

# BriskHeat®

Corporation



# FLEXIBLE HEATING SOLUTIONS

# 14<sup>th</sup>

Edition

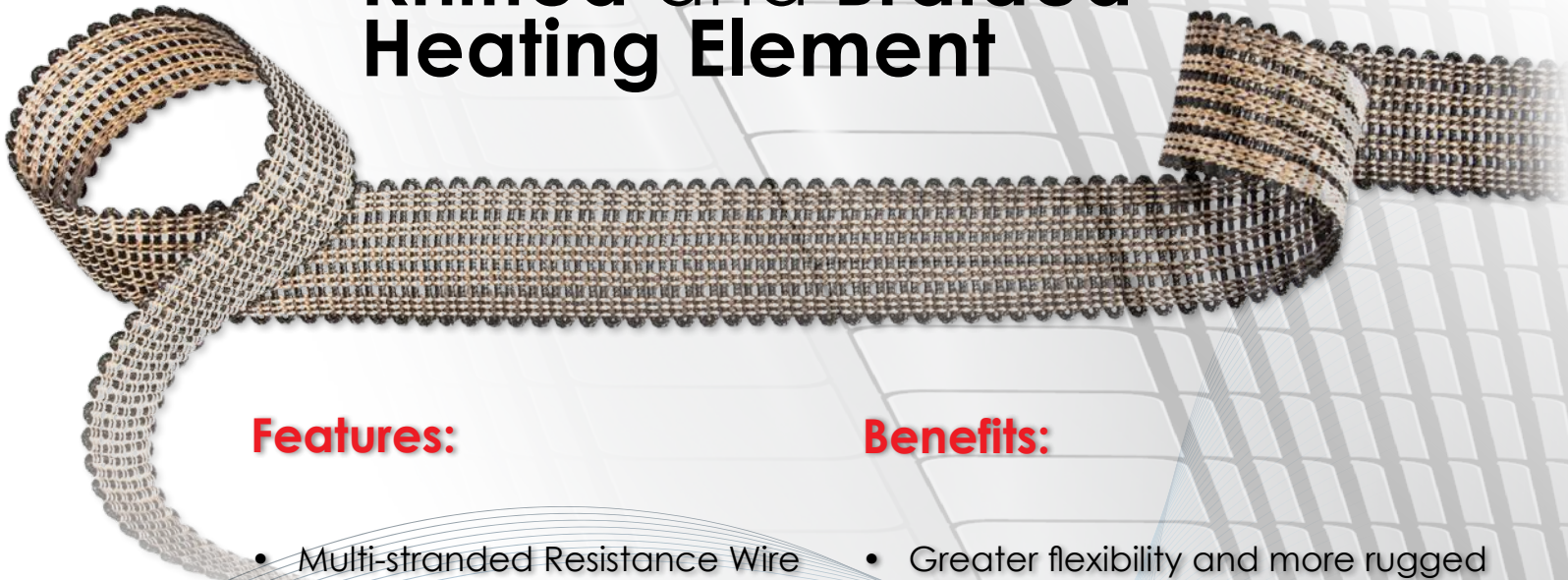
Revision E

Your **Heating** Specialist since **1949**

UK Distributor  
North  
Composites  
Engineering Ltd  
07522914291  
(UK Mobile)

# BriskHeat Core Technology

## Knitted and Braided Heating Element



### Features:

- Multi-stranded Resistance Wire
- Braided Insulator
- Optional 360° Braided Ground Shield
- Knitted Element
- Variety of Outer Materials (e.g. Silicone, High-Temperature Cloth, etc.)

### Benefits:

- Greater flexibility and more rugged
- Improved Dielectric strength and suitable design for many environments
- 100% ground coverage for your safety
- Better temperature uniformity and even greater strength
- Final heating product designed for many environments

## Experience the difference

Your **Heating** Specialist since 1949

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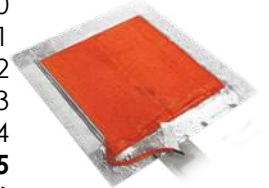
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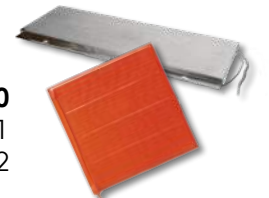
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## Who We Serve: Industries

### Flexible Surface Heating Solutions for Unlimited Applications

### Wide Range of Industries Served:

Ranging from Aviation to Laboratory and Semiconductor to Petrochemical

### Heating Solutions Perfect For:

- Freeze protection
- Condensation prevention
- Flow/viscosity control
- Vacuum bake-out
- Temperature process control
- Composite curing



### Aviation/Aerospace

Aviation and Aerospace industries can benefit from BriskHeat's composite curing/process temperature maintenance solutions, such as hot bonders and silicone rubber heating blankets. The hot bonders and heating blankets allow for fast and easy composite repair/strengthening of damaged composite pieces with BriskHeat's out-of-autoclave solutions. Using the easily transportable ACR® series hot bonders and a properly sized silicone rubber heating blanket, these repairs can be made on-site without having to ship out pieces for repair. Easily heat and vacuum composite parts in one easy step for debulking and composite curing with BriskHeat's vacuum/debulking table. Its single set-up greatly reduces overall time and cost associated with traditional debulking and autoclave curing. Another common application that BriskHeat can help with in the Aviation and Aerospace industries is moisture detection in elevators and other aircraft components. Using BriskHeat NDT kits, end-users can perform these tests without damaging the component being tested.



### General Manufacturing

BriskHeat's products are used for a wide variety of applications in manufacturing. Processes that BriskHeat's products can benefit and make more efficient include: temperature process control, viscosity control, and condensation prevention. BriskHeat's wide variety of product offerings allows us to customize a solution to specific surface heating application needs. Additionally, there are freeze protection issues which vary by facility, and can benefit from using BriskHeat's self-regulating heating cable or silicone rubber heating blankets.

## Who We Serve: Industries... continued



### Laboratory, Medical Science, and Analytical Instrumentation

Laboratory, Medical Science, and Analytical Instrumentation companies often use processes that require the removal of moisture to eliminate it as a variable in an analysis. Additionally, they often must heat-up and maintain contents of laboratory apparatuses to conduct experiments. For applications that require exceptional accuracy and heightened functionalities, BriskHeat's cloth heating jackets are used. These "all-inclusive" heating jackets have tight temperature tolerances, are easy to repeatedly install and remove, and include insulation and built-in sensors.

An alternative is to use heating tapes in conjunction with insulation. Heating tapes are extremely flexible and durable and feature rapid heat-up. BriskHeat also offers heating mantles and silicone rubber beaker heaters for heating glassware. Etched foil is another popular option for heating substrates quickly. The thin profile of the etched foil element allows it to fit into tight areas. In addition to our heating products, BriskHeat also carries a variety of laboratory equipment ranging from homogenizers to incubators and centrifuges to water baths.

### Gas Handling/Processing

Gas Handling/Processing companies use gas cylinders to store and dispense many types of gas. They can be both ordinary and hazardous-rated. BriskHeat's gas cylinder warmers increase the cylinders' temperatures and maintain the proper pressure to allow a much higher percent of the gasses to dispense. BriskHeat's gas cylinder warmers come in standard and hazardous-area options.



### Petrochemical/Chemical Processing

Petrochemical/Chemical Processing companies must often lower the viscosity of chemicals to enhance flow efficiency. Common products to solve viscosity issues include BriskHeat's heating cable, IBC/tote tank heaters, drum heaters, and silicone rubber heating blankets. Constant-wattage heating cable is especially popular to keep chemicals at elevated temperatures, sometimes several hundred degrees, when transporting them through pipes. Constant-wattage heating cable is easy-to-install, has circuit lengths up to 1,200 feet (366m), is rated for hazardous areas, and is affordable. Additionally, there are often freeze protection issues which vary by facility, requiring BriskHeat's self-regulating heating cable or silicone rubber heating blankets.



### Oil & Gas

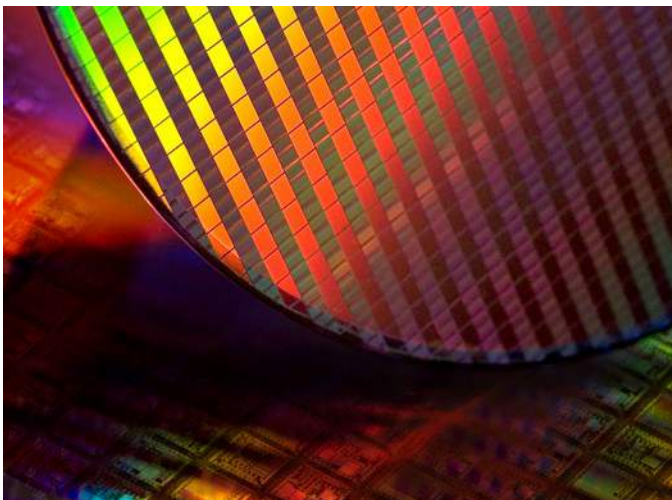
Oil & Gas companies often require freeze protection for their oil and gas pipe lines. To protect the oil and gas, they use BriskHeat's self-regulating heating cable. It is easy-to-install, extremely rugged, and has long circuit lengths up to 660 feet (201m).

## Who We Serve: Industries... continued



### Power Generation

Condensation is a concern for Power Generation companies, specifically waste-to-energy and coal-burning, that use hopper systems to capture fly-ash during the burn process. The hoppers must be heated to prevent condensation, which disrupts the process. BriskHeat offers a full line of both metal-clad and silicone rubber heaters which will both solve the condensation issue and meet all regulatory requirements. Additionally, there are often freeze protection issues which vary by facility, requiring self-regulating heating cable or silicone rubber heating blankets.



### Semiconductor, Flat Panel, LCD, LED, and Photovoltaic/Solar

Semiconductor, Flat Panel, LCD, LED, and Photovoltaic/Solar companies use custom cloth heating systems on gas delivery, foreline, and exhaust pipe lines to prevent condensation which could cause clogging. The heating jackets provide precise temperature, are easy to install and remove, and have exceptional longevity and durability.



### Food Processing

Food Processing companies need to prevent condensation so food preparation areas are not contaminated. BriskHeat's silicone rubber heating blankets are used to create temperature equilibrium, thus eliminating condensation. In applications where ingredients must be heated to reduce viscosity so they can more easily move from one process to another, BriskHeat products such as IBC/tote tank heaters, drum heaters, heating cable, and silicone rubber heating blankets can be used. Additionally, there are often freeze protection issues which vary by facility, requiring BriskHeat's self-regulating heating cable or silicone rubber heating blankets.



### Water/Wastewater Treatment

Water/Wastewater Treatment facilities often need to prevent waste build-up in the filtering stage of processing. Hazardous-area blankets warm the dead plate (a steel plate on which water and waste are separated) to keep the separation process flowing. Additionally, for many of these facilities, freeze protection is an additional concern. BriskHeat's self-regulating heating cable or silicone rubber heating blankets help to prevent water in tanks and pipes from freezing.



## Who We Serve: Industries... continued



### Concrete/Asphalt

Concrete manufacturers often use products called admixtures and liquid color as parts of their processes. These products may be stored in 55-gallon drum and IBC/tote tanks and must stay warm. Our full line of drum heaters and IBC/tote tank heaters are used to maintain the temperature. Asphalt manufacturers must maintain their asphalt's working temperatures between 200-300°F (90-150°C). Constant-wattage heating cable for pipes and silicone rubber heating blankets for vessels help asphalt manufacturers maintain the required heating level. Additionally, there are often freeze protection issues which vary by facility, which can be solved with BriskHeat's self-regulating heating cable or silicone rubber heating blankets.



### Plastics/Injection Molding

Plastics/Injection Molding companies' most common surface heating application requires melting plastic pellets into a liquid before injecting it into plastic-forming molds. BriskHeat's cloth heating jackets are a popular choice for use in this application. They normally replace uninsulated mica band heaters as the cloth heaters are more energy efficient, safer to work with, and keep the work environment more comfortable. Additionally, for many of the Plastics/Injection Molding facilities, freeze protection is an area of concern. BriskHeat's self-regulating heating cable or silicone rubber heating blankets help to prevent fluids from freezing.



### Construction

Freeze protection can be an area of concern in the Construction Industry. Easily protect and prevent water lines and tanks from freezing by using BriskHeat's self-regulating heating cable and silicone rubber heating blankets. For excavation of small areas, BriskHeat's snow melting mats can be used to warm the ground prior to excavation. BriskHeat also offers roof and gutter heating cable that can be installed to prevent snow and ice build-up on structures.



### Pulp & Paper and Packaging

Pulp & Paper and Packaging manufacturers often use glue that is stored in IBC/tote tank containers. BriskHeat's IBC/tote tank heaters can help maintain the proper glue temperature so it can be effectively used. Condensation is a concern during production because it can negatively affect many stages of the production process. Self-regulating heating cable is used to heat pipe lines (such as fire suppression water lines) to prevent condensation. Additionally, for many of these facilities, freeze protection is also a concern. BriskHeat's self-regulating heating cable or silicone rubber heating blankets help to prevent fluids from freezing.

## Who We Serve: Industries... continued



### Agriculture

Freeze protection can be an issue in the Agriculture Industry. Easily protect and prevent water lines, tanks, and troughs from freezing by using BriskHeat's self-regulating heating cable and silicone rubber heating blankets. BriskHeat's products can also be used on containers of pesticides and fertilizers to prevent them from freezing.



### Mining

Freeze protection can be an area of concern in the Mining Industry. Easily protect and prevent water lines and tanks from freezing by using BriskHeat's self-regulating heating cable and silicone rubber heating blankets.



### Biodiesel

During one of the initial steps of the biodiesel manufacturing process, the manufacturer must heat waste-vegetable oil. This is typically heated in 55-gallon drums. BriskHeat's full line of drum heaters can help with the heat-up. For larger manufacturers that use bigger tanks for this step, BriskHeat's silicone rubber heating blankets can be symmetrically installed around the tank to provide heat. Additionally, there are often freeze protection issues which vary by facility, and can be solved using BriskHeat's self-regulating heating cable or silicone rubber heating blankets.



### Marine

The Marine Industry can benefit from BriskHeat's composite curing/process temperature maintenance solutions, such as hot bonders and silicone rubber heating blankets. The hot bonders and heating blankets allow for fast and easy composite repair/strengthening of damaged composite pieces with BriskHeat's out-of-autoclave solutions. Using the easily transportable ACR® series hot bonders and a properly sized silicone heating blanket, these repairs can be made on-site without having to ship out pieces for repair. Freeze protection can also be an area of concern for boats and ships. Easily protect and prevent freezing by using BriskHeat's self-regulating heating cable and silicone rubber heating blankets.

## Easy Ways to Order

1. Contact your **local BriskHeat® distributor** North Composite Engineering Ltd.
2. email: [info@northcompositesengineering.co.uk](mailto:info@northcompositesengineering.co.uk)
3. Call us at 07522914291 (UK Mobile): We have a full staff of application specialists available to solve your application.
4. Please note we are currently operating a UK mobile number for contact to help protect our staff during the current Covid-19 situation.

## MAJOR CREDIT CARDS ACCEPTED



## Heating Solutions for All Industries



General



Industrial



Semiconductor



Composites



Laboratory



OEM/Engineered

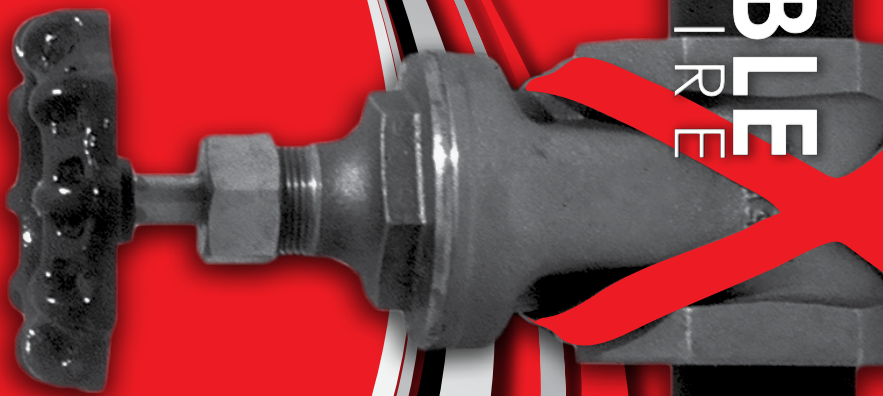


Home and Office

**At BriskHeat® we have over 69 years experience solving thousands of heating applications.**

# HEATING CABLE

RESISTANCE WIRE



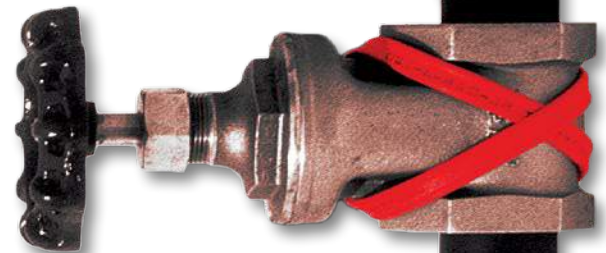
HEATING CABLE  
RESISTANCE WIRE

**BriskHeat**<sup>®</sup>  
Corporation




## Introduction To Self-Regulating Heating Cable

### Product Highlights

- ✓ Automatically Adjusts Heat Output Based Upon Surface Temperature
- ✓ Can Be Safely Overlapped and Insulated
- ✓ Ideal for Long Runs
- ✓ Can be Cut-to-Length at Job Site
- ✓ Temperatures up to 248°F (120°C )
- ✓ Meets UL Subject 1588 and IEEE-515.1
- ✓ Wide Range of Applications
  - Freeze protection
  - Viscosity control
  - Low temperature process maintenance
  - Roof and gutter
  - Ordinary locations
  - Hazardous locations



## Self-Regulating Heating Cable Selection Guide

BriskHeat® Self-Regulating Heating Cable	SLCBL Self-Regulating Heating Cable	SLMCBL Mid-Temperature Self-Regulating Heating Cable	SLHCBL High-Temperature Self-Regulating Heating Cable
<b>Maximum Continuous Maintenance Temperature</b>	149°F (65°C)	230°F (110°C)	248°F (120°C)
<b>Maximum Intermittent Exposure Temperature</b>	185°F (85°C)	275°F (135°C)	392°F (200°C)
<b>Available Input Voltages</b>	110-120 VAC or 208-277VAC	110-120 VAC or 208-277VAC	110-120 VAC or 208-277VAC
<b>Available Wattages</b>	3, 5, 8, 10, 12 watts/ft 10, 17, 25, 31, 40 watts/m	5, 10, 15, 20 watts/ft 17, 31, 45, 60 watts/m	5, 10, 15, 20 watts/ft 15, 30, 45, 60 watts/m
<b>Automatically adjusts heat output based on surface temperature</b>	✓	✓	✓
<b>Can be safely overlapped and insulated</b>	✓	✓	✓
<b>Moisture, Chemical, and Flame Resistant</b>	✓	✓	✓
<b>Approvals</b>			

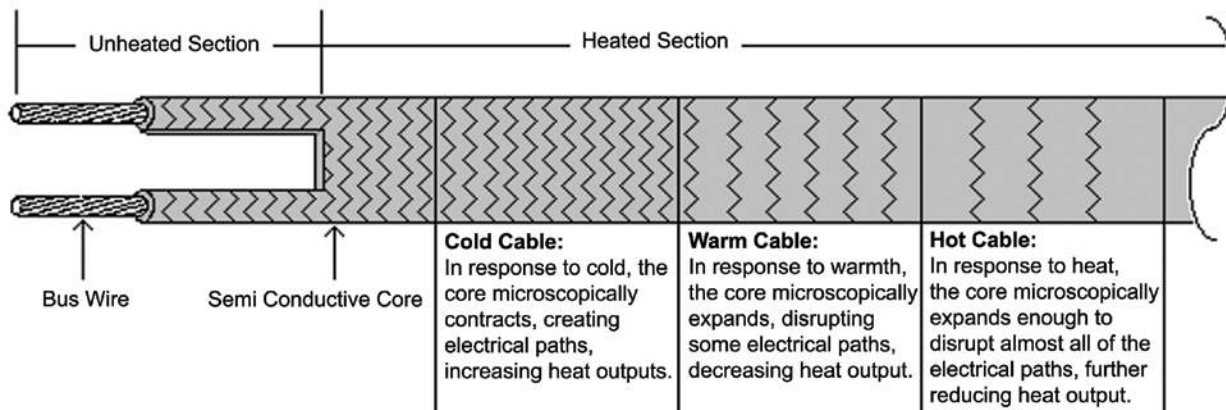


See **Page 12 & 13** for SpeedTrace Pre-Assembled Self-Regulating Heating Cable

CABLE / WIRE

**NOTE:** For best results, BriskHeat® Self-Regulating Heating Cable should be used with an appropriate temperature controller. See pages 90 through 108 for options.

### How Self-Regulating Cable Works



The semi-conductive core material contains a graphite network, which allows electricity to flow from one bus wire to the other. When the core is dense and colder, there are many paths for electricity to take through the graphite network, producing more heat.

Since the core material expands as it heats, the graphite network is elongated, disrupting some of the paths. More and more paths are disrupted as heating continues until the system reaches self-controlled thermal stability. When the core material cools, it contracts, reconnecting some of the electrical paths in the graphite network, and more equivalent heat is produced.

This temperature response occurs independently at each point along the heater. If an externally produced high temperature occurs next to a low temperature in the cable, each section of heating cable will adjust its own heat output in relation to its own local requirements.

# SLCBL Self-Regulating Heating Cable

## Product Highlights

- ✓ Ideal for freeze protection and low temperature process maintenance up to 149°F (65°C)
- ✓ Automatically adjusts heat output based on surface temperature
- ✓ Safe to overlap and insulate
- ✓ Can be cut-to-length and terminated in the field
- ✓ No temperature controller is required\*
  - \* If a specific process temperature is required, a temperature controller is necessary.

### Specifications:

- Maximum continuous maintenance temperature: 149°F (65°C)
- Maximum intermittent exposure temperature: 185°F (85°C)
- Minimum intermittent exposure temperature: -40°F (-40°C)
- Nominal power output at 50°F (10°C): 3, 5, 8, 10, 12 W/ft (10, 17, 25, 31, 40 W/m)
- Supply voltages (AC): 110-120V or 208-277V
- Moisture, chemical, and flame resistant
- Bus wire gauge: 16 AWG
- Braid resistance: Tinned copper 0.0055 ohms/ft (0.0182 ohms/m)
- T6 Rating - 3, 5, 8, 10 W/ft (10, 17, 25, 31 W/m)
- T5 Rating - 12 W/ft (40 W/m)

NOTE: Electrical equipment T-Rating codes define the maximum surface temperature that equipment will reach. It is used in hazardous (classified) area applications.

### Outer Layer Options:

Product Type	Description	Nominal Dimensions	Shipping Weight 500-ft (152m) spool	Purpose
SLCBL-B	Tinned Copper Metal Braid	0.17" x 0.43" (4.4mm x 11.0mm)	35 lb. (16 kg)	Ordinary applications
SLCBL-BP	Tinned Copper Metal Braid with Thermoplastic Elastomer Overjacket	0.23" x 0.50" (6.0mm x 12.6mm)	46 lb. (21 kg)	For use in wet or weak chemical environments (i.e. weak acids)
SLCBL-BF	Tinned Copper Metal Braid with Fluoropolymer Overjacket	0.21" x 0.47" (5.4mm x 12.0mm)	44 lb. (20 kg)	For use in strong chemical environments (i.e. strong acids)

### Ordering Information:

#### Part Number Matrix

SLCBL 3 120 BP

Watts/ft: \_\_\_\_\_

3, 5, 8, 10, 12

Voltage: \_\_\_\_\_

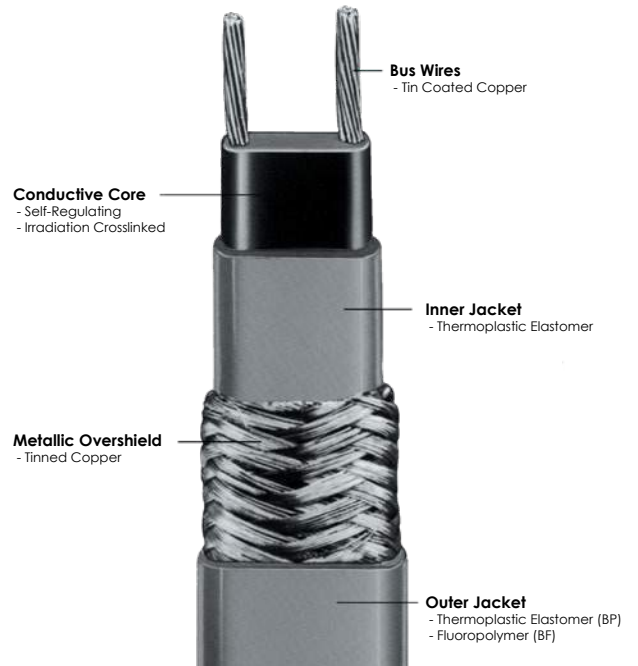
120- (110-120V), 240- (208-277V)

Outer Layer: \_\_\_\_\_

B- (Tinned Copper Metal Braid)

BP- (Tinned Copper Metal Braid with Thermoplastic Elastomer Overjacket)

BF- (Tinned Copper Metal Braid with Fluoropolymer Overjacket)



### Approvals:



Ordinary Locations  
-B, -BP Series Only



Ordinary and Hazardous (Classified) Locations  
Class I, Division 2, Groups A, B, C, D  
Class II, Division 2, Groups E, F, G  
Class III



Approvals valid only when used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

See **Page 10 & 11** for power connection/termination kits.

## SLCBL Self-Regulating Heating Cable *continued*

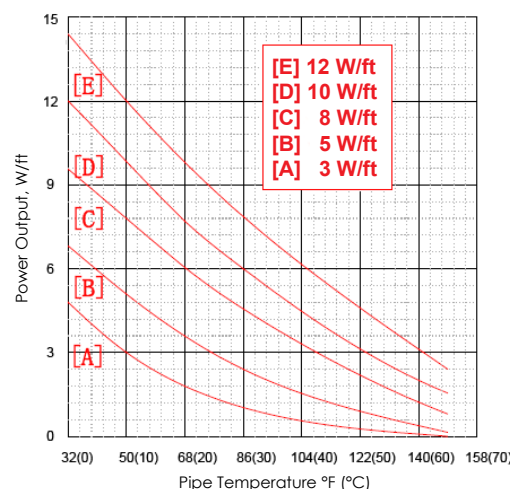
### Specification / Application Information:

#### Maximum Circuit Length in Feet Vs. Circuit Breaker Size

Heat Cable Type	Circuit Breaker Size	Start-up Temperature			
		50°F (10°C)	32°F (0°C)	-4°F (-20°C)	-40°F (-40°C)
SLCBL3120	10 amp	240	200	140	115
	15 amp	320	300	220	190
	20 amp	330	320	265	225
	30 amp	330	320	280	265
	40 amp	330	320	280	265
SLCBL3240	10 amp	485	396	275	232
	15 amp	643	606	436	377
	20 amp	660	643	530	449
	30 amp	660	643	557	530
	40 amp	660	643	557	530
SLCBL5120	10 amp	162	135	105	80
	15 amp	249	215	170	127
	20 amp	265	252	215	164
	30 amp	265	252	240	200
	40 amp	265	252	240	200
SLCBL5240	10 amp	324	269	209	160
	15 amp	498	429	337	255
	20 amp	530	505	433	328
	30 amp	530	505	480	400
	40 amp	530	505	480	400
SLCBL8120	10 amp	123	100	54	52
	15 amp	177	145	90	82
	20 amp	200	180	115	103
	30 amp	210	180	175	135
	40 amp	210	180	175	160
SLCBL8240	10 amp	246	203	108	104
	15 amp	354	291	183	164
	20 amp	406	360	229	206
	30 amp	420	360	350	275
	40 amp	420	360	350	320
SLCBL10120	10 amp	75	55	45	35
	15 amp	121	85	65	55
	20 amp	150	105	80	70
	30 amp	155	120	105	85
	40 amp	180	155	105	105
SLCBL10240	10 amp	147	111	85	68
	15 amp	242	177	131	114
	20 amp	295	216	164	141
	30 amp	315	246	215	170
	40 amp	360	315	215	215
SLCBL12120	10 amp	55	40	30	25
	15 amp	90	60	45	45
	20 amp	115	80	60	50
	30 amp	115	90	80	60
	40 amp	120	105	80	80
SLCBL12240	10 amp	111	78	59	49
	15 amp	183	124	91	85
	20 amp	229	160	124	98
	30 amp	229	180	158	120
	40 amp	240	210	158	158

**Note: Special consideration must be given for the circuit breaker due to the high initial in-rush currents.**

#### Heat Output (Watts per Foot)



#### Voltage Adjustment Factors

Product Type	Watt/ft Adjustment Factor	
	208 VAC	277 VAC
SLCBL3240	0.82	1.13
SLCBL5240	0.85	1.12
SLCBL8240	0.89	1.08
SLCBL10240	0.89	1.08
SLCBL12240	0.89	1.08

Product Type	Max Circuit Length Adjustment Factor	
	208 VAC	277 VAC
SLCBL3240	0.96	1.08
SLCBL5240	0.94	1.09
SLCBL8240	0.92	1.11
SLCBL10240	0.92	1.11
SLCBL12240	0.92	1.11



# SLMCBL Mid-Temperature Self-Regulating Heating Cable

## Product Highlights

- ✓ Ideal for freeze protection and low temperature process maintenance up to 230°F (110°C)
- ✓ Automatically adjusts heat output based on surface temperature
- ✓ Safe to overlap and insulate
- ✓ Can be cut-to-length and terminated in the field
- ✓ No temperature controller is required\*  
\* If a specific process temperature is required, a temperature controller is necessary.

## Specifications:

- Maximum continuous maintenance temperature: 230°F (110°C)
- Maximum intermittent exposure temperature: 275°F (135°C)
- Minimum intermittent exposure temperature: -22°F (-30°C)
- Nominal power output at 50°F (10°C): 5, 10, 15, 20 W/ft (17, 31, 45, 60 W/m)
- Supply voltages (AC): 110-120V or 208-277V
- Moisture, chemical, and flame resistant
- Bus wire gauge: 16 AWG
- Braid resistance: Tinned copper 0.0055 ohms/ft (0.0182 ohms/m)



## Outer Layer Options:

Product Type	Description	Nominal Dimensions	Shipping Weight: 500-ft (152m) spool	Purpose
SLMCBL-B	Tinned Copper Metal Braid	0.15" x 0.45" (3.8mm x 11.4mm)	32 lb. (14.5 kg)	Ordinary applications
SLMCBL-BP	Tinned Copper Metal Braid with Thermoplastic Elastomer Overjacket	0.23" x 0.54" (6.0mm x 13.6mm)	37 lb. (16.8 kg)	For use in wet or weak chemical environments (i.e. weak acids)
SLMCBL-BF	Tinned Copper Metal Braid with Fluoropolymer Overjacket	0.19" x 0.49" (4.8mm x 12.4mm)	47 lb. (21.2 kg)	For use in strong chemical environments (i.e. strong acids)

## Ordering Information:

Part Number Matrix **SLMCBL 5 120 BP**

Watts/ft: \_\_\_\_\_  
5, 10, 15, 20

Voltage: \_\_\_\_\_  
120- (110-120V), 240- (208-277V)

Outer Layer: \_\_\_\_\_  
B- (Tinned Copper Metal Braid)  
BP- (Tinned Copper Metal Braid with Thermoplastic Elastomer Overjacket)  
BF- (Tinned Copper Metal Braid with Fluoropolymer Overjacket)

## Approvals:



See Page 11 for power connection/termination kits.

# SLMCBL Mid-Temperature Self-Regulating Heating Cable *continued*

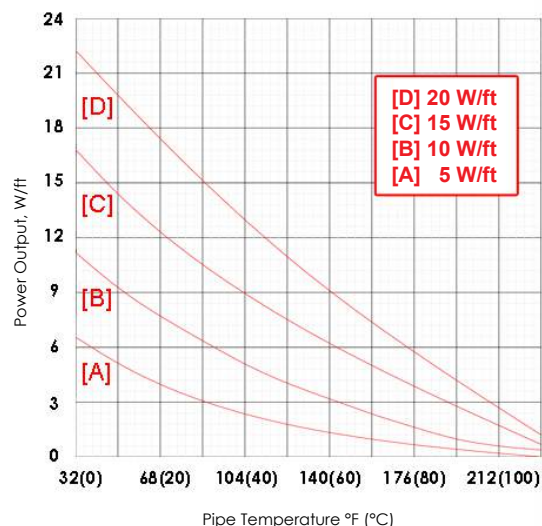
## Specification / Application Information:

### Maximum Circuit Length in Feet Vs. Circuit Breaker Size

Heat Cable Type	Circuit Breaker Size	Start-up Temperature			
		50°F (10°C)	32°F (0°C)	-4°F (-20°C)	-40°F (-40°C)
SLMCBL5120	10 amp	110	80	-	-
	15 amp	133	105	98	90
	20 amp	195	160	148	138
	30 amp	210	195	170	165
	40 amp	210	195	183	180
SLMCBL5240	10 amp	220	160	145	135
	15 amp	265	210	195	180
	20 amp	390	320	295	275
	30 amp	420	390	365	360
	40 amp	420	390	340	330
SLMCBL10120	10 amp	75	73	-	-
	15 amp	100	95	80	70
	20 amp	133	148	125	100
	30 amp	174	180	156	130
	40 amp	174	175	156	140
SLMCBL10240	10 amp	150	145	121	114
	15 amp	200	190	160	140
	20 amp	265	295	249	200
	30 amp	347	360	311	280
	40 amp	347	350	311	260
SLMCBL15120	10 amp	57	51	-	-
	15 amp	94	87	57	54
	20 amp	120	108	71	69
	30 amp	154	133	80	80
	40 amp	154	133	90	87
SLMCBL15240	10 amp	114	101	68	65
	15 amp	187	173	114	108
	20 amp	239	216	141	137
	30 amp	308	265	180	173
	40 amp	308	265	160	160
SLMCBL20120	10 amp	51	41	-	-
	15 amp	82	72	51	49
	20 amp	102	90	67	61
	30 amp	131	115	84	74
	40 amp	150	128	110	95
SLMCBL20240	10 amp	101	82	62	55
	15 amp	164	144	101	98
	20 amp	203	180	134	121
	30 amp	262	229	167	147
	40 amp	300	255	220	190

**Note:** Special consideration must be given for the circuit breaker due to the high initial in-rush currents.

### Heat Output (Watts per Foot)



### Voltage Adjustment Factors

Watt/ft Output Adjustment Factor		
Product Type	208 VAC	277 VAC
SLMCBL5240	0.84	1.20
SLMCBL10240	0.85	1.18
SLMCBL15240	0.91	1.09
SLMCBL20240	0.90	1.07

Max Circuit Length Adjustment Factor		
Product Type	208 VAC	277 VAC
SLMCBL5240	0.95	1.04
SLMCBL10240	0.94	1.06
SLMCBL15240	0.91	1.10
SLMCBL20240	0.91	1.11

CABLE / WIRE

# SLHCBL High-Temperature Self-Regulating Heating Cable

## Product Highlights

- ✓ Ideal for freeze protection and low temperature process maintenance up to 248°F (120°C)
- ✓ Automatically adjusts heat output based on surface temperature
- ✓ Safe to overlap and insulate
- ✓ Can be cut-to-length and terminated in the field
- ✓ No temperature controller is required\*
  - \* If a specific process temperature is required, a temperature controller is necessary.



CABLE / WIRE

## Specifications:

- Maximum continuous maintenance temperature: 248°F (120°C)
- Maximum intermittent exposure temperature: 392°F (200°C)
- Minimum intermittent exposure temperature: -22°F (-30°C)
- Nominal power output at 50°F (10°C): 5, 10, 15, 20 W/ft (15, 30, 45, 60 W/m)
- Supply voltages (AC): 110-120V or 208-277V
- Moisture, chemical, and flame resistant
- Bus wire gauge: 16 AWG
- Braid resistance: Tinned copper 0.0055 ohms/ft (0.0182 ohms/m)

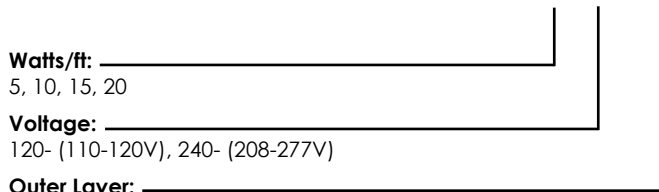
## Outer Layer Options:

Product Type	Description	Nominal Dimensions	Shipping Weight: 500-ft (152m) spool	Purpose
SLHCBL-B	Tinned Copper Metal Braid	0.15" x 0.45" (3.8mm x 11.4mm)	38 lb. (17 kg)	Ordinary applications
SLHCBL-BF	Tinned Copper Metal Braid with Fluoropolymer Overjacket	0.19" x 0.49" (4.8mm x 12.4mm)	47 lb. (21.2 kg)	For use in strong chemical environments (i.e. strong acids)

## Ordering Information:

### Part Number Matrix

SLHCBL 5 120 BF



**Watts/ft:** \_\_\_\_\_  
5, 10, 15, 20

**Voltage:** \_\_\_\_\_  
120- (110-120V), 240- (208-277V)

**Outer Layer:** \_\_\_\_\_  
B- (Tinned Copper Metal Braid)  
BF- (Tinned Copper Metal Braid with Fluoropolymer Overjacket)

## Approvals:



See **Page 11** for power connection/termination kits.

