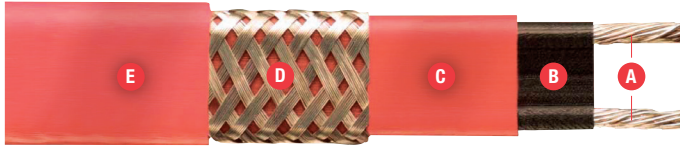


PRODUCT OVERVIEW


- A** Twin 16 AWG Copper Bus Wires
- B** Semiconductive Polymer Core Matrix
- C** High-Temperature Fluoropolymer Jacket
- D** Metallic Braid
- E** High Temperature Fluoropolymer Overjacket (Optional)

Chromalox® CPM self-regulating medium-temperature heating cable provides the most versatility in commercial process heat trace designs and applications, delivering safe, reliable heat tracing for caustic soda, diesel fuel, grease waste and freeze protection 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 area applications.

DESCRIPTION

The heating cable consists of two (2) 16 AWG nickel-plated copper bus wires embedded in a self-regulating polymeric core that controls power output so that the cable can be used directly on metal pipes and tanks. A flame-retardant, high-temperature fluoropolymer jacket electrically insulates the matrix and bus wires and provides cor-

rosion resistance. A metallic braid covering serves added mechanical protection in any environment and a positive ground path. The high-temperature fluoropolymer overjacket provides additional protection in most hostile, chemically active environments and against abrasion and impact damage.

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

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 302°F (150°C)

Maximum Exposure Temperature, Power Off 420°F (215°C)

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

CPM SELF-REGULATING MEDIUM-TEMPERATURE HEATING CABLE

APPROVALS



• Ordinary Areas

DESIGN AND INSTALLATION

For proper design and installation, use ChromaTrace Heat Trace Project Design Software. Additional resources include the Pipe Heat Tracing Design Worksheet (PJ305),

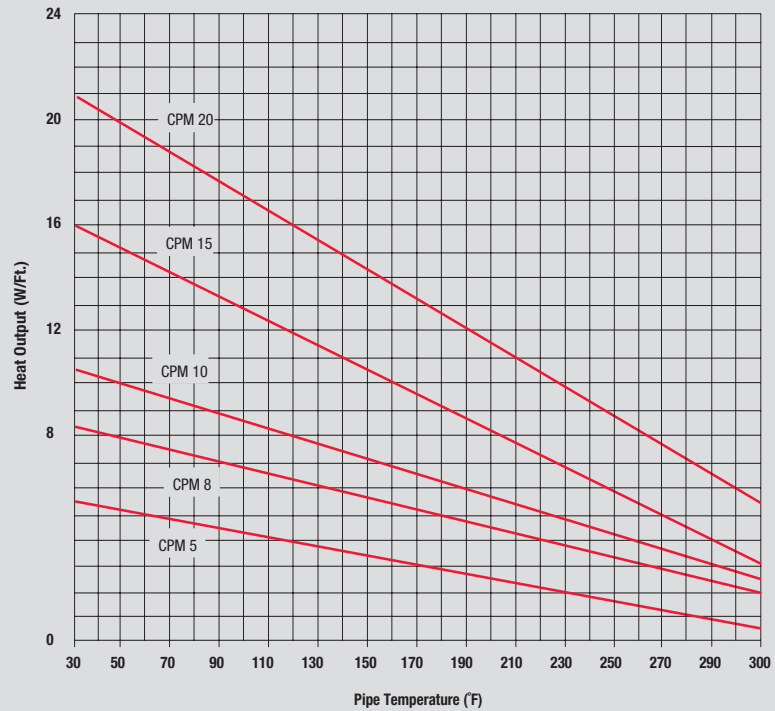
and Chromalox Commercial Heating Cable Products Installation Instructions (PJ970). These resources are available on the Chromalox website, www.chromalox.com.

NOMINAL POWER OUTPUT RATINGS

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

Model	208 V	% Change in Output	220 V	% Change in Output	277 V	% Change in Output
CPM 5-2	3.85 (12.63)	-23	4.25 (13.94)	-15	6.45 (21.16)	+22
CPM 8-2	6.40 (20.99)	-20	6.88 (22.57)	-14	10.24 (33.59)	+22
CPM 10-2	8.30 (27.22)	-17	8.80 (28.86)	-12	12.50 (41.00)	+20
CPM 15-2	12.75 (41.82)	-15	13.50 (44.28)	-10	18.45 (60.52)	+19
CPM 20-2	17.60 (57.73)	-12	18.40 (60.35)	-8	24.40 (80.03)	+18

