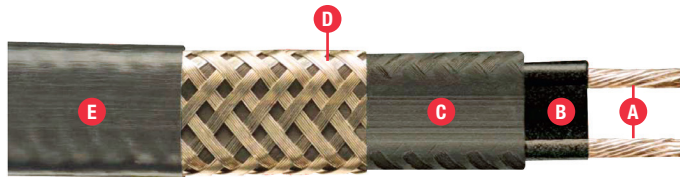


PRODUCT OVERVIEW



- A** Twin 16 AWG Nickel-Plated 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 CPR Cable is a multi-purpose heating cable designed for commercial pipe tracing, roof & gutter deicing, embedded floor warming, and frost heave prevention. Chromalox's CPR Cable is constructed of a self-regulating polymer core that varies its heat output based on sensed temperature along its entire length. It can be easily cut to length, spliced, tee-branched and terminated to more easily follow piping networks. In addition to insulated surfaces, Chromalox's CPR Heating Cable can be used on roofs and in gutters to prevent Ice Dams and provide a path for the melt water to excavate the roof surface. Chromalox's CPR Heating Cable can be placed in conduit and embedded in concrete to prevent frost heave or placed onto concrete slabs for supplemental comfort heat.

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 Acids or bases (Fluoropolymer overjacket)

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)

APPROVALS

-  • Ordinary Areas*
- See schedule for specific model
- *Roof and gutter, fire suppression system piping and grease waste flow maintenance. For fire sprinkler supply and branch line piping freeze protection, CPR is certified by UL for metallic but not plastic piping
-  • Ordinary Areas

CPR SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

DESIGN & 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

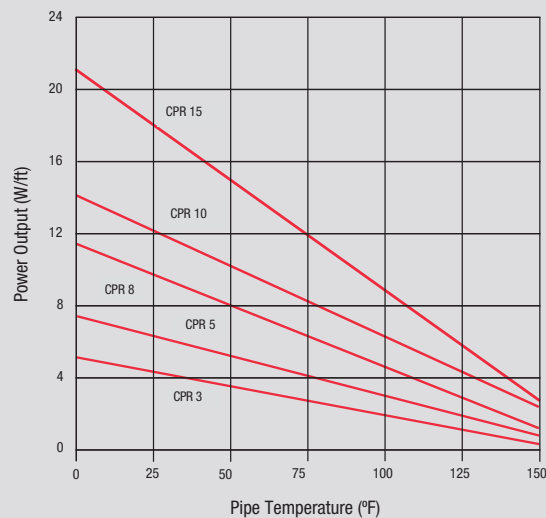
Output Wattage at Alternate voltages, 50°F (10°C), W/ft (W/m)

Model	208V	% Change in Output	220V	% Change in Output	277V	% Change in Output
CPR 3-2	2.4 (7.87)	-20	2.6 (8.53)	-13	3.4 (11.15)	+15
CPR 5-2	4.1 (13.45)	-18	4.5 (14.76)	-10	5.6 (18.37)	+13
CPR 8-2	6.88 (22.57)	-14	7.28 (23.88)	-9	8.96 (29.39)	+12
CPR 10-2	8.7 (28.54)	-13	9.2 (30.18)	-8	11.1 (36.41)	+10
CPR 15-2	13.2	-12	13.95 (30)	-8	16.2 (53.1)	+8

Output Wattage in Snow at Alternate voltages, W/ft (W/m)

Model	Rated @ 50F (10C) in Air			Rated @ 32F (0C) in Air		
	208V	240V	277V	208V	240V	277V
CPR 5-2	4.1 (13.4)	5.0 (16.4)	5.6 (18.4)	7.57 (24.8)	8.8 (28.9)	11.5 (37.7)
CPR 8-2	6.88 (22.6)	8.0 (26.2)	8.96 (29.4)	15.65 (51.3)	18.2 (59.7)	21.9 (71.8)
CPR 10-2	8.7 (28.5)	10.0 (32.8)	11.1 (36.4)	20.88 (68.5)	24.0 (78.7)	28.0 (91.8)
CPR 15-2	13.2 (43.3)	15.0 (49.2)	16.2 (53.1)	38.42 (93.2)	32.3 (105.9)	36.1 (118.4)

