

Heating Cable

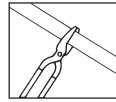
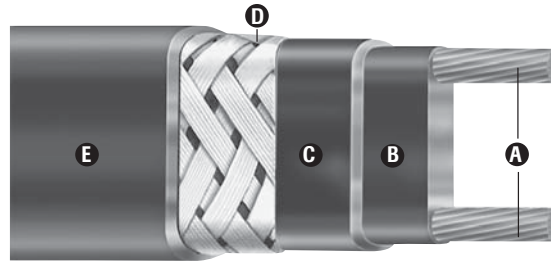
SRL Self-Regulating Low Temperature

- 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
- Single or Dual Monitor Wires Available
- Field Splicing Without Disrupting Heat Output
- 3, 5, 8 and 10 W/Ft.
- 120 and 208 - 277 Volt From Stock
- Approximate Size .47"W x .20"H
- Min. Bend Radius 1-1/8"
- For Use on Metal and Plastic Pipes

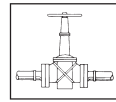
Description

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).

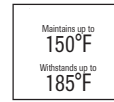
WARNING — A ground fault protection device is required by NEC to minimize the danger of fire if the heating cable is damaged or improperly installed. A minimum trip level of 30mA is recommended to minimize nuisance tripping.



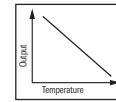
Cut to Length
in Field



Can be Single
Overlapped



Maintains up to
150°F
Withstands up to
185°F
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 burn-out, 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** — 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, 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 0359 IIG Ex e IIC T* Gb
Ta -60°C to 195°C

IECEx Approved:

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



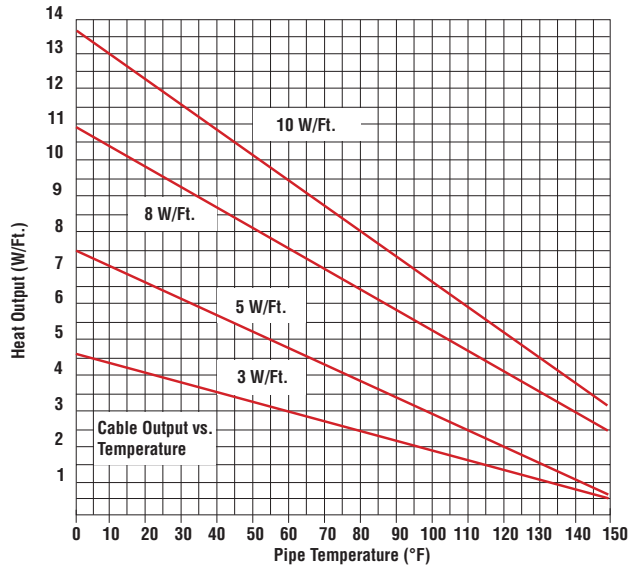
Heating Cable

SRL

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

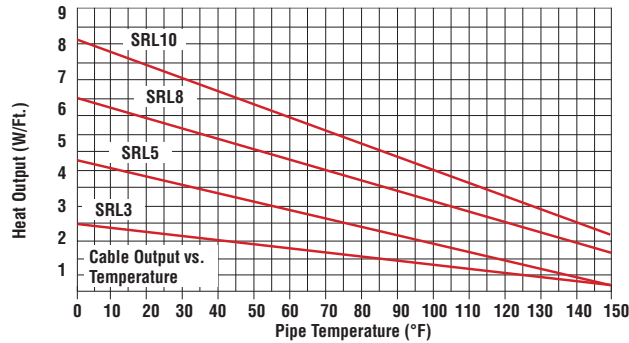


Thermal Output Ratings on Insulated Metal Pipe¹



Note 1 — Thermal output is determined per IEEE 515-2011 Standard for testing, design installation, and maintenance of electrical resistance heat tracing section 4.1.1 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 |

SELF-REGULATING

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 | S | 383400 | 66 |
| | | SRL 3-1CR | S | 382731 | 64 |
| | 208 - 277 | SRL 3-2CT | S | 383419 | 66 |
| | | SRL 3-2CR | S | 382740 | 64 |
| 5 @ 50°F | 120 | SRL 5-1CT | S | 383443 | 66 |
| | | SRL 5-1CR | S | 382758 | 64 |
| | 208 - 277 | SRL 5-2CT | S | 383451 | 66 |
| | | SRL 5-2CR | S | 382766 | 64 |
| 8 @ 50°F | 120 | SRL 8-1CT | S | 383460 | 66 |
| | | SRL 8-1CR | S | 382598 | 64 |
| | 208 - 277 | SRL 8-2CT | S | 383478 | 66 |
| | | SRL 8-2CR | S | 382600 | 64 |
| 10 @ 50°F | 120 | SRL 10-1CT | S | 383486 | 66 |
| | | SRL 10-1CR | S | 382846 | 64 |
| | 208 - 277 | SRL 10-2CT | S | 383494 | 66 |
| | | SRL 10-2CR | S | 382854 | 64 |

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