

# BH-CRG - Self-Regulating Heating Cable

BH-CRG Heating Cables are designed for freeze protection of metal and plastic pipes and tanks in building and construction market applications. BH-CRG Cables are also designed and approved for use in roof & gutter de-icing applications. The semiconductive polymer core changes its power output versus pipe temperature to optimize power usage and prevent overheating. The cables are designed for extended service life, are third-party tested and approved to strict industry standards for building and construction market applications. Cables are available from stock for same-day shipment.

#### **SPECIFICATIONS**

- Self-Regulating Power Output
- Continuous Maintenance Temperature
  - •150°F (65°C) Max
- Maximum Exposure Temperature
  - •185°F (85°C) Max
- Output Wattage (pipe application)
  - •5 & 10 W/FT @ 50°F
  - •16 & 33 W/M @ 10°C
- Output Wattage (roof and gutter)
  - •12 W/FT in snow/ice (32°F)
- Supply Voltage
  - •120. 208-277 VAC
- Size = 1/2" W x 1/4" H
- Minimum Bend Radius = 1 1/8"
- Minimum Install Temperature
  - •-40°F (-40°C)
- · Cut to Length and terminate in the field
- Can be overlapped without burnout





# **CONSTRUCTION**

- A. 16 AWG Nickel Plated Copper Buss Wires
- B. Radiation Cross Linked Polymer Heater Core
- C. Flame Retardant, UV Stabilized Polyolefin Jacket
- D. Tinned Copper Braid
- E. Modified Polyolefin Outer Jacket
  - •UV Stabilized
  - •Flame Retardant
  - •Protects Cable against aqueous inorganic Chemicals

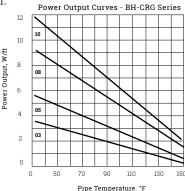
# **APPROVALS**



**UL Pipe Heating Cable**Roof and Gutter De-icing

## POWER OUTPUT CURVES

Power Output Curves shown below apply to cables used at service voltages shown below on insulated metal pipes. For Plastic pipe installation derate cable power output by 35% and use aluminum tape installation method. For other applications contact Brasch.



Power Adjustment Factor							
Model	208 Volts	277 Volts					
BH-CRG05-2	0.86	1.16					
BH-CRG10-2	0.93	1.08					

## **CONNECTION ACCESSORIES**

All Cables require power connection and end seal terminations as a minimum to comply with third party requirements. Brasch offers accessories to provide trouble free easy installation and maximum cable circuit life.

Accessories - Ordinary Area					
Description	Model				
Power Connection Kit - Hot Water Maintenance, no enclosure (end seal not included in kit)	BH-PCA-HW				
End seal (Hot Water Maintenance)	BH-ESA-ES				
Power Connection Kit - Roof & Gutter, no enclosure (end seal included in kit)	BH-PCA-RG2				
Splice/Tee Connection (10/pk)	BH-SPTA-1				
Roof & Gutter - Roof Clips (25/pk)	RC-RG				
Roof & Guter - Downspout Hangar (10/pk)	DS-RG				
Thermostat - Ambient Sense (same)	HTTS-A				
Thermostat - Line Sense (same)	HTTS-L				
Application Tape (same)	HTFT-1				
Aluminum Foil Tape (same)	HTAT-1				
6 inch Pipe Strap (same)	HTPS-6				
10 inch Pipe Strap (same)	HTPS-10				
Caution Label (10/pk)	HTCL-1				

#### CIRCUIT BREAKER SIZING

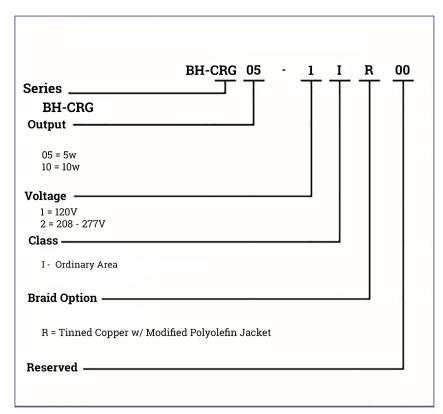
Maximum Circuit Lengths per start up temperature and circuit breaker size are shown below. Use local electrical codes to select appropriate branch circuit breakers. Ground Fault circuit breakers are required for heat trace branch circuits – typical minimum trip level is 30mA. Thermal magnetic circuit breakers are recommended to reduce nuisance tripping.

Maximum Circuit Length vs Breaker Size & Start-Up Temp FT (M)								
Model	Start-Up Temperature Deg F Deg C	15 A	20 A	30 A	40 A			
BH-CRG05-1	50 (10)	230 (70)	270 (82)	270 (82)	270 (82)			
	0 (-18)	150 (45)	200 (60)	270 (82)	270 (82)			
	-20 (-29)	130 (40)	175 (54)	260 (80)	270 (82)			
BH-CRG05-2	50 (10)	460 (140)	540 (165)	540 (165)	540 (165)			
	0 (-18)	300 (92)	400 (122)	540 (165)	540 (165)			
	-20 (-29)	260 (80)	345 (105)	520 (160)	540 (165)			
BH-CRG10-1	50 (10)	115 (35)	150 (45)	180 (55)	180 (55)			
	0 (-18)	70 (22)	95 (30)	145 (44)	180 (55)			
	-20 (-29)	60 (18)	85 (26)	120 (37)	165 (50)			
BH-CRG10-2	50 (10)	230 (70)	305 (93)	360 (110)	360 (110)			
	0 (-18)	150 ( 45)	200 (60)	300 (92)	360 (110)			
	-20 (-29)	130 (40)	175 (54)	260 (80)	360 (110)			

Note – Circuit lengths shown above are based on trip current characteristics of Type QO and Type QOB devices. For equipment with different trip current characteristics please consult Brasch.



## PRODUCT ORDERING INFORMATION



Ordering Information									
Output W/ft	Volts	Model	Stock	LBS/1000'					
5 W/FT @ 50F	120	BH-CRG05-11R00	S	80					
	208-277	BH-CRG05-21R00	S	80					
10 W/FT @ 50 F	120	BH-CRG10-11R00	S	80					
	208-277	BH-CRG10-21R00	S	80					

Note = To order specify model, length, and connection accessories. Cables are shipped +/- 5% of label, maximum spool length 1000 feet, minimum order is 250 feet. No fee to cut to length between 250 and 1000 feet.

Note = BH-CRG 5 w/ft cable 12 w/ft in snow and ice recommended for roof and gutter de-icing applications

