Wire
- Circuit Lengths to 660 Feet
- Process Temperature Maintenance to 150°F (65°C)
- Maximum Continuous Exposure Temperature, Power Off, 185°F (85°C)
- Industrial Freeze Protection Applications
- Field Splicing Without Disrupting Heat Output
- 3, 5, 8 and 10 W/Ft.
- 120 and 208 - 277 Volt From Stock
- Approximate Size 0.47"W x 0.20"H
- Min. Bend Radius 1-1/8"
- For Use on Metal and Plastic Pipes

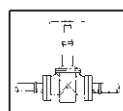
### Description

Chromalox SRL self-regulating heating cable provides safe, reliable heat tracing for freeze protection of pipes, valves, tanks and similar applications. Constructed of industrial grade 16 AWG buss wire with a tinned copper braid and overjacketing, SRL ensures operating integrity in Div. 2 hazardous environments as well as certain corrosive industrial environments. SRL heating cable has a maximum maintenance temperature rating of 150°F (65°C).

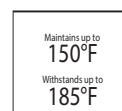
**WARNING** — A ground fault protection device is required by NEC to minimize the danger of fire if the heating cable is damaged or improperly installed. A minimum trip level of 30mA is recommended to minimize nuisance tripping.



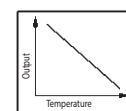
Cut to Length  
in Field



Can be Single  
Overlapped



Low Tempera-  
ture



Self Regulating  
Output

### Features

- Energy efficient, self-regulating SRL uses less energy when less heat is required.
- Easy to install, SRL can be cut to any length (up to max. circuit length) in the field.
- Field splices can be performed easily in minutes with no scrap or wasted cold sections.
- SRL features lower installed cost than steam tracing, less maintenance expense and less downtime.
- SRL can be single overlapped without burnout, which simplifies heat tracing of in-line process equipment such as valves, elbows and pumps.
- Because SRL is self-regulating, over-temperature conditions are minimized.
- Chromalox termination, splice, tee and end seal kits reduce installation time.

### Construction

- A** **Twin Nickel Plated 16 AWG Copper Buss Wires** — Provide reliable electrical current capability.
- B** **Semiconductive Polymer Core Matrix** “Self-Regulating” component of the cable, its electrical resistance varies with temperature. As process temperature drops, the core’s heat output increases; as process temperature rises, the heat output decreases.
- C** **TPE Polyolefin Jacket** — Flame retardant, electrically insulates the matrix and buss wires and provides resistance to water and some inorganic chemical solutions.
- D** **Tinned Copper Braid** — Provides additional mechanical protection in any environment and a positive ground path.

- E** **High Temperature Fluoropolymer or TPE Overjacket** — Corrosion resistant, flame retardant overjacket is highly effective in many environments. TPE coatings protect against certain inorganic chemical solutions. Fluoropolymer coatings are used for exposure to organic or corrosive solutions. These coatings also protect against abrasion and impact damage.

### Approvals

Factory Mutual (FM) Approved, UL Listed, and CSA certified for ordinary areas. ATEX, IECEx, FM, and CSA Approved for hazardous (classified) areas when used with U Series, HL, DL, and EL accessories.

#### CSA and FM Approved:

- Class I, Div. 1\* & 2 Groups A\*, B, C, D (gases, vapors)
- Class II, Div. 1\* & 2 Groups E\*, F, G (combustible dust)
- Class III, Div. 2 (easily ignitable fibers and fillings)
- 3 Watt Rated T6 Temperature Class
- 5 and 8 Watt Rated T5 Temperature Class
- 10 Watt Rated T4A Temperature Class

