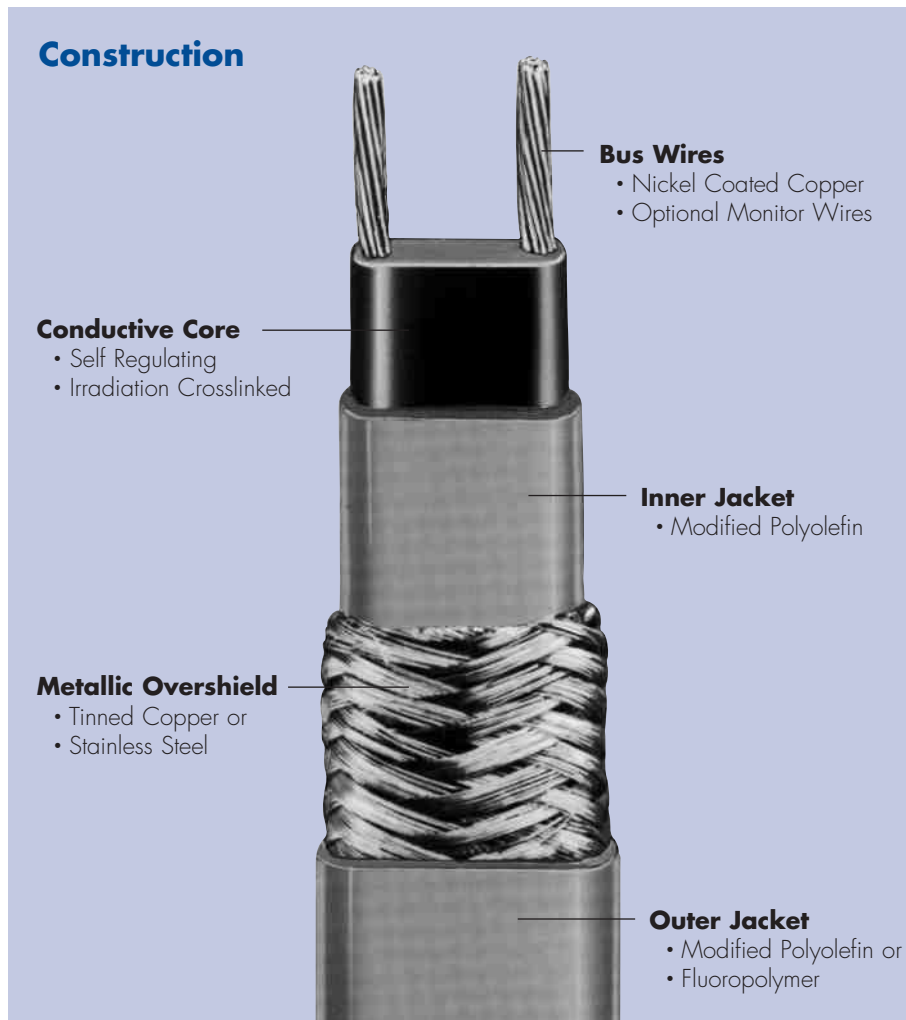


2700 Series

Self-Regulating Heating Cable



Construction



Description

The 2700 series of self-regulating heating cables are designed to supply a specified amount of heat at any point along their length in direct response to local temperature variations. These cables can maintain temperatures up to 150°F (65°C) and survive intermittent exposure up to 185°F (85°C) with power applied.

2700 cables can be cut to length and terminated in the field, and will not overheat or burnout when overlapped.

Applications

The industrial grade 2700 cables provide freeze protection and process temperature maintenance for fluid transport and storage systems. The bus wires, jackets and metallic braids can be configured for both ordinary (non-classified) and hazardous (classified) locations, including areas where exposure to corrosive or organic materials is possible.

Performance Ratings

Output wattage:

3, 5, 8, 10 w/ft @ 50°F

Supply voltages:

110 - 120 or 208V - 277Vac

Continuous maintenance temperature:

150°F (65°C) max

Intermittent exposure temperature:

185°F (85°C) max

T Rating*:

T-5 (10 w/ft), T-6 (3, 5, 8 w/ft)

Braid resistance:

Tinned copper: 0.003 Ω /ft

Stainless steel: 0.125 Ω /ft

*T-Rating per the 1999 NEC, Tables 500-5(d) and verified by FM and CSA.