# SLHCBL High-Temperature Self-Regulating Heating Cable *continued*

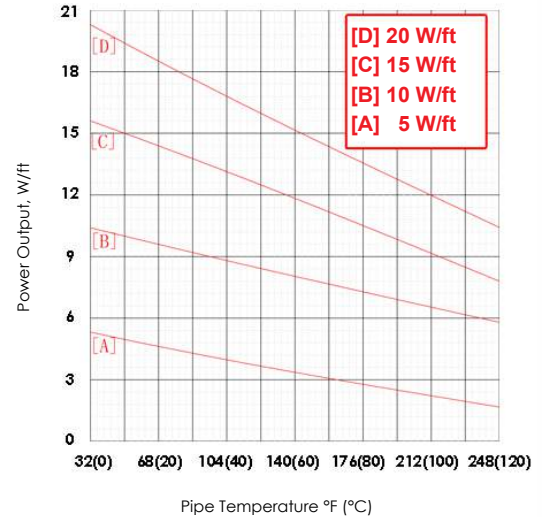
## Specification / Application Information:

### Maximum Circuit Length in Feet Vs. Circuit Breaker Size

Heat Cable Type	Circuit Breaker Size	Start-up Temperature			
		50°F (10°C)	32°F (0°C)	-4°F (-20°C)	-40°F (-40°C)
SLHCBL5120	10 amp	120	110	105	90
	15 amp	180	175	158	143
	20 amp	240	215	190	180
	30 amp	259	245	240	225
	40 amp	266	255	250	240
SLHCBL5240	10 amp	240	220	210	180
	15 amp	360	350	315	285
	20 amp	479	430	380	360
	30 amp	518	490	480	450
	40 amp	531	510	500	480
SLHCBL10120	10 amp	73	69	65	58
	15 amp	118	110	98	88
	20 amp	148	140	130	118
	30 amp	220	200	182	175
	40 amp	255	240	220	230
SLHCBL10240	10 amp	146	138	130	116
	15 amp	236	220	195	175
	20 amp	295	280	260	235
	30 amp	440	400	364	350
	40 amp	510	480	440	460
SLHCBL15120	10 amp	50	47	42	40
	15 amp	75	65	63	60
	20 amp	100	90	83	80
	30 amp	143	135	125	120
	40 amp	190	175	168	160
SLHCBL15240	10 amp	100	93	83	80
	15 amp	150	130	125	120
	20 amp	200	180	165	160
	30 amp	285	270	250	240
	40 amp	380	350	335	320
SLHCBL20120	10 amp	39	33	34	32
	15 amp	58	55	50	48
	20 amp	75	71	68	63
	30 amp	115	105	100	95
	40 amp	153	143	133	125
SLHCBL20240	10 amp	77	70	67	63
	15 amp	115	110	100	95
	20 amp	150	142	135	125
	30 amp	230	210	200	190
	40 amp	306	286	265	250

**Note:** Special consideration must be given for the circuit breaker due to the high initial in-rush currents.

### Heat Output (Watts per Foot)



### Voltage Adjustment Factors

Watt/ft Output Adjustment Factor		
Product Type	208 VAC	277 VAC
SLHCBL5240	0.87	1.07
SLHCBL10240	0.88	1.08
SLHCBL15240	0.88	1.08
SLHCBL20240	0.86	1.07

Max Circuit Length Adjustment Factor		
Product Type	208 VAC	277 VAC
SLHCBL5240	0.99	1.08
SLHCBL10240	0.99	1.06
SLHCBL15240	0.98	1.06
SLHCBL20240	1.00	1.08

CABLE / WIRE

## SLCBL Connection / Termination Kits

For use in ordinary locations with SLCBL cable only (UL approved).

For use in roof & gutter snow melting & de-icing applications with SLCBL cable only (UL approved).



Ordinary Locations

Approvals valid only when used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

### SLCBLUC: SLCBL Power Connection Kit



Kit Contents:

- |   |   |
|---|---|
| 2 Heat-trace warning labels                           | 1 Black heat-shrink tube<br>1/2" x 1" (13mm x 25mm)       |
| 2 De-icing snow melt caution labels                   | 1 Green/Yellow heat-shrink tube<br>1/4" x 6" (6mm x 15cm) |
| 1 Standoff pipe mounting bracket                      | 2 Black heat-shrink tubes<br>1/8" x 5-1/2" (3mm x 14cm)   |
| 1 Lock nut  | 1 Sealing gasket  |
| 1 1/2"NPT Seal fitting with strain relief and grommet | 1 End seal  |
| 3 Wire nuts   |   |

Enough to complete:

One input power connection and one end seal termination.

NOTE: Junction box and pipe strap sold separately. Requires UL Listed junction box suitable for the location with a clearance hole for 1/2" conduit or 1/2" NPT thread hub. For heating cable with no outer-jacket (Type -B only), a metallic junction box must be used to ensure proper grounding.

### SLCBLUC-GF: Ground Fault Power Connection Kit



Kit Contents:

- |   |   |
|---|---|
| 2 Heat-trace warning labels                   | 1 Heat-shrink tube<br>3/4" x 5" (19mm x 13cm)             |
| 2 De-icing snow melt caution labels           | 2 Heat-shrink tubes<br>1/8" x 1" (3mm x 25mm)             |
| 1 Cloth tape                                  | 1 Heat-shrink tube<br>1/2" x 1" (13mm x 25mm)             |
| 2 Mastic strips                               | 1 Heat-shrink tube<br>5/16" x 1-1/2" (8mm x 38mm)         |
| 2 Clamp ties                                  | 1 Ground fault device with 120V<br>3-Prong NEMA 5-15 plug |
| 2 Crimp-on insulated terminals                |   |
| 1 Crimp-on non-insulated barrel               |   |
| 1 Heat-shrink tube<br>3/4" x 8" (19mm x 20cm) |   |

Enough to complete:

One ground-fault protection power input power connection.

### SLCBLKC: SLCBL End Seal Kit



Kit Contents:

- |  |  |
|--|--|
| 2 Heat-shrink caps                             | 2 Woven braid sleeves 1/2" x 4"<br>(13mm x 10cm) |
| 2 Heat-shrink tubes 3/4" x 5"<br>(19mm x 13cm) |  |

Enough to complete:

Two end seal terminations.

### SLCBLSK: SLCBL Splice and Tee Kit



Kit Contents:

- |                    |  |                                 |
|--------------------|--|---------------------------------|
| 1 Clamp tie        | 1 Black heat-shrink tube<br>1" x 8" (25mm x 20cm)    | 1 Heat-shrink tube              |
| 3 Cable ties       | 3 Black heat-shrink tubes<br>1/2" x 1" (13mm x 25mm) | 2 Crimp-on insulated terminals  |
| 1 Cloth tape       | 6 Black heat-shrink tubes<br>1/8" x 1" (3mm x 25mm)  | 1 Crimp-on non-insulated barrel |
| 5 Mastic strips    |  | 1 End seal                      |
| 2 Heat-shrink caps |  |                                 |

Enough to complete:

One splice connection and one end seal termination or one tee connection and one end seal termination.

NOTE: This kit does not complete an input power connection.

## SLCBL, SLMCBL, SLHCBL Connection / Termination Kits

For use in Hazardous Area Locations with SLCBL cable only (CSA approved).

For use in non-hazardous area locations with SLCBL, SLMCBL, SLHCBL cable (non-CSA approved).



Hazardous (Classified) Locations  
Class I, Division 2, Groups A, B, C, D  
Class II, Division 2, Groups E, F, G  
Class III

-BP, -BF Series Only

**Approvals valid only when** used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

### PTBO-GET: SLCBL, SLMCBL, SLHCBL Power Connection Kit With Octagon Enclosure



Kit Contents:

- |  |  |
|--|--|
| 1 Octagon junction box with rail mounted DIN terminal block electrical connections | 1 Sealing gasket                                       |
| 1 Pipe standoff mounting bracket   | 1 M25x1.5 IP68 Seal fitting                            |
| 2 Pipe Straps  | 2 Watertight sealing grommets                          |
| 1 Lock nut   | 1 Watertight sealing plug                              |
|  | 1 Green/Yellow heat-shrink tube 1/4" x 6" (6mm x 15cm) |
|  | 2 Black heat-shrink tube 1/8" x 5-1/2" (3mm x 14cm)    |

Enough to complete:

One input power connection.

### JHE-GET: SLCBL, SLMCBL, SLHCBL Low-Profile End Seal Kit



Kit Contents:

- 1 End seal housing
- 1 Watertight sealing grommet
- 1 Pressure seal end with screws

Enough to complete:

One low-profile end seal termination.

### JHS-GET: SLCBL, SLMCBL, SLHCBL Low-Profile Splice Connection Kit



Kit Contents:

- 1 In-line splice housing
- 2 Watertight sealing gaskets
- 2 Housing covers with screws
- 2 Watertight sealing grommets
- 2 Pressure seal ends with screws

Enough to complete:

One low-profile splice connection.

### JHT-GET: SLCBL, SLMCBL, SLHCBL Low-Profile Tee Connection Kit



Kit Contents:

- 1 Tee splice housing
- 2 Watertight sealing gaskets
- 2 Housing covers with screws
- 3 Watertight sealing grommets
- 3 Pressure seal ends with screws

Enough to complete:

One low-profile tee connection.

**NOTE:** This kit does not complete an input power connection.

## SpeedTrace & SpeedTrace Extreme Pre-Assembled Self-Regulating Heating Cable

### Product Highlights

- ✓ Ideal for freeze protection and thawing metal or plastic pipes and valves
- ✓ Easy-to-install plug-and-play pre-assembled heater
- ✓ Safe to overlap and insulate
- ✓ Automatically adjusts heat output based on surface and ambient temperature
- ✓ No temperature controller is required
- ✓ Safe for use in roof & gutter snow melting & de-icing applications



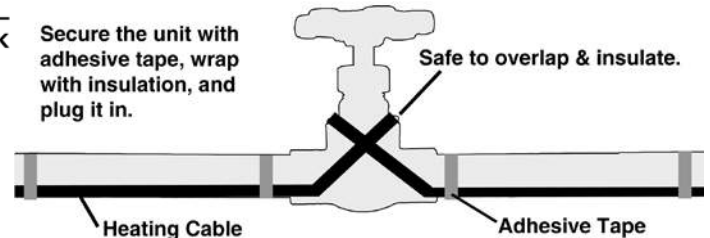
CABLE / WIRE

### Specifications:

- Supply voltages: 110-120VAC, 208-277VAC
- Wattage at 50°F (10°C)
  - SpeedTrace: 5 W/ft (16 W/m)
  - SpeedTrace Extreme: 8 W/ft (26 W/m)
- Minimum/maximum exposure temperature: -40°F/150°F (-40°C/65°C)
- Moisture and flame resistant thermoplastic elastomer outer jacket
- 16 AWG bus wires
- Power cord 30" (72 cm) long
  - 120V includes standard 3-prong plug (NEMA 5-15)
  - 240V has bare wire leads



Secure the unit with adhesive tape, wrap with insulation, and plug it in.



### Ordering Information:

Heating Cable Length	SpeedTrace		SpeedTrace Extreme	
	Part Number (120V)	Part Number (240V)	Part Number (120V)	Part Number (240V)
6 ft (1.8 m)	FFSL1-6	FFSL2-6	FFSL81-6	FFSL82-6
12 ft (3.7 m)	FFSL1-12	FFSL2-12	FFSL81-12	FFSL82-12
18 ft (5.5 m)	FFSL1-18	FFSL2-18	FFSL81-18	FFSL82-18
24 ft (7.3 m)	FFSL1-24	FFSL2-24	FFSL81-24	FFSL82-24
37 ft (11.2 m)	FFSL1-37	FFSL2-37	N/A	N/A
50 ft (15.2 m)	FFSL1-50	FFSL2-50	FFSL81-50	FFSL82-50
62 ft (18.8 m)	FFSL1-62	FFSL2-62	N/A	N/A
75 ft (22.8 m)	FFSL1-75	FFSL2-75	FFSL81-75	FFSL82-75
87 ft (26.5m)	FFSL1-87	FFSL2-87	N/A	N/A
100 ft (30.5 m)	FFSL1-100	FFSL2-100	FFSL81-100	FFSL82-100
125 ft (38.1 m)	FFSL1-125	FFSL2-125	N/A	N/A
150 ft (45.7 m)	FFSL1-150	FFSL2-150	N/A	N/A

### SpeedTrace Roof & Gutter Kits



Complete kit for installing roof & gutter heating.

- Kit Includes: SpeedTrace Heating Cable, Downspout Hanger Brackets, Roof Clips, UV Resistant Cable Ties, Caution Labels.
- Professional-grade heating cable for residential and commercial roofing.

See [page 13](#) for ordering information.

### Accessories:

#### Thermo-Cube Thermostatically Controlled Outlet (PN: THERMO-CUBE)



Power-saving ambient temperature sensing outlet.

- Turns on when air temperature drops below 35°F (2°C)
- Turns off when air temperature exceeds 45°F.
- Saves energy/money and extends the life of the heater.
- Suitable for indoor/outdoor use.

#### Fiberglass Adhesive Tape (PN: PSAT36A)



Heat resistant tape for easy installation of heating cable.

- Size: 0.5" x 108' (13mm x 38m)
- Temperature Limit: 350°F (176°C)

#### INSUL-LOCK® DS Foam Insulation



Easy insulation for residential and commercial pipe and tube.

- Easy-to-install pre-formed foam with adhesive flap.
- Moisture resistant foam is suitable for indoor/outdoor applications.
- Compatible for use with SpeedTrace and self-regulating heating cables.
- 1/2" wall thickness; R-value 3.0.

See [page 14](#) for ordering information.

## SpeedTrace Roof & Gutter De-Icing Kits: Self-Regulating Heating Cable

### Product Highlights

- ✓ Durable, long lasting professional-grade heating cable
- ✓ Suitable for residential, commercial, and industrial roofing applications
- ✓ Ideal for melting snow and de-icing roofs, gutters, and downspouts
- ✓ Prevent property damage and injuries from falling ice

### Kits includes

SpeedTrace Heating Cable, Downspout Hanger Brackets, Roof Clips, UV Resistant Cable Ties, Caution Labels

*Additional Items Required , but not supplied:*  
UV resistant RTV Sealant, Roofing Nails and Screws

### Specification

- Supply Voltage: 120 V, 240 V\*
- Nominal 5 W/ft (16 W/m) at 50°F (10°C); 10 W/ft (33 W/m) at 32°F (0°C) in ice and snow
- Minimum exposure temperature: -40°F (-40°C)
- Maximum exposure temperature: 150°F (65°C)
- Moisture and flame resistant Thermoplastic outer jacket
- 16 AWG bus wires
- Power cord with standard 3-prong plug (NEMA 5-15)\*

\* 240 V models with bare wire leads.

### Installation Requirements

*Suitable For:*

- Standard pitched roofs with or without gutters
- Standard roofing materials including shingle, shake, rubber, tar, wood, metal and plastic roofs
- Gutters & downspouts made from standard materials including metal and plastic

*Not Suitable For:*

- Flat, slate, stone, ceramic, composite tar/gravel roofs

*Electrical Requirements:*

- GFCI protected circuit, local code approved outlet (power source) within close proximity to the heating cable starting point, and protected from the weather

### Ordering Information

Part No. 120 V	Part No. 240 V	Cable Length (Feet)	Kit Includes			
			Roof Clips	Downspout Hangers	Cable Ties	Caution Labels
FFRG15-50	FFRG25-50	50	30	2	15	2
FFRG15-75	FFRG25-75	75	50	4	20	2
FFRG15-100	FFRG25-100	100	60	4	25	2
FFRG15-125	FFRG25-125	125	80	4	30	2
FFRG15-150	FFRG25-150	150	100	6	40	2

### Accessories for Roof & Gutter De-Icing

Part No.	Description
THERMO-CUBE	Thermostatically Controlled Outlet 120VAC
SLCBL-RDOWN1	Aluminum Downspout Hanger Bracket
SLCBL-RCLIP10	Aluminum Roof Clip (Qty 1 = 10 clips)
SLCBL-RCLIP50	Aluminum Roof Clip (Qty 1 = 50 clips)

## SpeedTrace Roof & Gutter



CABLE / WIRE

### Measuring Heating Cable Length for Roof & Gutter De-Icing

Use the equation below to calculate heating cable length:

$$\text{Cable Required for Roof} = (R \times M) + G + D$$

(R) Roof Edge Length (linear length of roof to protect)

(M) Multiplier from table below

(G) Gutter Length

(D) Downspout Length (X2 if heating cable returns back to gutter)

**Heating Cable Kit Length Required** [Round Up to the nearest kit size]

### M = Length of Cable per Foot of Roof Edge (ft)

Roof Overhang (Eave/Soffit)	Standard Roof (M)	Standing Seam Roof 18" Seam (M)	Standing Seam Roof 24" Seam (M)
None	2.0 ft	2.5 ft	2.0 ft
12"	2.5 ft	2.8 ft	2.4 ft
24"	3.0 ft	3.6 ft	2.9 ft
36"	4.0 ft	4.3 ft	3.6 ft

### Thermo-Cube Thermostatically Controlled Outlet



- Power saving outlet.
- Thermostatically controlled outlet only runs in cold temperatures.
- Turns on when air temperature drops below 35°F (2°C); turns off when air temperature exceeds 45°F.
- Suitable for indoor/outdoor use.



## INSUL-LOCK® DS Flexible Closed Cell Pipe Insulation

### Product Highlights

- ✓ Easy-to-install with locking adhesive flap for precision fit
- ✓ Double-seal technology
  - Built-in pressure sensitive adhesive
  - Built-in PVC overlap tape with acrylic adhesive
- ✓ Scrim reinforcement on the seam surface
- ✓ Environmentally-friendly, CFC-free, flexible elastomeric thermal insulation
- ✓ Non-porous, fiber-free, and resistant to mold growth
- ✓ Resistant to moisture vapor flow
- ✓ Compatible with heating cable and tapes



### Specifications:

- Operating temperature range: -70°F (-57°C) to 220°F (104°C)
- R-value: 3
- Color: Black
- Length: 6.0' (1.8m)
- Thickness: 0.5" (1.3cm)
- Density: 3 to 6 PCF
- Water vapor permeability:
  - Dry cup (Elastomeric insulation): 0.03 perm/in
  - Wet cup (Glued seam with overlap): 0.12 perm/in
- Water absorption % (volume change): 0

### Applications:

- Self-Regulating heating cable pipe/tube insulation
- Freeze protection
- Prevent condensation on refrigerant lines, cold water plumbing, roof drains, and chilled water systems
- Many indoor/outdoor uses

### Ordering Information:

Part Number	Recommended Pipe/Tube O.D.	Inside Diameter of Insul-Lock® DS
INSUL78	1/2" - 5/8"	7/8"
INSUL118	3/4" - 7/8"	1-1/8"
INSUL138	1"	1-3/8"
INSUL158	1-1/8"	1-5/8"
INSUL2	1-3/8"	2"
INSUL218	1-5/8"	2-1/8"
INSUL238	2"	2-3/8"
INSUL258	2-1/8"	2-5/8"
INSUL278	2-3/8"	2-7/8"
INSUL318	2-5/8"	3-1/8"
INSUL312	2-7/8"	3-1/2"
INSUL358	3-1/8"	3-5/8"
INSUL418	3-1/2"	4-1/8"
INSUL412	4"	4-1/2"



### Recommended Accessories:

#### Adhesive Aluminum Tape

For extra environmental protection.

Part #	Width	Length
INSFOIL-3	3" (76mm)	150' (46m)

#### DUCK® Duckling Duct Tape

Seal spaces between multiple pieces of insulation and prevent heat loss.

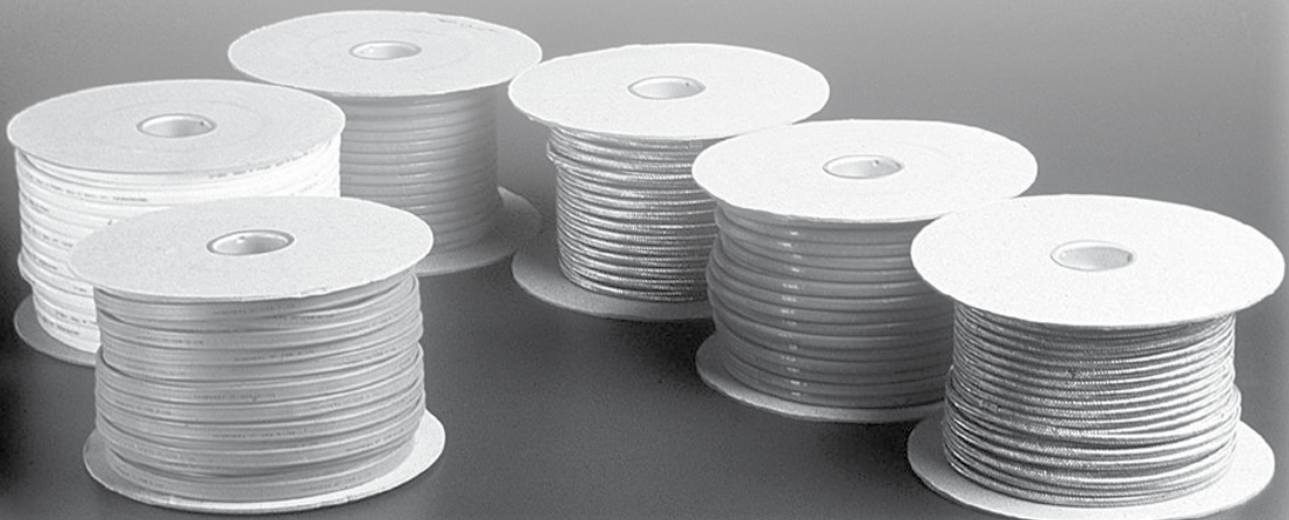
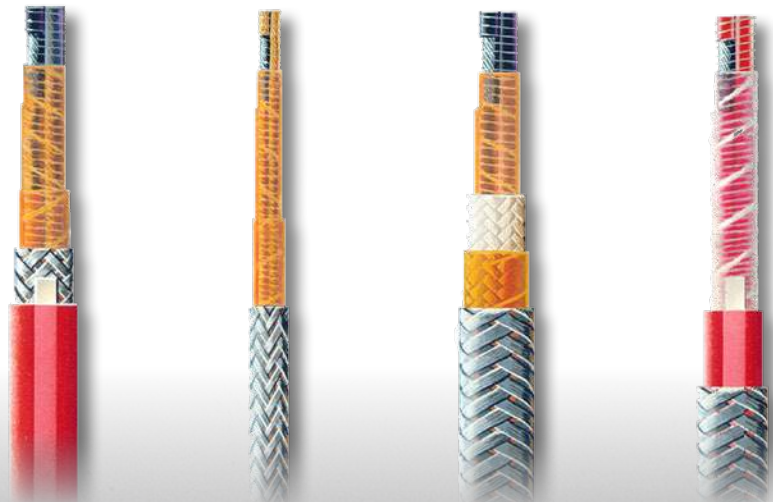
Part #	Width	Length
282309	0.75" (19mm)	180" (4.5m)

Your **Heating** Specialist since 1949

## Constant-Wattage Heating Cable

### Product Highlights

- ✓ Precise and Constant Temperatures
- ✓ Temperatures up to 500°F (260°C)
- ✓ Ideal for Long Runs
- ✓ Can Be Cut-to-Length at Job Site
- ✓ Tension Wrapping Holds Resistance Wire in Place, Even Under Extreme Bending
- ✓ Wide Range of Applications
  - Freeze protection
  - Viscosity control
  - Low to high temperature control
  - Process maintenance
  - Ordinary locations
  - Hazardous locations



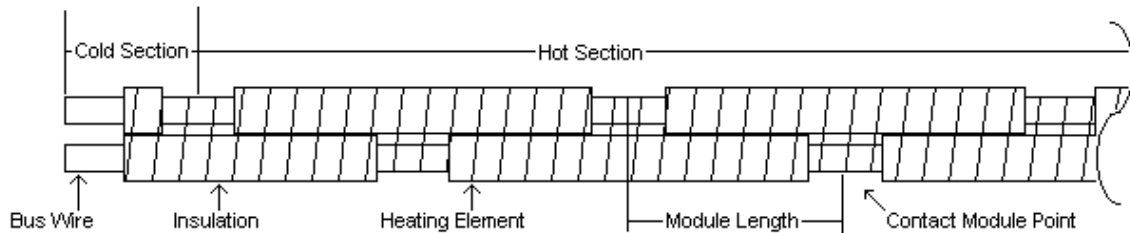
CABLE / WIRE

## Constant-Wattage Heating Cable Selection Guide

CABLE / WIRE

BriskHeat® Constant-Wattage Heating Cables	FE General Purpose Heating Cable	KE Harsh Environment Heating Cable	KM Heating Cable	KK High Temperature Heating Cable
<b>Maximum Exposure Temperature</b>	400°F (204°C)	500°F (260°C)	500°F (260°C)	500°F (260°C)
<b>Available Voltages</b>	120, 208, 240, 277, 480VAC	120, 208, 240, 277, 480VAC	120, 208, 240, 277, 480VAC	120, 208, 240, 277, 480VAC
<b>Available Wattages</b>	3, 5, 8, & 12 watts/ft (10, 16, 26, & 39 watts/m)	4, 8, & 12 watts/ft (13, 26, & 39 watts/m)	4, 8 & 12 watts/ft (13, 26, & 39 watts/m)	4, 8, 12, & 18 watts/ft (13, 26, 39, & 59 watts/m)
<b>Nominal Dimensions</b>	0.2" x 0.3" (5mm x 8mm) 12AWG	0.2" x 0.3" (5mm x 8mm) 12AWG	0.2" x 0.3" (5mm x 8mm) 12AWG	0.15" x 0.25" (4mm x 6mm) 12AWG
<b>Weight per 500 Foot (152m) Spool</b>	40lb (18kg)	41lb (19kg)	45lb (20kg)	30lb (14kg)
<b>Dielectric Strength</b>	Over 2000 volts	Over 2000 volts	Over 2000 volts	Over 2000 Volts
<b>Resistance to Moisture</b>	Poor	Excellent	Good	Good
<b>Resistance to Chemicals</b>	Poor	Excellent	Good	Good
<b>Resistance to Flame</b>	Outstanding	Excellent	Outstanding	Excellent
<b>Resistance to Radiation</b>	Fair to good	Fair to good	Good	Outstanding <i>Flexible</i> after exposure to 10 <sup>9</sup> RADS

### How Constant-Wattage Cable Works



Constant-Wattage cable uses a fixed resistance wire wrapped around two main conductors (bus wires). At specific intervals the insulation is removed from the bus wires, forming the Contact Module Points.

These Contact Module Points are staggered along the length of the cable. This creates consistent heating circuits known as the Module Length. When power is applied to the bus wires each *complete* Module Length heats at the rated wattage output.

The incomplete Module Lengths, at the beginning and end of each cable, do not heat. This allows the "Cold" ends to be safely placed inside of a controller or junction box.

# FE General Purpose Constant-Wattage Heating Cable

## Product Highlights

- ✓ Temperatures up to 400°F (204°C)
- ✓ Power remains constant regardless of temperature
- ✓ Can be cut-to-length at job site
- ✓ Ideal for wide range of general purpose applications:
  - Mid-range process temperature control for food and chemical processing
  - Water lines
  - Fire protection systems
  - Fuel oil
  - Condensate return
  - Hot water lines
  - Lines periodically purged with 250 psig steam
  - Not suitable for installation in wet locations and outdoor use.

## Specifications:

- Maximum exposure temperature is 400°F (204°C)
- 12AWG bus wires
- Dimensions 0.2" x 0.3" (5mm x 8mm)
- 40lb (18kg) per 500-foot (152m) spool

## Approvals:

**FM APPROVED** Ordinary Locations  
 Hazardous Locations:  
 Class I, Division 2, Groups B, C, & D  
 Class II, Division 2, Groups F, & G  
 Class III, Division 2

**SP** Tinned copper braid only  
 Ordinary Locations  
 120, 240VAC only

**RoHS** Compliant **REACH** **CE**

**Approvals valid only when** used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

## Ordering Information:

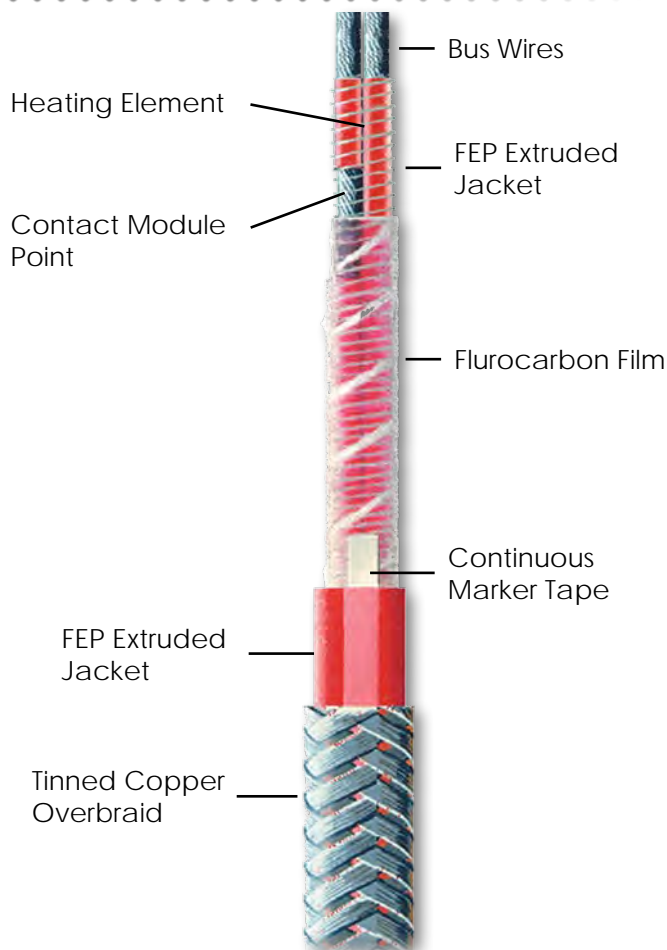
### Part Number Matrix

FECAB 3 120 B

Watts / ft: \_\_\_\_\_  
 3, 5, 8, 12

Voltage: \_\_\_\_\_  
 120, 208, 240, 277, 480

Braid Type: \_\_\_\_\_  
 B- (tinned copper metal braid), SS- (stainless steel overbraid)



CABLE / WIRE

Maximum Circuit Length in ft (m)

Cable	120VAC	208VAC	240VAC	277VAC	480VAC
3 watts/ ft (10 watts/ m)	640 (195)	1110 (338)	1280 (390)	N/A	2560 (780)
5 watts/ ft (16 watts/ m)	385 (117)	665 (203)	770 (234)	N/A	1535 (468)
8 watts/ ft (26 watts/ m)	240 (73)	415 (127)	480 (146)	555 (169)	960 (293)
12 watts/ ft (39 watts/ m)	160 (49)	277 (85)	320 (98)	370 (113)	640 (195)

Circuit Module Length in ft (m)

Cable Type	120VAC	208VAC	240VAC	277VAC	480VAC
3 watts/ ft (10 watts/ m)	2.0 (0.6)	4.0 (1.2)	4.0 (1.2)	N/A	8.0 (2.4)
5 watts/ ft (16 watts/ m)	2.0 (0.6)	4.0 (1.2)	3.0 (0.9)	N/A	6.0 (1.8)
8 watts/ ft (26 watts/ m)	2.0 (0.6)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	6.0 (1.8)
12 watts/ ft (39 watts/ m)	2.0 (0.6)	6.0 (1.8)	2.0 (0.6)	4.0 (1.2)	4.0 (1.2)

When ordering, please allow a minimum of 1 module length extra for terminations.

See [page 21 & 22](#) for connection/termination kits and accessories.

**IMPORTANT: Temperature controller is required for this product. See [pages 86 through 104](#) for options.**

# KE Harsh Environment Constant-Wattage Heating Cable

## Product Highlights

- ✓ Temperatures up to 500°F (260°C)
- ✓ Power remains constant regardless of temperature
- ✓ Can be cut-to-length at job site
- ✓ Ideal for a wide range of applications in corrosive environments:
  - Freeze protection
  - Viscosity control
  - High temperature process control
  - Asphalt plants
  - Oil refineries
  - Mines
  - Chemical and petrochemical processing areas
  - Other explosive and corrosive atmospheres
  - Severe arctic cold

## Specifications:

- Maximum exposure temperature is 500°F (260°C)
- Moisture, chemical, flame, and radiation resistant
- 12AWG bus wires
- Dimensions 0.2" x 0.3" (5mm x 8 mm)
- 41lb. (19kg.) per 500-foot (152m)

## Approvals:

**FM** Ordinary Locations  
**APPROVED** Hazardous Locations:  
 Class I, Division 2, Groups B, C, & D  
 Class II, Division 2, Groups F, & G  
 Class III, Division 2



**Approvals valid only when** used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

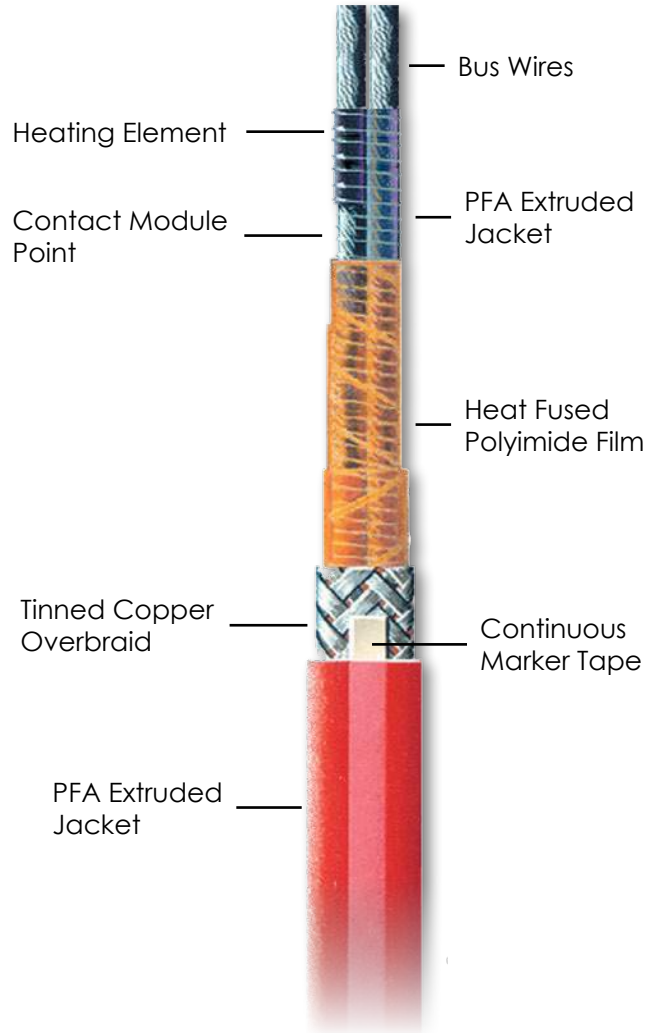
## Ordering Information:

### Part Number Matrix

**KECAB 4 120**

Watts / ft: \_\_\_\_\_  
 4, 8, 12

Voltage: \_\_\_\_\_  
 120, 208, 240, 277, 480



**Maximum Circuit Length in ft (m)**

Cable Type	120VAC	208VAC	240VAC	277VAC	480VAC
4 watts/ ft (13 watts/ m)	480 (146)	830 (253)	960 (293)	1110 (338)	1920 (585)
8 watts/ ft (26 watts/ m)	240 (73)	415 (127)	480 (146)	555 (169)	960 (293)
12 watts/ ft (39 watts/ m)	160 (49)	277 (85)	320 (98)	370 (113)	640 (195)

**Circuit Module Length in ft (m)**

Cable Type	120VAC	208VAC	240VAC	277VAC	480VAC
4 watts/ ft (13 watts/ m)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	8.0 (2.4)
8 watts/ ft (26 watts/ m)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	6.0 (1.8)
12 watts/ ft (39 watts/ m)	2.0 (0.6)	6.0 (1.8)	4.0 (1.2)	4.0 (1.2)	6.0 (1.8)

When ordering, please allow a minimum of 1 module length extra for terminations.

See [page 21 & 22](#) for connection/termination kits and accessories.