\*CSA Only

\*-CT overjacket only

#### ATEX Approved:

- CE 2903 IIG Ex e IIC T\* Gb Ta -60°C to 95°C

#### IECEx Approved:

- ITS 07.0018X Ex e IIC T5 Gb Ta -60°C to 95°C



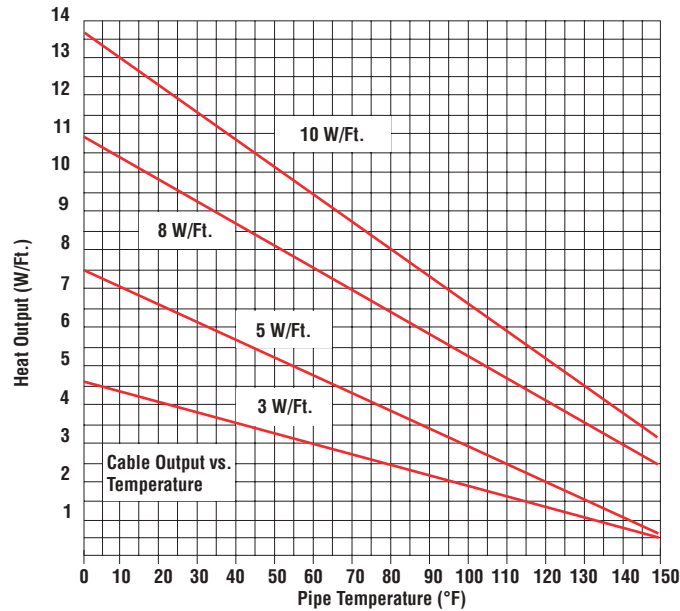
HEAT TRACE AND  
ACCESSORIES

# Heating Cable

## SRL Self-Regulating Low Temperature (cont'd.)

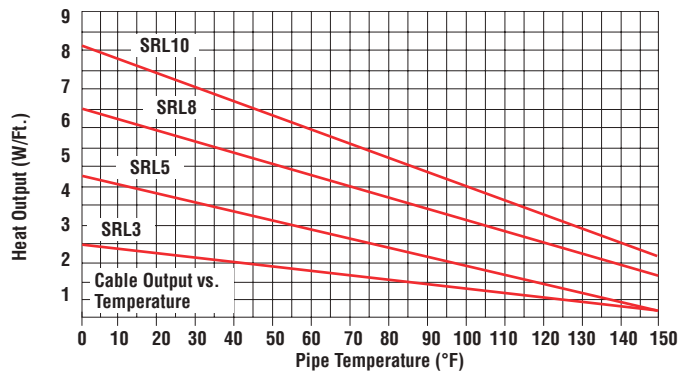


### Thermal Output Ratings on Insulated Metal Pipe<sup>1</sup>



**Note 1** — Thermal output is determined per IEEE 515-2011 Standard for testing, design, installation, and maintenance of electrical resistance heat tracing section 4.1.11 Method C.

### Thermal Output Ratings on Plastic Pipe with Aluminum Tape



### Output Wattage at Alternate Voltages (W/Ft.)

Model	208V	% Change In Output	220V	% Change In Output	277V	% Change In Output
SRL 3	2.4	-20	2.6	-13	3.4	+15
SRL 5	4.1	-18	4.5	-10	5.6	+13
SRL 8	6.88	-14	7.28	-9	8.96	+12
SRL 10	8.7	-13	9.2	-8	11.1	+10

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

Cable Rating	50°F Start-Up (Ft.)						0°F Start-Up (Ft.)						-20°F Start-Up (Ft.)					
	10A	15A	20A	25A	30A	40A	10A	15A	20A	25A	30A	40A	10A	15A	20A	25A	30A	40A
SRL3-1	205	305	360	NR	NR	NR	135	200	270	330	360	NR	120	185	245	300	360	NR
SRL3-2	400	600	660	NR	NR	NR	275	415	555	660	NR	NR	245	370	495	600	660	NR
SRL5-1	125	185	250	270	NR	NR	90	135	180	225	270	NR	80	120	160	205	245	270
SRL5-2	250	375	505	540	NR	NR	180	270	360	450	540	NR	160	245	325	405	490	540
SRL8-1	100	150	200	215	NR	NR	70	110	145	180	215	NR	65	100	130	165	200	210
SRL8-2	185	285	375	420	NR	NR	135	200	265	335	395	420	120	175	235	300	350	420
SRL10-1	60	95	130	160	180	NR	50	80	105	130	155	180	45	70	95	120	140	180
SRL10-2	100	160	210	260	315	360	80	125	170	210	255	340	75	120	160	195	240	320

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 "nuisance trip" at low temperature.

# Heating Cable

## SRL Self-Regulating Low Temperature (cont'd.)

### Ordering Information

Output (W/Ft.)	Volts	Model	Stock	PCN	Wt./1000' (Lbs.)
3 @ 50°F	120	SRL 3-1CT SRL 3-1CR	S S	383400 382731	66 64
	208 - 277	SRL 3-2CT SRL 3-2CR	S S	383419 382740	66 64
5 @ 50°F	120	SRL 5-1CT SRL 5-1CR	S S	383443 382758	66 64
	208 - 277	SRL 5-2CT SRL 5-2CR	S S	383451 382766	66 64
8 @ 50°F	120	SRL 8-1CT SRL 8-1CR	S S	383460 382598	66 64
	208 - 277	SRL 8-2CT SRL 8-2CR	S S	383478 382600	66 64
10 @ 50°F	120	SRL 10-1CT SRL 10-1CR	S S	383486 382846	66 64
	208 - 277	SRL 10-2CT SRL 10-2CR	S S	383494 382854	66 64

**To Order** — Specify length, model, PCN and installation accessories.

HEAT TRACE AND  
ACCESSORIES

### Accessories

Accessories		U Series	DL	EL
Power Connection	Heat trace to electrical service connection	UPC	RTPC	SSK
Splice & Tee		UMC	RTST	RT-RST
End Seal	For terminating cable	UES	RTES	RT-RES
Lighted End Seal		UESL	RTST-SL	N/A
Thermostat	Ambient air sensing thermostat	UAS	RTAS	THL/TXL
	Line sensing mechanical thermostat	UBC	RTBC	THR/TXR

**To Order** — General Application & Installation Accessories such as tape, pipe straps, warning labels, etc., refer to the U Series, DL & EL General Application Accessories page at the end of this section.

### Ordering Information

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

Contact your Local  
Chromalox Sales  
office for monitor  
wire option.

#### Model Self-Regulating Low Temperature

**SRL** Self-Regulating, Low Temperature Heating Cable

#### Code Output (W/Ft.)

**3** Three  
**5** Five  
**8** Eight  
**10** Ten

#### Code Voltage

**1** 120  
**2** 208 - 277

#### Code Overjacket Options

**CT** Fluoropolymer corrosion resistant overjacket over braid for hostile/corrosive environments  
**CR** TPR overjacket over braid for protection against certain inorganic chemical solutions

**SRL 5 - 1 CT** Typical Model Number



More Information  
is Available Online  
on Heat Trace.

Bookmark Your Browser to  
[www.chromalox.com](http://www.chromalox.com)  
and Select **Manuals**.