Approvals/Certifications

Factory Mutual:

Ordinary locations

Hazardous locations

Class I, Div 1* / 2, Groups B, C, D

Class II, Div 2, Groups F, G

Class III, Div 1* and 2

CSA:

Ordinary locations STD. 130-03, -G, -W, -S

Hazardous locations

Class I, Div 1* / 2, Groups A,B,C,D

Class II, Div 1* / 2, Groups E, F, G

Class III, Div 1* and 2

UL:

Roof and Gutter

Hot Water Maintenance

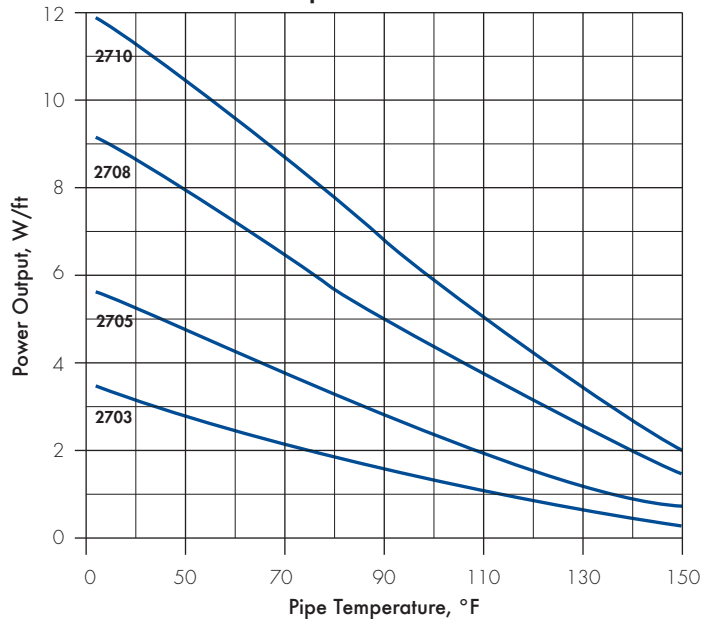
SEMCO - (CE mark):

2700 Series

Self-Regulating Heating Cable



Power Output Curves - 2700 Series



Product Ordering Information

(Example Shown: 5 watt 120volt, tinned copper braid)

Series 27 = 2700

Output 05 = 5w
03 = 3w
08 = 8w
10 = 10w

Voltage 1 = 120V
2 = 240V

Class 1 = Ord./Div. 2
3 = Ord./Div. 2 w/ monitor wires
4 = Class 1, Div. 1

Braid Option C = Tinned Copper
S = Stainless Steel
T = Tinned Copper w/Fluoropolymer Jacket
R = Tinned Copper w/Modified Polyolefin Jacket

Reserved 00

120 Volt Breaker Sizing vs. Max Circuit Length (FT)

	15A	20A	30A	40A
2703-1 If started at: 50°F	300	—	—	—
0°F	200	270	330	—
-20°F	180	230	330	—
2705-1 If started at: 50°F	230	270	—	—
0°F	150	200	270	—
-20°F	130	175	260	270
2708-1 If started at: 50°F	150	200	210	—
0°F	95	125	190	210
-20°F	85	100	170	210
2710-1 If started at: 50°F	115	150	180	—
0°F	70	95	145	180
-20°F	60	85	120	165

240 Volt Breaker Sizing vs. Max Circuit Length (FT)

	15A	20A	30A	40A
2703-2 If started at: 50°F	660	—	—	—
0°F	410	560	660	—
-20°F	360	480	660	—
2705-2 If started at: 50°F	460	540	—	—
0°F	300	400	540	—
-20°F	260	345	520	540
2708-2 If started at: 50°F	295	390	420	—
0°F	195	250	375	420
-20°F	170	225	340	420
2710-2 If started at: 50°F	230	305	360	—
0°F	150	200	300	360
-20°F	130	175	260	360

NOTE: Recommended circuit breakers to minimize the effect of transit start-up currents.

Westinghouse: Types BA, EB, EHB, FB, HFB. **General Electric:** E100 Type TEB, E150, Types TED, THED. **Square D:** Types EH, FAIF. The National Electric Code requires ground fault protection of equipment for each branch circuit supplying electrical heating cables or devices.

Power Adjustment Factor

Part No.	208 Volts	277 Volts
2703-2	.75	1.28
2705-2	.86	1.16
2708-2	.91	1.10
2710-2	.93	1.08

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