**IMPORTANT: Temperature controller is required for this product. See [pages 86 through 104](#) for options.**

# KM Constant-Wattage Heating Cable

## Product Highlights

- ✓ Temperatures up to 500°F (260°C)
- ✓ Power remains constant regardless of temperature
- ✓ Can be cut-to-length at job site
- ✓ Ideal for a wide range of applications:
  - Freeze protection
  - Viscosity control
  - High temperature process control
  - Power plants
  - Oil refineries
  - Water treatment plants
  - Food processing plants
  - Other explosive atmospheres

## Specifications:

- Maximum exposure temperature 500°F (260°C)
- Moisture, chemical, flame and radiation resistant
- 12AWG bus wire
- Dimensions: 0.2" x 0.3" (5mm x 8mm)
- Weight per 500-foot (152m) spool: 45 lb (20kg)

## Approvals:

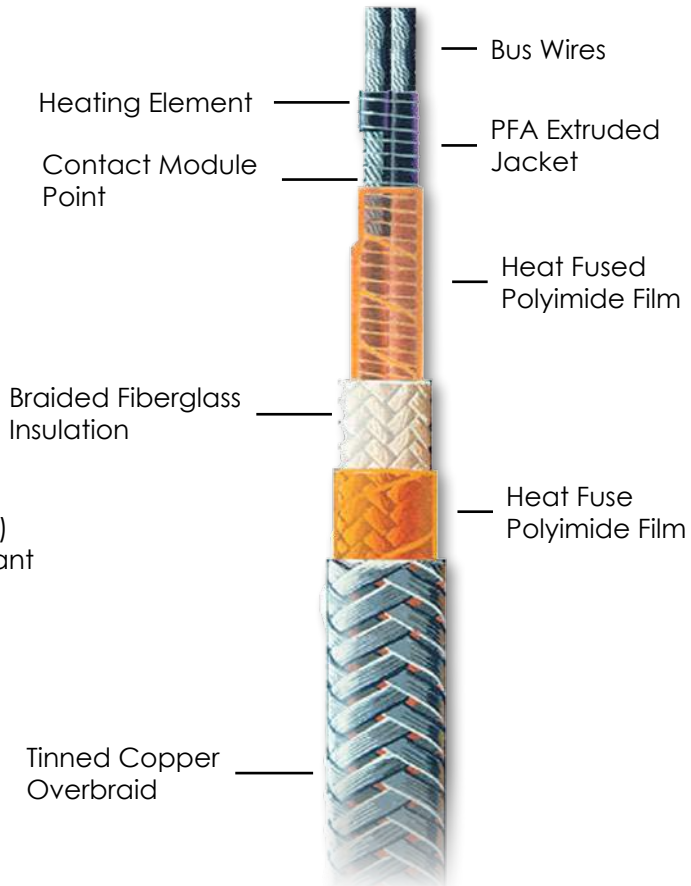
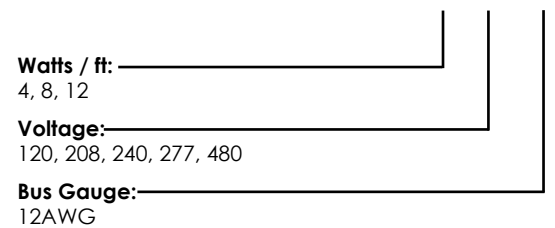
**FM** Ordinary Locations  
**APPROVED** Hazardous Locations:  
 Class I, Division 2, Groups B, C, & D  
 Class II, Division 2, Groups F, & G  
 Class III, Division 2



Approvals valid only when used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

## Ordering Information:

**Part Number Matrix**      **KMCAB 8 120 12**



CABLE / WIRE

**Maximum Circuit Length in ft (m)**

Cable Type	120VAC	208VAC	240VAC	277VAC	480VAC
4 watts/ft (13 watts/ m)	480 (146)	830 (253)	960 (293)	1110 (338)	1920 (585)
8 watts/ ft (26 watts/ m)	240 (73)	415 (127)	480 (146)	555 (169)	960 (293)
12 watts/ ft (39 watts/ m)	160 (49)	277 (85)	320 (98)	370 (113)	640 (195)

**Circuit Module Length in ft (m)**

Cable Type	120VAC	208VAC	240VAC	277VAC	480VAC
4 watts/ft (13 watts/ m)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	8.0 (2.4)
8 watts/ ft (26 watts/ m)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	6.0 (1.8)
12 watts/ ft (39 watts/ m)	4.0 (1.2)	6.0 (1.8)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)

When ordering, please allow a minimum of 1 module length extra for terminations.

See [page 21](#) & [22](#) for connection/termination kits and accessories.

**IMPORTANT: Temperature controller is required for this product. See [pages 86 through 104](#) for options.**

# KK High Temperature Constant-Wattage Heating Cable

## Product Highlights

- ✓ Temperatures up to 500°F (260°C)
- ✓ Power remains constant regardless of temperature
- ✓ Can be cut-to-length at job site
- ✓ Ideal for a wide range of high temperature applications:
  - Viscosity control
  - Asphalt lines
  - Heavy oil lines
  - Nuclear environments
  - Locations where halogens are not permitted
  - Process lines subject to high pressure steam blow down

## Specifications:

- Maximum exposure temperature 500°F (260°C)
- Moisture, chemical, flame, and radiation resistant
- 12 AWG bus wires
- Dimensions 0.15 in x 0.25 in (4 mm x 6 mm)
- 30 lb. (14 Kg) per 500-foot (152 m) spool

## Approvals:

**FM** Ordinary Locations  
**APPROVED** Hazardous Locations:  
 Class I, Division 2, Groups B, C, & D  
 Class II, Division 2, Groups F, & G  
 Class III, Division 2



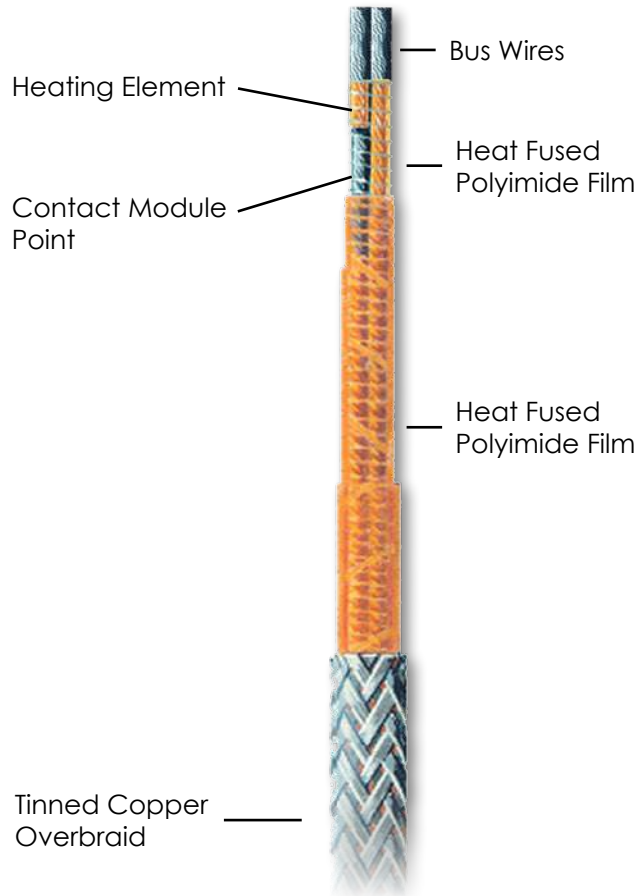
Approvals valid only when used with appropriate heating cable and installation accessories, and installed in accordance with all applicable instructions, codes, and regulations.

## Ordering Information:

**Part Number Matrix:** **KKCAB 8 120**

**Watts / ft:** \_\_\_\_\_  
 4, 8, 12, 18

**Voltage:** \_\_\_\_\_  
 120, 208, 240, 277, 480



**Maximum Circuit Length in ft (m)**

Cable Type	120 VAC	208 VAC	240 VAC	277 VAC	480 VAC
4 watts/ ft (13 watts/ m)	480 (146)	830 (253)	960 (293)	1110 (338)	1920 (585)
8 watts/ ft (26 watts/ m)	240 (73)	415 (127)	480 (146)	555 (169)	960 (293)
12 watts/ ft (39 watts/ m)	160 (49)	277 (85)	320 (98)	370 (113)	640 (195)
18 watts/ ft (59 watts/ m)	105 (32)	185 (56)	215 (65)	245 (75)	425 (130)

**Circuit Module Length in ft (m)**

Cable Type	120 VAC	208 VAC	240 VAC	277 VAC	480 VAC
4 watts/ ft (13 watts/ m)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	8.0 (2.4)
8 watts/ ft (26 watts/ m)	2.0 (0.6)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	6.0 (1.8)
12 watts/ ft (39 watts/ m)	2.0 (0.6)	4.0 (1.2)	4.0 (1.2)	4.0 (1.2)	7.0 (2.1)
18 watts/ ft (59 watts/ m)	1.75 (0.5)	3.0 (0.9)	3.5 (1.1)	4.0 (1.2)	5.5 (1.7)

When ordering, please allow a minimum of 1 module length extra for terminations.

See [page 21 & 22](#) for connection/termination kits and accessories.

**IMPORTANT: Temperature controller is required for this product. See [pages 86 though 104](#) for options.**

## FE Connection / Termination Kits



FE CABUC Contents

### FE CABUC:

#### Universal Connection/Termination Kit

- 3-Lead pouches
- 2-End pouches
- 6-Shrink tubes
- 1-3 oz. tube RTV sealant
- 1-Caution label
- 2-Ring terminals
- 2-Splice connectors 12-10
- 3-Wire nuts
- 1-1" NPT Pipe standoff
- 2-Pipe straps

Enough to complete one power input connection or one power input splice, three lead terminations and two end terminations.

*NOTE: Requires double hub junction box.*

### FE CABSK:

#### Splice Kit

- 3-Lead pouches
- 1-End pouch
- 4-Shrink tubes
- 1-3 oz. Tube RTV sealant
- 1-Caution label
- 3-Ring terminals
- 3-Splice connectors 12-10

Enough to complete one in-line splice or one tee splice, three lead terminations and one end termination.

*NOTE: Requires single hub junction box, pipe standoff, two pipe straps.*

### FE CABKC:

#### Lead/End Termination Kit

- 5-Lead pouches
  - 5-End pouches
  - 10-Shrink tubes
- Enough to complete five lead terminations and five end terminations.

### FE CABLP:

#### Lead Termination Kit

- 1-Lead pouch
  - 1-Shrink tube
- Enough to complete one lead termination.

### FE CABEP:

#### End Termination Kit

- 1-End pouch
  - 1-Shrink tube
- Enough to complete one end termination.

## KE, KM, KK Connection / Termination Kits



KE CABUC Contents

### KE CABUC:

#### Universal Connection/Termination Kit

- 2-Lead pouches
- 2-End pouches
- 1-3 oz. Tube RTV sealant
- 1-Caution label
- 2-Ring terminals
- 2-Splice connectors 12-10
- 2-Wire nuts
- 1-1" NPT pipe standoff
- 2-Pipe straps

Enough to complete one power input connection or one power input splice, two lead terminations and two end terminations.

*NOTE: Requires double-hub junction box.*

### KE CABSK:

#### Splice Kit

- 3-Lead Pouches
- 3-End pouches
- 1-3 oz. Tube RTV sealant
- 1-Caution label
- 3-Ring terminals
- 3-Splice connectors 12-10

Enough to complete one in-line splice or one tee splice, three lead terminations and three end terminations.

*NOTE: Requires single hub junction box, pipe standoff, two pipe straps.*

### KE CABKC:

#### Lead/End Termination Kit

- 5-Lead pouches
  - 5-End pouches
  - 1-3 oz. Tube RTV sealant
- Enough to complete five lead terminations and five end terminations.

### KE CABLP:

#### Lead Termination Kit

- 1-Lead pouch
- Enough to complete one lead termination.

*NOTE: Requires RTV silicone.*

### KE CABEP:

#### End Termination Kit

- 1-End pouch
- Enough to complete one end termination.

*NOTE: Requires RTV silicone.*



## Heating Cable Accessories



### Adhesive Tape

Adhesive tape used for mounting heating cable.

Part Number	Description
PSAT36A	Fiberglass Adhesive Tape: Size: 0.5" x 108' (13mm x 38m) Temp Limit: 350°F (176°C)
AAT260	Aluminum Adhesive Tape: Size: 2" x 180' (51mm x 55m) Temp Limit: 350°F (176°C)
AAT2180	Aluminum Adhesive Tape: Size: 2" x 180' (51mm x 55m) Temp Limit: 550°F (288°C)

### Junction Box

Metallic enclosure with watertight cover. Suitable for ordinary locations. NEMA 3R rated for outdoor/wet area use.

UL File No. 195978    SP File No. C22.2 No. 18



Part Number	Description
JBM050	Metallic Box 3 hub 1/2" NPT Dimensions: 2" x 4-1/2" x 2-3/4" (51mm x 114mm x 70mm)
JBM075	Metallic Box 3 hub 3/4" NPT Dimensions: 2" x 4-1/2" x 2-3/4" (51mm x 114mm x 70mm)
JBM100	Metallic Box 3 hub 1" NPT Dimensions: 2-5/8" x 4-1/2" x 2-3/4" (67mm x 114mm x 70mm)

Hazardous-Area Rated Junction Box available upon request.

### INSUL-LOCK® DS Insulation

Flexible thermal insulation for pipes and tubing. Adhesive flap closure.



Part Number	Recommended Pipe/Tube O.D.	Insulation I.D.
INSUL78	1/2" - 5/8"	7/8"
INSUL118	3/4" - 7/8"	1-1/8"
INSUL138	1"	1-3/8"
INSUL158	1-1/8"	1-5/8"
INSUL2	1-3/8"	2"
INSUL218	1-5/8"	2-1/8"
INSUL238	2"	2-3/8"
INSUL258	2-1/8"	2-5/8"
INSUL278	2-3/8"	2-7/8"
INSUL318	2-5/8"	3-1/8"
INSUL312	2-7/8"	3-1/2"
INSUL358	3-1/8"	3-5/8"
INSUL418	3-1/2"	4-1/8"
INSUL412	4"	4-1/2"



### Pipe Standoff

Aluminum standoff for mounting junction boxes to pipe.

Part Number	Description
PSOCAB075	3/4" NPT thread
PSOCAB010	1" NPT thread



### Pipe Strap

Stainless steel pipe straps used to secure pipe standoff to pipe.

Part Number	Description
BPSCAB2-6	Adjustable from: 2" to 6" (51mm to 152mm)



### RTV Sealant

Silicone sealant used to seal lead pouches, end pouches, and pipe standoffs.

Part Number	Description
RTV3.0	3 oz. (89ml)



### NEW & IMPROVED

#### Monitor Light Kit for Self-Regulating and Constant Wattage Heating Cable

Provides an end of circuit continuity indication for all types of heating cable. Suitable for ordinary locations. NEMA 3R rated for outdoor/wet area use. Now with brighter LED.

Part Number	Description
MLK1001	120V LED
MLK2001	240V LED

Note: Lead termination kit required.  
For SL series cables use SLCABLP  
For FE series cables use FECABLP  
For KE, KK, and KM series cables use KCABLP



### Heat Conductive Putty

Used to fill voids between cable and pipe surface.

Part Number	Description
HCP1	Size: 1 lb. (0.5kg)
HCP3	Size: 3 lb. (1.4kg)



### Electrical Tracing Caution Label

Recommended for every 10ft (3m) of heat trace.



Part Number	Description
BCLCAB	Caution label (English)
BCLCAB-DE	Caution label (Deutsch)
BCLCAB-ES	Caution label (Español)
BCLCAB-FR	Caution label (Frances)
BCLCAB-IT	Caution label (Italiano)

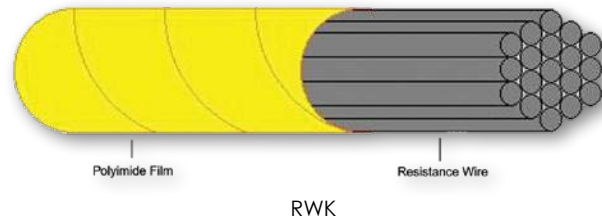
## Resistance Wire

### Product Highlights

- ✓ Same Multi-Stranded Wire We Use In Our High Quality Heating Element
- ✓ Provides Greater Flexibility and Durability Than Solid Strand Wires
- ✓ Flexible up to a 1/16" (1.6mm) Radius
- ✓ 500ft (152m) or 1000ft (305m) Standard Spools Sizes


### RWK Polyimide Film Insulated Resistance Wire: Specifications:

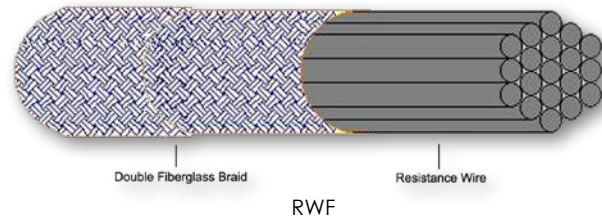
- Insulation type: 1 mil polyimide film with 50% overlap
- Insulation thickness: 2 mil
- Dielectric strength: Over 2000 volts
- Suitable for use on conductive surfaces
-  rated to 482°F (250°C), 600VAC, AWM 5417
- 



RWK



### RWF Fiberglass Insulated Resistance Wire: Specifications:

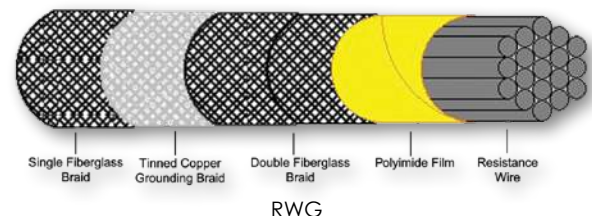
- 1100°F (593°C) maximum continuous exposure temperature
- Insulation type: Two layers of 8 mil diameter strands of fiberglass yarn
- Dielectric strength: Over 2000 volts
- Not suitable for conductive surfaces
- Optional PTFE coating provides anti-fraying and abrasion resistance
- 



RWF

### RWG Grounded Resistance Wire: Specifications:

- Patented grounded braid through entire length of heating element
- Insulation type: 1 mil polyimide film with 50% overlap
- Insulation thickness: 2 mil
- Two layers of 8-mil diameter fiberglass braided over polyimide film
- Dielectric strength: Over 2000 volts
- Suitable for use on conductive surfaces
- Optional PTFE coating provides anti-fraying and abrasion resistance
-  rated to 482°F (250°C), 600VAC, AWM 5418
- 



RWG

## Getting Started

### Ordering Information

When specifying resistance wire, it is important to consider all aspects of the application and of the wire. For example, if the application is on a conductive surface, wire type RWF should not be chosen. Also, if the application requires constant temperatures of 350°F (176°C), then alloy K should not be chosen. Call your local distributor for application assistance.

### Part Number Guide

**RWG 18 C - 4.899 T A**

**Resistance Wire Type:** \_\_\_\_\_  
 RWK- (Polyimide Film Insulated), RWF- (Fiberglass Insulated), RWG- (Grounded)

**Number of Strands:** \_\_\_\_\_  
 (see below tables)

**Alloy Type:** \_\_\_\_\_  
 (see below tables)

**Resistance per Foot:** \_\_\_\_\_  
 (see below tables)

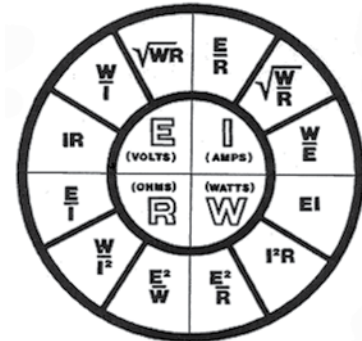
**Optional Coating:** \_\_\_\_\_  
 T- (PTFE) [RWF and RWG only], Blank- (None)

**Spool Size:** \_\_\_\_\_  
 A- (500ft [152m]), B- (1000ft [305m])

### Alloy Specifications

Alloy Type	Gauge/Strand	Max Exposure Temperature	Ohms/FT/Strand	Composition
A	43	1650°F (899°C)	175.00	71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu
B	41	1650°F (899°C)	115.31	71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu
C	40	1650°F (899°C)	88.18	71.75% Fe, 22% Cr, 5.75% Al, 0.5% Cu
D	40	1650°F (899°C)	70.24	60% Ni, 15% Cr, 25% Fe
E	39	1650°F (899°C)	55.10	60% Ni, 15% Cr, 25% Fe
F	37	1650°F (899°C)	33.33	60% Ni, 15% Cr, 25% Fe
G	37	1022°F (550°C)	14.52	55% Cu, 45% Ni
H	37	1000°F (538°C)	8.88	78% Cu, 22% Ni
I	37	797°F (425°C)	4.44	88% Cu, 12% Ni
K	36	300°F (149°C)	0.43	96% Cu (core), 4% Ni (cladding)

Ohm's Law



### Resistance Per Foot

Number of Strands	Alloy Type									
	A	B	C	D	E	F	G	H	I	K
5	35.000	23.062	17.636	14.048	11.020	6.666	2.904	1.776	0.888	0.086
6	29.167	19.218	14.697	11.707	9.183	5.555	2.420	1.480	0.740	0.072
7	25.000	16.473	12.597	10.034	7.871	4.761	2.074	1.269	0.634	0.061
8	21.875	14.414	11.023	8.780	6.888	4.166	1.815	1.110	0.555	0.054
9	19.444	12.812	9.798	7.804	6.122	3.703	1.613	0.987	0.493	0.048
10	17.500	11.531	8.818	7.024	5.510	3.333	1.452	0.888	0.444	0.043
11	15.909	10.483	8.016	6.385	5.009	3.030	1.320	0.807	0.404	0.039
12	14.583	9.609	7.348	5.853	4.592	2.778	1.210	0.740	0.370	0.036
13	13.462	8.870	6.783	5.403	4.238	2.564	1.117	0.683	0.342	0.033
14	12.500	8.236	6.299	5.017	3.936	2.381	1.037	0.634	0.317	0.031
15	11.667	7.687	5.879	4.683	3.673	2.222	0.968	0.592	0.296	0.029
16	10.938	7.207	5.511	4.390	3.444	2.083	0.908	0.555	0.278	0.027
17	10.294	6.783	5.187	4.132	3.241	1.961	0.854	0.522	0.261	0.025
18	9.722	6.406	4.899	3.902	3.061	1.852	0.807	0.493	0.247	0.024
19	9.211	6.069	4.641	3.697	2.900	1.754	0.764	0.467	0.234	0.023
20	8.750	5.766	4.409	3.512	2.755	1.667	0.726	0.444	0.222	0.022
21	8.333	5.491	4.199	3.345	2.624	1.587	0.691	0.423	0.211	0.020
22	7.955	5.241	4.008	3.193	2.505	1.515	0.660	0.404	0.202	0.020
23	7.609	5.013	3.834	3.054	2.396	1.449	0.631	0.386	0.193	0.019
24	7.292	4.805	3.674	2.927	2.296	1.389	0.605	0.370	0.185	0.018
25	7.000	4.612	3.527	2.810	2.204	1.333	0.581	0.355	0.178	0.017
26	6.731	4.435	3.392	2.702	2.119	1.282	0.558	0.342	0.171	0.017
27	6.481	4.271	3.266	2.601	2.041	1.234	0.538	0.329	0.164	0.016
28	6.250	4.118	3.149	2.509	1.968	1.190	0.519	0.317	0.159	0.015
29	6.034	3.976	3.041	2.422	1.900	1.149	0.501	0.306	0.153	0.015
30	5.833	3.844	2.939	2.341	1.837	1.111	0.484	0.296	0.148	0.014

NOTE: Resistance tolerance is +/- 8%

# HEATING TAPES / CORDS

# HEATING TAPES / CORDS

**BriskHeat**<sup>®</sup>  
Corporation



## XtremeFLEX® Heating Tapes

The flexible design and high temperature capability of **XtremeFLEX®** Heating Tapes provide an ideal solution. Heating tapes can be used on any surface or body requiring fast and efficient direct contact heating, up to temperatures of 932°F (500°C).

### Product Highlights

#### ✓ High Temperatures and Watt Densities

- Rapid thermal response
- Up to 932°F (500°C)
- Up to 13.1 W/in<sup>2</sup> (2.0 W/cm<sup>2</sup>)

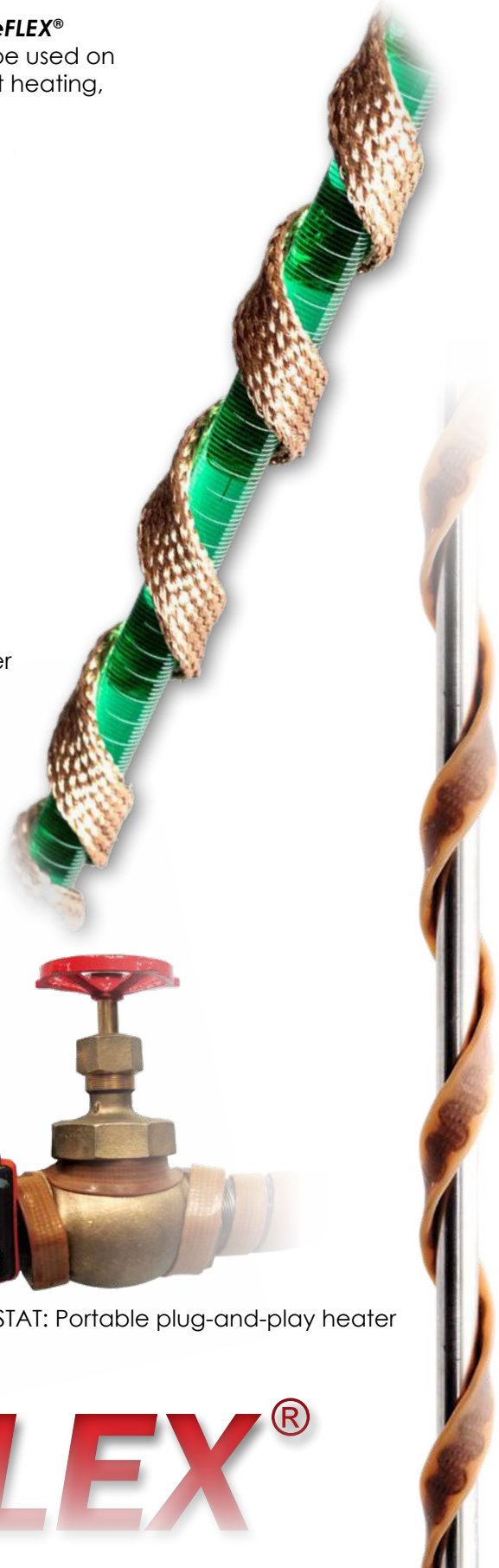
#### ✓ Extremely Flexible and Versatile

#### ✓ Rugged and Durable

- Multi-stranded resistance wire
- Serpentine woven heating element
- Moisture and chemical resistance with silicone rubber sheath

#### ✓ Wide Range of Applications

- Viscosity and temperature control
- Freeze protection
- Integrally heated tools
- Gas tubing
- Valves
- Laboratory apparatus
- Plastic bending
- External heating of dies and tools
- Temporary heat
- Hopper throat heater



HSTAT: Portable plug-and-play heater

HEATING TAPE

# Xtreme FLEX®


## XtremeFLEX® Heating Tapes Selection Guide

Type	Maximum Exposure Temperature	Power Density W/in <sup>2</sup> (W/cm <sup>2</sup> )	Suitable for Electrical Conductive Surfaces	Moisture and Chemical Resistant	Integral Tie Downs	Grounded	Built-in Control
HSTAT Silicone Rubber Heating Tape with Adjustable Control	425°F (218°C)	6.0 (0.9)	✓	✓			✓
BSAT Silicone Rubber Heating Tape with Time Percentage Dial Control	450°F (232°C)	6.0 (0.9)	✓	✓			✓
RKP Silicone Rubber Heating Tape with Preset Thermostat	450°F (232°C)	1.0 (0.15)	✓	✓			✓
BIH Heavy Insulated Heating Tape	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	Standard: 8.6 (1.3) Wide: 5.1 (0.8)	✓		✓		
BWH High Wattage Heavy Insulated Heating Tape	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	Standard: 13.1 (2.0) Wide: 7.7 (1.2)	✓		✓		
B00 Standard Insulated Heating Tape	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	8.6 (1.3)			✓		
BW0 High Wattage Standard Insulated Heating Tape	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	13.1 (2.0)			✓		
BWH-D Dual Element Heating Tape	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	13.1 (2.0)	✓		✓		
BIH-G Grounded Heavy Insulated Heating Tape	482°F (250°C)	9.6 (1.5)	✓		✓	✓	
BS0 Silicone Rubber Heating Tape	450°F (232°C)	4.3 (0.7)	✓	✓			
BS0-G Grounded Silicone Rubber Heating Tape	450°F (232°C)	4.3 (0.7)	✓	✓		✓	
CTL Cut-To-Length Silicone Rubber Heating Tape	450°F (232°C)	Varies with length	✓	✓			
HTC Heating Cord	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	1.8 (0.3)	✓		✓		
HWC High Wattage Heating Cord	Removable & Reusable: Up to 572°F (300°C) Single Install Use: Up to 932°F (500°C)	13.1 (2.0)	✓		✓		

HEATING TAPE

## XtremeFLEX® HSTAT Silicone Rubber Heating Tapes with Adjustable Thermostat Control

### Product Highlights

- ✓ Built-in adjustable thermostat control
- ✓ Useful for a wide range of applications
  - Process temperature control
  - De-icing
  - Supplemental heat
- ✓ Exceptional heater flexibility, durability, and uniformity
- ✓ Rapid heat-up and thermal response
- ✓  Compliant

### Specifications:

- Adjustable thermostat: Up to 425°F (218°C)†
- Maximum exposure temperature: 450°F (232°C)
- Moisture and chemical resistant silicone rubber extruded outer sheath
- Uniform, fiberglass-reinforced serpentine-wound multi-stranded heating element
- Minimum Bend Radius: 0.250in (6mm)
- Nominal Thickness: 0.125in (3mm)
- Power density: 6.0 W/in<sup>2</sup> (0.009 W/mm<sup>2</sup>)
- Power cord: 6ft (1.8m) long
  - 120VAC with standard 2-prong plug (NEMA 1-15)
  - 240VAC with crimped ferrule wire terminated leads
- Suitable for electrically conductive surfaces
- Ingress Protection Rating: IP54

† If precise temperature control is required for your application, please contact BriskHeat or your local distributor for application assistance and product solutions.



### Quickly Heat

- Valves
- Pipes
- Bearings
- Pumps
- Gas tubing
- Filter Housings
- Actuators
- And More!!

HEATING TAPE

### Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	Part Number 120VAC	Part Number 240VAC (No plug)
0.5 (13)	2 (0.6)	72	HSTAT051002	HSTAT052002
0.5 (13)	4 (1.2)	144	HSTAT051004	HSTAT052004
0.5 (13)	6 (1.8)	216	HSTAT051006	HSTAT052006
0.5 (13)	8 (2.4)	288	HSTAT051008	HSTAT052008
0.5 (13)	10 (3.1)	360	HSTAT051010	HSTAT052010
1.0 (25)	2 (0.6)	144	HSTAT101002	HSTAT102002
1.0 (25)	4 (1.2)	288	HSTAT101004	HSTAT102004
1.0 (25)	6 (1.8)	432	HSTAT101006	HSTAT102006
1.0 (25)	8 (2.4)	576	HSTAT101008	HSTAT102008
1.0 (25)	10 (3.1)	720	HSTAT101010	HSTAT102010
2.0 (51)	2 (0.6)	288	HSTAT201002	HSTAT202002
2.0 (51)	4 (1.2)	576	HSTAT201004	HSTAT202004
2.0 (51)	6 (1.8)	864	HSTAT201006	HSTAT202006
2.0 (51)	8 (2.4)	1152	HSTAT201008	HSTAT202008
2.0 (51)	10 (3.1)	1440	HSTAT201010	HSTAT202010
3.0 (76)	2 (0.6)	432	HSTAT301002	HSTAT302002
3.0 (76)	4 (1.2)	864	HSTAT301004	HSTAT302004
3.0 (76)	6 (1.8)	1296	HSTAT301006	HSTAT302006
3.0 (76)	8 (2.4)	1440	HSTAT301008	HSTAT302008
3.0 (76)	10 (3.1)	1440/1800	HSTAT301010	HSTAT302010



### Adhesive Tape

Provides intimate contact with surface to be heated.

Part Number	Material	Width	Length	Temperature Limit
		in (mm)	Yards (m)	
PSAT36A	Fiberglass	0.5 (13)	36 (32.9)	350°F (176°C)
AAT260	Aluminum	2.0 (51)	60 (54.8)	350°F (176°C)
AAT2180	Aluminum	2.0 (51)	60 (54.8)	550°F (288°C)

# XtremeFLEX® BSAT Silicone Rubber Heating Tapes with Time Percentage Control

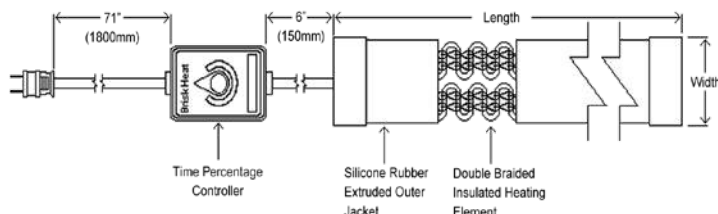
## Product Highlights

- ✓ Ideal for a wide range of temporary heating applications and surfaces: laboratory, valves, facilities maintenance, and more
- ✓ Easily adjust percentage of time heater is on and off: 5 to 100%
- ✓ Exceptional heater flexibility, durability, and uniformity
- ✓ Rapid thermal response



## Specifications:

- Maximum exposure temperature: 450°F (232°C)
- Moisture and chemical resistant silicone rubber extruded outer sheath
- Uniform, fiberglass-reinforced serpentine-wound multi-stranded heating element
- Minimum Bend Radius: 0.250in (6mm)
- Nominal Thickness: 0.125in (3mm)
- Power density: 6.0 watts/in<sup>2</sup> (0.009 watts/mm<sup>2</sup>)
- Compact, time percentage controller built-in
- 6-foot (2m) long power cord with
  - 120VAC: standard 2-prong NEMA 1-15 plug
  - 240VAC: bare wire connection
- Suitable for electrically conductive surfaces
- Ingress Protection Rating: IP54



## What is a Time Percentage Control?

The time percentage controller varies the proportion (length) of time the heater is in the “on” or “off” heating mode. The heating application will determine the actual percentage set-point required. The controller does not use a temperature sensor and therefore satisfactory operation requires occasional supervision under changing load conditions.

## Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC (No plug)
0.5 (13)	2 (0.6)	72	BSAT051002	BSAT052002
0.5 (13)	4 (1.2)	144	BSAT051004	BSAT052004
0.5 (13)	6 (1.8)	216	BSAT051006	BSAT052006
0.5 (13)	8 (2.4)	288	BSAT051008	BSAT052008
0.5 (13)	10 (3.1)	360	BSAT051010	BSAT052010
1.0 (25)	2 (0.6)	144	BSAT101002	BSAT102002
1.0 (25)	4 (1.2)	288	BSAT101004	BSAT102004
1.0 (25)	6 (1.8)	432	BSAT101006	BSAT102006
1.0 (25)	8 (2.4)	576	BSAT101008	BSAT102008
1.0 (25)	10 (3.1)	720	BSAT101010	BSAT102010
2.0 (51)	2 (0.6)	288	BSAT201002	BSAT202002
2.0 (51)	4 (1.2)	576	BSAT201004	BSAT202004
2.0 (51)	6 (1.8)	864	BSAT201006	BSAT202006
2.0 (51)	8 (2.4)	1152	BSAT201008	BSAT202008
2.0 (51)	10 (3.1)	1440	BSAT201010	BSAT202010
3.0 (76)	2 (0.6)	432	BSAT301002	BSAT302002
3.0 (76)	4 (1.2)	864	BSAT301004	BSAT302004
3.0 (76)	6 (1.8)	1296	BSAT301006	BSAT302006
3.0 (76)	8 (2.4)	1440	BSAT301008	BSAT302008
3.0 (76)	10 (3.1)	1440/1800	BSAT301010	BSAT302010

Plug not included on 240VAC models

## Adhesive Tape

Provides intimate contact with surface to be heated. A heating tape essential!

