

## HSRM Self-Regulating Medium Temperature

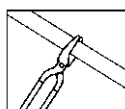
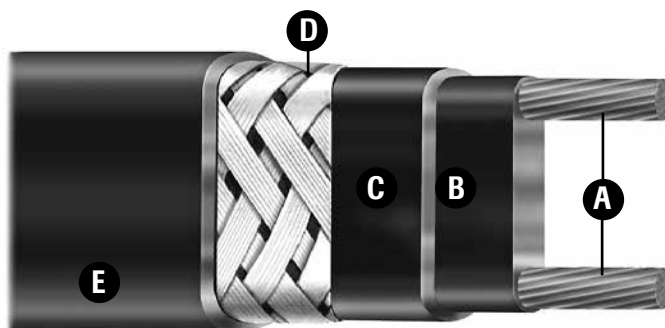
- Self-Regulating, Energy Efficient
- 16 AWG Buss Wire
- Circuit Lengths to 750 Feet
- Process Temperature Maintenance to 302°F (150°C)
- Maximum Continuous Exposure Temperature, Power Off, 420°F (215°C)
- Freeze Protection of Fire Protection System Piping
- Available in 5, 8, 10, 15 and 20 Watts per Foot
- 120 and 208-277 Volts Available
- Division 1 Hazardous Locations
- Approximate Size 3/8"W x 1/8"H
- Minimum Bend Radius 1-1/8"
- For Use on Metallic Pipes Only

### Description

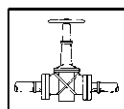
Chromalox HSRM self-regulating heating cable provides safe, reliable heat tracing for freeze protection of pipes, valves, tanks and similar applications. Constructed of industrial grade 16 AWG buss wire with a tinned copper braid and fluoropolymer overjacket, HSRM ensures operating integrity in Div. 1 hazardous environments. HSRM heating cable has a maximum maintenance temperature rating of 302°F (150°C) and a maximum exposure temperature of 420°F (215°C).

**Note:** Due to the nature of Division 1 hazardous location applications consultation with a factory representative is required.

**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.



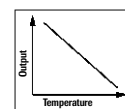
Cut to Length  
in Field



Can be  
Overlapped



Medium Tem-  
perature



Self Regulating  
Output

### Features

- Energy efficient, self-regulating HSRM uses less energy when less heat is required.
- Easy to install, HSRM can be cut to any length (up to max circuit length) in the field.
- HSRM features lower installed cost than steam tracing, less maintenance expense and less down time.
- HSRM can be overlapped without burnout, which simplifies heat tracing of in-line process equipment such as valves, elbows and pumps.
- Chromalox HL Connection Kits reduce installation time.

### Construction

- A Twin 16 AWG Copper Buss Wires**— Provide reliable electric 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 Fluoropolymer Jacket**— Flame retardant electrically insulates the matrix and provides corrosion resistance.

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

**E High Temperature Fluoropolymer Overjacket**— Corrosion resistant, flame retardant overjacket is highly effective in many environments. Protects against exposure to organic or corrosive solutions. The overjacket also protects against abrasion and impact damage.

### Approvals

#### FM Approved

- Class I, Division 1, Groups B, C, D
- Class II, Division 1, Groups E, F, G
- Class III, Division 1
- 5 and 8 Watt rated T3C Temperature Class
- 10 Watt rated T3A Temperature Class
- 15 and 20 Watt rated T2C Temperature Class

#### CSA Approved

- Class I, Division 1, Groups B, C, D
- Class II, Division 1, Groups E, F, G
- 5 and 8 Watt rated T3C Temperature Class
- 10 Watt rated T3A Temperature Class
- 15 and 20 Watt rated T2C Temperature Class



THORNE &  
DERRICK  
INTERNATIONAL Thorne & Derrick  
+44 (0) 191 410 4292  
www.heatingandprocess.com

