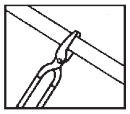
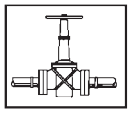
SRM/E

Self-Regulating Medium Temperature

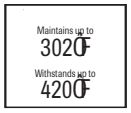
- **Self-Regulating, Energy Efficient**
- **16 AWG Buss Wire**
- **Circuit Lengths to 750 Feet**
- **Process Temperature Maintenance to 302°F (150°C)**
- **Maximum Continuous Exposure Temperature, Power Off, 420°F (215°C)**
- **Industrial Process Maintenance Applications**
- **Industrial Freeze Protection Applications**
- **Single or Dual Monitor Wires Available**
- **Steam Cleanable on Process Equipment Up to 300 PSIG**
- **5, 8, 10, 15 and 20 W/Ft.**
- **120 and 208 - 277 Volt From Stock**
- **Approx. Size 0.47"W x 0.20"H**
- **Minimum Bend Radius 1-1/8"**
- **For Use on Metallic Pipes Only**



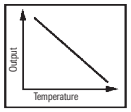
Cut to Length in Field



Can be Overlapped



Medium Temperature



Self Regulating Output

Description

Chromalox SRM/E self-regulating heating cable provides safe, reliable heat tracing for process temperature maintenance and freeze protection of pipes, valves, tanks and similar applications. Constructed of industrial grade 16 AWG buss wire with metal braid and overjacketing, SRM/E ensures operating integrity in most hostile industrial environments. The 420°F (215°C) maximum exposure temperature rating allows steam cleaning of process equipment with up to 300 psig steam.

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.

Features

- Energy efficient, self-regulating SRM/E uses less energy when less heat is required.
- Easy to install, SRM/E 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.
- With lower installed cost than steam tracing, SRM/E features less maintenance expense and downtime.
- SRM/E can be overlapped without burnout, which simplifies heat tracing of in-line process equipment such as valves, elbows and pumps.
- Because SRM/E is self-regulating, overtemperature conditions are minimized.
- Chromalox termination, splice, tee and end seal kits reduce installation time.

Construction

Ⓐ **Twin 16 AWG Copper Buss Wires —** Provide reliable electrical current capability.

Ⓑ **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.

Ⓒ **High Temperature Fluoropolymer Jacket —** Flame retardant, electrically insulates the matrix and provides corrosion resistance.

Ⓓ **Metallic Braid —** Provides additional mechanical protection in any environment and a positive ground path.

Ⓔ **High Temperature Fluoropolymer Overjacket —** Corrosion resistant, flame retardant overjacket is highly effective in hostile, aqueous and chemically active environments. It also protects 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)
- 5 and 8 Watt Rated T3 Temperature Class
- 10, 15, and 20 Watt Rated T2D Temperature Class

*CSA Only
*-CT overjacket only

ATEX Approved:

- Ⓔx CE 2903 IIG Ex e IIC T* Gb Ta -60˚C to 195˚C

IECEx Approved:

- ITS 07.0018X Ex e IIC T3 Gb Ta -60˚C to 195˚C

Note 1 Exception — Cable Surface Temperature shall not exceed 190°C in Class II, Div. 2, Group F; 165°C in Class II, Div. 2 Group G.

TC-E B.V. authorized Chromalox distributor
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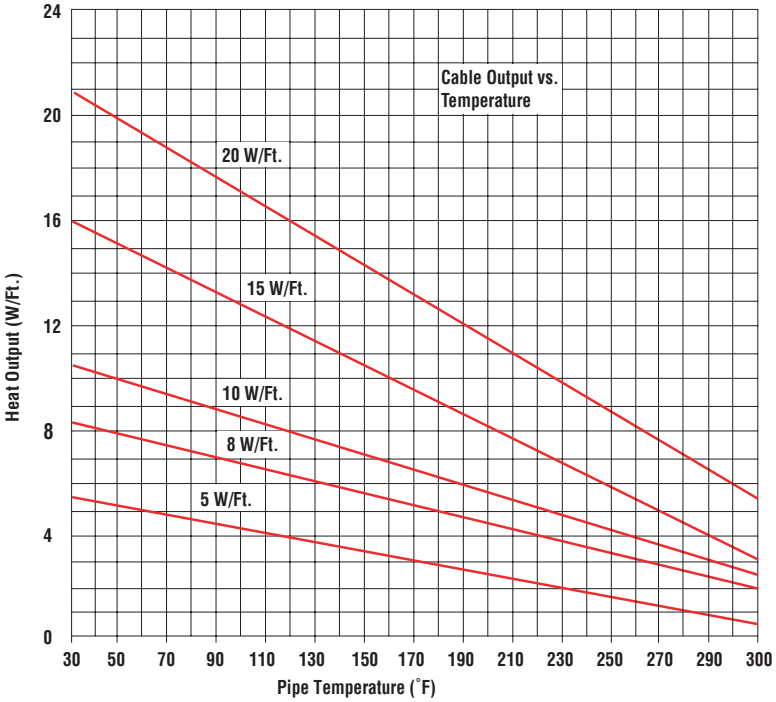
For more information visit www.tc-e.nl