Part Number	Material	Width	Length	Temperature Limit
		in (mm)	Yards (m)	
PSAT36A	Fiberglass	0.5 (13)	36 (32.9)	350°F (176°C)
AAT260	Aluminum	2.0 (51)	60 (54.8)	350°F (176°C)
AAT2180	Aluminum	2.0 (51)	60 (54.8)	550°F (288°C)

HEATING TAPE



# XtremeFLEX® RKP Silicone Rubber Heating Tapes with Preset Thermostat

## Product Highlights

- ✓ Plug-and-play heater with built-in pre-set temperature control
- ✓ Standard lengths up to 200 ft (61 m)
- ✓ Exceptional flexibility and durability
- ✓ For use in indoor/outdoor and wet-area locations
- ✓ Ideal for freeze protection and process control heating applications
- ✓ Rapid thermal response
- ✓ Suitable for electrically conductive surfaces
- ✓ Low profile design
- ✓ Custom sizes and designs available

**Moisture  
and Chemical  
Resistant**



## Specifications:

- Built-In Controlling Thermostat: 70°F or 120°F (21°C or 49°C)
- Silicone Rubber Extruded Construction
- Minimum Bend Radius: 0.25 in (6 mm)
- Nominal Thickness: 0.125 in (3 mm)
- Nominal Width: 0.50 in (12.7 mm)
- Power Density: 1.0 W/in<sup>2</sup> (0.16 W/cm<sup>2</sup>)
- Nominal Voltage: Available 120 VAC or 240 VAC
- Power Cord: 60 in (1.5 m)
  - 120 VAC includes standard 2-prong plug (NEMA 1-15)
  - 240 VAC has crimped ferrule terminated leads
- Ingress Protection Rating: IP66
- Maximum Exposure Temperature: 450°F (232°C)



## Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	70°F (21°C) Thermostat		120°F (49°C) Thermostat	
			Part No. 120V	Part No. 240V	Part No. 120V	Part No. 240V
0.5 (13)	10 (3.0)	60	RKP1A0120	RKP2A0120	RKP1B0120	RKP2B0120
0.5 (13)	20 (6.1)	120	RKP1A0240	RKP2A0240	RKP1B0240	RKP2B0240
0.5 (13)	40 (12.2)	240	RKP1A0480	RKP2A0480	RKP1B0480	RKP2B0480
0.5 (13)	50 (15.2)	300	RKP1A0600	RKP2A0600	RKP1B0600	RKP2B0600
0.5 (13)	60 (18.3)	360	RKP1A0720	RKP2A0720	RKP1B0720	RKP2B0720
0.5 (13)	75 (22.9)	450	RKP1A0900	RKP2A0900	RKP1B0900	RKP2B0900
0.5 (13)	80 (24.4)	480	RKP1A0960	RKP2A0960	RKP1B0960	RKP2B0960
0.5 (13)	100 (30.5)	600	RKP1A1200	RKP2A1200	RKP1B1200	RKP2B1200
0.5 (13)	125 (38.1)	750	RKP1A1500	RKP2A1500	RKP1B1500	RKP2B1500
0.5 (13)	150 (45.7)	900	N/A	RKP2A1800	N/A	RKP2B1800
0.5 (13)	200 (61.0)	1200	N/A	RKP2A2400	N/A	RKP2B2400

## Accessories:



**Fiberglass Adhesive Tape (PN: PSAT36A)**

Size: 0.5 in x 108 ft (13 mm x 38 m)  
Maximum exposure temperature: 350°F (176°C)



**GFCI Adapter (PN: GFCI01)**

Converts a standard outlet into a GFCI protected outlet. For 120 VAC use, max 15A.



**INSUL-LOCK® DS Foam Insulation**

Premium pre-formed foam insulation with adhesive flap. See page 14 for sizes and ordering information.

**Custom Sizes and Designs Available: Contact your local distributor for more information.**

# XtremeFLEX® BIH and BWH Heavy Insulated Heating Tapes

## Product Highlights

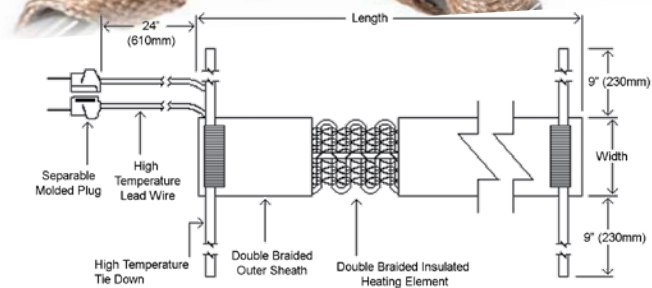
- ✓ Exceptional flexibility and durability
- ✓ Rapid thermal response
- ✓ Suitable for electrically conductive surfaces
- ✓ Choice of power leads on same end or opposite ends
- ✓ Includes high-temperature tie-downs for easy installation



## Specifications:

- Maximum exposure temperature:  
Removable & Reusable Use: Up to 572°F (300°C)  
Single Install Use: Up to 932°F (500°C)
- Construction:  
BIH series: fiberglass knitted and braided  
BWH series: Samox® knitted and braided
- Power density:  
BIH series: Standard: 8.6 W/in<sup>2</sup> (1.3 W/cm<sup>2</sup>)  
Wide†: 5.1 W/in<sup>2</sup> (0.8 W/cm<sup>2</sup>)  
BWH series: Standard: 13.1 W/in<sup>2</sup> (2.0 W/cm<sup>2</sup>)  
Wide†: 7.7 W/in<sup>2</sup> (1.2 W/cm<sup>2</sup>)
- Ingress Protection Rating: IP50

† 1.75" (44mm) wide tape or greater



## Ordering Information:

**BIH series: Heavy Insulated**  
Power Leads on Same End

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
0.50 (13)	2 (0.6)	105	BIH051020L	BIH052020L**
0.50 (13)	4 (1.2)	210	BIH051040L	BIH052040L**
0.50 (13)	6 (1.8)	310	BIH051060L	BIH052060L**
0.50 (13)	8 (2.4)	420	BIH051080L	BIH052080L**
0.50 (13)	10 (3.1)	520	BIH051100L	BIH052100L**
0.50 (13)	12 (3.7)	620	BIH051120L	BIH052120L**
1.00 (25)	1 (0.3)	105	BIH101010L	N/A
1.00 (25)	2 (0.6)	210	BIH101020L	BIH102020L**
1.00 (25)	4 (1.2)	420	BIH101040L	BIH102040L**
1.00 (25)	6 (1.8)	620	BIH101060L	BIH102060L**
1.00 (25)	8 (2.4)	830	BIH101080L	BIH102080L**
1.00 (25)	10 (3.1)	1045	BIH101100L	BIH102100L**
1.75 (44)	2 (0.6)	209	BIH171020L	BIH172020L*
1.75 (44)	4 (1.2)	418	BIH171040L	BIH172040L*
1.75 (44)	6 (1.8)	627	BIH171060L	BIH172060L*
1.75 (44)	8 (2.4)	836	BIH171080L	BIH172080L*
1.75 (44)	10 (3.1)	1045/1040	BIH171100L	BIH172100L*
2.50 (64)	2 (0.6)	313	BIH251020L	BIH252020L*
2.50 (64)	4 (1.2)	627	BIH251040L	BIH252040L*
2.50 (64)	6 (1.8)	940	BIH251060L	BIH252060L*
2.50 (64)	8 (2.4)	1254	BIH251080L	BIH252080L*
2.50 (64)	10 (3.1)	1567	BIH251100L	BIH252100L*
3.25 (83)	2 (0.6)	418	BIH321020L	BIH322020L*
3.25 (83)	4 (1.2)	836	BIH321040L	BIH322040L*
3.25 (83)	6 (1.8)	1254	BIH321060L	BIH322060L*
3.25 (83)	8 (2.4)	1672	BIH321080L*	BIH322080L*
3.25 (83)	10 (3.1)	2090	BIH321100L*	BIH322100L*

**BWH series: High Temperature Heavy Insulated**  
Power Leads on Same End


Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
0.50 (13)	2 (0.6)	156	BWH051020L	BWH052020L**
0.50 (13)	4 (1.2)	313	BWH051040L	BWH052040L**
0.50 (13)	6 (1.8)	470	BWH051060L	BWH052060L**
0.50 (13)	8 (2.4)	627	BWH051080L	BWH052080L**
0.50 (13)	10 (3.1)	783	N/A	BWH052100L**
0.50 (13)	12 (3.7)	940	N/A	BWH052120L**
1.00 (25)	2 (0.6)	313	BWH101020L	BWH102020L**
1.00 (25)	4 (1.2)	627	BWH101040L	BWH102040L**
1.00 (25)	6 (1.8)	940	BWH101060L	BWH102060L**
1.00 (25)	8 (2.4)	1254/1245	BWH101080L	BWH102080L**
1.00 (25)	10 (3.1)	1570/1567	N/A	BWH102100L**
1.75 (44)	2 (0.6)	313	BWH171020L	BWH172020L*
1.75 (44)	4 (1.2)	627	BWH171040L	BWH172040L*
1.75 (44)	6 (1.8)	940	BWH171060L	BWH172060L*
1.75 (44)	8 (2.4)	1254	BWH171080L	BWH172080L*
1.75 (44)	10 (3.1)	1570	BWH171100L	BWH172100L*
2.50 (64)	2 (0.6)	470	BWH251020L	BWH252020L*
2.50 (64)	4 (1.2)	940	BWH251040L	BWH252040L*
2.50 (64)	6 (1.8)	1411	BWH251060L	BWH252060L*
2.50 (64)	8 (2.4)	1881	BWH251080L*	BWH252080L*
2.50 (64)	10 (3.1)	2351	N/A	BWH252100L*
3.25 (83)	2 (0.6)	627	BWH321020L	BWH322020L*
3.25 (83)	4 (1.2)	1254	BWH321040L	BWH322040L*
3.25 (83)	6 (1.8)	1881	BWH321060L*	BWH322060L*
3.25 (83)	8 (2.4)	2508	BWH321080L*	BWH322080L*
3.25 (83)	10 (3.1)	3135	BWH321100L*	BWH322100L*

\* Bare wire power leads, plug not included      \*\* Ferrule crimp wire termination  
Ordering option: For a single power lead on opposite ends, remove "L" from end of part number

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options.**

# XtremeFLEX® B00 and BW0 Standard Insulated Heating Tapes

## Product Highlights

- ✓ Excellent flexibility
- ✓ Rapid thermal response
- ✓ Exceptional durability
- ✓ Suitable for non-conductive electrical surfaces only (i.e. glass)
- ✓ Choice of power leads on same end or opposite ends
- ✓ Includes high-temperature tie-downs for easy installation
- ✓ **RoHS** Compliant 



## Specifications:

- Maximum exposure temperature:  
Removable & Reusable Use: Up to 572°F (300°C)  
Single Install Use: Up to 932°F (500°C)

### Construction:

- B00 series: fiberglass knitted and braided
- BW0 series: Samox® knitted and braided
- Power density:  
B00 series: 8.6 W/in<sup>2</sup> (1.3 W/cm<sup>2</sup>)  
BW0 series: 13.1 W/in<sup>2</sup> (2.0 W/cm<sup>2</sup>)
- 120 or 240VAC
- Ingress Protection Rating: IP50

## Ordering Information:

### B00 series: Standard Insulated Heating Tape

#### Power Leads on Same End

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
0.5 (13)	2 (0.6)	105/100	B00051020L	B00052020L*
0.5 (13)	4 (1.2)	210	B00051040L	B00052040L*
0.5 (13)	6 (1.8)	310	B00051060L	B00052060L*
0.5 (13)	8 (2.4)	420	B00051080L	B00052080L*
0.5 (13)	10 (3.1)	520	B00051100L	B00052100L*
1.0 (25)	2 (0.6)	210	B00101020L	B00102020L*
1.0 (25)	4 (1.2)	420	B00101040L	B00102040L*
1.0 (25)	6 (1.8)	620	B00101060L	B00102060L*
1.0 (25)	8 (2.4)	830	B00101080L	B00102080L*
1.0 (25)	10 (3.1)	1045	N/A	B00102100L*

\* Plug not included

### BW0 series: High Temperature Standard Insulated Heating Tape

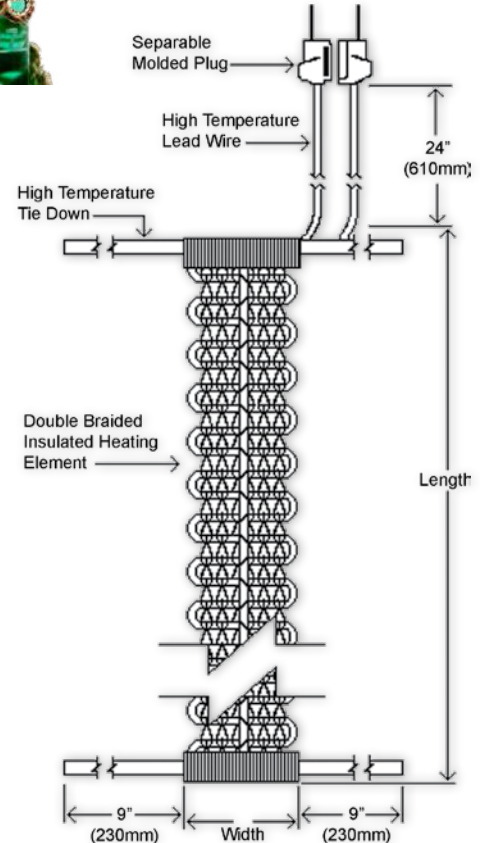
#### Power Leads on Same End

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
0.5 (13)	2 (0.6)	160	BW0051020L	BW0052020L*
0.5 (13)	4 (1.2)	310	BW0051040L	BW0052040L*
0.5 (13)	6 (1.8)	470	BW0051060L	BW0052060L*
0.5 (13)	8 (2.4)	620	BW0051080L	BW0052080L*
0.5 (13)	10 (3.1)	780	N/A	BW0052100L*
0.5 (13)	12 (3.7)	940	N/A	BW0052120L*
1.0 (25)	2 (0.6)	310	BW0101020L	BW0102020L*
1.0 (25)	4 (1.2)	620	BW0101040L	BW0102040L*
1.0 (25)	6 (1.8)	940	N/A	BW0102060L*
1.0 (25)	8 (2.4)	1250	N/A	BW0102080L*

\* Plug not included


Ordering option: For a single power lead on opposite ends, remove "L" from end of part number

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options.**



## XtremeFLEX® BWH-D Dual Element Heating Tapes

### Product Highlights

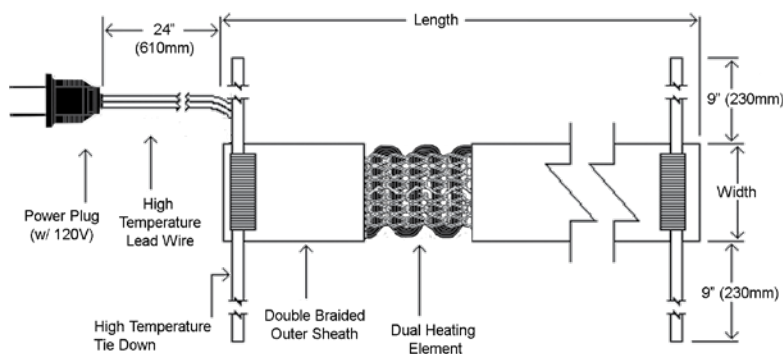
- ✓ Dual heater element design increases flexibility
- ✓ Connects easily to your choice of temperature control
- ✓ Includes high-temperature tie-downs for easy installation
- ✓ **RoHS** Compliant 

### Specifications:

- Highly flexible and durable multi-stranded dual heating element provides even heat across tape
- Reinforced with high temperature Samox® fiberglass for added strength and durability
- Maximum exposure temperature:  
Removable & Reusable Use: Up to 572°F (300°C)  
Single Install Use: Up to 932°F (500°C)
- Power density: 13.1 W/in<sup>2</sup> (2.0 W/cm<sup>2</sup>)
- Suitable for electrical conductive surfaces
- 24" (610mm) power leads with
  - 120VAC: standard 2-prong (NEMA 1-15) plug
  - 240VAC: bare-wire connection
- Ingress Protection Rating: IP50



HEATING TAPE



### Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
0.5 (13)	2 (0.6)	156	BWH051020LD	BWH052020LD*
0.5 (13)	4 (1.2)	312	BWH051040LD	BWH052040LD*
0.5 (13)	6 (1.8)	468	BWH051060LD	BWH052060LD*
0.5 (13)	8 (2.4)	624	BWH051080LD	BWH052080LD*
0.5 (13)	10 (3.1)	780	BWH051100LD	BWH052100LD*
1.0 (25)	2 (0.6)	312	BWH101020LD	BWH102020LD*
1.0 (25)	4 (1.2)	624	BWH101040LD	BWH102040LD*
1.0 (25)	6 (1.8)	936	BWH101060LD	BWH102060LD*
1.0 (25)	8 (2.4)	1248	BWH101080LD	BWH102080LD*

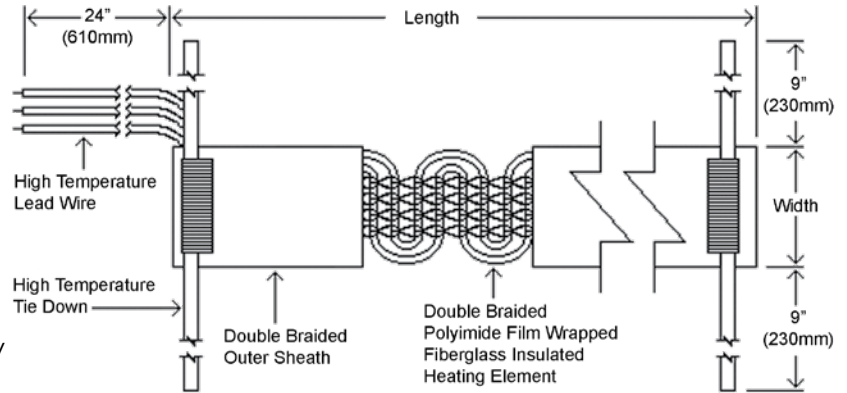
\* Plug not included

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options.**

## XtremeFLEX® BIH-G Grounded Heavy Insulated Heating Tapes

### Product Highlights

- ✓ Grounded for your safety
- ✓ Exceptional flexibility
- ✓ Rapid thermal response
- ✓ Exceptional durability
- ✓ Suitable for electrically conductive surfaces
- ✓ Includes high-temperature tie-downs for easy installation.



## With Ground

### Specifications:

- Maximum exposure temperature: 250 °C (482 °F)
- Patented grounded heating element
- Polyimide film wrapped fiberglass knitted and braided construction
- Fiberglass outer sheath
- Power density: 1.5 W/cm<sup>2</sup> (9.6 W/in<sup>2</sup>)
- 120 or 240VAC
- 610 mm (24 in) lead wire
- Ingress Protection Rating: IP50

### Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
1.0 (25)	2 (0.6)	230	BIH101020LG	BIH102020LG
1.0 (25)	4 (1.2)	460	BIH101040LG	BIH102040LG
1.0 (25)	6 (1.8)	690	BIH101060LG	BIH102060LG
1.0 (25)	8 (2.4)	920	BIH101080LG	BIH102080LG
1.0 (25)	10 (3.1)	1150	BIH101100LG	BIH102100LG

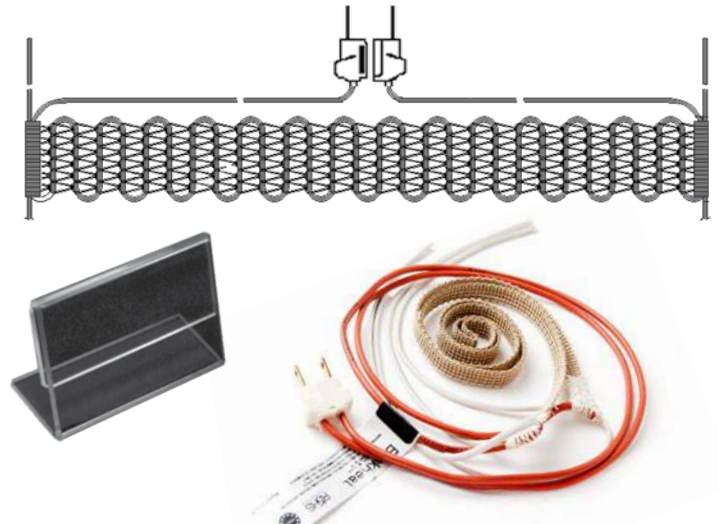
**IMPORTANT: Temperature controller is required for these products. See pages 86 through 104 for options.**

HEATING TAPE

## RH Plastic Bending Strip Heaters

### Product Highlights

- ✓ Quickly softens acrylic sheets for easy bending
  - Plastic photos frames
  - Arts and crafts
  - Custom work shop fabricating
- ✓ Suitable for non-conductive electrical surfaces only
- ✓ Provides radiant line of heat. Heater never comes in contact with the plastic
- ✓ Easy-to-use. Designed for production and craft makers



### Specifications:

- Multi-stranded resistance wire reinforced with fiberglass knit and braided construction provides even heat across surface
- Power density: 1.3 W/cm<sup>2</sup> (8.6 W/in<sup>2</sup>)
- Maximum exposure temperature: 482 °C (900 °F)
- Connects with standard two-prong separable 110VAC electrical plug
- Includes heating element and instructions for building complete strip heater. Other materials are required.
- Ingress Protection Rating: IP50

### Ordering Information:

Part Number	Width in (mm)	Length ft (m)	Total Watts
RH24	0.5 (13)	2 (0.6)	105
RH36	0.5 (13)	3 (0.9)	157
RH48	0.5 (13)	4 (1.2)	209

**IMPORTANT: Temperature controller or proper supervision is required for these products. See pages 86 through 104 for options.**

# XtremeFLEX® BSO Silicone Rubber Heating Tapes

## Product Highlights

- ✓ Moisture, chemical, and radiation resistant
- ✓ Exceptional durability and flexibility for a wide range of heating applications
- ✓ Rapid thermal response
- ✓ Suitable for electrically conductive surfaces
- ✓ Choice of power leads on same end or opposite ends



## Specifications:

- Maximum Exposure Temperature: 450°F (232°C)
- Silicone rubber extruded outer sheath
- Fiberglass knitted and braided construction
- Minimum Bend Radius: 0.250in (6mm)
- Nominal Thickness: 0.125in (3mm)
- Power Density: 4.3 W/in<sup>2</sup> (0.007 W/mm<sup>2</sup>)
- 120 or 240VAC
- Electrical leads on same end
- Ingress Protection Rating: IP66

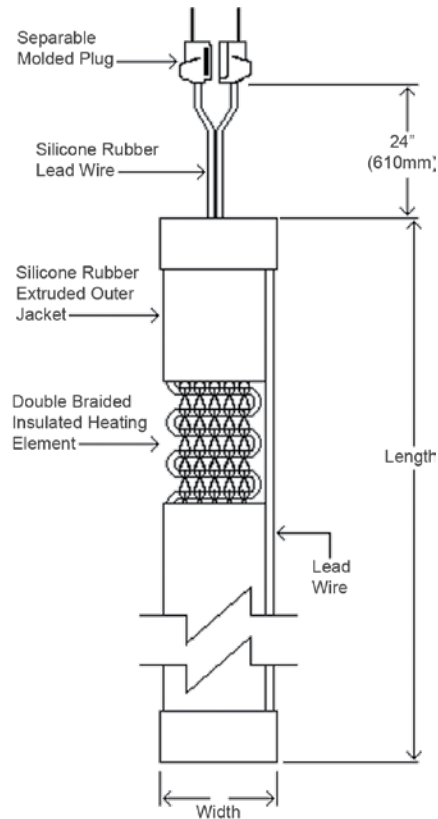
## Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
0.5 (13)	2 (0.6)	52	BS0051020L	BS0052020L**
0.5 (13)	4 (1.2)	104	BS0051040L	BS0052040L**
0.5 (13)	6 (1.8)	156	BS0051060L	BS0052060L**
0.5 (13)	8 (2.4)	209	BS0051080L	BS0052080L**
0.5 (13)	10 (3.1)	261	BS0051100L	BS0052100L**
0.5 (13)	12 (3.7)	313	BS0051120L	BS0052120L**
1.0 (25)	2 (0.6)	104	BS0101020L	BS0102020L**
1.0 (25)	4 (1.2)	209	BS0101040L	BS0102040L**
1.0 (25)	6 (1.8)	313	BS0101060L	BS0102060L**
1.0 (25)	8 (2.4)	418	BS0101080L	BS0102080L**
1.0 (25)	10 (3.1)	522	BS0101100L	BS0102100L**
1.0 (25)	12 (3.7)	627	BS0101120L	BS0102120L**
1.0 (25)	14 (4.3)	731	BS0101140L	BS0102140L**
1.0 (25)	16 (4.9)	836	BS0101160L	BS0102160L**
1.0 (25)	18 (5.5)	940	BS0101180L	BS0102180L**
1.0 (25)	20 (6.1)	1075/1045	BS0101200L	BS0102200L**
2.0 (51)	2 (0.6)	209	BS0201020L	BS0202020L*
2.0 (51)	4 (1.2)	418	BS0201040L	BS0202040L*
2.0 (51)	6 (1.8)	627	BS0201060L	BS0202060L*
2.0 (51)	8 (2.4)	836	BS0201080L	BS0202080L*
2.0 (51)	10 (3.1)	1045	BS0201100L	BS0202100L*
2.0 (51)	12 (3.7)	1254	BS0201120L	BS0202120L*
2.0 (51)	14 (4.3)	1463	BS0201140L	BS0202140L*
2.0 (51)	16 (4.9)	1627	BS0201160L	BS0202160L*
2.0 (51)	18 (5.5)	1881	BS0201180L*	BS0202180L*
2.0 (51)	20 (6.1)	2090	BS0201200L*	BS0202200L*

**Ordering option:** For a single power lead on opposite ends, remove "L" from end of part number.

\* Bare wire, plug not included      \*\* Ferrule crimp wire termination

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options.**



## Adhesive Tape

Provides intimate contact with surface to be heated. A heating tape essential!

Part Number	Material	Width	Length	Temperature Limit
		in (mm)	Yards (m)	
PSAT36A	Fiberglass	0.5 (13)	36 (32.9)	350°F (176°C)
AAT260	Aluminum	2.0 (51)	60 (54.8)	350°F (176°C)
AAT2180	Aluminum	2.0 (51)	60 (54.8)	550°F (288°C)

HEATING TAPE

# XtremeFLEX® BS0-G Grounded Silicone Rubber Heating Tapes

## Product Highlights

- ✓ Grounded for your safety
- ✓ Moisture and chemical resistant
- ✓ Exceptional flexibility
- ✓ Rapid thermal response
- ✓ Exceptional durability



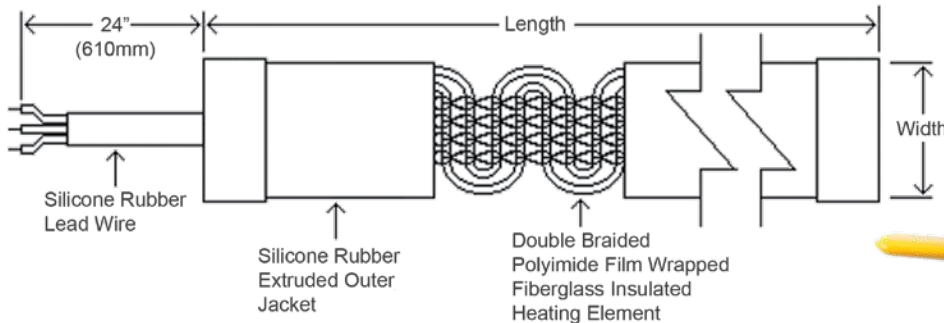
**With Ground**

**Moisture and Chemical Resistant**



## Specifications:

- Maximum exposure temperature: 450°F (232°C)
- Silicone rubber extruded outer sheath
- Polyimide film wrapped fiberglass knitted and braided construction
- Patented grounded heating element
- Minimum Bend Radius: 0.250in (6mm)
- Nominal Thickness: 0.125in (3mm)
- Power density: 4.3 W/in<sup>2</sup> (0.007 W/mm<sup>2</sup>)
- Suitable for electrically conductive surfaces
- 120 or 240VAC
- 24" (610mm) lead wire
- Electrical leads same end
- Ingress Protection Rating: IP66



## Ordering Information:

Width in (mm)	Length ft (m)	Total Watts	Part No. 120VAC	Part No. 240VAC
1.0 (25)	2 (0.6)	104	BS0101020LG	BS0102020LG
1.0 (25)	4 (1.2)	209	BS0101040LG	BS0102040LG
1.0 (25)	6 (1.8)	313	BS0101060LG	BS0102060LG
1.0 (25)	8 (2.4)	418	BS0101080LG	BS0102080LG
1.0 (25)	10 (3.1)	522	BS0101100LG	BS0102100LG



## Adhesive Tape

Provides intimate contact with surface to be heated. A heating tape essential!

Part Number	Material	Width	Length	Temperature Limit
		in (mm)	Yards (m)	
PSAT36A	Fiberglass	0.5 (13)	36 (32.9)	350°F (176°C)
AAT260	Aluminum	2.0 (51)	60 (54.8)	350°F (176°C)
AAT2180	Aluminum	2.0 (51)	60 (54.8)	550°F (288°C)

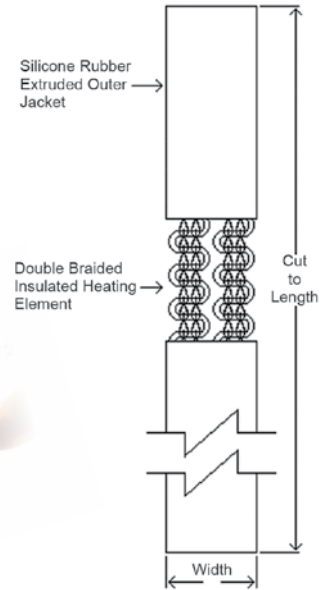
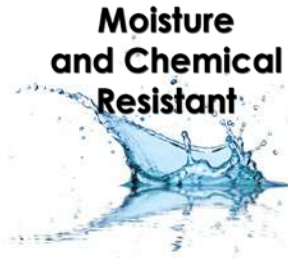
**IMPORTANT:** Temperature controller is required for these products. See pages 86 through 104 for options.

HEATING TAPE

## XtremeFLEX® CTL Cut-To-Length Silicone Rubber Heating Tapes

### Product Highlights

- ✓ Well suited for pipeline tracing
- ✓ Can be cut-to-length at job site
- ✓ Moisture and chemical resistant
- ✓ Exceptional flexibility



### Specifications:

- Minimum Bend Radius: 0.250 in (6 mm)
- Nominal Thickness: 0.125 in (3 mm)
- Ingress Protection Rating: IP54



### Ordering Information:

CTL heating tape is a series heating element design; wattages and amperages vary with the tape length. Contact BriskHeat to determine the actual wattage output for your given application.

Part Number	Ohms Per	Volts	Min	Max	Width
	ft (m)				
CTLA	0.10	120VAC	57 (17)	220 (67)	1 (25)
	(0.328)	240VAC	114 (35)	440 (134)	
CTLB	0.90	120VAC	19 (6)	74 (23)	1 (25)
	(2.953)	240VAC	38 (12)	146 (45)	
CTLC	10.00	120VAC	6 (2)	22 (7)	1 (25)
	(32.808)	240VAC	12 (4)	44 (13)	

### Adhesive Tape

Provides intimate contact with surface to be heated. A heating tape essential!

Part Number	Material	Width	Length	Temperature Limit
		in (mm)	Yd (m)	
PSAT36A	Fiberglass	0.5 (13)	36 (32.9)	350°F (176°C)
AAT260	Aluminum	2.0 (51)	60 (54.8)	350°F (176°C)
AAT2180	Aluminum	2.0 (51)	60 (54.8)	550°F (288°C)

Available factory finished for immediate use, consult factory for details.

**IMPORTANT: Temperature controller is required for these products. See pages 86 through 104 for options.**

## Cut-To-Length Termination Kits

### CTLLK: Lead Kit

- Crimp-on wire terminals
- Heavy-duty joint cover
- 8 ft (2.4 m) 6 AWG high temperature leads covered with insulating sleeve

Usage: Connects main power supply to heating tape.

NOTE: Requires RTV adhesive and adhesive tape.

### CTLEK: End Kit

- Crimp-on wire terminals
- Heavy-duty joint cover

Usage: Terminates the end of the heating tape.

NOTE: Requires RTV adhesive and adhesive tape.

### RTV3.0: RTV Adhesive

High-temperature RTV silicone adhesive sealant with high dielectric strength. 3 oz. (89 ml) tube.

Usage: Seals connection kits.

### CTLTK: Tee Kit

- Crimp-on wire terminals
- Heavy-duty joint covers
- 1 ft (0.3 m) 16 AWG high-temperature leads covered with insulating sleeve
- 1 End kit

Usage: Joins three segments of heating tape.

NOTE: Requires RTV adhesive and adhesive tape.

### CTLJK: Jumper Kit

- Heavy-duty joint cover
- 2 ft (0.6 m) 16 AWG high-temperature leads covered with insulating sleeve

Usage: Makes a splice/jumper combining two segments of heating tape.

NOTE: Requires RTV adhesive and adhesive tape.

HEATING TAPE



## HTC and HWC Heating Cords

### Product Highlights

- ✓ Designed for use on small tubes, vessels, or any application where space is limited
- ✓ Can be wrapped around objects as small as 1/8" (3mm) diameter
- ✓ Exceptional flexibility
- ✓ Rapid thermal response
- ✓ Exceptional durability: excellent for laboratory, production, maintenance, and R&D applications



### Specifications:

- 3/16" (4.8mm) diameter heating cord
- Maximum exposure temperature:  
Removable & Reusable Use: Up to 572°F (300°C)  
Single Install Use: Up to 932°F (500°C)
- Construction:  
HTC series: Double braided fiberglass outer sheath  
HWC series: Double braided high temperature Samox® fiberglass outer sheath
- Power density:  
HTC series: 21 W/ft (68 W/m)  
HWC series: 60 W/ft (196 W/m)
- Suitable for electrically conductive surfaces
- 2 to 6ft (0.6 to 1.8m) long power leads with  
120VAC: Separable molded plug  
240VAC: Crimped ferrule wire termination
- Includes high-temperature tie-downs for easy installation
- Ingress Protection: IP50



HEATING TAPE

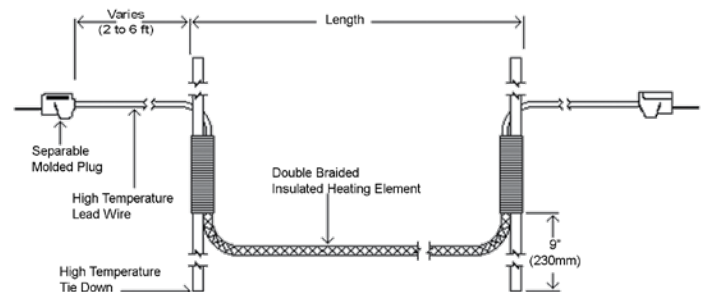
### Ordering Information:

#### HTC Series: Heating Cord

Cord Length		Total Watts	Lead Length	Part No. 120VAC	Part No. 240VAC
ft	m				
0.5	0.15	17	2ft (0.6m)	HTC451007	N/A
1	0.3	22	2ft (0.6m)	HTC451006	N/A
2	0.6	43	2ft (0.6m)	HTC451005	N/A
3	0.9	64	2ft (0.6m)	HTC451001	N/A
4	1.2	82	2ft (0.6m)	HTC451008	N/A
6	1.8	125/135	2ft (0.6m)	HTC451002	HTC452002
8	2.4	170	2ft (0.6m)	HTC451009	N/A
12	3.7	260	2ft (0.6m)	HTC451003	HTC452003

#### HWC Series: High Temperature Heating Cord

Cord Length		Total Watts	Lead Length	Part Numbers	
ft	m			120VAC	240VAC
4	1.2	266	2ft (0.6m)	HWC1040	N/A
6	1.8	350	2ft (0.6m)	HWC1060	N/A
12	3.7	750/720	6ft (1.8m)	HWC1120	HWC2120
18	5.5	1000	6ft (1.8m)	HWC1180	HWC2180
24	7.3	1440	6ft (1.8m)	HWC1240	HWC2240



**IMPORTANT:** Temperature controller is required for these products. See **pages 86 through 104** for options.

## Temperature Controllers and Accessories for Heating Tapes

### SDC Benchtop Temperature Controller Features:

- Small Unit Size:
  - 5.5 in L x 4.25 in W x 1.75 in H
  - (140 mm L x 108 mm W x 45 mm H)
- Temperature Control Range: 32°F to 999°F (0°C to 600°C)
  - Accuracy: +/- 1% FS
- Models for °F or °C display
- Choose J-type or K-type Thermocouple Sensor
  - 5-foot (1.5 m) factory installed
- 120 VAC or 240 VAC power input
- 10-Amp Fused Output



### X2-series PID Temperature Controller Features:

- Temperature Control Range: 32°F to 1400°F (0°C to 760°C)
  - Accuracy: Type-J +/- 0.9°F (0.50°C)
  - Type-K +/- 0.5°F (0.25°C)
- Programmable to either °C or °F
- Type-J or Type-K thermocouple input
- 120VAC or 240VAC
- Compact, plug-and-play design
- Advanced PID control
- Simple three key user control



### T50 Portable Bulb and Capillary Temperature Controller Features:

- 120 or 240VAC
- 15 amps
- 4 foot copper bulb and capillary
- Compact portable design
- Plug-in operation



### TTD Outdoor-Use Digital On/Off Thermocouple Temperature Controller Features:

- 120 or 240VAC
- 15 amps
- Digital On/Off controller
- Plug-in operation
- Type K thermocouple input
- Compact portable design



For more information and choices, see **pages 86 through 104** for the full temperature controller section.