Thermal Output Ratings on Insulated Metal Pipe*

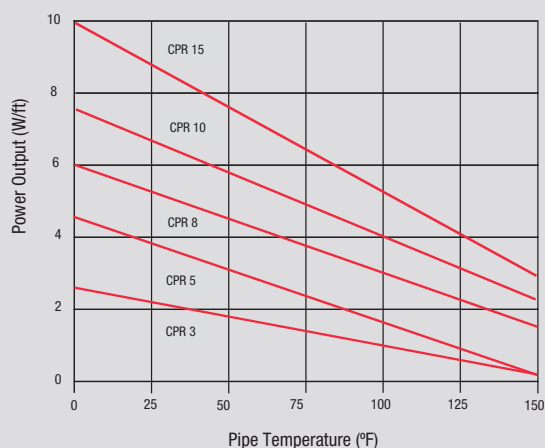


*Thermal output is determined per IEC / IEEE 62395-1 Electrical Resistance Trace Heating Systems for Industrial and Commercial Applications

CPR SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

**NOMINAL POWER
OUTPUT RATINGS
con't.**

Thermal Output Ratings on Plastic Pipe with Aluminum Tape



MAXIMUM CIRCUIT LENGTHS

**Grease Flow Maintenance
& Pipe Freeze Protection**

Model	Ambient Temp. 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
CPR 3	65°F (18°C)	350 (106.7)	440 (134.1)	440 (134.1)	440 (134.1)	680 (207.3)	800 (243.9)	825 (251.5)	825 (251.5)
	50°F (10°C)	305 (93.0)	360 (109.8)	360 (109.8)	360 (109.8)	525 (160.1)	660 (201.2)	660 (201.2)	660 (201.2)
	40°F (4°C)	265 (80.8)	350 (106.7)	360 (109.8)	360 (109.8)	525 (160.1)	660 (201.2)	660 (201.2)	660 (201.2)
	20°F (-7°C)	220 (67.1)	290 (88.4)	360 (109.8)	360 (109.8)	440 (134.1)	585 (178.4)	660 (201.2)	660 (201.2)
	0°F (-18°C)	200 (61.0)	266 (81.1)	360 (109.8)	360 (109.8)	415 (126.5)	553 (168.6)	660 (201.2)	360 (109.8)
	-20°F (-29°C)	180 (54.9)	238 (72.6)	340 (103.7)	350 (106.7)	368 (112.2)	489 (149.1)	628 (191.5)	643 (196.0)
	-40°F (40°C)	160 (48.8)	210 (64.0)	320 (97.6)	340 (103.7)	320 (97.6)	425 (129.6)	595 (181.4)	625 (190.5)
CPR 5	65°F (18°C)	205 (62.5)	279 (85.1)	300 (91.5)	300 (91.5)	410 (125.0)	550 (167.7)	620 (189.0)	620 (189.0)
	50°F (10°C)	185 (56.4)	250 (76.2)	270 (82.3)	270 (82.3)	375 (114.3)	505 (154.0)	540 (164.6)	540 (164.6)
	40°F (4°C)	170 (51.8)	226 (68.9)	270 (82.3)	270 (82.3)	340 (103.7)	450 (137.2)	540 (164.6)	540 (164.6)
	20°F (-7°C)	150 (45.7)	200 (61.0)	270 (82.3)	270 (82.3)	300 (91.5)	400 (122.0)	540 (164.6)	540 (164.6)
	0°F (-18°C)	135 (41.2)	180 (54.9)	270 (82.3)	270 (82.3)	270 (82.3)	360 (109.8)	540 (164.6)	540 (164.6)
	-20°F (-29°C)	120 (36.6)	160 (48.8)	240 (73.2)	248 (75.6)	243 (74.1)	323 (98.5)	485 (147.9)	525 (160.1)
	-40°F (40°C)	105 (32.0)	140 (42.7)	210 (64.)	225 (68.6)	215 (65.5)	286 (87.2)	430 (131.1)	510 (155.5)

CPR SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

MAXIMUM CIRCUIT LENGTHS

Grease Flow Maintenance
& Pipe Freeze Protection
con't.