# Heating Cable

## HSRM

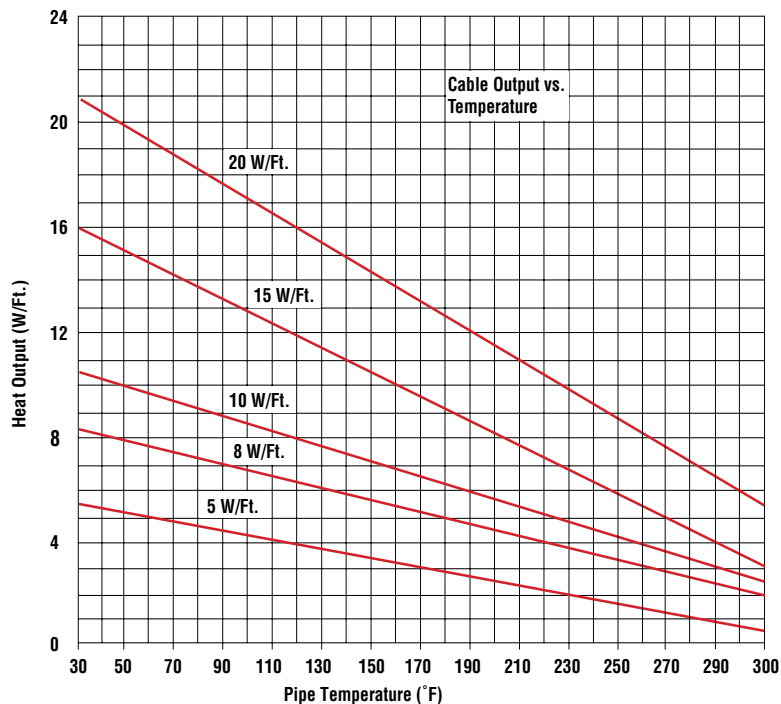
Self-Regulating  
Medium Temperature

(cont'd.)

Thorne & Derrick  
+44 (0) 191 410 4292  
www.heatingandprocess.com



### 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.

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

Model	208V	% Change In Output	220V	% Change In Output	277V	% Change In Output
HSRM 5	3.85	-23	4.25	-15	6.45	+23
HSRM 8	6.4	-20	6.88	-14	10.24	+22
HSRM 10	8.3	-17	8.80	-12	12.50	+20
HSRM 15	12.75	-15	13.50	-10	18.45	+19
HSRM 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
HSRM 5-1	180	240	360	375	NA	165	220	330	375	NA	155	210	310	375	NA
HSRM 5-2	360	480	720	750	NA	325	430	645	750	NA	310	415	620	750	NA
HSRM 8-1	145	190	285	325	NA	135	175	265	325	NA	130	165	250	325	NA
HSRM 8-2	285	380	575	650	NA	255	345	520	650	NA	245	335	490	650	NA
HSRM 10-1	95	125	190	250	NA	90	110	175	250	NA	85	100	170	245	250
HSRM 10-2	190	255	385	490	NA	165	225	345	490	NA	155	215	330	470	490
HSRM 15-1	70	95	145	190	210	65	85	125	165	210	60	80	120	150	210
HSRM 15-2	145	190	290	385	420	120	175	270	360	420	115	165	260	340	420
HSRM 20-1	60	75	115	155	160	50	65	105	140	160	45	65	100	135	160
HSRM 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.

# Heating Cable

## HSRM

Self-Regulating  
Medium Temperature

(cont'd.)

Thorne & Derrick  
+44 (0) 191 410 4292  
www.heatingandprocess.com

THORNE &  
DERRICK  
INTERNATIONAL



### Ordering Information

Output (W/Ft.)	Volts	Model	Stock	PCN	Wt./1000' (Lbs.)
5 @ 50°F	120	HSRM5-1CT	S	382176	80
	208 - 277	HSRM5-2CT	S	382168	80
8 @ 50°F	120	HSRM8-1CT	S	382150	80
	208 - 277	HSRM8-2CT	S	382141	80
10 @ 50°F	120	HSRM10-1CT	S	382133	80
	208 - 277	HSRM10-2CT	S	382125	80
15 @ 50°F	120	HSRM15-1CT	S	382117	80
	208 - 277	HSRM15-2CT	S	382109	80
20 @ 50°F	120	HSRM20-1CT	S	382096	80
	208 - 277	HSRM20-2CT	S	382088	80

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

### Accessories

Description	Model	
Power Connection	Heat trace to electrical service connection	HL-PC
T- Splice	Electrical connection for 3 circuits	HL-T
In-Line Splice	Electrical connection for 2 circuits	HL-S
End Seal	For terminating cable	HL-ES
Thermostat	Ambient air sensing thermostat	TXL
	Line sensing mechanical thermostat	TXR E-122

**To Order** — Please refer to HL Connection Accessories page.

### Ordering Information

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

**Note** — Due to the nature of Division 1 hazardous location applications consultation with a factory representative is required.

Model	Hazardous Location Self-Regulating Medium Temperature	
HSRM	Self-Regulating, Medium Temperature Heating Cable	
	<b>Code</b>	<b>Output (W/Ft.)</b>
	5	Five
	8	Eight
	10	Ten
	15	Fifteen
	20	Twenty
	<b>Code</b>	<b>Voltage</b>
	1	120
	2	240
	<b>Code</b>	<b>Standard Braid &amp; Overcoat Options</b>
	CT	Tinned copper braid for ground path fluoropolymer overjacket specifically tested for Division I environments
HSRM	8	-
	1	CT
	<b>Typical Model Number</b>	

SELF-REGULATING