## Accessories:

### Adhesive tape

Part Number	Material	Width	Length		Temperature Limit
		in (mm)	Yards	Meters	
PSAT36A	Fiberglass	0.5 (13)	36	32.9	350°F (176°C)
AAT260	Aluminum	2.0 (51)	60	54.8	350°F (176°C)
AAT2180	Aluminum	2.0 (51)	60	54.8	550°F (288°C)



PSAT36A



AAT260

### Power Plugs

Part Number	Description	Voltage	NEMA	Amps	
10115	2 Pin, 2 Wire	125VAC	1-15	15	
10113	2 Pin, 3 Wire (Grounded)	125VAC	5-15	15	
10478	2 Pin, 3 Wire (Grounded)	250VAC	15		
CA0001	2 Pin, 3 Wire (Crimp Pins Included)	Up to 600VAC	N/A	15	
CA0002	2 Pin, 3 Wire (Crimp Sockets Included)	Up to 600VAC	N/A	15	

## SDC Temperature Controller with Heater Bundles

Bundle your:

- Heating Mantles
- Beaker Heaters
- Heating Tapes
- Heating Cords

with our

**SDC-Benchtop Digital Controller**  
and receive special discounted pricing



### Bundle Highlights

- ✓ Special discount pricing
- ✓ Many options to choose from
- ✓ Ideal for a wide range of applications including pipe heating, valves, glassware, gas lines, temporary heat, and more!

### SDC-Benchtop Digital Temperature Controller:

- 120 VAC/ 240 VAC
- J-Type/ K-Type Thermocouple

LABORATORY

### Bundle Products:

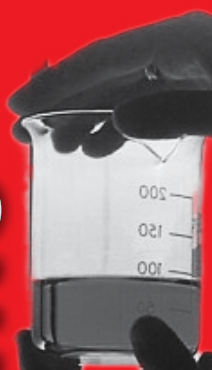
#### Choose a Heating Product:

- Beaker Heaters
- Heating Mantles
- Heating Tapes
- Heating Cords



# HEATING MANTLES BEAKER HEATERS

LABORATORY



**BriskHeat**<sup>®</sup>  
Corporation

## Heating Mantles for Laboratory Flasks

BriskHeat® Heating Mantles offer uniform heat distribution for round-bottom flasks. Whether the need is a self-standing mantle, a mantle to fit in a basket ring stand, a full coverage zippered mantle, BriskHeat® Heating Mantles provide the solution.

### Product Highlights

- ✓ Molded to Fit Round-Bottom Flasks
- ✓ Basket Ring Stand or Bench Top Models
- ✓ Temperatures up to 900°F (482°C)
- ✓ Low Watt Density



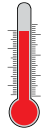
## HM Lower Hemispherical Heating Mantles

### Product Highlights

- ✓ Ideal for use with basket ring stand
- ✓ 120VAC model includes 3" (76mm) lead wire with NEMA L1-15R connector and a 4-foot (1.2m) power adaptor cord with NEMA 1-15 plug.
- ✓ 240VAC model includes 3" (76mm) lead wire with crimped wire ferrule terminated leads.



Temperatures up to

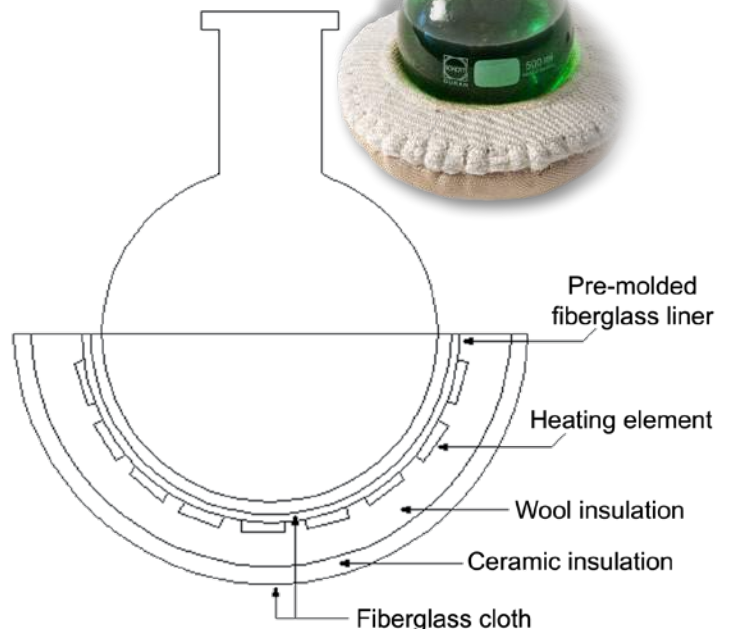


842°F (450°C)



### Ordering Information:

Size ml	Total Watts	Part Number	
		120VAC	240VAC
50	60	HM0050-HS1	HM0050-HS2
100	80	HM0100-HS1	HM0100-HS2
125	80	HM0125-HS1	HM0125-HS2
200	100	HM0200-HS1	HM0200-HS2
250	180	HM0250-HS1	HM0250-HS2
500	270	HM0500-HS1	HM0500-HS2
1000	380	HM1000-HS1	HM1000-HS2
2000	500	HM2000-HS1	HM2000-HS2
3000	500	HM3000-HS1	HM3000-HS2
5000	600	HM5000-HS1	HM5000-HS2
12000	1300	HM12000-HS1	HM12000-HS2



**IMPORTANT:** Temperature controller is required for this product. See **pages 86 through 104** for options.

## HM Upper Hemispherical Heating Mantles

### Product Highlights

- ✓ Opening holds 1, 2, or 3 neck flasks on ring stand
- ✓ Ideal for preventing vapor condensation in upper half of flask
- ✓ 120VAC model includes 3" (76mm) lead wire with NEMA L1-15R connector and a 4-foot (1.2m) power adaptor cord with NEMA 1-15 plug.
- ✓ 240VAC model includes 3" (76mm) lead wire with no plug.



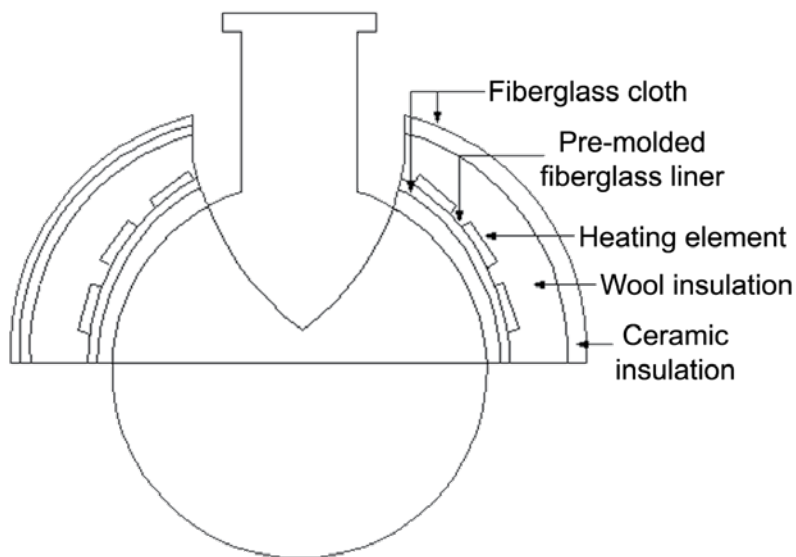
### Ordering Information:

Size ml	Total Watts	Part Number	
		120VAC	240VAC
250	140	HM0250-TS1	HM0250-TS2
500	140	HM0500-TS1	HM0500-TS2
1000	140	HM1000-TS1	HM1000-TS2
2000	200	HM2000-TS1	HM2000-TS2
3000	200	HM3000-TS1	HM3000-TS2
5000	300	HM5000-TS1	HM5000-TS2

Temperatures up to



842°F (450°C)



**IMPORTANT:** Temperature controller is required for this product. See [pages 86 through 104](#) for options.

## HM Spherical Heating Mantles

### Product Highlights

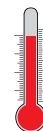
- ✓ Opening holds 1, 2, or 3 neck flasks on ring stand
- ✓ Zipper fastens upper and lower halves together
- ✓ 120VAC model includes 3" (76mm) lead wire with NEMA L1-15R connector and a 4-foot (1.2m) power adaptor cord with NEMA 1-15 plug.
- ✓ 240VAC model includes 3" (76mm) lead wire with no plug



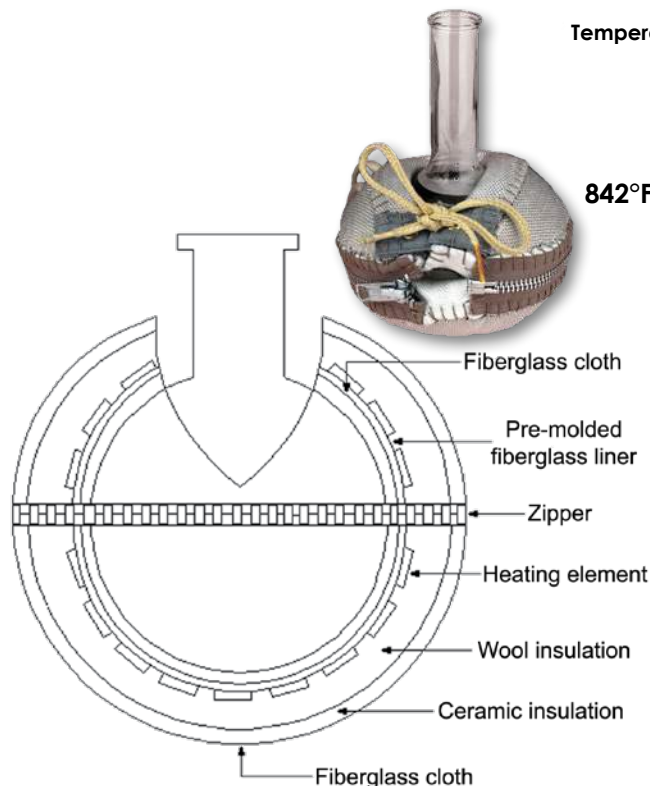
### Ordering Information:

Size ml	Total Watts		Part No. 120VAC	Part No. 240VAC
	upper	lower		
500	0	270	HM0500-SS1	HM0500-SS2
1000	140	380	HM1000-SS1	HM1000-SS2
2000	200	500	HM2000-SS1	HM2000-SS2

Temperatures up to



842°F (450°C)



**IMPORTANT:** Temperature controller is required for this product. See [pages 86 through 104](#) for options.

LABORATORY

## HM Table Top Heating Mantles

### Product Highlights

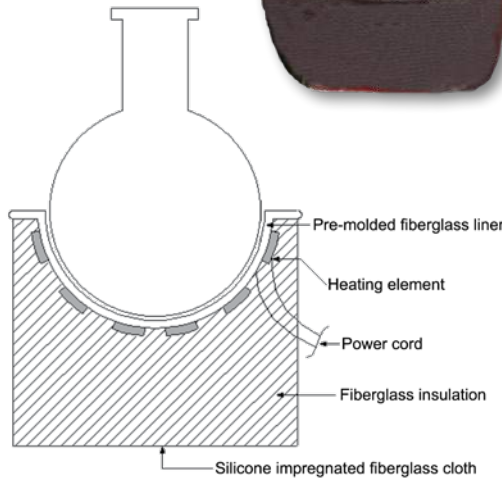
- ✓ Self-supporting: can be placed directly on counter top
- ✓ Easy viewing of flask contents
- ✓ Stackable for easy storage
- ✓ Includes 6-foot (1.8m) power cord with either a NEMA 1-15 (for 120VAC) or NEMA 6-15 (for 240VAC) plug



Temperatures up to



900°F (482°C)



### Ordering Information:

Size ml	Total Watts	Part Number	
		120VAC	240VAC
50	52	HM0050VF1	HM0050VF2
100	70	HM0100VF1	HM0100VF2
250	143	HM0250VF1	HM0250VF2
500	210	HM0500VF1	HM0500VF2
1000	377	HM1000VF1	HM1000VF2
2000	520	HM2000VF1	HM2000VF2
3000	550	HM3000VF1	HM3000VF2
5000	620	HM5000VF1	HM5000VF2

**IMPORTANT:** Temperature controller is required for this product. See [pages 86 through 104](#) for options.

LABORATORY

## Temperature Controllers for Heating Mantles

### SDC Benchtop Temperature Controller

#### Features:

- Temperature control range: 32-999°F (°F models) or 0-700°C (°C models)
- Includes J-type or K-type thermocouple sensor - 5-foot (1.5 m) factory installed
- 120 VAC or 240 VAC power input
- 10-Amp Fused Output
- Small Unit Size



### TP0 Portable Time Percentage Dial Temperature Controller

#### Features:

- 120 or 240VAC
- 15 amps
- Compact portable design
- Plug-in operation



The TP0 series controller varies the proportion (length) of time a heater is in the "on" or "off" heating mode. The heating application will determine the actual percentage set point required. The controller does not use a temperature sensor and therefore satisfactory operation requires occasional supervision under changing load conditions.

### TS0 Portable Bulb and Capillary Temperature Controller

#### Features:

- 120 or 240VAC
- 15 amps
- 4-foot copper bulb and capillary
- Compact portable design
- Plug-in operation



### X2-series PID Temperature Controller

#### Features:

- 120VAC or 240VAC
- Programmable to either °C or °F
- Type J or K thermocouple input
- Compact, plug-and-play design
- Advanced PID control
- Simple three key user control



For more information and choices, see [pages 86 through 104](#) for the full temperature controller section.

## Silicone Rubber Griffin Beaker Heaters

### Product Highlights

- ✓ Provides Even Heat for Griffin and Standard Beaker Heating Applications.
- ✓ Removable with hook and loop fastener. Easy-Access to Graduation.
- ✓ Moisture and Chemical Resistant. No Need to Worry About Spills.



### Specifications:

- Maximum exposure temperature: 232°C (450°F)
- 120 or 240VAC
- Power density: 5.0 watts/in<sup>2</sup> (0.008 watts/mm<sup>2</sup>)
- Heating element is laminated between two layers of 15mil fiberglass reinforced silicone rubber
- 1" (25mm) wide hook and loop fastener
- Moisture, chemical, and radiation resistant
- Dielectric strength of over 2000 volts
- 24" (610mm) long power leads with
  - 120VAC: Standard 2-prong NEMA 1-15 plug
  - 240VAC: Crimped wire ferrule terminated leads



### Ordering Information:

Size ml	Diameter in (mm)	Heater Height in (mm)	Heater Length in (mm)	Total Watts	Part Number 120VAC	Part Number 240VAC
250	2.7 (69)	3.0 (76)	12.25 (311)	150	GBH0250-1	GBH0250-2
400	3.0 (76)	3.5 (89)	13.75 (349)	200	GBH0400-1	GBH0400-2
600	3.6 (91)	4.0 (102)	15.00 (381)	250	GBH0600-1	GBH0600-2
1000	4.3 (109)	4.6 (117)	17.25 (438)	350	GBH1000-1	GBH1000-2

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options.**

BriskHeat® offers a wide variety of temperature control options including the SDC Benchtop Digital Temperature Controller.



**Need a different size or have a different object to heat?** We can design a heater specifically for your application. **Contact your local distributor for more details.**



# Did You Know?

All **Briskheat**® Products Can Be  
**Configured-to-Order** to match...

Your **Application**

Your **Size**

Your **Shape**

Your **Budget**

NEED HELP?



Contact Your Local Distributor For a Solution Right For You.

email:[info@northcompositesengineering.co.uk](mailto:info@northcompositesengineering.co.uk)

# HEATING BLANKETS

HEATING  
BLANKETS



**BriskHeat**<sup>®</sup>  
Corporation

## Silicone Rubber Heating Blankets

Many industrial heating applications require heaters with the ability to resist moisture, chemicals and abusive environments. These same applications also require rapid heat-up, steady temperature maintenance, and uniform heat distribution. For conditions such as these, BriskHeat® Silicone Rubber Heating Blankets are the best products available.

### Product Highlights

#### ✓ Uniform Heat Distribution

- Up to 450°F (232°C)

#### ✓ Easy-to-Apply Industrial Strength Pressure Sensitive Adhesive Backing Option

#### ✓ Suitable for a Large Range of Environments

- Moisture and chemical resistant
- Hazardous-area approved model option

#### ✓ Exceptional Durability

- Multi-stranded resistance wire

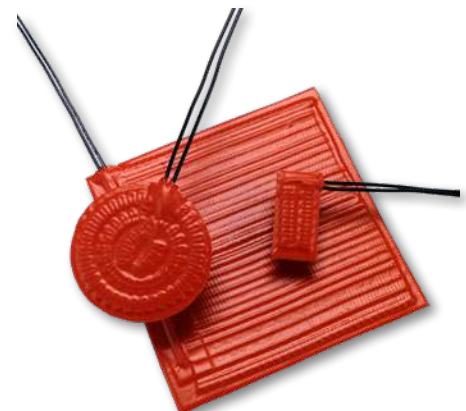
#### ✓ Variety of Standard and Configure-to-Order Options

Configure-to-order options:



















- Complex shapes
- Built-in controlling options
- Your choice of attachment options

#### ✓ Wide Range of Applications

- Viscosity and temperature control
- Freeze protection
- Storage tanks
- Hoppers
- Enclosures / control panels
- Silos
- Conveyors
- Presses
- Vats
- Tank trucks
- Low temperature ovens



## Heating Blankets Selection Guide

Heating Blanket Type	SRL and SRP	SRL-ADJ with Control	SRX Hazardous-Area	SRMU	NEW Etched Foil Heaters
Material Type	Silicone Rubber	Silicone Rubber	Silicone Rubber	Silicone Rubber	Polyimide Film or Silicone Rubber
Heating Element Type	Multi-stranded Resistance Wire	Multi-stranded Resistance Wire	Multi-stranded Resistance Wire	Multi-stranded Resistance Wire	Etched Foil
Silicone Layers and Thickness Per Layer	2 layers of 20 mil	2 layers of 20 mil	2 layers of 20 mil 2 layers of 27 mil	2 layers of 20 mil	N/A
Adhesive Backing	Optional	Optional	Optional	Optional	Optional
Standard Power Leads	48 in (1219 mm) silicone rubber	48 in (1219 mm) silicone rubber	12 in (305 mm) silicone rubber with tinned copper overbraid	12 in (305 mm) PFA extruded	12 in (305 mm) PTFE leads
Resistance to Moisture	Good	Good	Good	Good	Good
Resistance to Chemicals	Good	Good	Good	Good	Good
Resistance to Radiation	Good	Good	Good	Good	Good
Suitable Locations	Ordinary	Ordinary	Class 1 Division 2 Group A, B, C, & D Class II Division 2, Groups F and G	Ordinary	Ordinary
Grounded	✓	✓	✓		
Approvals	  maximum temperature rating 392°F (200°C)   	   	 APPROVED Class I Division 2, Groups A, B, C and D Class II Division 2, Groups F and G  Zone 2/22  	  	 

BriskHeat® can design a heater for your application. Contact your local distributor for more information.

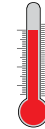
HEATING BLANKETS

## SRL and SRP Silicone Rubber Heating Blankets

### Product Highlights

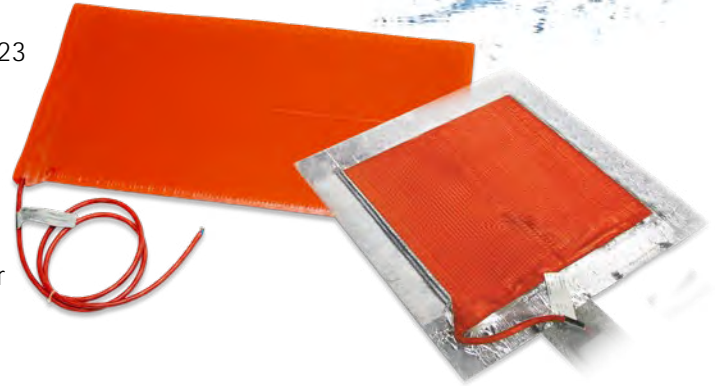
- ✓ Exceptional durability and suitable for a large range of surfaces like tanks, hoppers, conveyors, silos, etc.
- ✓ Easy-to-apply industrial strength pressure sensitive adhesive backing option
- ✓ Patented grounded heating element meets NEC 427.23
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between two layers of 20mil fiberglass reinforced silicone rubber
- ✓ Optional high-limit safety thermostat to protect heater and contents being heated
- ✓ **cRU<sup>us</sup>** up to 392°F (200°C)
- ✓ **SP<sup>c</sup>** **CE** **RoHS** **REACH** Compliant

Temperatures up to



450°F (232°C)

**Moisture and Chemical Resistant**

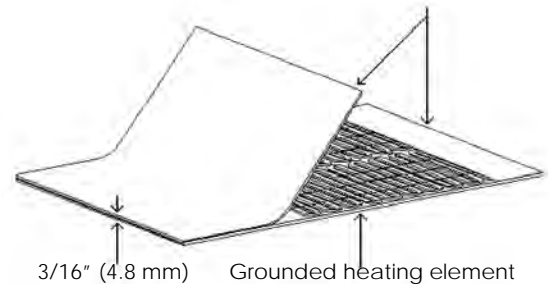


Fiberglass reinforced silicone rubber

### Specifications:

- Power Density:  
SRL series: 2.50 W/in<sup>2</sup> (0.4 W/cm<sup>2</sup>) for metal surfaces\*  
SRP series: 1.25 W/in<sup>2</sup> (0.4 W/cm<sup>2</sup>) for plastic surfaces
- Voltage Options: 120VAC to 600VAC single phase
- Exposure Temperature: -60°F to 450°F (-51°C to 232°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density: 46 oz/yd<sup>2</sup> (1560 g/m<sup>2</sup>)
- Power Cord: 48" (1219mm) high temperature silicone cord
- Ingress Protection Rating: IP66

\* Consult factory if SRL series will be used on a plastic surface.



### About High-Limit Safety Thermostat:

BriskHeat® offers an optional high-limit safety thermostat to protect both the heater and the product being heated from damage if the main controlling device fails.

### Ordering Information:

Standard Sizes and Wattages

Size		Total Watts	
Width in (mm)	Length in (mm)	SRL Series: 2.5 watts/in <sup>2</sup> (0.4 W/cm <sup>2</sup> )	SRP Series: 1.25 watts/in <sup>2</sup> (0.2 W/cm <sup>2</sup> )
6 (152)	12 (305)	180	90
6 (152)	24 (610)	360	180
6 (152)	36 (914)	540	270
12 (305)	12 (305)	360	180
12 (305)	24 (610)	720	360
12 (305)	36 (914)	1080	540
18 (457)	18 (457)	810	405
18 (457)	36 (914)	1620	810
24 (610)	24 (610)	1440	720
24 (610)	36 (914)	2160	1080

Note: Plug not included

### Part Number Matrix

SRL 06 12 1 P H150 -096

Product Series \_\_\_\_\_

SRL- (2.5 W/in<sup>2</sup>), SRP- (1.25 W/in<sup>2</sup>)

Width (inches) \_\_\_\_\_

Length (inches) \_\_\_\_\_

Voltage, 1-(120), 2-(240), 3-(277), 4-(480), 5-(208), 6-(600) \_\_\_\_\_

Pressure Sensitive Adhesive Option \_\_\_\_\_

P- (with), blank- (without)

High-Limit Safety Thermostat Option \_\_\_\_\_

H150- (150°F / 66°C) [recommended for plastic surfaces]  
H450- (450°F / 232°C)  
blank- no high-limit

Lead Length Adjustment Option \_\_\_\_\_

Additional lead lengths in 6 inch increments example:  
096- (96 in), blank- (standard 48 in)

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options. Custom Sizes and Designs Available: Contact your local distributor for more information.**

## SRL-ADJ Silicone Rubber Heating Blankets with Control

### Product Highlights

- ✓ Built-in temperature control for plug-and-play operation
- ✓ Exceptional durability and suitable for a large range of surfaces like tanks, hoppers, conveyors, silos, etc.
- ✓ Easy-to-apply industrial strength pressure sensitive adhesive backing option
- ✓ Patented grounded heating element meets NEC 427.23
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between two layers of 20mil fiberglass reinforced silicone rubber



### Ideal For

- Tanks
- Vessels
- Hoppers
- Silos
- Conveyors
- Vats
- Any Large Surface

### Specifications:

- Power Density:  
SRL Series: 2.50 W/in<sup>2</sup> (0.39W/cm<sup>2</sup>) for metal surfaces\*  
SRP Series: 1.25 W/in<sup>2</sup> (0.19 W/cm<sup>2</sup>) for plastics surfaces
- Adjustable Thermostat Options:  
SRL Series: Up to 425°F (218°C) †  
SRP Series: Up to 160°F (71°C) †
- Voltage Options: 120VAC or 240VAC single phase
- Exposure Temperature: -60°F to 450°F (-51°C to 232°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density: 46.0 oz/yd<sup>2</sup> (1560 g/m<sup>2</sup>)
- Power Cord 6 ft (1.8 m) long  
120VAC with standard 3-prong plug (NEMA 5-15)  
240VAC with standard 3-prong plug (NEMA 6-15)
- Ingress Protection Rating: IP54

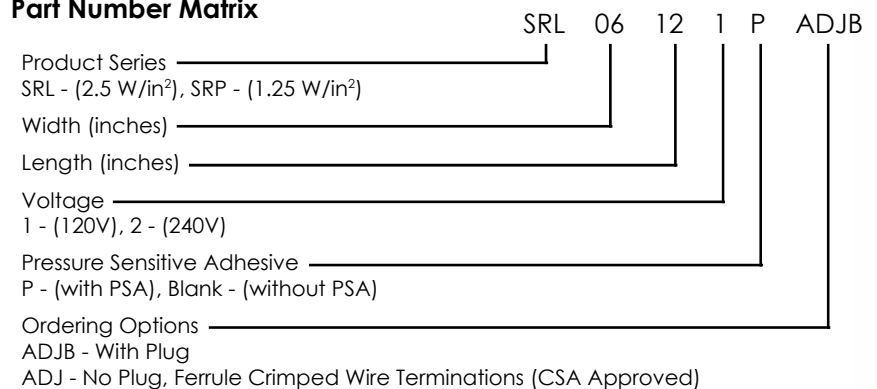
\* Consult factory if SRL series will be used on a plastic surface.

† If precise temperature control is required for your application, please contact your local distributor for application assistance and product solutions.

### Ordering Information:

Size		Total Watts	
Width in (mm)	Length in (mm)	SRL: 2.5 W/in <sup>2</sup> (0.4 W/cm <sup>2</sup> )	SRP: 1.25 W/in <sup>2</sup> (0.2 W/cm <sup>2</sup> )
6 (152)	12 (305)	180	90
6 (152)	24 (610)	360	180
6 (152)	36 (914)	540	270
12 (305)	12 (305)	360	180
12 (305)	24 (610)	720	360
12 (305)	36 (914)	1080	540
18 (457)	18 (457)	810	405
18 (457)	36 (914)	1472 <sup>(1)</sup>	810
24 (610)	24 (610)	1440	720
24 (610)	36 (914)	N/A	1080

### Part Number Matrix



<sup>(1)</sup> 2.27 W/in<sup>2</sup> (0.35 W/cm<sup>2</sup>)

**Custom Sizes and Designs Available: Contact your local distributor for more information.**

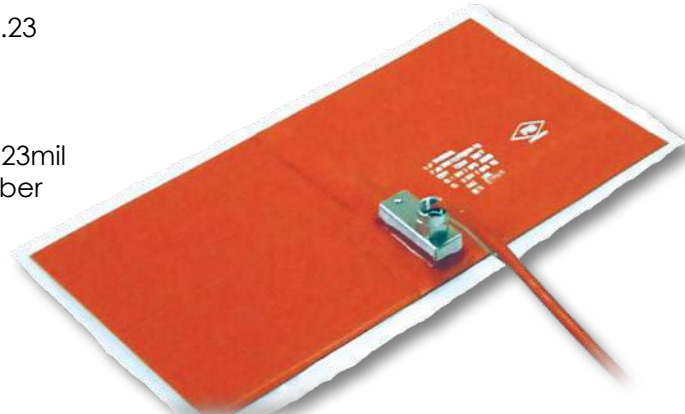
# SRX Hazardous-Area Silicone Rubber Heating Blankets

## Product Highlights

- ✓ Hazardous-area rated
- ✓ Exceptional durability and suitable for a large range of metal surfaces like tanks, hoppers, conveyors, silos, etc.
- ✓ Easy-to-apply industrial strength pressure sensitive adhesive backing option
- ✓ Patented grounded heating element meets NEC 427.23
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between two layers of 23mil and two layers 27mil fiberglass reinforced silicone rubber



Class I Division 2 Groups A, B, C, and D  
Class II Division 2, Groups F and G

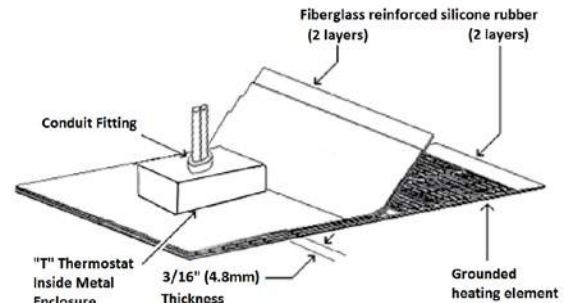


## Specifications:

- Power Density: 2.50 W/in<sup>2</sup> (0.39 W/cm<sup>2</sup>)
- Voltage Options: 120VAC or 240VAC single phase
- Exposure Temperature: -60°F to 400°F (-51°C to 204°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density: 104 oz/yd<sup>2</sup> (3526 g/m<sup>2</sup>)
- High-limit thermostat designed to keep blanket below NEC article 500 T-Rating

T-Rating	NEC Temperature	Actual High Limit Thermostat
T3	392°F (200°C)	292°F (145°C)
T4A	248°F (120°C)	158°F (70°C)

- Power Leads: 12" (305mm) long high-temperature leads with silicone rubber protective sheath
- Conduit Connection: Female 3/4-14 NPSM conduit fitting
- Ingress Protection Rating: IP54

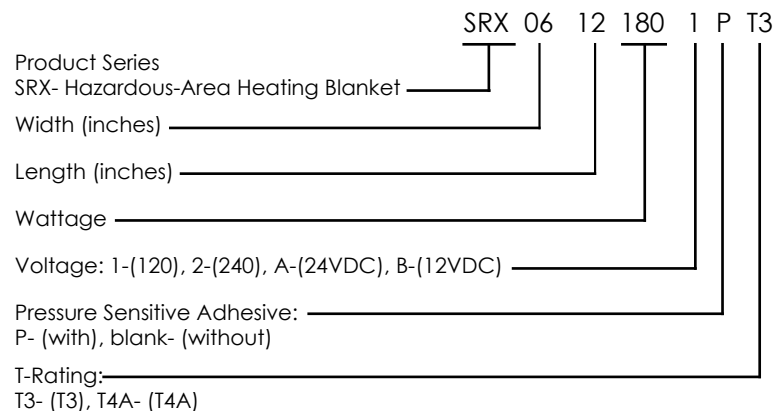


## Ordering Information:

Width in (mm)	Length in (mm)	Total Watts
6 (152)	12 (305)	180
6 (152)	24 (610)	360
12 (305)	12 (305)	360
12 (305)	24 (610)	720
24 (610)	24 (610)	1440

**Note: Plug not included**

## Part Number Matrix



**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options. Custom Sizes and Designs Available: Contact your local distributor for more information.**

HEATING BLANKETS

## SRMU Silicone Rubber Heating Blankets

### Product Highlights

- ✓ Thin low-profile silicone rubber blanket with multi-stranded resistance wire
- ✓ Exceptional durability and suitable for a large range of surfaces like tanks, hoppers, conveyors, silos, etc.
- ✓ Easy-to-apply industrial strength pressure sensitive adhesive backing option
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between two layers of 20mil fiberglass reinforced silicone rubber



### Specifications:

- Power Density Options: 2.5 W/in<sup>2</sup>, 5.0 W/in<sup>2</sup>, 10.0 W/in<sup>2</sup> (0.39 W/cm<sup>2</sup>, 0.78 W/cm<sup>2</sup>, 1.55 W/cm<sup>2</sup>)
- Voltage: 120VAC single phase
- Exposure Temperature: -60°F to 450°F (-51°C to 232°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density: 46.0 oz/yd<sup>2</sup> (1560 g/m<sup>2</sup>)
- Power Leads: 12" (305mm) PFA extruded leads with bare wire connection (no plug)
- Ingress Protection Rating: IP66

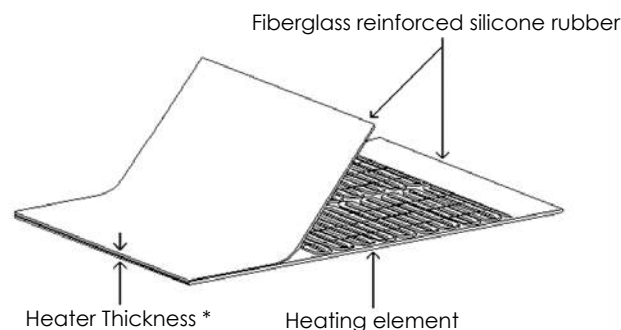
### Ordering Information:

Rectangle

Size		Total Watts		
Width in (mm)	Length in (mm)	2.5 W/in <sup>2</sup> (0.39 W/cm <sup>2</sup> )	5.0 W/in <sup>2</sup> (0.78 W/cm <sup>2</sup> )	10.0 W/in <sup>2</sup> (1.55 W/cm <sup>2</sup> )
6 (152)	12 (305)	180	360	720
6 (152)	24 (610)	360	720	1440
6 (152)	36 (914)	540	1080	2160
12 (305)	12 (305)	360	720	1440
12 (305)	24 (610)	720	1440	N/A
12 (305)	36 (914)	1080	2160	N/A
18 (457)	18 (457)	810	1620	N/A
18 (457)	36 (914)	1620	N/A	N/A
24 (610)	24 (610)	1440	N/A	N/A
24 (610)	36 (914)	2160	N/A	N/A

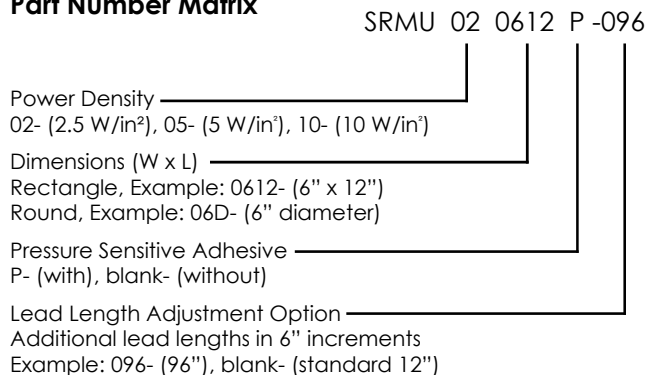
Round

Size	Total Watts		
Diameter in (mm)	2.5 W/in <sup>2</sup> (0.39 W/cm <sup>2</sup> )	5.0 W/in <sup>2</sup> (0.78 W/cm <sup>2</sup> )	10.0 W/in <sup>2</sup> (1.55 W/cm <sup>2</sup> )
6 (152)	71	140	283
12 (305)	283	565	1130



\* Thickness without PSA varies between 0.07" to 0.12" (1.8mm to 3.0mm).