Model	Ambient Temp. 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
CPR 8	65°F (18°C)	165 (50.3)	220 (67.1)	240 (73.2)	240 (73.2)	310 (94.5)	425 (129.6)	480 (146.3)	480 (146.3)
	50°F (10°C)	165 (50.3)	220 (67.1)	240 (73.2)	240 (73.2)	285 (86.9)	375 (114.3)	420 (128.0)	420 (128.0)
	40°F (4°C)	135 (41.2)	180 (54.9)	215 (65.5)	215 (65.5)	270 (82.3)	330 (100.6)	420 (128.0)	420 (128.0)
	20°F (-7°C)	115 (35.1)	153 (46.6)	215 (65.5)	215 (65.5)	235 (71.6)	310 (94.5)	420 (128.0)	420 (128.0)
	0°F (-18°C)	110 (33.5)	145 (44.2)	215 (65.5)	215 (65.5)	200 (61.0)	265 (80.8)	395 (120.4)	420 (128.0)
	-20°F (-29°C)	98 (29.9)	129 (39.3)	193 (58.8)	205 (62.5)	188 (57.3)	238 (72.6)	355 (108.2)	410 (125.0)
	-40°F (40°C)	85 (25.9)	113 (34.5)	170 (51.8)	195 (59.5)	175 (53.4)	210 (64.0)	315 (96.0)	400 (122.0)
CPR 10	65°F (18°C)	105 (32.)	140 (42.7)	190 (57.9)	190 (57.9)	210 (64.0)	230 (70.1)	345 (105.2)	420 (128.0)
	50°F (10°C)	95 (29.0)	130 (39.6)	180 (54.9)	180 (54.9)	160 (48.8)	210 (64.0)	315 (96.0)	360 (109.8)
	40°F (4°C)	90 (27.4)	120 (36.6)	180 (54.9)	180 (54.9)	150 (45.7)	200 (61.0)	300 (91.5)	360 (109.8)
	20°F (-7°C)	85 (25.9)	113 (34.5)	170 (51.8)	180 (54.9)	140 (42.7)	185 (56.4)	280 (85.4)	360 (109.8)
	0°F (-18°C)	80 (24.4)	90 (27.4)	135 (41.2)	180 (54.9)	125 (38.1)	166 (50.6)	250 (76.2)	333 (101.5)
	-20°F (-29°C)	73 (22.3)	88 (26.8)	130 (39.6)	175 (53.4)	118 (36.0)	156 (47.6)	233 (71.0)	313 (95.4)
	-40°F (40°C)	65 (19.8)	85 (25.9)	125 (38.1)	170 (51.8)	110 (33.5)	145 (44.2)	215 (65.5)	293 (89.3)
CPR 15	65°F (18°C)	70 (21.3)	90 (27.4)	145 (44.2)	190 (57.9)	105 (32.0)	150 (45.7)	220 (67.1)	280 (85.4)
	50°F (10°C)	65 (19.8)	85 (25.9)	130 (39.6)	175 (53.4)	100 (30.5)	140 (42.7)	210 (64.0)	265 (80.8)
	40°F (4°C)	60 (18.3)	80 (24.4)	120 (36.6)	160 (48.8)	95 (29.0)	125 (38.1)	190 (57.9)	250 (76.2)
	20°F (-7°C)	55 (16.8)	73 (22.3)	110 (33.5)	146 (44.5)	90 (27.4)	110 (33.5)	180 (54.9)	230 (70.1)
	0°F (-18°C)	53 (16.2)	70 (21.3)	105 (32.0)	140 (42.7)	75 (22.9)	100 (30.5)	150 (45.7)	200 (61.0)
	-20°F (-29°C)	49 (14.9)	65 (19.8)	98 (29.9)	130 (39.6)	70 (21.3)	93 (28.4)	140 (42.7)	187 (57.0)
	-40°F (40°C)	45 (13.7)	60 (18.3)	90 (27.4)	120 (36.6)	45 (13.7)	60 (18.3)	90 (27.4)	120 (36.6)

*240 Vac nominal.

