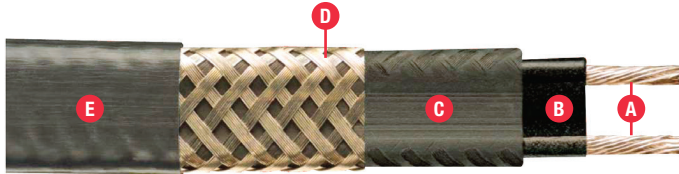


## PRODUCT OVERVIEW



- A** Twin 16 AWG Copper Bus Wires
- B** Semiconductive Polymer Core Matrix
- C** Water Resistant Polyolefin Jacket
- D** Tin-Plated Copper Braid
- E** High Temperature Fluoropolymer or TPR Overjacket (Optional)

Chromalox® SRL self-regulating low-temperature heating cable provides the most versatility in industrial process heat trace designs and applications, delivering safe, reliable heat for freeze protection and temperature maintenance of pipes, valves, tanks, and similar applications. Self-regulating cables are flexible, can be cut-to-length and spliced in the field, and can be single-overlapped without fear of burnout in areas where complex piping and equipment require additional heat trace cable. The self-regulating cable adjusts its output to independently respond to temperatures along its length. It is for use on 120 and 208 to 277 V. Chromalox self-regulating cables are third-party tested and approved for use in ordinary, harsh corrosive, and hazardous area applications.

## DESCRIPTION

The heating cable consists of two (2) 16 AWG nickel-plated copper bus wires embedded in a self-regulating semiconductive polymeric core matrix that controls power output so that the cable can be used directly on plastic or metallic pipes. A water-resistant polyolefin jacket electrically insulates the matrix and bus wires

and provides resistance to water and some inorganic chemical solutions. A tinned copper braid covering serves added mechanical protection and positive ground path. An optional high-temperature fluoropolymer or TPR outer jacket protects the braid from chemical attack and mechanical abuse.

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

## APPLICATION

**Trace surface type** ..... Metal and plastic

**Chemical Resistance** ..... Exposure to aqueous solutions of inorganic compounds

Exposure to liquids, organic chemicals, acids, or bases

## VOLTAGE SUPPLY

120 Vac

208 to 277 Vac (240 Vac nominal)

## TEMPERATURE RATING

**Maximum Maintenance Temperature**..... 150°F (65°C)

**Maximum Exposure Temperature, Power Off**..... 185°F (85°C)

**Minimum Installation Temperature**..... -40°F (-40°C)

# SRL SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

## APPROVALS



- Ordinary Areas



- ETL 24ATEX0405X II 2 G Ex eb IIC Gb T5\*\*\*
- Ta -60°C to 95°C



- Ordinary Areas
- Class I, Division 2 Groups B, C, D
- Class II, Division 2, Groups F, G
- Class III
- T-Rating\*\*



- ITS 07.0018X Ex eb II Gb T5\*\*\*
- Ta -60°C to 95°C



- Ex e IIC T\*\*\* IP66
- Ex e II T3... T5\*\*\*



- Ordinary Areas
- Class I, Division 1\* & 2, Groups B, C, D
- Class II, Division 1\* & 2, Groups F, G
- Class III, Division 2
- T-Rating\*\*



- Suitable for Hazardous Areas
- T-Rating\*\*\*

\*-CT overjacket only  
 \*\*T6: 185°F (85°C), SRL 3  
 T5: 212°F (100°C), SRL 5, 8  
 T4A: 248°F (120°C), SRL 10

\*\*\*T5: 212°F (100°C), SRL 3, 5  
 T4: 248°F (120°C) SRL 8, 10



## DESIGN & INSTALLATION

For proper design and installation, use ChromaTrace Heat Trace Project Design Software. Additional resources include the Chromalox Heat Trace Design Guide (PJ130), Pipe Heat Tracing Design Worksheet

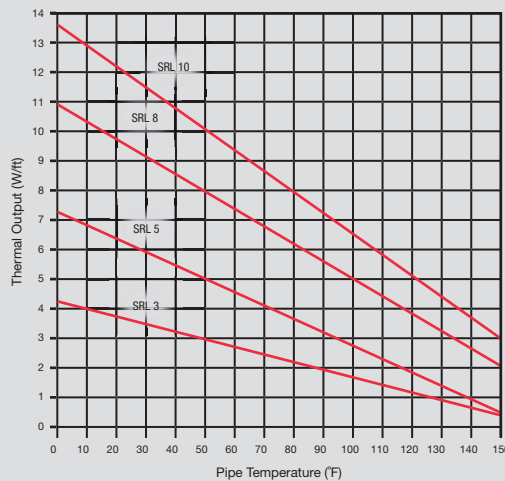
(PJ305), and Chromalox Industrial Heating Cable Products Installation Instructions (PJ438). These resources are available on the Chromalox website, [www.chromalox.com](http://www.chromalox.com).