### Part Number Matrix







HEATING  
BLANKETS

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options. Custom Sizes and Designs Available: Contact your local distributor for more information.**



## TSREH Enclosure / Control Panel Heaters

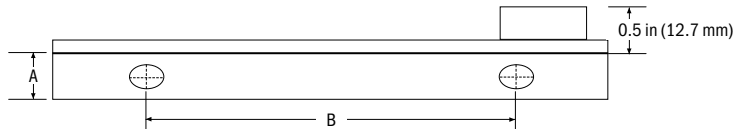
### Product Highlights

- ✓ Prevents condensation or freezing of electronics located within enclosures and control panels
- ✓ Easy-to-install mounting plate
- ✓ Air sensing thermostat for most models
- ✓  US    Compliant



### Specifications:

- Heater vulcanized to an aluminum plate for easy installation
- Aluminum mounting plate has two mounting slots that are 1/4 in x 5/32 in (6 mm x 4 mm) centered in a 1/2 in (12 mm) flange for mounting
- Suggested mounting method is at the bottom of the enclosure, mounted vertically
- 120 VAC. Other voltages available upon request
- 48 in (1219 mm) PFA extruded leads
- Safe to operate, no exposed electrical connections
- Overall thickness (blanket and bracket): 0.140 in (3.6 mm)
- Bracket: 0.09 in (2.3 mm) thick aluminum
- Exposure temperature range: -70°F to 392°F (-57°C to 200°C)
- Moisture, chemical, and radiation resistant



### Ordering Information:

Width* in (mm)	Length in (mm)	(A) Mounting Flange Width in (mm)	(B) Mounting Holes Center in (mm)	Total Watts	Thermostat		Part Number 120VAC	Part Number 240VAC
					Opens	Closes		
2.5 (64)	6 (152)	0.5 (12.7)	4 (102)	60	N/A	N/A	TSREH600	TSREH2600
2.5 (64)	6 (152)	0.5 (12.7)	4 (102)	60	60°F (15°C)	40°F (4°C)	TSREH640	TSREH2640
2.5 (64)	6 (152)	0.5 (12.7)	4 (102)	60	140°F (60°C)	110°F (43°C)	TSREH6110	N/A
2.5 (64)	6 (152)	0.5 (12.7)	4 (102)	60	180°F (82°C)	150°F (65°C)	TSREH6150	N/A
2.5 (64)	12 (305)	0.5 (12.7)	9 (229)	120	N/A	N/A	TSREH1200	TSREH21200
2.5 (64)	12 (305)	0.5 (12.7)	9 (229)	120	60°F (15°C)	40°F (4°C)	TSREH1240	TSREH21240
2.5 (64)	12 (305)	0.5 (12.7)	9 (229)	120	140°F (60°C)	110°F (43°C)	TSREH12110	N/A
2.5 (64)	12 (305)	0.5 (12.7)	9 (229)	120	180°F (82°C)	150°F (65°C)	TSREH12150	N/A

\* Dimensions listed are for heater and bracket; actual heater width is 2.0 in (51 mm)

**Other sizes and thermostat settings are available upon request**

## Etched Foil Heaters

### Product Highlights

- ✓ Ultra-thin profile
- ✓ High-watt densities
- ✓ Uniform heat distribution
- ✓ Quick turnaround prototyping
- ✓ A wide variety of options to meet your exact requirements



### Features and Options

- Any shape, cut-out, and size: up to 22" x 30" (559mm x 762mm)
- High watt densities: up to 15 watts/in<sup>2</sup> (0.023 watts/mm<sup>2</sup>)
- Very fast thermal response time
- Thin profile: as thin as 10 mil (0.010") (0.25mm) with PSA backing
- Tight bend radius
- Wide range of outer materials to meet your environment and application:
  - Polyimide film, silicone rubber, and your choice of materials
- Wide range of attachment options:
  - PSA (Pressure Sensitive Adhesive) backing, epoxies, or pre-attached to your plates and objects
- Single-zone, multi-zone, and dual-element heaters
- Integrated sensors, fuses, and control devices
- Turnkey systems with temperature control



Outer Material	Maximum Exposure Temperature	Total Thickness	Advantages
Polyimide Film	392 °F (200°C)	10 mil (0.010") (0.25mm)	Thinnest & highest dielectric strength
Silicone Rubber	450°F (232°C)	60 mil (0.06") (1.52mm)	Moisture and chemical resistance

Other outer material options available. Contact us for more details.

### Ideal For

- **OEM applications**
- **Analytical instrumentation**
- **Medical**
- **Semiconductor**
- **Electronics (Indoor and Outdoor)**
- **Aerospace**

### Ordering Information:

Please contact your local representative for a quotation and personalized application assistance.



## Temperature Controllers and Accessories for Silicone Rubber Heating Blankets

### SDC Benchtop Temperature Controller Features:

- Temperature Control Range: 32°F to 999°F (0°C to 600°C)
- Choose J-type or K-type Thermocouple Sensor
- 120 VAC or 240 VAC power input
- Models for °F or °C display
- 10-Amp Fused Output



### TTD Outdoor-Use Digital On/Off Thermocouple Temperature Controller Features:

- 120 or 240VAC
- 15 amps
- Digital On/Off controller
- Plug-in operation
- Type K thermocouple input
- Compact portable design



### TB4000 High Capacity Bulb and Capillary Temperature Controller Features:

- Maximum controller exposure temperatures: -40°F to 160°F (-40°C to 71°C)
- 304 stainless steel bulb and capillary, 10 feet (3 m) long
- Manually set your desired temperature
- Suitable for outdoor use



### TB250N All-Purpose Bulb and Capillary Temperature Controller Features:

- Maximum controller exposure temperatures: -40°F to 160°F (-40°C to 71°C)
- Manually set your desired temperature
- Tinned copper bulb and capillary, 10 ft (3 m) long
- Suitable for outdoor use



### TD 101 Automatic On/Off Thermostat Control Features:

- Single pole double throw (SPDT)
- Numerous temperature range choices to fit your application
- Maximum exposure temperature -40°F to 221°F (-40°C to 105°C)
- Mounts directly to heated surface



### Adhesive Tape

Maintains the heating blanket in intimate contact with the surface to be heated while pressure sensitive adhesive cures.



Part Number	Description
AAT2180	Aluminum Adhesive Tape: Size: 2" x 180' (51 mm x 55 m) Temp Limit: 550°F (288°C)



### Heat Conductive Putty

Used to fill voids between blanket and surface being heated.

Part Number	Description
HCP1	Size: 1 lb. (0.5kg)
HCP3	Size: 3 lb. (1.4kg)



### Strain Relief / Conduit Bracket

Provides strain relief for the heater's power wires and a straight connector mount for connecting 3/4" or 21mm electrical conduit.

Part Number	Description
SRLCB	Strain Relief Conduit Bracket



### Insul-EZ™ Adhesive Backed Sheet Insulation

Easy-to-install peel-and-stick adhesive backed sheet insulation for heaters and enclosures to reduce heat loss.

Part Number	Description
INSULEZ48	48" x 48" (122cm x 122cm) Adhesive Backed Sheet Insulation



### RTV Sealant

Silicone sealant used to seal lead pouches, end pouches, and pipe standoffs.

Part Number	Description
RTV3.0	3 oz. (89 ml)



## Insul-EZ™ Adhesive Backed Sheet Insulation

### Product Highlights

- ✓ Easy-to-install peel-and-stick adhesive insulation
- ✓ Moisture, mold and mildew resistant foam
- ✓ Full adhesive coverage
- ✓ Compatible with silicone heating blankets
- ✓ Composite-reinforced abrasion-resistant cover
- ✓ Easily trimmable to fit your unique application
- ✓ Insulates heaters and enclosures to reduce heat loss

### Specifications:

- 3/4" (2 cm) Thick
- R-Value: 3.0
- 48"x 48" (122 cm x 122 cm) sheets
- Recommended temperature usage range -297° to 220°F (-183° to 105°C)

### Applications:

- Freeze protection
- Condensation control
- Insulating hazardous area heaters
- Many other indoor/outdoor applications

### Ideal for Insulating:

- Vessels
- Tanks
- Cabinets
- Enclosures
- Hoppers
- Silos
- Conveyors
- Vats
- Curved or Irregular Surfaces
- Large Surfaces

### Ordering Information:

Part Number	Width	Length
INSULEZ48	48" (122 cm)	48" (122 cm)



# HOPPER HEATING

# HOPPER HEATING

**BriskHeat**<sup>®</sup>  
Corporation

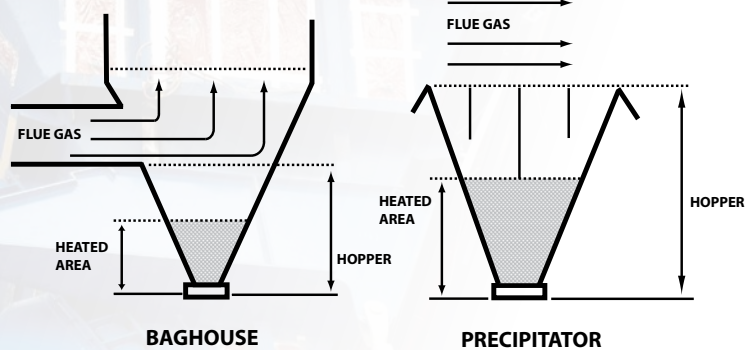
## Hopper Modular Surface Heaters

### Eliminate Bridging, Pluggage, Condensation, and Corrosion

**BriskHeat**® Hopper Surface Heating Systems maintain elevated temperatures above moisture and acid dew points using a proven combination of:

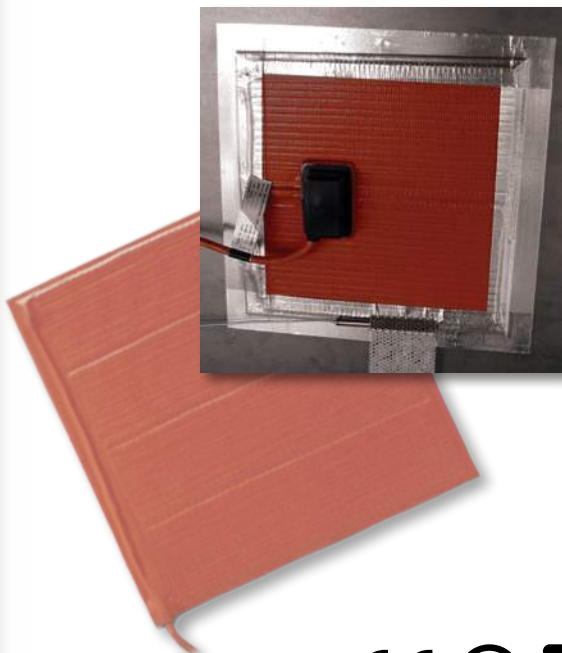
1. Modular hopper surface heaters
2. Flexible heating tapes for throats, poke tubes, and manways
3. Temperature control and installation hardware

**IEEE 1069  
STANDARD**



Our modular design provides the:

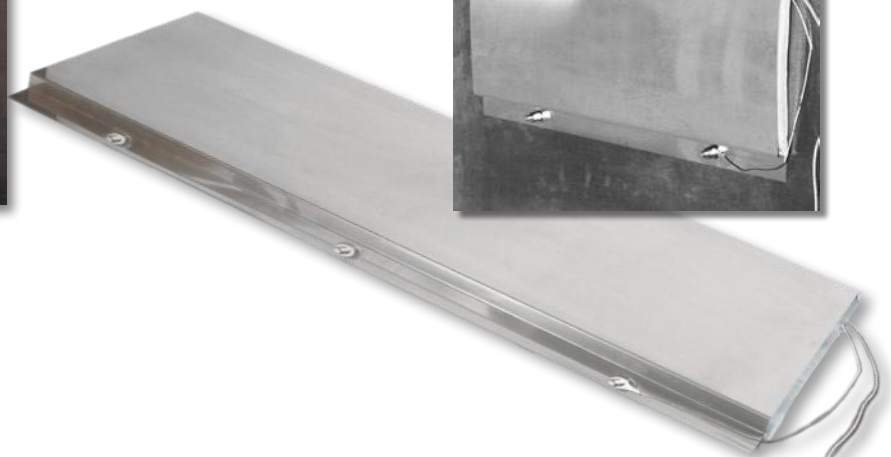
- Easiest and lowest cost-of-installation
- Most cost-effective and energy-efficient heat possible across a large surface area



**Silicone Rubber** CE SPC RU US

**Advantages:**

- Lowest profile and best surface contact
- No welding or mechanical attachments necessary
- Hazardous-area-rated model available





**Metal Clad** CE FM APPROVED

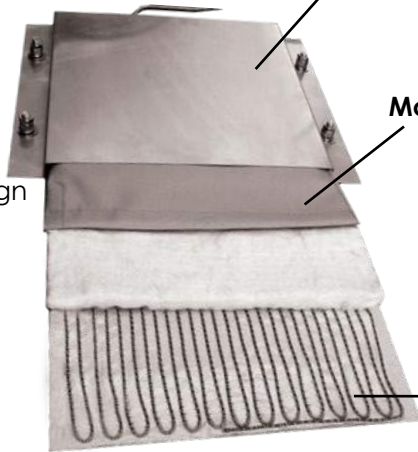
**Advantages:**

- Higher maximum exposure temperature: Up to 1000°F (538°C)
- Minimal surface preparation time

## MCH Metal Clad Modular Hopper Surface Heater

### Product Highlights

- ✓ Ideal for ESP (Electrostatic Precipitator) hoppers, baghouse hoppers, and material and dust-collector hoppers
- ✓ System of modular heaters meets your heat-up and total wattage requirements
- ✓ Easy stud-welding installation
- ✓ Meets all IEEE 1069 standards
- ✓ Simple, one-piece stainless steel design
- ✓ Exceptional durability
- ✓ 5-year warranty
- ✓   APPROVED



#### Stainless Steel Protective Shell

- Protects heater from outdoor conditions
- Superior rigidity enhances heater-to-surface contact
- Corrosion and rust resistant

#### Modular Blanket Hopper Heater

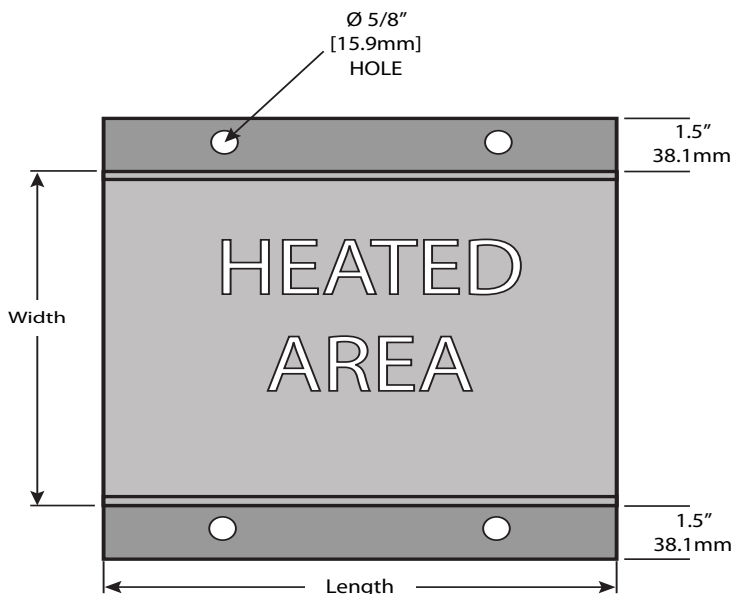
- High-temperature construction
- Energy-efficient 3/4" (19mm) thick fiberglass insulation reduces required wattage and improves heat-up time

#### Multi-Stranded Heating Element

- Maximum uniformity, durability, and safety
- BriskHeat® exclusive core technology

### Specifications:

- Maximum exposure temperature: 1000°F (538°C)
- Power density range: 0.75 W/in<sup>2</sup> (0.001 W/mm<sup>2</sup>) to 3.0 W/in<sup>2</sup> (0.005 W/mm<sup>2</sup>)
- Patented grounded heating element; meets NEC 427.23
- Dielectric strength of over 2000 volts
- Choice of voltage: 120, 208, 240, 277, 480, or 600VAC single-phase
- Power Leads: 12ft (3.6m) long, moisture resistant, high-temperature stainless steel overbraid, with bare-wire connection



### Modular Heater Size Chart:

Width in (mm)	Length in (mm)	# of Stud Holes
3 (76)	12 (305)	2
6 (152)	12 (305)	2
12 (305)	12 (305)	4
12 (305)	24 (610)	4
12 (305)	36 (914)	6
12 (305)	48 (1220)	6

Note: For installation add 3" (76mm) to heater width

### Stud Welding Kits:

Type	# of Studs per Kit	Part Number
Arc Stud	2	MCHARC2
	6	MCHARC6
	12	MCHARC12
Capacitive Discharge	2	MCHCD2
	6	MCHCD6
	12	MCHCD12








### Ordering Information:

Contact your local representative North Composites Engineering Ltd for a quotation and application assistance.

**IMPORTANT: Temperature controller is required for this product. See pages 86 through 104 for options.**

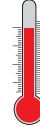
## Silicone Rubber Hopper Heater

### Product Highlights

- ✓ Eliminate Bridging, Pluggage, Condensation and Corrosion
- ✓ Lowest profile and best surface contact
- ✓ No welding or mechanical attachments necessary
- ✓ Hazardous-area-rated model available
- ✓ Temperatures up to 450°F (232°C)
- ✓      Compliant
- ✓   Up To 392°F (200°C)

**Moisture  
and Chemical  
Resistant**

Temperatures up to



**450°F (232°C)**

### Specifications:

- Power density: engineered to meet your application
- Moisture, chemical, and radiation resistant
- Heating element is laminated between two layers of 20mil fiberglass reinforced silicone rubber
- Exposure temperature range: -60°F to 450°F (-51°C to 232°C)
- Patented grounded heating element
- Dielectric strength of over 2000 volts
- Silicone density 21.7 oz/yd<sup>2</sup> (736 grams/m<sup>2</sup>) per layer
- 120, 208, 240, 277, 480, or 600VAC
- Configured for your system
- Ingress Protection Rating: IP54

### Heating Tapes For Hopper Heating Systems

Extremely flexible heating tapes easily install around challenging components like throats, poke tubes, and manways.

See **pages 26 through 40** to view our full line of heating tapes.





# CONTAINER HEATERS



CONTAINER  
HEATERS

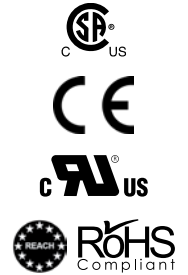
**BriskHeat**<sup>®</sup>  
Corporation

## Drum and Pail Heaters

BriskHeat® Drum and Pail Heaters are designed to provide practical, efficient means of freeze protection, viscosity control, and maintenance of materials at elevated temperatures. A variety of standard sizes are combined with availability of configure-to-order designs to meet your application requirements.

### Product Highlights

- ✓ **Durable and Long Lasting**
- ✓ **Large Uniform Heater Coverage and High Wattages**
- ✓ **Grounded Heating Element**
- ✓ **Built-in Control**
- ✓ **Hazardous-Area Drum Heater Option**
- ✓ **Wide Range of Applications**
  - Viscosity control
  - Freeze protection
  - Temperature maintenance
  - Melting of solids
  - Heat-up drum contents to a required temperature
  - Thermal mixing
- ✓ **Variety of Standard Sizes and Configure-to-Order Options for Special Vessel Heaters**
















Fully Insulated  
With Digital Control



## Drum and Pail Heaters Selection Guide

CONTAINER HEATERS

Type	DHCS & DPCS Heavy Duty Drum Heater	DHCH & DPCH Extra Heavy Duty Drum Heater	DHCX Hazardous-Area Drum Heater	ECONO Drum Heater	FGDH Full-Coverage Drum Heater	FGDI Drum Insulator
Coverage Area	4" (102mm)	4" (102mm)	8" (203mm)	3.6" (91mm)	Full-Coverage	Full-Coverage
Silicone layers and thickness per layer	2 layers of 20 mil	2 layers of 20 mil 1 layer of 27 mil	2 layers of 20 mil 2 layer of 27 mil	2 layers of 20 mil	N/A	N/A
Moisture Resistant	✓	✓	✓	✓	✓	✓
Chemical Resistant	✓	✓	✓	✓	✓	✓
Grounded	✓	✓	✓	✓	✓	
Available for use with poly drums	✓	✓			✓	✓
Approvals	   	   	 APPROVED Class I Division 2, Groups A*, B, C, and D Class II Division 2, Groups F and G *without controller	 	 	N/A

## Heavy Duty Silicone Rubber Drum and Pail Heaters

### Product Highlights

- ✓ Exceptional durability and flexibility for a wide range of poly and metal drum heating applications
- ✓ Easy adjustable thermostat control displays both °F and °C
- ✓ Wide 4" (102mm) silicone rubber band
- ✓ Patented grounded heating element meets NEC 427.23
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between multiple layers of fiberglass reinforced silicone rubber



**Extra-Wide  
Extra-Strong  
Easier-to-Use**



### Specifications:

- Power Density:  
DH Series: 5.0 W/in<sup>2</sup> (0.78W/cm<sup>2</sup>) for metal surfaces  
DP Series: 1.25 W/in<sup>2</sup> (0.19 W/cm<sup>2</sup>) for plastics surfaces
- Adjustable Thermostat Options:  
Up to 425°F (218°C) for metal †  
Up to 160°F (71°C) for plastic †
- Voltage Options: 120VAC or 240VAC
- Exposure Temperature: -60°F to 450°F (-51°C to 232°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density:  
DHCS/DPCS: 46.0 oz/yd<sup>2</sup> (1560 g/m<sup>2</sup>)  
DHCH/DPCH: 75.0 oz/yd<sup>2</sup> (2543 g/m<sup>2</sup>)
- Spring closure can be expanded 3" (76mm)
- Power cord 6-foot (1.8m) long  
120V includes standard 3-prong plug (NEMA 5-15)  
240V has crimped ferrule terminated leads
- Ingress Protection Rating: IP54

Standard Drum & Pail Heater Sizes

Size Gallon (Liter)	Diameter in (mm)	Length in (mm)	Width in (mm)
5 (19)	11.1 (282)	35.0 (889)	4 (102)
15 (57) & 16 (61)	14.0 (355)	44.0 (1118)	4 (102)
30 (114)	18.6 (473)	58.5 (1486)	4 (102)
55 (208)	22.3 (566)	70.0 (1778)	4 (102)

† If precise temperature control is required for your application, please contact your local distributor for application assistance and product solutions.

### Ordering Information:

- **Heavy Duty (DHCS and DPCS series):** Designed with two extra-thick layers of fiberglass reinforced silicone rubber for excellent strength and durability.
- **Extra Heavy Duty (DHCH and DPCH series):** Designed with three extra-thick layers of fiberglass reinforced silicone rubber for **ultimate strength and durability**. The longest lasting and most durable silicone drum heater.

### Accessories:

Part Number	Description
10180	Replacement spring for BriskHeat® Silicone Rubber Drum Heaters

### For Metal Drums/Pails

Size Gallon (Liter)	Watts	Heavy Duty		Extra Heavy Duty	
		120VAC	240VAC	120VAC	240VAC
5 (19)	550	DHCS10	DHCS20	DHCH10	DHCH20
16 (61)	700	DHCS11	DHCS21	DHCH11	DHCH21
30 (114)	1000	DHCS13	DHCS23	DHCH13	DHCH23
55 (208)	1200	DHCS15	DHCS25	DHCH15	DHCH25

### For Poly (Non-Metal) Drums/Pails

Size Gallon (Liter)	Watts	Heavy Duty		Extra Heavy Duty	
		120VAC	240VAC	120VAC	240VAC
5 (19)	150	DPCS10	DPCS20	DPCH10	DPCH20
15 (57)	200	DPCS11	DPCS21	DPCH11	DPCH21
30 (114)	250	DPCS13	DPCS23	DPCH13	DPCH23
55 (208)	300	DPCS15	DPCS25	DPCH15	DPCH25

### Ordering Options:

A. **CSA/UL Approved Option:** Add an "A" at the end of the part number. No plug - has bare wire leads.

B. **Drum Heater without controlling thermostat:** Replace "C" with "N" in part number. External control is required with this option.

## DHCX Hazardous-Area Rated Drum Heater

### Product Highlights

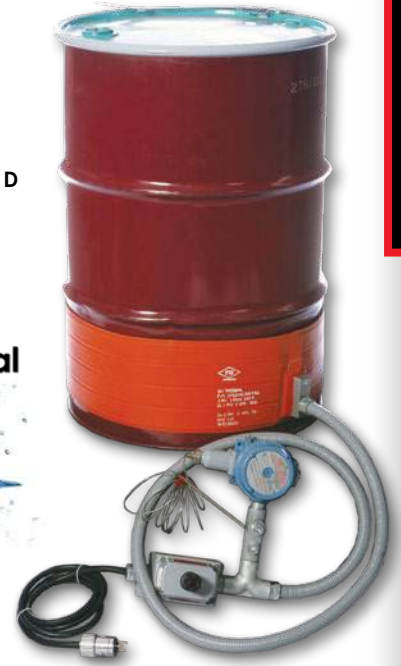
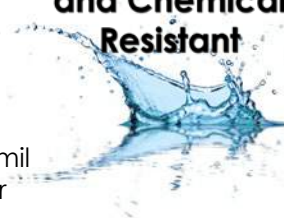
- ✓ Hazardous-area rated \*
- ✓ Dual set-point NEMA 7 temperature controller connected to a high temperature limit indicator light
- ✓ Exceptional durability and flexibility for a wide range of metal drum heating applications
- ✓ Extra-wide 8" (203mm) silicone rubber band
- ✓ Patented grounded heating element meets NEC 427.23
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between two layers of 23mil and two layers 27mil fiberglass reinforced silicone rubber



\* Class I Division 2 Groups A, only for drum heater without NEMA 7 temperature controller.

**FM**  
**APPROVED**  
Class I Division 2  
Groups A\*, B, C, and D  
Class II Division 2,  
Groups F and G

**Moisture  
and Chemical  
Resistant**



### Specifications:

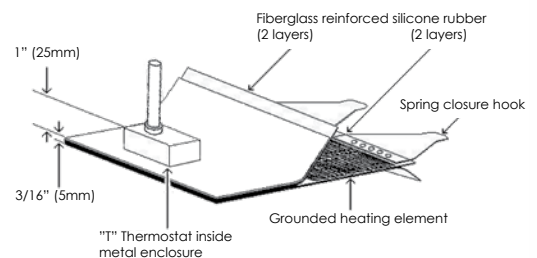
- Power Density: 2.50 W/in<sup>2</sup> (0.39 W/cm<sup>2</sup>)
- Voltage Options: 120VAC or 240VAC
- Exposure Temperature: -60°F to 400°F (-51°C to 204°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density: 104 oz/yd<sup>2</sup> (3526 g/m<sup>2</sup>)
- High-limit thermostat designed to keep blanket below NEC article 500 T-Rating

T Rating	NEC Temperature	Actual High Limit Thermostat
T3	392°F (200°C)	292°F (145°C)
T4A	248°F (120°C)	158°F (70°C)

- Power Cord:  
6-foot (1.8m) long for models with NEMA7 controller  
1-foot (0.3m) long for models without controller  
Leads from heater to controller are in liquid tight conduit.
- Ingress Protection Rating: IP54



NEMA 7 Controller and High Temperature Limit Indicator Light



### Ordering Information:

For T3 Environments

Gallon (Liter) Size	Diameter in (mm)	Total Wattage	Length in (mm)	Width in (mm)	Part Number	
					120VAC	240VAC
30 (114)	18.6 (473)	1000	58.5 (1486)	8 (203)	DHCX131000T3	DHCX231000T3
55 (208)	22.3 (566)	1300	70.0 (1778)	8 (203)	DHCX151300T3	DHCX251300T3

For T4A Environments

Gallon (Liter) Size	Diameter in (mm)	Total Wattage	Length in (mm)	Width in (mm)	Part Number	
					120VAC	240VAC
30 (114)	18.6 (473)	1000	58.5 (1486)	8 (203)	DHCX131000T4A	DHCX231000T4A
55 (208)	22.3 (566)	1300	70.0 (1778)	8 (203)	DHCX151300T4A	DHCX251300T4A

**Ordering Option:** Without controlling thermostat and pilot light. Replace "C" with "N" in part number. External control is required with this option.

## ECONO Drum and Pail Heater

### Product Highlights

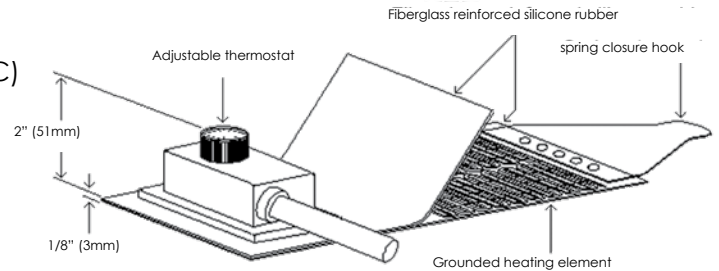
- ✓ Economical choice for exceptional durability and flexibility for a wide range of metal drum heating applications
- ✓ Easy adjustable thermostat control displays both °F and °C
- ✓ Wide 3.6 in (91mm) silicone rubber band
- ✓ Patented grounded heating element meets NEC 427.23
- ✓ Moisture, chemical, and radiation resistant
- ✓ Heating element is laminated between two layers of 20mil fiberglass reinforced silicone rubber



### Specifications:

- Adjustable Thermostat: Up to 425°F (218°C)<sup>†</sup>
- Voltage Options: 120VAC or 240VAC
- Exposure Temperature: -60°F to 450°F (-51°C to 232°C)
- Dielectric Strength: Over 2000 volts
- Silicone Rubber Density: 46.0 oz/yd<sup>2</sup> (1560 g/m<sup>2</sup>)
- Spring closure can be expanded 3" (76 mm)
- Power cord 6 ft (1.8 m) long
- 120V includes standard 3-prong plug (NEMA 5-15)
- 240V has crimped ferrule terminated leads
- Ingress Protection Rating: IP54

<sup>†</sup> If precise temperature control is required for your application, please contact BriskHeat or your local distributor for application assistance and product solutions.



### Ordering Information:

Size Gallon (Liter)	Diameter in (mm)	Total Wattage	Length in (mm)	Width in (mm)	Part Number	
					120VAC	240VAC
5 (19)	11.1 (282)	300	35.0 (889)	3.6 (92)	ECONO5-1	ECONO5-2
16 (61)	14.0 (355)	500	44.0 (1118)	3.6 (92)	ECONO15-1	ECONO15-2
30 (114)	18.6 (473)	750	58.5 (1486)	3.6 (92)	ECONO30-1	ECONO30-2
55 (208)	22.3 (566)	1100	70.0 (1778)	3.6 (92)	ECONO55-1	ECONO55-2

### Accessories:

Part Number	Description
10180	Replacement spring for BriskHeat® Silicone Rubber Drum Heaters



10180: Replacement Spring

## FGDH Full-Coverage Drum Heaters

BriskHeat® Full-Coverage Drum Heaters are designed to wrap around a drum and heat the contents while insulating to keep the heat exactly where it needs to be. Full-Coverage drum heaters combine the convenience of quick heat-up time and the precision of a digital controller to provide you with the most practical, efficient means of freeze protection, viscosity control, and maintenance of materials at elevated temperatures.

### Product Highlights

- ✓ Full-Coverage Drum Heaters are insulated to maximize heat efficiency and heat-up time
- ✓ Easy-to-use digital temperature controller
- ✓ Designed for metal and poly drums
- ✓ Grounded heating element meets NEC 427.23
- ✓ **CE**
- ✓ Wide range of applications
  - Viscosity control
  - Freeze protection
  - Temperature maintenance
  - Melting of solids
  - Heat-up drum contents to a required temperature
  - Thermal mixing

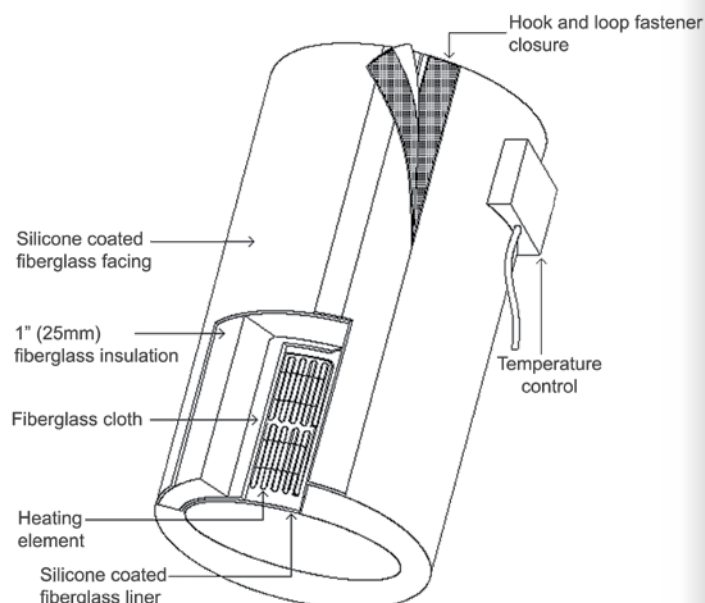


Fully Insulated  
With Digital Control

### Specifications:

- Silicone impregnated cloth facing and liner
- 1 in (25mm) thick fiberglass insulation
- Digital on / off temperature controller:  
50°F to 450°F (10°C to 232°C) for metal drums  
50°F to 160°F (10°C to 71°C) for poly drums
- Heated area:  
55 and 30 gallon size: Lower two thirds  
15 and 5 gallon size: Lower third
- Patented grounded heating element
- Dielectric strength over 2000 Volts
- Closure: Hook and loop fastener
- Power cord 6 ft (1.8 m) long  
120V includes standard 3-prong plug (NEMA 5-15)  
240V includes standard 3-prong plug (NEMA 6-15)\*
- 500°F (260°C) maximum exposure temperature on heating surface
- Designed for use indoors
- Ingress Protection: IP40

\* 240VAC Celsius models have crimped wire ferrule terminated leads.



## FGDH Full-Coverage Drum Heaters



Single-Zone Model



- Easily control temperatures with the programmable digital controller.
- Display is mounted on top of controller box for increased visibility and user convenience.
- Displays in °F (for °C, see ordering options)



Dual-Zone Model

### Ordering Information:

#### Single Zone (FGDH Series) - For Metal Drums

Size Gallon (Liter)	Diameter in (mm)	Height in (mm)	Number of Zones	Total Wattage	Part Number 120VAC	Part Number 240VAC
55 (208)	22.3 (566)	36.4 (924)	1	1600	FGDHC55120D	FGDHC55240D*
30 (114)	18.6 (473)	29.5 (749)	1	1160	FGDHC30120D	FGDHC30240D
16 (61)	14.0 (355)	26.7 (678)	1	870	FGDHC15120D	FGDHC15240D
5 (19)	11.1 (282)	13.5 (343)	1	550	FGDHC5120D	FGDHC5240D

#### Single Zone (FGPDH Series) - For Poly Drums

Size Gallon (Liter)	Diameter in (mm)	Height in (mm)	Number of Zones	Total Wattage	Part Number 120VAC	Part Number 240VAC
55 (208)	22.3 (566)	36.4 (924)	1	770	FGPDHC55120D	FGPDHC55240D*

#### Dual Zone (FGDDC Series) - For Metal Drums

Designed to quickly melt viscous materials like molasses, syrups, etc.

Size Gallon (Liter)	Diameter in (mm)	Height in (mm)	Number of Zones	Total Wattage	Part Number 240VAC
55 (208)	22.3 (566)	36.4 (924)	2	3200 (1600 per zone)	FGDDC55240D*

#### Ordering Options:

A. **For Celsius Control Option:** Add a "C" at the end of the part number.

\* 240VAC Celsius models have crimped wire ferrule terminated leads.

### Accessories:

Part Number	Description
FGDC55	Drum Insulation Cover for 55 gallon
FGDHSTRIP	6" (152mm) wide strip that expands heater to fit up to a 24.2" (615mm) diameter drum. Strip is necessary for heater to fit around drums with removable lids.



Drum Covers Help Reduce Heat Loss and Speed up Heat-up Time

If your drum diameter is greater than what is shown, an **FGDHSTRIP** expansion strip may be required.

**Custom Sizes and Designs Available: Contact your local distributor for more information.**



## FGDI Drum Insulator

### Product Highlights

- ✓ Compliments any 55-gallon (208-liter) drum heater
- ✓ Full-coverage
- ✓ Reduces heat loss

### Specifications:

- Silicone impregnated cloth facing and liner
- 1 in (25 mm) fiberglass insulation
- Closure: Hook and loop fastener
- 500°F (260°C) maximum exposure temperature on heating surface
- Designed for use indoors
- Ingress Protection: IP50

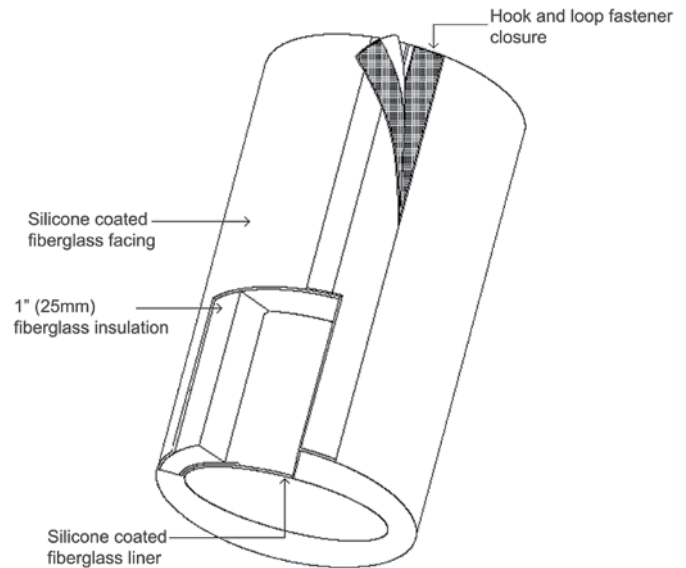
### Ordering Information:

Gallon Size	Diameter in (mm)	Height in (mm)	Part Number
55	22.3 (565)	36.4 (924)	FGDI55

If your drum diameter is greater than what is shown, an FGDHSTRIP expansion strip may be required.

### Accessories:

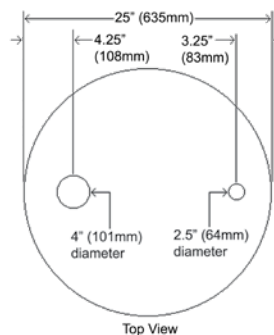
Part Number	Description
FGDC55	Drum Insulation Cover for 55 gallon
FGDHSTRIP	6 in (152 mm) wide strip that expands insulator to fit up to a 24.2 in (615 mm) diameter drum. Strip is necessary for insulator to fit around drums with removable lids.



Drum Covers Help Reduce Heat Loss and Speed up Heat-up Time



FGDC55



FGDC55



FGDHSTRIP

## Tote Tank and IBC Heaters

The contents in your tote tanks and intermediate bulk containers (IBCs), such as honey, molasses, or lube oil, can be slow moving and uncooperative when you need it most, especially when winter strikes. Heat allows the contents to flow at a manageable rate.

