

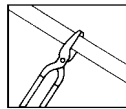
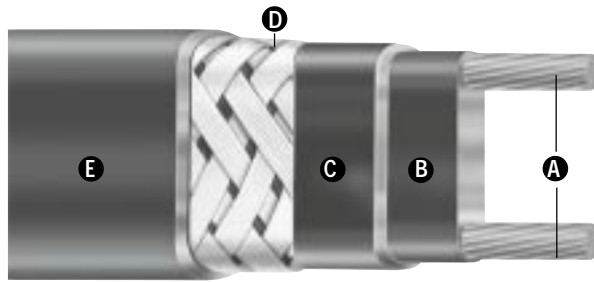
## SRL

### Self-Regulating Low Temperature

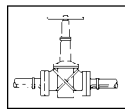
- Self-Regulating, Energy Efficient
- 16 AWG Buss Wire
- Circuit Lengths to 660 Feet
- Process Temperature Maintenance to 150°F (65°C)
- Maximum Continuous Exposure Temperature, Power Off, 185°F (85°C)
- Industrial Freeze Protection Applications
- Field Splicing Without Disrupting Heat Output
- 3, 5,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

#### Description

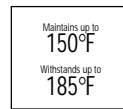
Chromalox SRL self-regulating heating cable provides safe, reliable heat tracing for freeze protection of pipes, valves, tanks and similar applications. Constructed of industrial grade 16 AWG buss wire with a tinned copper braid and optional overjacketing, SRL ensures operating integrity in Div. 2 hazardous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



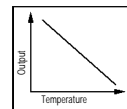
Cut to Length  
in Field



Can be Single  
Overlapped



Low  
Temperature



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 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 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 TPR Overjacket (optional)** — Corrosion resistant, flame retardant overjacket is highly effective in many environments. TPR 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 for ordinary areas. UL Listed, CSA Certified for ordinary areas. FM Approved for hazardous (classified) areas when used with DL or EL accessories:

- Class I, Div. 2, Groups B, C, D (gases, vapors)
- Class II, Div. 2, Groups 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 Certified for hazardous areas when used with DL or EL accessories:

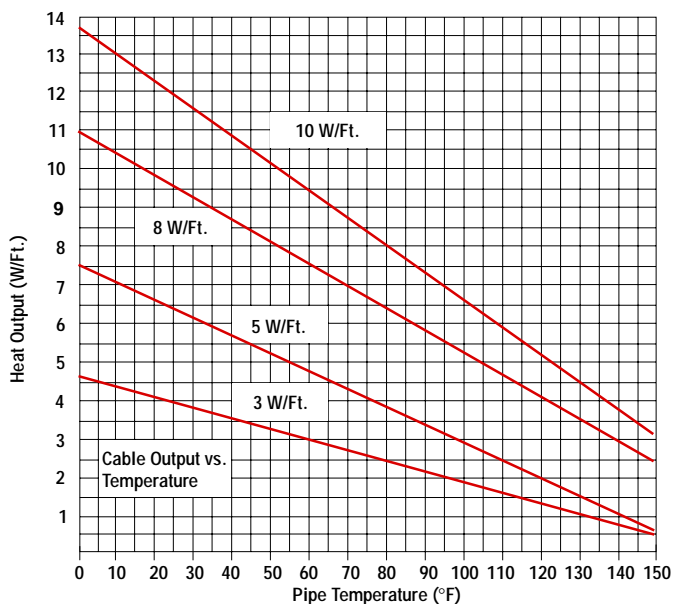
- Class I, Div. 2, Groups A, B, C, D
- Class II, Div. 2, Groups F, G.

## 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 515-1997 Standard for testing, design, installation, and maintenance of electrical resistance heat tracing section 4.1.11 Method C.

#### 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
SRL3-1C	205	305	360	NR	NR	NR	135	200	270	330	360	NR	120	185	245	300	360	NR
SRL3-2C	400	600	660	NR	NR	NR	275	415	555	660	NR	NR	245	370	495	600	660	NR
SRL5-1C	125	185	250	270	NR	NR	90	135	180	225	270	NR	80	120	160	205	245	270
SRL5-2C	250	375	505	540	NR	NR	180	270	360	450	540	NR	160	245	325	405	490	540
SRL8-1C	100	150	200	215	NR	NR	70	110	145	180	215	NR	65	100	130	165	200	210
SRL8-2C	185	285	375	420	NR	NR	135	200	265	335	395	420	120	175	235	300	350	420
SRL10-1C	60	95	130	160	180	NR	50	80	105	130	155	180	45	70	95	120	140	180
SRL10-2C	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.

## SRL

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

#### Ordering Information

Output (W/Ft.)	Volts	Model	Stock	PCN	Wt./1000' (Lbs.)
3 @ 50°F	120	SRL 3-1C	S	382678	53
		SRL 3-1CT	S	383400	66
		SRL 3-1CR	S	382731	64
	208 - 277	SRL 3-2C	S	382686	53
		SRL 3-2CT	S	383419	66
		SRL 3-2CR	S	382740	64
5 @ 50°F	120	SRL 5-1C	S	382694	53
		SRL 5-1CT	S	383443	66
		SRL 5-1CR	S	382758	64
	208 - 277	SRL 5-2C	S	382707	53
		SRL 5-2CT	S	383451	66
		SRL 5-2CR	S	382766	64
8 @ 50°F	120	SRL 8-1C	S	382555	53
		SRL 8-1CT	S	388460	66
		SRL 8-1CR	S	382598	64
	208 - 277	SRL 8-2C	S	382563	53
		SRL 8-2CT	S	383478	66
		SRL 8-2CR	S	382600	64
10 @ 50°F	120	SRL 10-1C	S	382820	53
		SRL 10-1CT	S	383486	66
		SRL 10-1CR	S	382846	64
	208 - 277	SRL 10-2C	S	382838	53
		SRL 10-2CT	S	383494	66
		SRL 10-2CR	S	382854	64

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

#### Accessories

Accessories		DL	EL
Power Connection	Heat trace to electrical service connection	RTPC	RT-JBC-1
Splice & Tee		RTST	RT-RST
End Seal	For terminating cable	RTES	RT-RES
Thermostat	Ambient air sensing thermostat	RTAS	B-100/B-121
	Line sensing mechanical thermostat	RTBC	E-100/E-121
	Line sensing electronic thermostat	RTSS	N/A

**To Order** — General Application & Installation Accessories such as tape, pipe straps, warning labels, etc., refer to the 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 Braid and Overcoat Options

**C** Plated-copper metallic braid for additional protection and ground path  
**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 C** 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**.