## NOMINAL POWER OUTPUT RATINGS

### Output Wattage at Alternate voltages, 50°F (10°C), W/ft (W/m)

Model	208V	% Change in Output	220V	% Change in Output	277V	% Change in Output
SRL 3-2	2.4 (7.87)	-20	2.6 (8.53)	-13	3.4 (11.15)	+15
SRL 5-2	4.1 (13.45)	-18	4.5 (14.76)	-10	5.6 (18.37)	+13
SRL 8-2	6.88 (22.57)	-14	7.28 (23.88)	-9	8.96 (29.39)	+12
SRL 10-2	8.7 (28.54)	-13	9.2 (30.18)	-8	11.1 (36.41)	+10

### Thermal Output Ratings on Insulated Metal Pipe at 120 Vac/240 Vac\*

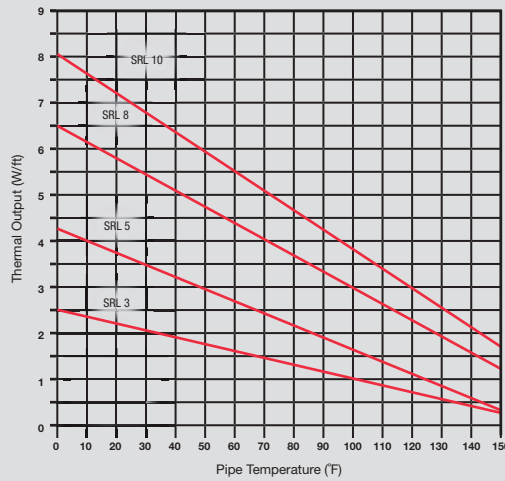


\*Thermal output is determined per IEC / IEEE 62395-1 Electrical Resistance Trace Heating Systems for Industrial and Commercial Applications

# SRL SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

## NORMAL POWER OUTPUT RATINGS con't.

Thermal Output Ratings on Plastic Pipe with Aluminum Tape



## MAXIMUM CIRCUIT LENGTH

Model	Ambient Temp. at Startup	Maximum Circuit Length in Feet (Meters) per Circuit Breaker											
		120 Vac						208 to 277 Vac*					
		10 A	15 A	20 A	25 A	30 A	40 A	10 A	15 A	20 A	25 A	30 A	40 A
SRL 3	50°F (10°C)	205 (62)	305 (93)	360 (110)	NR	NR	NR	400 (122)	600 (183)	660 (201)	NR	NR	NR
	0°F (-18°C)	135 (41)	200 (61)	270 (81)	330 (101)	360 (110)	NR	275 (84)	415 (126)	555 (169)	600 (201)	NR	NR
	-20°F (-29°C)	120 (37)	185 (56)	245 (75)	300 (91)	360 (110)	NR	245 (75)	370 (113)	495 (151)	600 (183)	660 (201)	NR
SRL 5	50°F (10°C)	125 (38)	185 (56)	260 (76)	270 (82)	NR	NR	250 (75)	375 (114)	505 (154)	540 (165)	NR	NR
	0°F (-18°C)	90 (27)	135 (41)	180 (55)	225 (69)	270 (82)	NR	180 (55)	270 (75)	360 (110)	450 (137)	540 (165)	NR
	-20°F (-29°C)	80 (24)	120 (37)	160 (49)	205 (62)	245 (75)	270 (82)	160 (49)	245 (75)	325 (99)	405 (123)	490 (149)	540 (165)
SRL 8	50°F (10°C)	100 (31)	150 (46)	200 (61)	215 (66)	NR	NR	185 (56)	285 (87)	375 (114)	420 (128)	NR	NR
	0°F (-18°C)	70 (21)	110 (34)	145 (44)	180 (55)	215 (66)	NR	135 (41)	200 (61)	265 (81)	335 (102)	395 (120)	420 (128)
	-20°F (-29°C)	65 (20)	100 (31)	130 (40)	165 (50)	200 (61)	210 (64)	120 (37)	175 (53)	235 (72)	300 (91)	350 (107)	420 (128)
SRL 10	50°F (10°C)	60 (18)	95 (29)	130 (40)	160 (49)	180 (55)	NR	100 (30)	160 (49)	210 (64)	260 (79)	315 (96)	360 (110)
	0°F (-18°C)	50 (15)	80 (24)	105 (32)	130 (40)	155 (47)	180 (55)	80 (24)	125 (38)	170 (52)	210 (64)	255 (78)	340 (104)
	-20°F (-29°C)	45 (14)	70 (21)	95 (29)	120 (37)	140 (43)	180 (55)	75 (23)	120 (37)	160 (49)	195 (59)	240 (73)	320 (98)

\*240 Vac nominal.

# SRL SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

## PRODUCT CHARACTERISTICS

Maximum Bend Radius, in. (mm)	1.125 in. (28.5)
Bus Wire Size	16 AWG
Heating Cable Dimensions WxH, in. (mm)	CT: 0.48 x 0.21 (12.1 x 5.3) CR: 0.50 x 0.23 (12.7 x 5.8)
Weight, lb per 1,000 ft (kg per 300m)	CT: 63 (30) CR: 64 (29)

## CONNECTION KITS

Chromalox has a complete line of accessories specifically designed for use with SRL cable. Use only Chromalox accessories to ensure the performance of the heat trace system, compliance with warranty, codes, and approval requirements.

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

## ORDERING INFORMATION

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



1347 Heil Quaker Blvd  
LaVergne, TN 37086

TECHNICAL SUPPORT  
412-967-3940

email: [sales@chromalox.com](mailto:sales@chromalox.com)  
[www.chromalox.com](http://www.chromalox.com)

\*press 11 to be directed to heat trace support