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

CPM SELF-REGULATING MEDIUM-TEMPERATURE HEATING CABLE

MAXIMUM CIRCUIT LENGTHS

Model	Ambient Temperature at Startup	Maximum Circuit Length in Feet (Meters) per Circuit Breaker							
		120 Vac				208 to 277 Vac*			
		15 A	20 A	30 A	40 A	15 A	20 A	30 A	40 A
CPM 5	50°F (10°C)	162 (49.4)	216 (65.8)	324 (98.8)	338 (103)	324 (98.8)	432 (131.7)	648 (197.6)	675 (205.8)
	0°F (-18°C)	149 (45.4)	198 (60.4)	297 (90.5)	338 (103)	293 (89.3)	387 (117.9)	581 (177.1)	675 (205.8)
	-20°F (-29°C)	140 (42.7)	189 (57.6)	279 (85.1)	338 (103)	279 (85.1)	374 (114)	558 (170.1)	675 (205.8)
CPM 8	50°F (10°C)	131 (39.9)	171 (52.1)	257 (78.3)	293 (89.3)	257 (78.3)	342 (104.3)	518 (157.9)	585 (178.3)
	0°F (-18°C)	122 (37.2)	158 (48.2)	239 (72.9)	293 (89.3)	230 (70.1)	311 (94.8)	468 (142.7)	585 (178.3)
	-20°F (-29°C)	117 (35.7)	149 (45.4)	225 (68.6)	293 (89.3)	221 (67.4)	302 (92.1)	441 (134.4)	585 (178.3)
CPM 10	50°F (10°C)	86 (26.2)	113 (34.4)	171 (52.1)	225 (68.6)	171 (52.1)	230 (70.1)	347 (105.8)	441 (134.4)
	0°F (-18°C)	81 (24.7)	99 (30.2)	158 (48.2)	225 (68.6)	149 (45.4)	203 (61.9)	311 (94.8)	441 (134.4)
	-20°F (-29°C)	77 (23.5)	90 (27.4)	153 (46.6)	221 (67.4)	140 (42.7)	194 (59.1)	297 (90.5)	423 (128.9)
CPM 15	50°F (10°C)	63 (19.2)	86 (26.2)	131 (39.9)	171 (52.1)	131 (39.9)	171 (52.1)	261 (79.6)	347 (105.8)
	0°F (-18°C)	59 (17.9)	77 (23.5)	113 (34.4)	149 (45.4)	108 (32.9)	158 (48.2)	243 (74.1)	324 (98.8)
	-20°F (-29°C)	54 (16.5)	72 (21.9)	108 (32.9)	135 (41.1)	104 (31.7)	149 (45.4)	234 (71.3)	306 (93.3)
CPM 20	50°F (10°C)	54 (16.5)	68 (20.7)	104 (31.7)	140 (42.7)	104 (31.7)	140 (42.7)	207 (63.1)	275 (83.8)
	0°F (-18°C)	45 (13.7)	59 (17.9)	95 (28.9)	126 (38.4)	90 (27.4)	122 (37.2)	180 (54.9)	243 (74.1)
	-20°F (-29°C)	41 (12.5)	59 (17.9)	90 (27.4)	122 (37.2)	81 (24.7)	117 (35.7)	176 (53.6)	230 (70.1)

*240 Vac nominal.

CPM SELF-REGULATING MEDIUM-TEMPERATURE HEATING CABLE

PRODUCT CHARACTERISTICS

Minimum Bend Radius, in. (mm)	1.125 (28.5)
Bus Wire Size	16 AWG
Heating Cable Dimensions WxH, in. (mm)	0.48 x 0.21 (12.1 x 5.3)
Weight, lb per 1,000 ft (kg per 300 m)	100 (45)

CONNECTION KITS

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

Accessories		EL Series	DL Series
Power Connection	Heat trace to electrical service connection	N/A	RTPC
Splice & Tee		RT-TST	RTST
End Seal	For terminating cable	N/A	RTES
Lighted End Seal		N/A	RTST-SL
Thermostat	Ambient air sensing thermostat	TPR	RTAS
	Line sensing mechanical thermostat	TPR	RTBC

ORDERING INFORMATION

Model	Volts	Output (W/ft.)	PCN
CPM 5-1CT	120	5 @ 50F	514298
CPM 5-2CT	208-277	5 @ 50F	514300
CPM 8-1CT	120	8 @ 50F	514319
CPM 8-2CT	208-277	8 @ 50F	514327
CPM 10-1CT	120	10 @ 50F	514335
CPM 10-2CT	208-277	10 @ 50F	514343
CPM 15-1CT	120	15 @ 50F	514351
CPM 15-2CT	208-277	15 @ 50F	514360
CPM 20-1CT	120	20 @ 50F	514378
CPM 20-2CT	208-277	20 @ 50F	514386



1347 Heil Quaker Blvd
LaVergne, TN 37086

TECHNICAL SUPPORT
412-967-3940

email: sales@chromalox.com
www.chromalox.com

*press 1 to be directed to heat trace support