### Product Highlights

- ✓ **Two Styles: Wrap-Around Full-Coverage Blanket Heater or Heating Pad that is Placed Underneath Tank / Bladder**
- ✓ **Does Not Contaminate or Scorch Your Product**
- ✓ **Durable and Long Lasting**
- ✓ **Variety of Standard Sizes and Configure-to-Order Options**
- ✓ **Wide Range of Applications**
  - Viscosity control
  - Freeze protection
  - Temperature maintenance
  - Melting of solids
  - Heat-up tote tank / IBC contents to a required temperature
  - Thermal mixing



## TOTE Wrap-Around Tote Tank / IBC Heater

### Product Highlights

- ✓ Designed for caged, plastic, or metal tote tanks / IBCs
- ✓ Wrap-around blanket design allows you to heat a tote tank / IBC from the outside
- ✓ Does not contaminate or scorch your product
- ✓ Two separate heat zones allow you to adjust heater output when content levels decrease



Heats caged and metal IBCs with ease.



Perfect for plastic tote tanks. Heat does not scorch surface.

### The Features You Need:

Controls temperature easily with adjustable thermostats.



Protects contents and IBC / Tote tank surface from heat damage with manual reset high-limit safety thermostats.

Includes standard plug for an easy electrical connection.



Fits several tote tank sizes with adjustable nylon straps and buckles.



Mouse Hole in provides easy access to Spigot.

CONTAINER HEATERS

## TOTE Wrap-Around Tote Tank / IBC Heater continued

### Specifications:

- Full coverage plug-and-play system
- Fits any tote tank from 40 in x 40 in (1016 mm x 1016 mm) to 48 in x 48 in (1219 mm x 1219 mm)
- Three standard height sizes: 36 in (914 mm), 42 in (1067 mm), 48 in (1220 mm)
- Two separate heat zones (top and bottom)
- Adjustable thermostat: Up to 160°F (71°C)
- Built-in manual reset high-limit safety thermostat set at 195°F (91°C) for each heat zone
- Attachment method: adjustable nylon straps with buckles (Two across the top and three around the tank)
- Silicone impregnated cloth outer and inner material
- 1/4 in (6 mm) fiberglass insulation
- inMouse hole in designed for spigot access
- Patented ground for your safety
- 120 / 240VAC, single-phase
- Total wattage:
  - 120VAC = 1440 watts
  - 240VAC = 2880 watts
- Power cord 6-foot (1.8m) long
  - 120VAC standard 3-prong plug (NEMA 5-15)
  - 240VAC standard 3-prong plug (NEMA 6-15)
- Optional insulated top cover reduces heat loss and accelerates heat-up.
- Ingress Protection Rating: IP20



### How to Measure Your Tote Tank / IBC:

1. Measure the height of the tote tank / IBC (Not including the pallet or support stand).

2. Measure the length and width of the tank. This determines the tank perimeter for the heated area.

$$\text{_____} \times 2 + \text{_____} \times 2 = \text{_____}$$

Tank Length                      Tank Width                      Tank Perimeter

Note: If tank perimeter measurement is below 160 in (4064 mm) or above 192 in (4877 mm), contact factory for heater recommendation.

### Ordering Information:

Height	Tank Perimeter Minimum	Tank Perimeter Maximum	Total Wattage 120V / 240V	Weight	Part Number 120VAC	Part Number 240VAC
36 in (914 mm)	160 in (4064 mm)	192 in (4877 mm)	1440 / 2880	34 lbs (15 kg)	TOTE361-ADJ	TOTE362-ADJ
42 in (1067 mm)	160 in (4064 mm)	192 in (4877 mm)	1440 / 2880	40 lbs (18 kg)	TOTE421-ADJ	TOTE422-ADJ
48 in (1220 mm)	160 in (4064 mm)	192 in (4877 mm)	1440 / 2880	46 lbs (21 kg)	TOTE481-ADJ	TOTE482-ADJ

### Ordering Options:

**European Lead Wire Option (240V Only):** Add a in-CVE in at the end of the part number for crimped wire ferrule terminated leads.

**RECO mENDED:** 240VAC model and top insulator is strongly recommended for applications that involve faster heat-up and melting due to the higher wattage requirements.

### Accessories:

Part Number	Description
TOTE-TOP	Insulated top cover, minimizes heat loss.
TOTE-TOPF	Insulated top cover with flap opening, minimizes heat loss.



**Custom Sizes and Designs Available: Contact your local distributor for more information.**

## TTH Caged Tote Tank / IBC Silicone Rubber Heater and Control

### Product Highlights

- ✓ Ideal for a wide range of outdoor and indoor caged tote tank / IBC heating applications
- ✓ Quick heat-up time due to direct surface contact underneath plastic bladder
- ✓ Non-invasive heat: Does not contaminate or scorch your product
- ✓ Easy-to-use and accurate digital temperature control

### Specifications:

- Includes outdoor-use digital temperature control and IBC heating pad. Easy plug-and-play connections
- Multi-stranded heating element is uniformly placed to maximize heat distribution
- Heating element is laminated between two extra-thick layers of 20 mil fiberglass reinforced silicone rubber
- Type K thermocouple built into IBC heating pad
- Moisture and chemical resistant silicone rubber heating pad
- 1/2" (13mm) thick foam pad
- 180°F (82°C) maximum exposure temperature
- Silicone rubber power leads 6-foot (1.8m) long with IP 67 four-pin (NEMA 6P equivalent) output receptacle
- Temperature control input power cord is 6-foot (1.8m) long with standard three-prong plug
  - 120VAC: NEMA 5-15
  - 240VAC: NEMA 6-15



Includes an easy-to-use digital temperature controller

### Installs Underneath Bladder for Quick Heat-up Time



### Ordering Information:

#### TTH Tote Tank / IBC Heating Pad System

System Includes:

- TTH Tote Tank Silicone Rubber Heating Pad: Installs underneath bladder
- TTD Outdoor-Use Digital On/Off Temperature Controller: Mounts easily to cage

Heater Size in (mm)	Volts	Watts	Set-Point Range	Part Number
32" x 36" (813mm x 914mm)	120	1600	0 to 175°F	TTH32361DK
32" X 36" (813mm x 914mm)	240	3200	0 to 175°F	TTH32362DK

#### Ordering Options:

- A. **Celsius Control Option (0 to 80°C):** Add a "-C" at the end of the part number.
- B. **TTH Tote Tank Heating Pad without control:** Remove "K" from end of part number. External control is required with this option.

## Gas Cylinder Warmers

### Product Highlights

#### ✓ Improves Process Control and Reduces Wasted Condensed Gas

- Creates convection current
- Increases pressure inside cylinder

#### ✓ Gases Known to Benefit from this Process

- SF<sub>6</sub>, Propane, Nitrogen, Oxygen, BCl<sub>3</sub>, WF<sub>6</sub>, and HF

#### ✓ Fits Most Gas Cylinders

#### ✓ Full Surface Coverage

#### ✓ Insulation Reduces Heat Loss

#### ✓ Models for Hazardous Locations



US Class I Division 1 Groups B, C, and D

### Specifications:

- Self-regulating grounded heating element
- Total watts: up to 150W
- 150°F (66°C) maximum exposure temperature on heating surface
- Available in 120 and 240 VAC
- Frequency range: 50-60Hz
- Insulation Thickness:
  - Sides: 2.0" (51mm)
  - Top: 0.5" (13mm)
- Ambient temperature range: 30° to 95°F (-1° to 35°C)
- Closure: hook and loop fastener
- Moisture and oil resistant
- Capable of being used outdoors
- Power lead type:
  - Ordinary location model: SJOW cord
  - Hazardous location models: Teck 90 cable
- GCW power cord 10ft (3m) long with:
  - 120 VAC = standard 3-prong NEMA 5-15 plug
  - 240 VAC = crimped wire ferrule terminated lead
- HCW power cord 10ft (3m) long with:
  - 120 VAC = bare wire leads
  - 240 VAC = bare wire leads

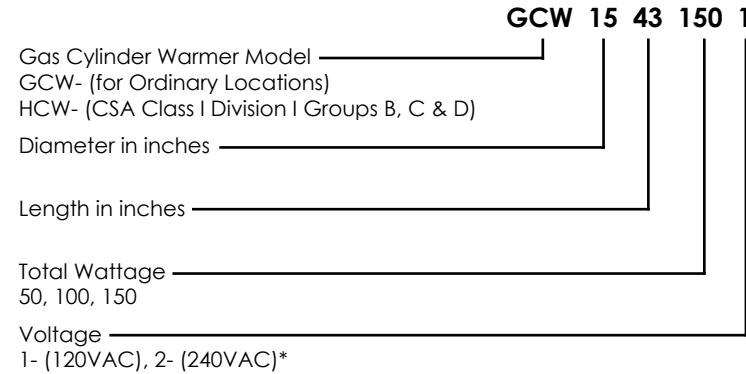


Patent 7,015,425 B2

## Gas Cylinder Warmers continued

### Ordering Information:

Ordinary Locations and  Class I Division I Groups B, C & D  
Part Number Matrix



\* GCW, 240VAC, 150W models have crimped wire ferrule terminated leads.

### Hazardous-Area Rated Models (HCW series) Min / Max Sizes:

Diameter:

Minimum: 8" (203mm)

Maximum: 15" (381mm)

Length:

Minimum: 15" (381mm)

Maximum: 51" (1295mm)

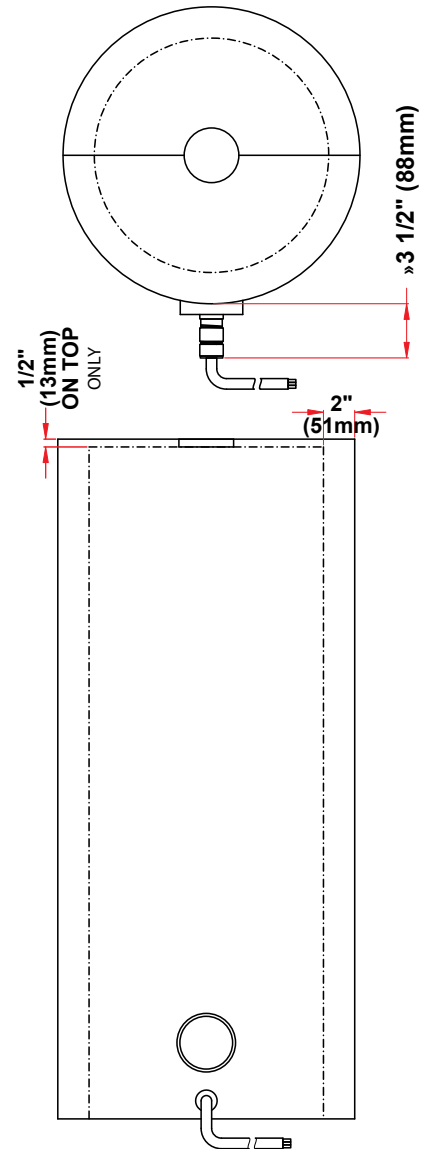
**Ordinary Location Models (GCW series):** can be designed for a wide range of gas cylinder sizes. Call factory for details.

### Accessories

**Cylinder Base Insulation Pad-** Placed between cylinder and floor. Further insulates the cylinder from heatsinks such as a concrete floor.

**Valve Cover-** Placed on top. Reduces the amount of heat loss through the top of the cylinder.

Part Number	Description
GCWTOP	Gage/Valve Cover
GCW12B	12" (305mm) Cylinder Base Insulation Pad for 8" (203mm) Cylinder
GCW15B	15" (381mm) Cylinder Base Insulation Pad for 9" (229mm) Cylinder
GCW18B	18" (457mm) Cylinder Base Insulation Pad for 15" (381mm) Cylinder



**Custom Sizes and Designs Available:** Contact your local distributor for more information.

# Can't find what you are looking for?

Our **Configure-to-Order Solutions** are  
quickly designed...

...to meet your  
**TIME** and **BUDGET**

Contact Your Local Distributor For a Solution That is Right For You.



# CLOTH HEATING JACKETS AND INSULATORS

# CLOTH HEATING JACKETS AND INSULATORS



**BriskHeat**<sup>®</sup>  
Corporation

## Cloth Heating Jackets

### Ideal for a Wide Range of Applications

#### Features

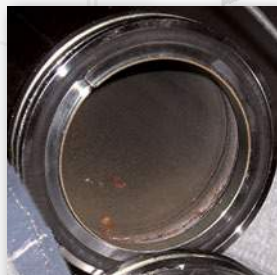
- Ability to heat and insulate all components of a system
  - Diameters as small as 1/4" (6mm)
  - Flanges, VCR nuts, valves, unistruts, etc.
- Uniform temperatures throughout entire line or component
- Easy on-off installation with durable and reusable hook and loop fasteners
- High temperature capabilities
  - Up to 250°C for Class 10 Clean rooms
  - Up to 593°C for Class 100 Clean rooms
- Energy efficient design
- Patented grounded heating element
- Exceptional durability
- Compatible with Centipede 2<sup>®</sup> Temperature Control System or existing control system

#### Benefits

- Economically reduces condensation build-up and contamination
- Increased productivity
- Decreased maintenance
- Energy-savings
- Safe and cool to the touch (meets SEMI S2 standards)
- Long service life: BriskHeat's typical heating jacket life is 10+ years. No need for aftermarket parts



**Before**



**After**



Centipede 2<sup>®</sup>  
See Pages 84 - 87

## Cloth Heating Jackets Cont.

- **Gas Lines**
  - **Exhaust Lines**
    - **Forelines**
    - **Abatements**
    - **Valves**



- **Tanks, drums, cylinders and vessels**
- **Laboratory equipment**
- **Analytical equipment**
- **Vacuum bake-out**
- **Emission testing**
- **Fluid delivery systems**
- **Small and unique geometries**



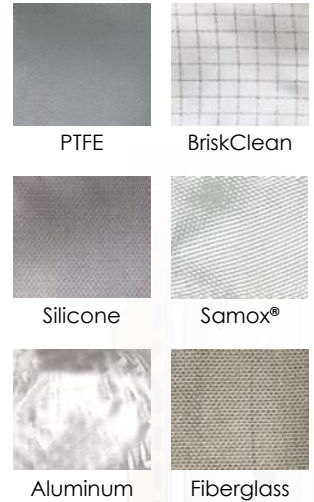
**Ability to engineer a solution for your EXACT needs**

## Cloth Jacket Design Options

### What are the Different Parts of a Cloth Jacket?

#### Liner and Facing Material (Inside and Outside cloth material):

- PTFE - Standard facing material. Up to Class 10 environments. Exposure temperature up to 500°F (260°C).
- BriskClean Cloth - For cleanroom Class 10 environments. Exposure temperatures up to 600°F (315°C).
- Silicone Cloth - Adds moisture and chemical resistance. Exposure temperatures up to 500°F (260°C).
- Samox® - Highest temperature material. Up to Class 100 environments. Exposure temperatures up to 1100°F (593°C)
- Aluminum - Facing material option. Exposure temperature up to 450°F (232°C).
- Fiberglass Cloth - Liner material option. Exposure temperature up to 900°F (482°C). Up to Class 100 environments.



#### Closure Options:

- Hook and Loop Fastener
- Hook and Lace
- Grommets

#### Voltage Options:

- 120-600 VAC
- Single Phase
- 3 Phase (Wye)
- 3 Phase (Delta)
- 60 Hz.
- 50 Hz.
- DC

#### Built-in Controlling/ High Limit Thermostat Options:

- 180°F (82°C)
- 248°F (120°C)
- 302°F (150°C)
- 347°F (175°C)
- 392°F (200°C)
- 500°F (260°C)

*Other Temperatures Available*

#### Built-In Low-Limit Alarm Thermostat Options:

- 180°F (82°C) with 30°F (17°C) differential
- 248°F (120°C) with 50°F (28°C) differential

*Other Temperatures Available*

#### Insulation (placed in between liner and facing):

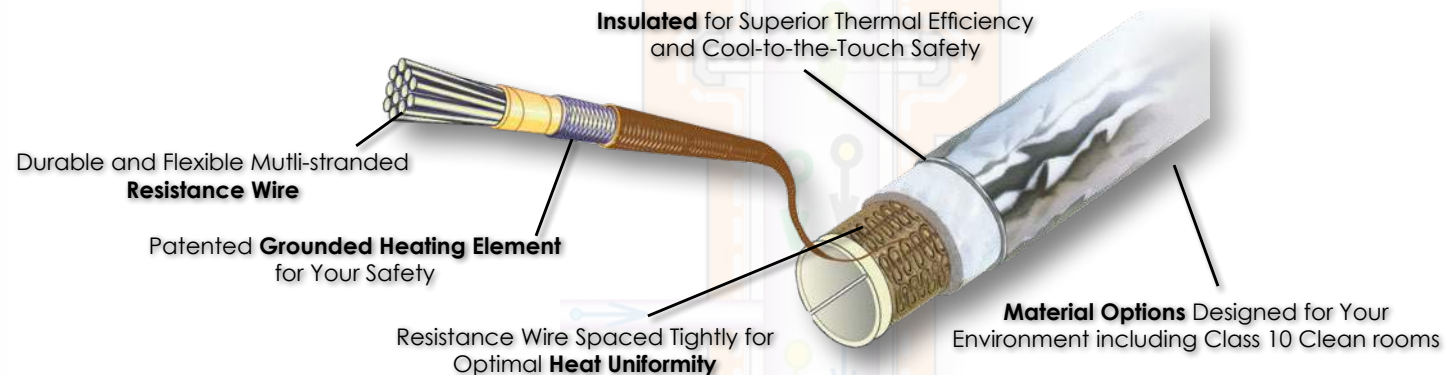
Fits your application based upon process temperatures. BriskHeat's industry leading engineers will design your system with the correct amount of insulation. Insulation will make your system **energy efficient** and **touch-safe**.

#### Power Plug / Connector Options:

- Mate-N-Lock
- Twist Lock
- CPC Connector
- Bare Wire
- Other Electrical Connections Available

#### Temperature Sensor Options:

- Platinum RTD PT100
- Type J Thermocouple
- Type K Thermocouple
- Thermistor
- Other Temperature Sensors Available



## How to Order:

Contact your local BriskHeat® representative to have a cloth heating jacket designed for your application.



## Cloth Jacket Insulators

BriskHeat® Cloth Jackets insulators maximize coverage and efficiency by providing insulation around the entire object. Cloth jacket insulators are ideal for a wide range of applications.

### Ideal for:

- |                     |                 |                        |                   |
|---------------------|-----------------|------------------------|-------------------|
| • Freeze Protection | • Flanges       | • Power Generation     | • Geothermal      |
| • Valves            | • OEM           | • Personnel Protection | • Exhaust Systems |
| • Industrial        | • Drilling      | • Heat Exchangers      | • Turbines        |
| • Military          | • Energy        | • Sound Attenuation    | • Aerospace       |
| • Process Control   | • Conservation  | • Instrumentation      | • Tanks           |
|                     | • Tubing        |                        | • Biomedical      |
|                     | • Semiconductor |                        |                   |

### Product Highlights

- ✓ Reusable, durable, and economical
- ✓ Easy-to-install
- ✓ Designed specifically for your application
- ✓ Versatile
- ✓ Thermally efficient
- ✓ Ingress Protection IP50

### Design Options:

#### Facing and Liner

Wide variety of materials available to meet your temperature and environmental needs

- Silicone Impregnated Fiberglass Cloth
- PTFE Gray Cloth
- Cleanroom Materials
- Aluminum Cloth
- And More

#### Insulation

Fiberglass, glassmat, or ceramic materials available in multiple thicknesses

#### Fastener Options

- Hook and Loop
- Hook and Lace
- Circumferential Belts with "D" rings
- Terminal end Rope Draw-Cord
- Grommets

Let our industry-leading engineering team design the perfect jacket for your application.

CLOTH HEATERS AND INSULATORS



# Need Help Finding a Heating Solution?

**BriskHeat** can design ANY flexible heater, insulator, or temperature controller for **Your Specific Application.**

**...at a price that meets your budget**

**Contact Your Local Distributor For a Solution That is Right For You.**

# TEMPERATURE CONTROLLERS

# TEMPERATURE CONTROLLERS



**BriskHeat**  
Corporation

## Temperature Controllers

All applications that require heat must be controlled. To meet this requirement, BriskHeat® provides control options ranging from bimetal thermostats to a network of digital PID temperature controllers for a heating system.

### Product Highlights



- ✓ **Temperature Controls for:**
  - Any Heater
  - Any Budget
  - Any Location and Environment
    - Bench Top
    - Control Panels
    - Outdoor Use
    - Hazardous Areas
  - Any Amperage or Voltage Requirement
- ✓ **Wide Range of Standard Choices Available**
- ✓ **Ability to Design and Custom Configure a Control System for Your Application**



We can configure a controller specially for your application. Contact your local distributor for more information.



## Temperature Controllers Selection Guide

Product Series	Control Type	Available Voltages	Available Amps	NEMA	Approvals	Sensor Type
Centipede 2® Temperature Control System	PID Autotune	100 to 240	3.5 amps per zone			RTD Platinum 100 ohm, DIN 385 curve, Class B
X2 Digital PID Benchtop Temperature Controller	PID Autotune	120, 240	15			Type-J or Type-K Thermocouple
SDC Digital On/Off Benchtop Digital Temperature Controller	Digital On/Off	120, 240	10			Type-J or Type-K Thermocouple
SCDE Digital On/Off Benchtop Temperature Controller	Digital On/Off	120, 240	8			Type-J, Type-K Thermocouple or PT100-RTD
TTD Outdoor-Use Digital On/Off Temperature Controller	Digital On/Off	120, 240	15			Type-K Thermocouple
TC4X Digital Temperature Controller with NEMA 4X Enclosure	Digital On/Off	120, 240	15, 10	4X		A99BB Type PTC
MPC2 Multi-Point PID Temperature Control Panel	PID Autotune Ramp/Soak	Your Choice	60 amps per zone			Type-J, Type-K Thermocouple or PT100-RTD
TD101 Automatic On/Off Thermostat Control	Thermostat	Up to 277	25			Bimetal Thermostat
TB250N All-Purpose Bulb and Capillary	Bulb-and-Capillary	Up to 277	22	3R		Tinned Copper Thermal Bulb
TB4000 High Capacity Bulb and Capillary	Bulb-and-Capillary	120, 240, 277, 480	50 per contactor	4X		304 SS Thermal Bulb
TB110N Hazardous-Area Bulb and Capillary	Bulb-and-Capillary	Up to 480	22	7 & 9	 <p>Hazardous-Rated</p>	304 SS Thermal Bulb
TB261N Ambient Sensing Capillary	Ambient	Up to 277	22	4X		Ambient Sensing Thermal Bulb
TS0 Portable Bulb and Capillary	Bulb-and-Capillary	120, 240	15			Copper Thermal Bulb
TP0 Portable Time Percentage Dial	Time Percentage	120, 240	15			N/A

## Centipede 2® Temperature Control System

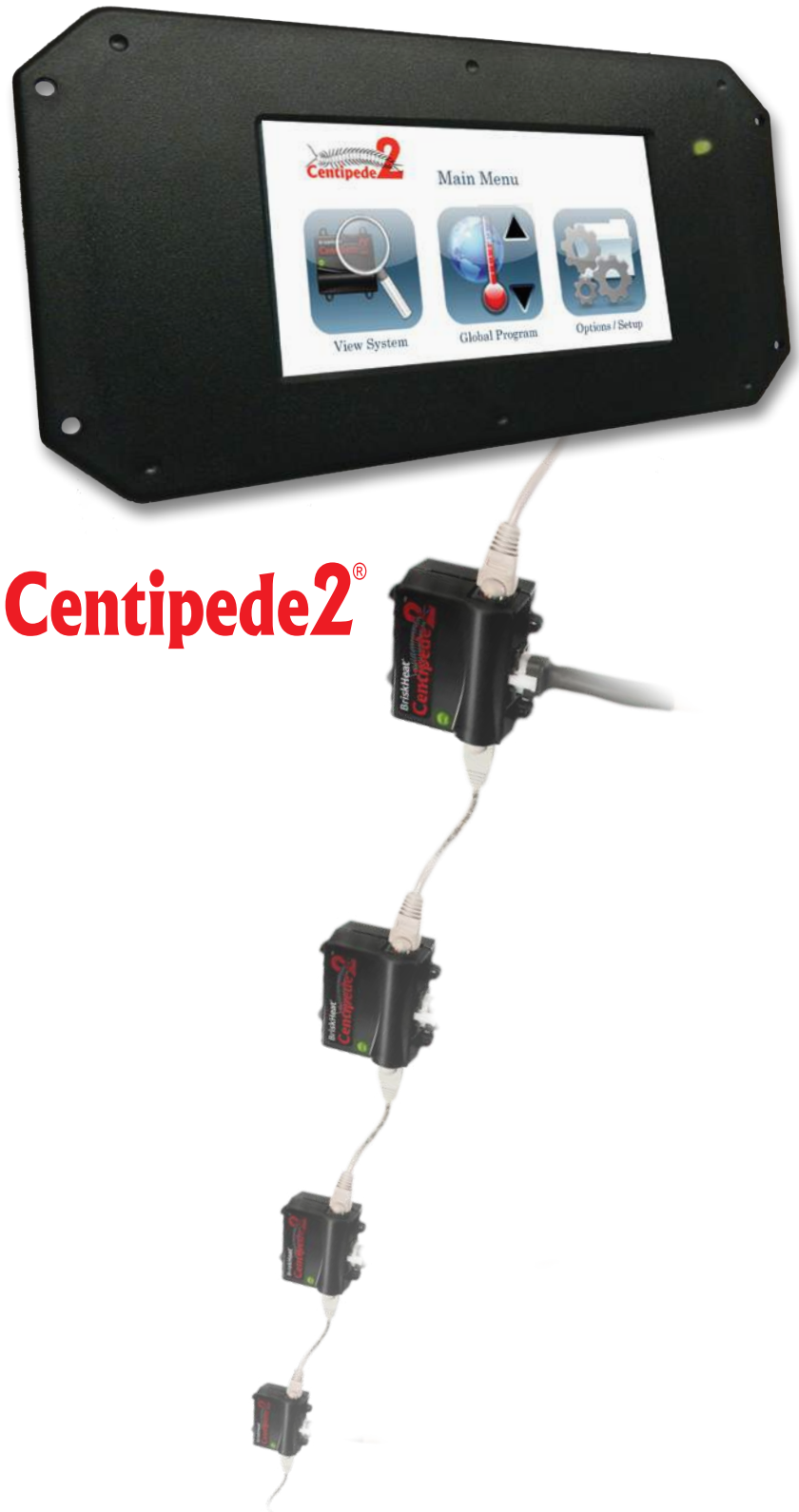
The Centipede 2® Temperature Control System provides the ease to program, control and monitor heating status by supplying a complete network of temperature control. The system includes a controller and sensor to each heater.

### FEATURES:

- Easy-to-use, full-color touchscreen interface
- Control multiple chambers, lines, and tools from one interface (up to 4 different lines of heaters)
- Expandable: It grows as your application grows
- Capable of integrating with your central monitoring system

### BENEFITS:

- Precise temperature control throughout heating system
- Improves system temperature uniformity
- Complete fab and foundry heating system integration
- Easily identify status of each zone
- Bidirectional communication with modules



## Centipede 2® Temperature Control System continued

### WHAT'S NEW?

- ✓ More Zones of PID Control
- ✓ New 7" Touch Screen Interface
- ✓ Improved Module Design
- ✓ New Alarm Relay Latch Feature
- ✓ Better Data and Error Log Streaming to Central Monitoring System
- ✓ Save More Money: Connect up to Four Strings of Modules to One Operator Interface
- ✓ Display Power Duty Cycle of Heater to Measure Energy Efficiency



Actual Screenshot



### General Specifications:


- PID-autotuned control for each zone. Receives set-point through communication link and stored in nonvolatile memory (retains settings if power is interrupted).
- Quickly and easily program the following parameters (individually or globally across system): temperature set-point, high-limit alarm temperature, and low-limit alarm temperature
- Operator interface displays actual temperature, power duty cycle of heater, and time / date stamped alarm messages in real-time.
  - The last 100 error messages are stored for easy diagnostics.
- Automatically assigned zone addresses.
- Up to 3.5 Amps @ 240VAC per control zone
- Temperature sensor: RTD PT100 Platinum 100 ohm, DIN 385 curve, class B
- Sensor accuracy:  $\pm 1.8^{\circ}\text{F}$  ( $1.0^{\circ}\text{C}$ )
- Temperature control range: 0 to  $320^{\circ}\text{C}$  (Displayed in  $^{\circ}\text{C}$ )
- Maximum high-limit:  $325^{\circ}\text{C}$
- Capable of communication with a PLC or external computer.
- Ability for data streaming to a central monitoring system
- Alarm relay latch feature: User can set-up alarm contacts to remain in alarm position and heaters powered off until the user manually clears the alarm through the operator interface or PLC.
- Dry contact master alarm relay: NO or NC (Normally Open or Normally Closed)
- Environmental temperature: 34 to  $131^{\circ}\text{F}$  (2 to  $55^{\circ}\text{C}$ )
- Storage temperature:  $-40$  to  $185^{\circ}\text{F}$  ( $-40$  to  $85^{\circ}\text{C}$ )
- Ambient humidity: 5 to 95% (non-condensing)



## Centipede 2® Temperature Control System: 7.0" Touch Screen Interface

The centipede 2 Touchscreen Interface Unit acts as a Modbus master for up to 128 Centipede 2 Modules. This unit displays real-time data for all zones and allows users to modify the major settings. It allows users to view the actual temperature, RTD status, set-point, high-limit alarm setting, low-limit alarm setting and power duty cycle of each heater.

### Product Highlights

- ✓ Easy-to-use full-color touchscreen operator interface for Centipede 2® Control Modules
- ✓ Globally program and monitor up to 4 different lines of heaters from one interface (up to 128 zones)
- ✓ Ability to data-stream to a central monitoring system
- ✓ Bi-directional communication
- ✓  US LISTED



### Specifications:

- **Control Zones:** Monitors and edits up to 128 zones
- **Programming:** Able to switch settings between individual and global systems
- **Connection:** Includes four RJ-45 connectors to connect up to four different control strings of Centipede 2® Modules
  - Up to 64 modules per string (Maximum of 128 modules per system)
- **Temperature setting range:** 0°C to 320°C (displayed in °C only)
- **Maximum high-limit:** 325°C
- **Touch screen dimensions:** 6" x 3.375" (152mm x 85mm)
- **External communication protocols**
  - Modbus RTU over RS-232C
  - Local User Interface (LUI) over RS-232C
- **Dry contact master alarm relay:** NO or NC (Normally Open or Normally Closed)
- **Universal input voltage:** 100-240VAC
- **Power Connection from jacket to control:** 6 position Molex Mini-Fit Jr. (for both the sensor and heater power)
- **Support:** Panel Mounts



### Ordering Information:

Part Number	Description
C2MOD-OI-7	Centipede® 2 7" Touch Screen Interface



## Centipede 2® Temperature Control System: PID Control Module

### Product Highlights

- ✓ Compact, PID-autotuned temperature controller: One module per zone of control
- ✓ Networked together with CAT 5 communication cable
- ✓ **NEW and STRONGER** 6-pin power and RTD PT100 connection with BriskHeat® heating jackets
- ✓ Power is supplied through Centipede 2® touch screen interface
- ✓ **UL** US



### Specifications:

- PID-autotuned control for each zone. Receives set-point through communication link and stored in nonvolatile memory (retains settings if power is interrupted)
- Tri-color LED status light
- **NEW** Bi-directional communication with modules
- Temperature sensor: RTD PT100 Platinum 100 ohm, DIN 385 curve, class B
- Maximum CAT5 communication string length: 400ft (122m) or 64 modules
- Dimensions: 2.0" x 2.2" x 1.0" (51mm x 56mm x 25mm)
- Weight: 0.14lb (65g)

### Ordering Information:

Part Number	Description
C2MOD-C	Centipede® 2 Module Unit. One required for each zone of control.



## Centipede 2® Temperature Control System: Module Accessories

### CAT5 Communication Cables

Part Number	Length
CENTCOM-001	1ft (0.3m)
CENTCOM-002	2ft (0.6m)
CENTCOM-003	3ft (0.9m)
CENTCOM-004	4ft (1.2m)
CENTCOM-005	5ft (1.5m)
CENTCOM-010	10ft (3.0m)
CENTCOM-014	14ft (4.3m)
CENTCOM-025	25ft (7.6m)



Ideal for Controlling BriskHeat® Cloth Heating Jacket Systems

CONTROLLERS

## X2 Digital PID Benchtop Temperature Controller

### Product Highlights

- ✓ Compact, plug-and-play design
- ✓ Advanced PID control
- ✓ Simple three-key user control
- ✓ Type J or K thermocouple sensor input

**NEW**



### Specifications

#### Key User Features:

- Compact, plug and play design: 6.39"x9.48"x1.99"
- Simple three-key user control
- Programmable temperature range: 32°F to 1400°F (0°C to 760°C)
  - Accuracy: Type-J +/- 0.9°F (0.50°C)
  - Type-K +/- 0.5°F (0.25°C)
- Programmable in either °C or °F
- Auto/manual control ability

#### Alarm and Protection Features:

- User programmable alarm types, including latching options
- Programmable security lock levels
- Fused input
- Sensor break protection with average output option which allows process to continue heating

**Sensor Input:** Type J or Type K thermocouple

#### Power:

- Input Voltage: 100-240VAC, 50-60hz, 3VA (nominal), +/-10% maximum humidity
- Amp capacity: 15 Amps
- 6 foot (1.8m) input power cord:
  - 120VAC = NEMA 5-15 plug
  - 240VAC = Bare Wire
- Heater receptacle: 3-prong AMP Mate-N-Lock

#### For Controllers with Stand Clamps:

- Mounts to poles 0.75" (18mm) diameter or less

### Ordering Information:

Part Number	Voltage	Includes Stand Clamp	Sensor Input
X2-120JT	120 VAC	No	Type J
X2-240JT	240 VAC	No	Type J
X2-120KT	120 VAC	No	Type K
X2-240KT	240 VAC	No	Type K
X2-120JS	120 VAC	Yes	Type J
X2-240JS	240 VAC	Yes	Type J
X2-120KS	120 VAC	Yes	Type K
X2-240KS	240 VAC	Yes	Type K

Thermocouple and optional heater adapter cords are sold separately.



Back

### Recommended Accessories

#### Thermocouples:

Thermocouple 24 AWG fiberglass insulated wire with mini connector.

Type J Part Number	Type K Part Number	Length ft (m)
TAJN05-AA	TAKN05-DA	5 (1.5)
TAJN10-AA	TAKN10-DA	10 (3.0)
TAJN25-AA	TAKN25-DA	25 (7.6)

#### Heater Adapter Cords:

Part Number	Description
PB1201-BR	Converts AMP Mate-N-Lock output receptacle to NEMA 5-15R (120VAC)
PB4201-ER	Converts AMP Mate-N-Lock output receptacle to NEMA 6-15R (240VAC)
PB4201-ER-P	Converts AMP Mate-N-Lock output receptacle to NEMA 6-15R (240VAC). Includes loose male plug NEMA6-15P for heater connection.

120V adapter cord is compatible with BriskHeat's heating tapes, mantle heaters, and beaker heaters.

## SDC Digital On/Off Benchtop Temperature Controller

### Product Highlights

- ✓ Affordable and compact
- ✓ Compatible with a wide range of heaters and applications
- ✓ Easy-to-use programmable digital controller, self contained, plug and play design
- ✓ Includes thermocouple and power output cords



### Specifications:

- Size:
  - Length: 5.5" (140mm)
  - Width: 4.25" (108mm)
  - Height: 1.75" (45mm)
- On-Off control
- Temperature control range:
  - °F models: 32°F to 999°F - Accuracy: +/- 1% FS
  - °C models: 0°C to 700°C - Accuracy: +/- 1% FS
- Includes 5-foot (1.5 m) factory installed J-type or K-type thermocouple sensor
- 120 VAC or 240 VAC power input
- Relay output rated for 10A @ 120/240 VAC
- Sensor break options
- Upper and lower limits of the setpoint can be adjusted
- Hysteresis: Adjustable setting from 1° to 99° (F or C)
- Exposure temperature: 32°F to 158°F (0°C to 70°C)
  - 80% humidity non-condensing
- 5-foot (1.5 m) input power cord
  - 120VAC unit = NEMA 5-15 plug
  - 240VAC unit = NEMA 6-15 plug
- 5-foot (1.5 m) output power cord
  - 120VAC unit = NEMA 5-15R receptacle
  - 240VAC unit = NEMA 6-15R receptacle\*
- Internal buzzer for alarm condition/error

Note: Other plug receptacle options available. Contact us for more information.