CPR SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

MAXIMUM CIRCUIT LENGTHS

Roof & Gutter

Frost Heave Prevention

Model	Ambient Temp. 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
CPR 3	40°F (4°C)	265 (80.8)	350 (106.7)	360 (109.8)	360 (109.8)	525 (160.1)	660 (201.2)	660 (201.2)	660 (201.2)
	20°F (-7°C)	220 (67.1)	290 (88.4)	360 (109.8)	360 (109.8)	440 (134.1)	585 (178.4)	660 (201.2)	660 (201.2)
	0°F (-18°C)	200 (61.0)	266 (81.1)	360 (109.8)	360 (109.8)	415 (126.5)	553 (168.6)	660 (201.2)	360 (109.8)
	-20°F (-29°C)	180 (54.9)	238 (72.6)	340 (103.7)	350 (106.7)	368 (112.2)	489 (149.1)	628 (191.5)	643 (196.0)
	-40°F (40°C)	160 (48.8)	210 (64.0)	320 (97.6)	340 (103.7)	320 (97.6)	425 (129.6)	595 (181.4)	625 (190.5)
CPR 5	40°F (4°C)	170 (51.8)	226 (68.9)	270 (82.3)	270 (82.3)	340 (103.7)	450 (137.2)	540 (164.6)	540 (164.6)
	20°F (-7°C)	150 (45.7)	200 (61.0)	270 (82.3)	270 (82.3)	300 (91.5)	400 (122.0)	540 (164.6)	540 (164.6)
	0°F (-18°C)	135 (41.2)	180 (54.9)	270 (82.3)	270 (82.3)	270 (82.3)	360 (109.8)	540 (164.6)	540 (164.6)
	-20°F (-29°C)	120 (36.6)	160 (48.8)	240 (73.2)	248 (75.6)	243 (74.1)	323 (98.5)	485 (147.9)	525 (160.1)
	-40°F (40°C)	105 (32.0)	140 (42.7)	210 (64.)	225 (68.6)	215 (65.5)	286 (87.2)	430 (131.1)	510 (155.5)
CPR 8	40°F (4°C)	135 (41.2)	180 (54.9)	215 (65.5)	215 (65.5)	270 (82.3)	330 (100.6)	420 (128.0)	420 (128.0)
	20°F (-7°C)	115 (35.1)	153 (46.6)	215 (65.5)	215 (65.5)	235 (71.6)	310 (94.5)	420 (128.0)	420 (128.0)
	0°F (-18°C)	110 (33.5)	145 (44.2)	215 (65.5)	215 (65.5)	200 (61.0)	265 (80.8)	95 (20.4)	420 (128.0)
	-20°F (-29°C)	98 (29.9)	129 (39.3)	193 (58.8)	205 (62.5)	188 (57.3)	238 (72.6)	355 (108.2)	410 (125.0)
	-40°F (40°C)	85 (25.9)	113 (34.5)	170 (51.8)	195 (59.5)	175 (53.4)	210 (64.0)	315 (96.0)	400 (122.0)
CPR 10	40°F (4°C)	90 (27.4)	120 (36.6)	180 (54.9)	180 (54.9)	150 (45.7)	200 (61.0)	300 (91.5)	360 (109.8)
	20°F (-7°C)	85 (25.9)	113 (34.5)	170 (51.8)	180 (54.9)	140 (42.7)	185 (56.4)	280 (85.4)	360 (109.8)
	0°F (-18°C)	80 (24.4)	90 (27.4)	135 (41.2)	180 (54.9)	125 (38.1)	166 (50.6)	250 (76.2)	333 (101.5)
	-20°F (-29°C)	73 (22.3)	88 (26.8)	130 (39.6)	175 (53.4)	118 (36.0)	156 (47.6)	233 (71.0)	313 (95.4)
	-40°F (40°C)	65 (19.8)	85 (25.9)	125 (38.1)	170 (51.8)	110 (33.5)	145 (44.2)	215 (65.5)	293 (89.3)

SRL SELF-REGULATING LOW-TEMPERATURE HEATING CABLE

PRODUCT CHARACTERISTICS

Maximum 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 300m)	CPR CT 66 (30) CPR CR (64 (29)

CONNECTION KITS

Chromalox has a complete line of accessories specifically designed for use with CPR cable. Use only Chromalox accessories to ensure

the performance of the heat trace system, compliance with warranty, codes, and approval requirements.

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

ORDERING INFORMATION

Model	Volts	Output (W/Ft.)	PCN
CPR 3-1 CT	120	3 @ 50°F	512209
CPR 3-1 CR		3 @ 50°F	512102
CPR 3-2 CT	208 - 277	3 @ 50°F	512217
CPR 3-2 CR		3 @ 50°F	512110
CPR 5-1 CT	120	5 @ 50°F	512225
CPR 5-1 CR		5 @ 50°F	512129
CPR 5-2 CT	208 - 277	5 @ 50°F	512233
CPR 5-2 CR		5 @ 50°F	512137
CPR 8-1 CT	120	8 @ 50°F	512241
CPR 8-1 CR		8 @ 50°F	512145
CPR 8-2 CT	208 - 277	8 @ 50°F	512250
CPR 8-2 CR		8 @ 50°F	512153
CPR 10-1 CT	120	10 @ 50°F	512268
CPR 10-1 CR		10 @ 50°F	512161
CPR 10-2 CT	208 - 277	10 @ 50°F	512276
CPR 10-2 CR		10 @ 50°F	512170
CPR 15-1 CT	120	15 @ 50°F	512284
CPR 15-1 CR		15 @ 50°F	512188
CPR 15-2 CT	208 - 277	15 @ 50°F	512292
CPR 15-2 CR		15 @ 50°F	512196



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