SRM/E
Self-Regulating Medium Temperature *(cont'd.)*

Thermal Output Ratings on Insulated Metal Pipe[1]



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.

Output Wattage at Alternate Voltages (W/Ft.)

Model	208V	% Change In Output	220V	% Change In Output	277V	% Change In Output
SRM/E 5	3.85	-23	4.25	-15	6.45	+23
SRM/E 8	6.4	-20	6.88	-14	10.24	+22
SRM/E 10	8.3	-17	8.80	-12	12.50	+20
SRM/E 15	12.75	-15	13.50	-10	18.45	+19
SRM/E 20	17.6	-12	18.40	-8	24.40	+19

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.)				
	15A	20A	30A	40A	50A	15A	20A	30A	40A	50A	15A	20A	30A	40A	50A
SRM/E 5-1	180	240	360	375	NR	165	220	330	375	NR	155	210	310	375	NR
SRM/E 5-2	360	480	720	750	NR	325	430	645	750	NR	310	415	620	750	NR
SRM/E 8-1	145	190	285	325	NR	135	175	265	325	NR	130	165	250	325	NR
SRM/E 8-2	285	380	575	650	NR	255	345	520	650	NR	245	335	490	650	NR
SRM/E 10-1	95	125	190	250	NR	90	110	175	250	NR	85	100	170	245	250
SRM/E 10-2	190	255	385	490	NR	165	225	345	490	NR	155	215	330	470	490
SRM/E 15-1	70	95	145	190	210	65	85	125	165	210	60	80	120	150	210
SRM/E 15-2	145	190	290	385	420	120	175	270	360	420	115	165	260	340	420
SRM/E 20-1	60	75	115	155	160	50	65	105	140	160	45	65	100	135	160
SRM/E 20-2	115	155	230	305	350	100	135	200	270	350	90	130	195	255	335

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.

SRM/E
Self-Regulating Medium Temperature *(cont'd.)*

Ordering Information

Output (W/Ft.)	Volts	Model	Stock	PCN	Wt./1000' (Lbs.)
5 @ 50°F	120	**SRM/E 5-1CT**	**S**	**388092**	100
	208 - 277	**SRM/E 5-2CT**	**S**	**388121**	100
8 @ 50°F	120	**SRM/E 8-1CT**	**S**	**388156**	100
	208 - 277	**SRM/E 8-2CT**	**S**	**388180**	100
10 @ 50°F	120	**SRM/E 10-1CT**	**S**	**388210**	100
	208 - 277	**SRM/E 10-2CT**	**S**	**388244**	100
15 @ 50°F	120	**SRM/E 15-1CT**	**S**	**388279**	100
	208 - 277	**SRM/E 15-2CT**	**S**	**388316**	100
20 @ 50°F	120	**SRM/E 20-1CT**	**S**	**388340**	100
	208 - 277	**SRM/E 20-2CT**	**S**	**388375**	100

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-TST
End Seal	For terminating cable	UES	RTES	N/A
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.*

Model	Self-Regulating Medium Temperature
SRM/E	Self-Regulating, Medium Temperature Enhanced Heating Cable

Code	Output (W/Ft.)
5	Five
8	Eight
10	Ten
15	Fifteen
20	Twenty

Code	Voltage
1	120
2	208 - 277

Code	Overjacket Options
CT	Fluoropolymer corrosion resistant overjacket over braid for hostile/ corrosive environments

SRM/E	**8**	**-**	**1**	**CT**	**Typical Model Number**