### Ordering Information:

Part Number	Voltage	Degrees C or F	Thermocouple Type
SDC120JF-A	98-132VAC	° F	J-Type
SDC120KF-A	98-132VAC	° F	K-Type
SDC120JC-A	98-132VAC	° C	J-Type
SDC120KC-A	98-132VAC	° C	K-Type
SDC240JF-A	184-253VAC	° F	J-Type
SDC240KF-A	184-253VAC	° F	K-Type
SDC240JC-A	184-253VAC	° C	J-Type
SDC240KC-A	184-253VAC	° C	K-Type

\* **Plug Option:** Add an "E" at the end of the part number for input power leads with ferrule wire crimped termination. i.e. SDC240JC-AE  
 Provided with loose NEMA 6-15 plug.



## TTD Outdoor-Use Digital On/Off Thermocouple Temperature Controller

### Product Highlights

- ✓ Easy-to-use digital controller with audible alarm
- ✓ Self-contained, plug and play design
- ✓ Designed for outdoor and indoor general purpose applications
- ✓ Type-K thermocouple input

### Specifications:

- 120 or 240VAC
- 15 amps
- Digital on/off controller
- Temperature units in °F (°C available upon request)
- Audible alarm
- Type K thermocouple mini and standard connector input\*
- Average accuracy of ±1% Full Scale (FS)
- Resolution: 1°
- Hysteresis: 5°
- Suitable for outdoor use (must be mounted vertically)
- Size: 8.00"L x 4.75"W x 3.75"D (203mm x 121mm x 95mm)
- Operating exposure temperatures: 14 to 131°F (-10 to 55°C)
- Storage exposure temperatures: -4 to 176°F (-20 to 80°C)
- Input power cord 6-foot (1.8m) long with standard plug
  - 120VAC: NEMA 5-15
  - 240VAC: NEMA 6-15
- Output receptacle:
  - IP 67 four-pin (NEMA 6P equivalent) [mating plug assembly included]
- Mounting feet included

\* Thermocouple sold separately

### Ordering Information:

Part Number	Volts	Range
TTD175-K120	120	32 to 175°F
TTD175-K240	240	32 to 175°F
TTD500-K120	120	32 to 500°F
TTD500-K240	240	32 to 500°F
TTD999-K120	120	32 to 999°F
TTD999-K240	240	32 to 999°F

Celsius Control Option: Add a "-C" at the end of the part number

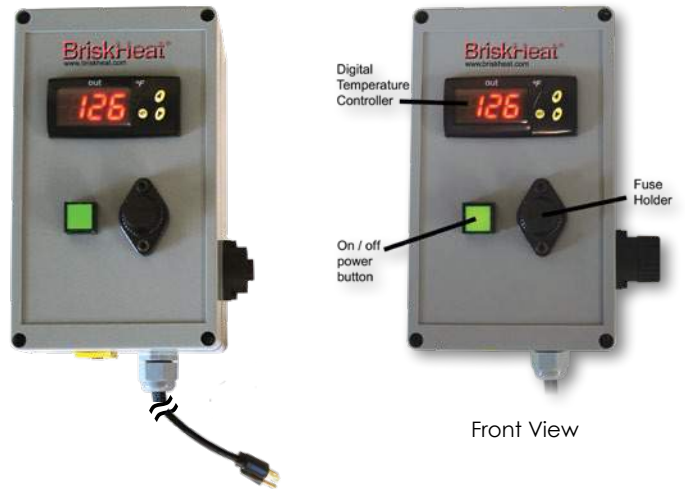
### Type K Thermocouple with mini connector

**Outdoor use:** PFA sleeving.  
Temperatures up to 500°F (260°C)

Part Number	Length (ft)
TCKN05-DA	5
TCKN10-DA	10

**Indoor use:** Fiberglass sleeving.  
Temperatures up to 800°F (426°C)

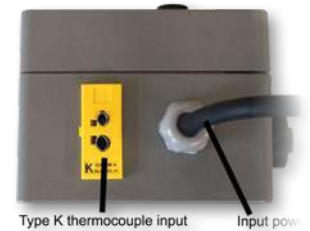
Part Number	Length (ft)
TAKN05-DA	5
TAKN10-DA	10



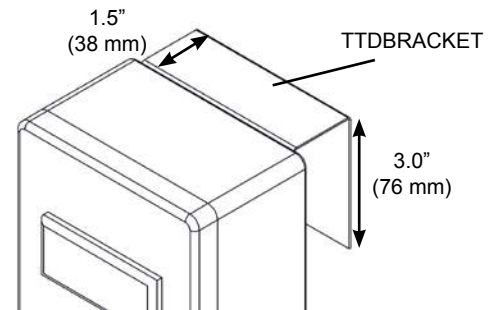
Front View



Side View



Bottom View



TTDBRACKET Installation

### Accessories:

Part Number	Description
11646	Replacement IP 67 four-pin (NEMA 6P equivalent) output male plug assembly
TTDBRACKET*	Optional mounting bracket kit

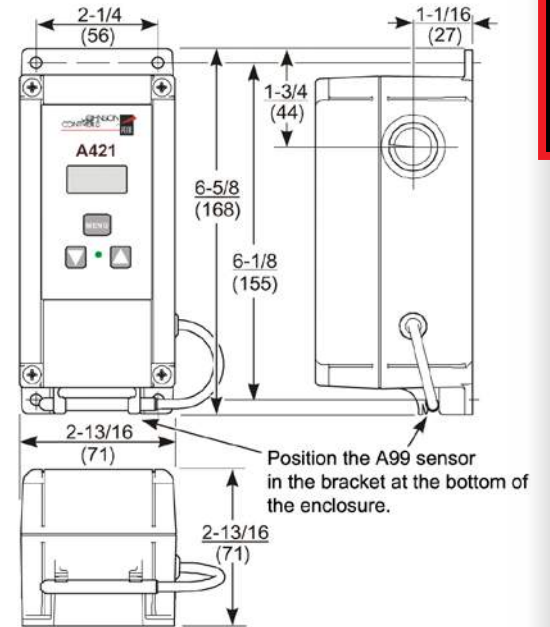
\*Included with TTD175-K120 and TTD-175-K240



## TC4X Digital Temperature Controller in NEMA4X Enclosure

### Product Highlights

- ✓ Easy-to-use single-stage digital temperature controller
- ✓ Suitable for outdoor and wet-area use
- ✓ Backlit LCD display with 3-button touchpad interface
- ✓ LED indicates On/Off status
- ✓ Displays in °F and °C
- ✓ Basic and advanced programming menus
- ✓ Parameter adjustment lock allows On/Off set-point adjustments only
- ✓ Adjustable anti-short cycle time delay
- ✓ NEMA4X/IP67 watertight plastic enclosure \*
- ✓ Heating or cooling operation
- ✓ Applications for heat tracing, freeze protection, process control, surface heating and more



### Specifications:

- Power Consumption: 1.8 VA maximum
- Supply Power: 110/120 or 208/230/240 VAC, 50/60Hz
- Ambient Operating Conditions: -40°F to 140°F (-40°C to 60°C), 0 to 95% RH noncondensing
- Temperature Control Range: -40°F to 212°F (-40°C to 100°C)
- Input Signal: 1035 ohm at 77°F (25°C) for A99 PTC sensor
- Temperature Sensor: A99 PTC Sensor 1/4" (6mm) diameter, field replaceable
- Sensor Offset Range: ±5°F or ±3°C
- Single-Pole Double Throw (SPDT) Output Relay: 15A at 110/120 VAC or 10A at 208/230/240 VAC

### Ordering Information:

Part No.	Volts	Range	Sensor Lead Length
TC4X-1	110/120 or 208/230/240 VAC	-30°F to 212°F (-34°C to 100°C)	9" (229mm)
TC4X-2	110/120 or 208/230/240 VAC	-30°F to 212°F (-34°C to 100°C)	78" (1981mm)

### Accessories:

Part No.	Description
41276-04	1/2" (13mm) diameter watertight conduit fitting suitable for NEMA 4 and 6 enclosures. Fits cable 0.17" to 0.45" (4mm to 11mm) diameter.
A99BB-200C	A99 PTC temperature sensor. 1/4" (6mm) diameter, 78" (1981mm) length.

\* Requires suitable watertight fitting for electrical connection (sold separately).

CONTROLLERS

## MPC2 Multi-Point Digital PID Temperature Control Panel

### Product Highlights

- ✓ Fully-configurable for enclosure material, sensor type, voltages, alarms, communication, and safety options
- ✓ Configure with one to dozens of zones
- ✓ Advanced Autotuning PID Control
- ✓ On/Off control operation available
- ✓ Indoor or Outdoor Use<sup>1</sup>
- ✓ Compatible with a broad range of heating blankets, tapes, and cables
- ✓ Stores up to 4 programs per control zone for easy repeatability
- ✓ 12-step ramp/soak programming
- ✓ Large 2-line, 3-color display simultaneously shows PV (actual) and SV (set) temperatures
- ✓ 2 levels of password protection

### Specifications:

- Voltages: Input/Output Configurations of 120, 208, 220-240, 277, 380, 400-415, 480, and 575-600 (and 3-phase options)
- Max. Amp. Load<sup>2</sup>: Up to 60 amps per zone with fuse or circuit breaker protection
- Temperature Control Range<sup>3</sup>: 0°F to 999°F (0°C to 999°C)
- Temperature Units: Programmable as °F or °C
- Sensor Input: Mini Type-J or Mini Type-K thermocouples, PT100-RTD or hardwire
- Accuracy: 0.2% of temperature with sampling time of 60 milliseconds
- Alarms: Audible and dry contact available
- Power Cords/Connections: Input Power - hardwire; Output Power - Harting 2.0 receptacle or hardwire
- Safety Options: Ground Fault Interruption, door-mounted disconnect, and emergency stop available
- Communications: RS-485, RS-232 or Ethernet available
- Environmental Exposures:
  - Operating range: 14°F to 104°F (-10°C to 40°C)
  - Storage range: -4°F to 158°F (-20°C to 70°C)
  - Relative humidity: 20 – 85% at non-condensing temperatures
- Enclosure: Dimensions - determined by number of zones. Materials - mild steel, fiberglass reinforced plastic or 304 stainless steel available

<sup>1</sup> Outdoor use requires special options

<sup>2</sup> Self-regulating cable requires use of circuit breakers for Zone Protection

<sup>3</sup> Do not exceed the maximum operating temperature of the heater



### Applications

Provides PID temperature control to cloth and silicone heating blankets, heating cable and tape, drum heaters and heating jackets for applications such as:

- Research laboratory experiments
- Food production
- Industrial heating and drying
- Freeze protection
- Condensation prevention
- Viscosity control

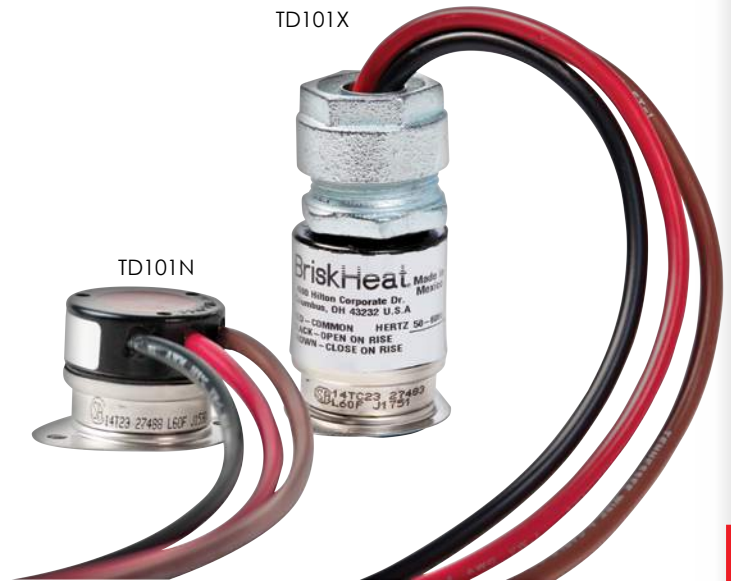
### Industries

- Agriculture
- Petrochemical
- Laboratory
- General manufacturing
- Semiconductor
- Chemical
- Food and Beverage
- Oil and Gas
- Plastics
- Aerospace

## TD101 Automatic On/Off Thermostat Control

### Product Highlights

- ✓ Ideal thermostat for individual circuits requiring a weatherproof device
- ✓ Typical uses:
  - Temperature control on heat tracing and process fluid system applications
  - External alarm or an over-temperature limit switch in conjunction with another control system
- ✓ Numerous temperature range choices to fit your application
- ✓ Mounts directly to heated surface
- ✓ TD101X Suitable for a Class I Division 2 hazardous-area with conduit fitting

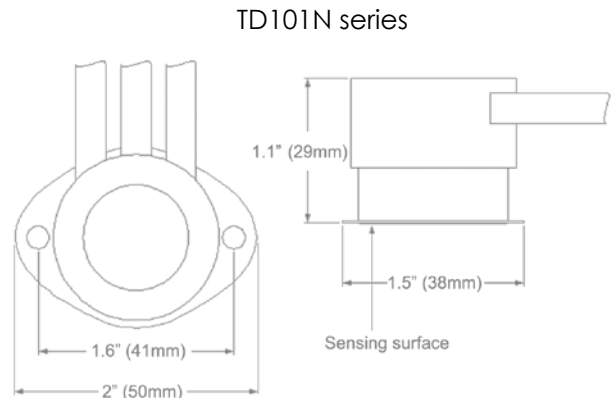


### Specifications:

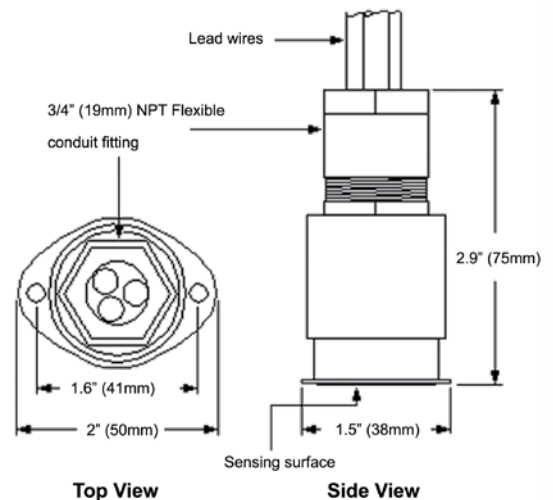
- Single pole double throw (SPDT)
- Temperature sensitive bimetal disc
- Average accuracy of  $\pm 15^{\circ}\text{F}$  ( $8^{\circ}\text{C}$ )
- Hermetically sealed black phenolic plastic housing
- Rated: 25 Amps, up to 240VAC (CSA)
- Maximum exposure temperature  $-40^{\circ}\text{F}$  to  $221^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $105^{\circ}\text{C}$ )
- 304 Stainless Steel mounting bracket - mounts using two 0.17" (4.3mm) diameter holes
- Power leads: 4ft (1.2m)
- Integral 3/4 NPT male conduit fitting (TD101X series)

### Ordering Information:

Part Number		Volts	Amps	Settings	
TD101N	TD101X with conduit fitting			Close °F (°C)	Open °F (°C)
TD101N-050	TD101X-050	Up to 277	25	35 (2)	50 (10)
TD101N-060	TD101X-060	Up to 277	25	45 (7)	60 (16)
TD101N-075	TD101X-075	Up to 277	25	60 (16)	75 (24)
TD101N-105	TD101X-105	Up to 277	25	90 (32)	105 (41)
TD101N-200	TD101X-200	Up to 277	25	185 (85)	200 (93)




TD101X series (with conduit fitting)



CONTROLLERS

## TB250N All-Purpose Bulb and Capillary Temperature Controller

### Product Highlights

- ✓ Suitable for outdoor use
- ✓ Temperature control on heat tracing, freeze protection, and process maintenance applications
- ✓ Manually set your desired temperature
- ✓ Bulb and capillary
- ✓ Three temperature range choices to fit your application
- ✓ 



Set-point dial protected within a NEMA 3R enclosure



### Specifications:

- Rated 22 amps up to 277VAC
- Differential 6°F (3°C)
- Average accuracy of ±5°F (3°C)
- Enclosure NEMA 3R rated, for outdoor use
- Maximum controller exposure temperatures: -40 to 160°F (-40 to 71°C)
- Tinned copper bulb and capillary, 10 feet (3m) long
- Single pole double throw (SPDT) contacts

### Bulb Dimensions

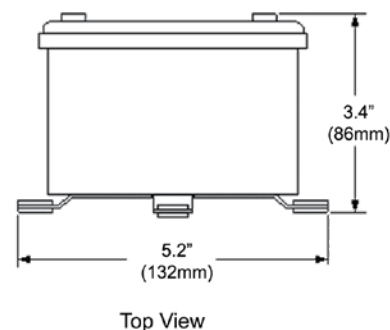
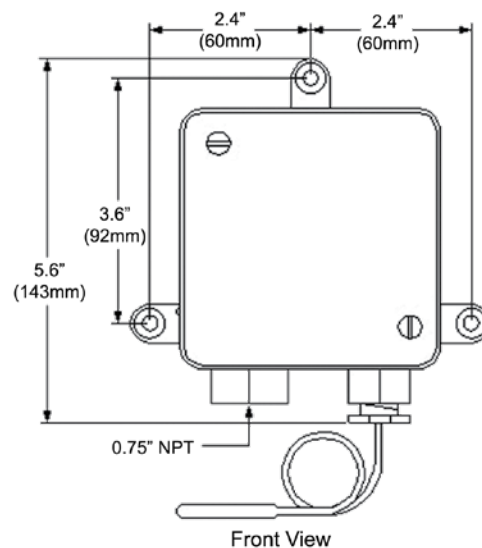
Part Number	Diameter		Length	
	Inches	mm	Inches	mm
TB250N-150	19/64	7.5	2 1/2	63.5
TB250N-250	19/64	7.5	2 1/2	63.5
TB250N-350	3/8	9.5	2 1/4	57.2

### Ordering Information:

Part number	Volts	Amps	Range
TB250N-150	Up to 277	22	0 to 150°F
TB250N-250	Up to 277	22	100 to 250°F
TB250N-350	Up to 277	22	200 to 350°F

### Accessories:

Part number	Description
TB250N-2BW	½" NPT x 2.8" copper bulb well, for 150 & 250
TB250N-1BW	½" NPT x 2.3" copper bulb well, for 350



# TB4000 High Capacity Bulb and Capillary Temperature Controller

## Product Highlights

- ✓ Ideal for high wattage tank and hopper applications
- ✓ Suitable for outdoor industrial use
- ✓ Easily set your desired temperature
- ✓ Bulb and capillary control

## Specifications:

- Large amperage capacity: 50 amps per contactor
- 120, 208, 240, 277, or 480VAC
- Enclosure NEMA 4X rated (optional stainless steel enclosure available)
- Industrial strength, clear viewable window cover with secure latches
- 304 stainless steel bulb and capillary, 10 feet (3m) long
- Average accuracy of  $\pm 5^{\circ}\text{F}$  ( $3^{\circ}\text{C}$ )
- Differential 2% full scale
- Maximum controller exposure temperatures:  
-40 to 160°F (-40 to 71°C)

## Bulb Dimensions

Temperature Range	Diameter		Length	
	Inches	mm	Inches	mm
0 to 150°F	3/8	10	6 7/8	175
50 to 300°F	3/8	10	4 3/8	111
150 to 650°F	3/8	10	3 5/8	92



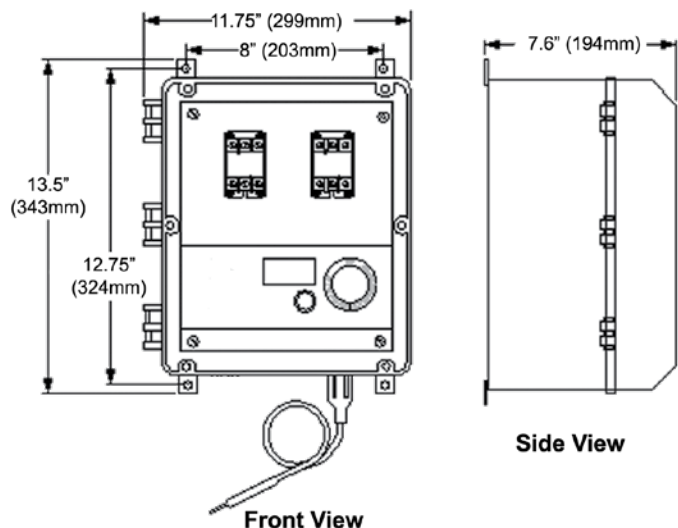
Easy-to-set dial controller within NEMA 4X enclosure

## Ordering Information:

### Part Number Matrix

TB 4 4 1 2 - 150

- Product Series \_\_\_\_\_
- Type of Enclosure \_\_\_\_\_  
4- (Plastic), 5- (Metal)
- Control Options \_\_\_\_\_  
1- (Single Zone)  
2- (Single with Low or High Temperature Alarm)  
3- (Single with High Limit Cutout)  
4- (Dual Zone)
- Contactor \_\_\_\_\_  
0- (No contactor / 15 amps - Single Phase)  
1- (One contactor / 50 amps - Single or Three-Phase)  
2- (Two contactors / 50 amps each - Single or Three-Phase)
- Voltage \_\_\_\_\_  
1- (120), 2- (240), 3- (277), 4-(480)
- Temperature Range \_\_\_\_\_  
150- (0 to 150°F [-17 to 66°C])  
300- (50 to 300°F [10 to 149°C])  
650- (150 to 650°F [66 to 343°C])



CONTROLLERS

# TB110 Hazardous-Area Bulb and Capillary Temperature Controller

## Product Highlights

- ✓ Suitable for hazardous-area environments



Class I Division 1 & 2 Group B, C, D  
Class II Division 1 & 2 Group E, F, G  
Class III  
Class I, Zone 1, Group IIB + H2 T6

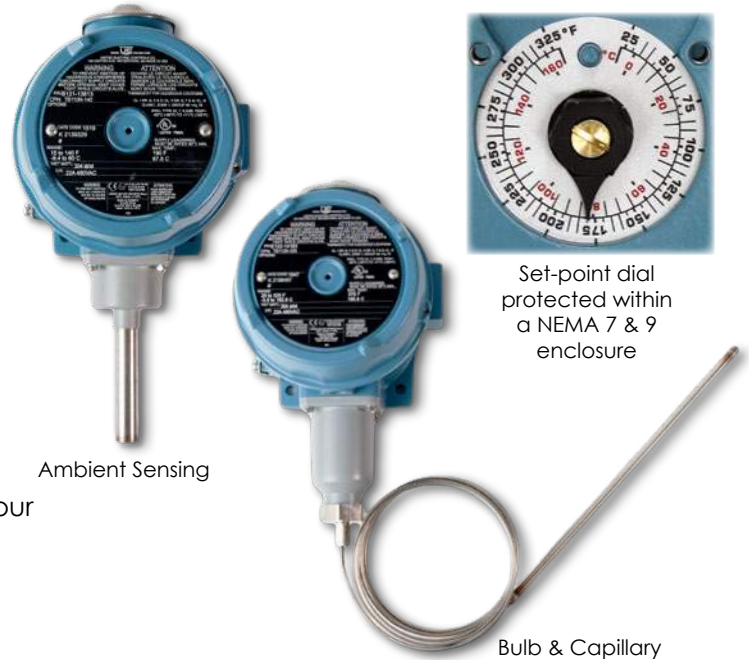


II 2 G Ex d IIC T6 Gb  
II 2 D Ex tb IIC T85°C Db IP66  
Tamb = -40°C to 75°C



Ex d IIC T6 Gb  
Ex tb IIC T85°C Db IP66  
Tamb = -40°C to 75°C

- ✓ Temperature control on heat tracing, freeze protection, and process maintenance applications
- ✓ Bulb and capillary
- ✓ Numerous temperature range choices to fit your application



Set-point dial protected within a NEMA 7 & 9 enclosure

Ambient Sensing

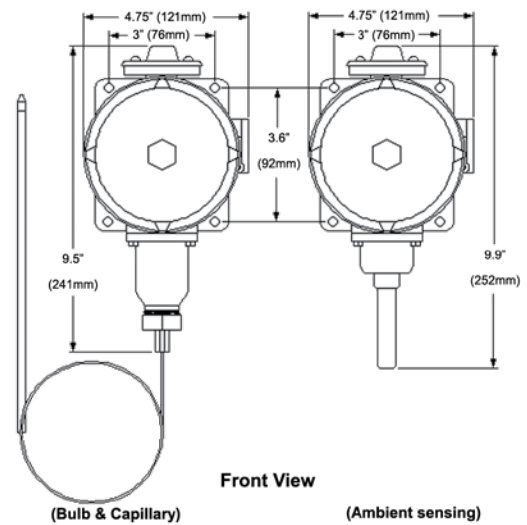
Bulb & Capillary

## Specifications:

- Rated 22 amps up to 480VAC
- 304 Stainless Steel Bulb and Capillary, 10 feet (3m) long (remote sensing only)
- Single pole double throw (SPDT) contacts
- Enclosure rated NEMA 7 & 9, for hazardous areas
- Differential 6°F (3°C)
- Average accuracy of ±5°F (3°C)
- Maximum controller exposure temperatures -40 to 160°F (-40 to 71°C)
- Repeatability 1% of range

## Bulb Dimensions

Part Number	Diameter		Length	
	inches	mm	inches	mm
TB110N-140	9/16	14.3	2 11/16	68.3
TB111N-325	1/4	6.4	10 1/4	200.4
TB113N-650	1/4	6.4	12 1/2	317.5
TB112N-325	1/4	6.4	10 1/4	200.4
TB114N-650	1/4	6.4	12 1/2	317.5



Front View

(Bulb & Capillary)

(Ambient sensing)

## Ordering Information:

Single set-point control

Part number	Volts	Amps	Range
TB111N-325	Up to 480	22	25 to 325°F (-4 to 163°C)
TB113N-650	Up to 480	22	300 to 650°F (148 to 343°C)

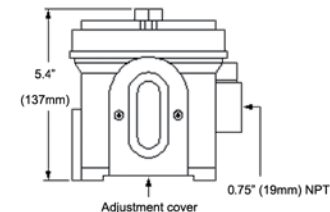
Dual set-point control

Part number	Volts	Amps	Range
TB112N-325	Up to 480	22	25 to 325°F (-4 to 163°C)
TB114N-650	Up to 480	22	300 to 650°F (148 to 343°C)

Ambient sensing

Part number	Volts	Amps	Range
TB110N-140	Up to 480	22	15 to 140°F (-9 to 60°C)

The Dual controller has two independent set-point dials and two independent SPDT contacts allowing two different temperature set-points.




Top View

## Accessories:

Part number	Description
TB110N-BW	1/2" NPT brass bulb well
TB110N-BWS	1/2" NPT stainless steel bulb well

## TB261N Ambient Sensing Capillary Temperature Controller

### Product Highlights

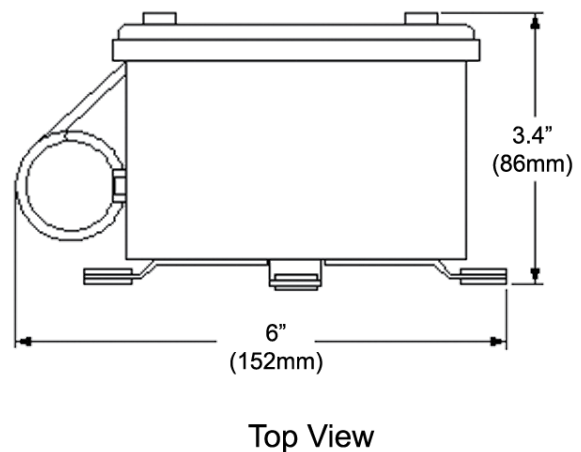
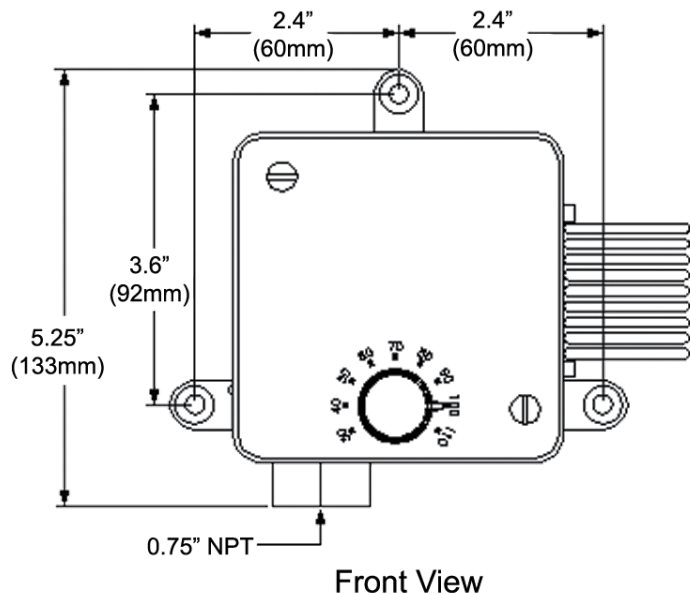
- ✓ Controls based on ambient conditions
- ✓ Suitable for outdoor use
- ✓ Manually set your desired temperature
- ✓ 

### Specifications:

- Rated 22 Amps up to 277VAC
- Differential 3°F (1.6°C)
- Single Pole Double Throw (SPDT) contacts
- Enclosure rated NEMA 4X, for outdoor use
- Maximum controller exposure temperatures: -40 to 160°F (-40 to 71°C)
- Ambient sensing capillary
- Corrosion resistant vinyl coated capillary sensor

### Ordering Information:

Part number	Volts	Amps	Range
TB261N-110	Up to 277	22	20 to 110°F (-7 to 43°C)



CONTROLLERS

## TSO Portable Bulb and Capillary Temperature Controller

### Product Highlights

- ✓ Portable, plug-and-play design
- ✓ For indoor general purpose applications
- ✓ Manually set your desired temperature
- ✓ Bulb and capillary control
- ✓ Two temperature range choices to fit your application



### Specifications:

- 120 or 240VAC
- Differential 6°F (3°C)
- Average accuracy of ±5°F (3°C)
- Maximum controller exposure temperatures: -40 to 160°F (-40 to 71°C)
- Copper bulb and capillary, 4 feet (1.2m) long
- Input power cord 6 feet (1.8m) long with standard plug
  - 120VAC: NEMA 5-15
  - 240VAC: NEMA 6-15
- Output receptacle:
  - 120VAC: NEMA 5-15R
  - 240VAC: NEMA 6-15R

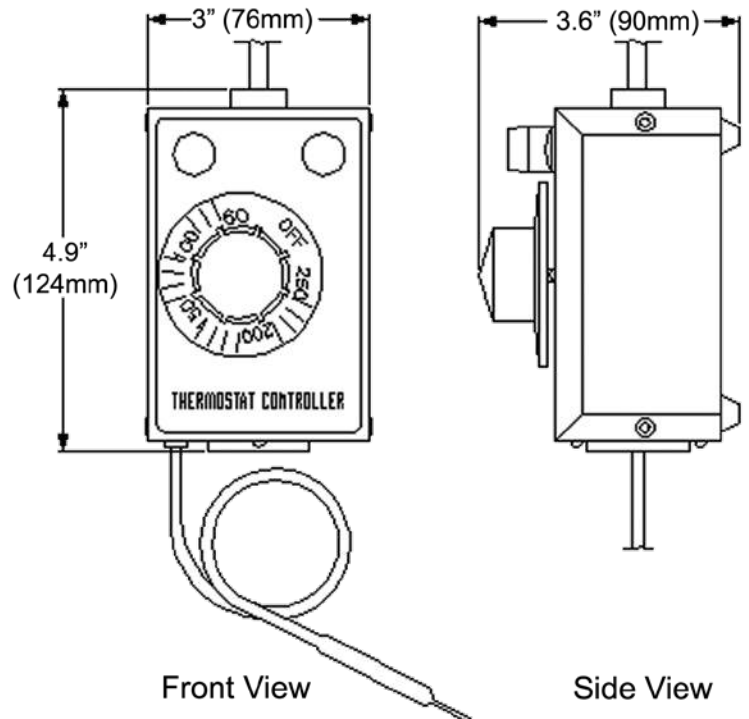


### Bulb Dimension

Diameter		Length	
Inches	mm	Inches	mm
3/8	10	4	102

### Ordering Information:

Part number	Volts	Amps	Range
TS0991-250	120	15	60 to 250°F (16 to 121°C)
TS0991-550	120	15	150 to 550°F (66 to 288°C)
TS0992-250	240	15	60 to 250°F (16 to 121°C)
TS0992-550	240	15	150 to 550°F (66 to 288°C)





## TPO Portable Time Percentage Controller

### Product Highlights

- ✓ Portable, plug-and-play design
- ✓ For indoor general purpose applications
- ✓ Adjustable time percentage control

### What is Time Percentage Control?

Time percentage control varies the proportion (length) of time the heater is in the "on" or "off" heating mode. The heating application will determine the actual percentage set-point required. The controller does not use a temperature sensor and therefore satisfactory operation requires occasional supervision under changing load conditions

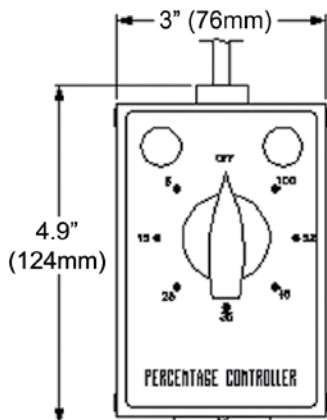


### Specification

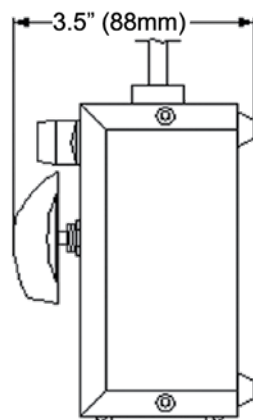
- 120 or 240VAC
- Maximum controller exposure temperatures: -40 to 160°F (-40 to 71°C)
- Input power cord 6 feet (1.8m) long with standard plug
  - 120VAC: NEMA 5-15
  - 240VAC: NEMA 6-15
- Output receptacle:
  - 120VAC: NEMA 5-15R
  - 240VAC: NEMA 6-15R

### Ordering Information:

Part number	Volts	Amps	Range
TP0941-000	120	15	5-100%
TP0942-000	240	15	5-100%



Top View



Side View

CONTROLLERS

**Configure-to-Order Temperature Control Panels**

**BriskHeat® can design a temperature control panel specific for your application.**

- Your Controller Type
- Your Power Requirements
- Your Environment
- Your Budget

CONTROLLERS



**We have a wide range of components to choose from and we have the ability to source from our global supply chain.**

Contact Your Local Distributor For a Solution that is Right For You

COMPOSITE  
CURING

COMPOSITE  
CURING



**BriskHeat**<sup>®</sup>  
Corporation

## ACR® 3 Hot Bonder

**BriskHeat**  
Corporation

# ACR<sup>®</sup> 3

## HOT BONDER

Easier • Better



### Perform Cures Faster and Better

- Single or dual zone
- 8.4" (213mm) full-color touch screen
- Dual vacuum system: Built-in electric vacuum pump and vacuum venturi for each zone
- Universal voltage: 100-130VAC, 200-240VAC
- 30 amps output per heat zone
- 10 thermocouple sensors per zone
- Accepts J-type thermocouples
- Includes everything you need
- Includes training DVD
- UL Listed

### Easy-to-Use Software on Full-Color HD Touchscreen

- Quick 3-step programming: Store 30 programs on hot bonder
- Easy-to-follow menu choices
- Quick data entry: Complete QWERTY keyboard interface
- Secure: Multiple levels of password protection
- Multi-task: Perform several operations at once
- Retains history of last 12 cures
- Customized post cure analysis: Data logging intervals 1 to 99 minutes
- Multiple language support:
  - English, German, Russian, Chinese (Mandarin)
  - Additional languages available upon request



Easy-to-Transport

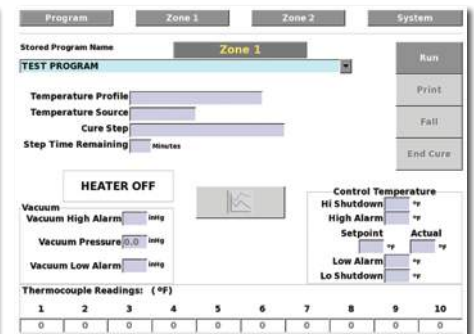
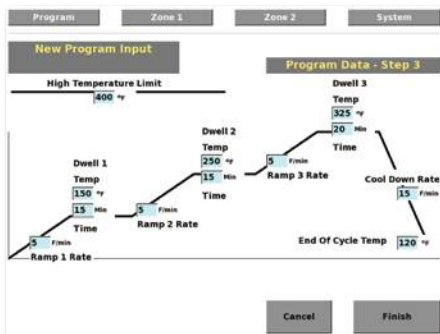
### Fast and Simple Data Transfer with USB Drive

(USB Flash Disk Included)

- Transfer and archive post cure data history to your PC.
- Instantaneously analyze your data on your spreadsheet and word processor programs including Microsoft® Excel® and Word®
- Transfer your programs quickly from one bonder to another
- Update your bonder easily with the latest FREE software at [www.briskheat.com](http://www.briskheat.com)



Transfer data instantly



COMPOSITE CURING

## ACR® 3 Hot Bonder

### Specifications

#### General

- Single or dual zone
- 8.4" (213mm) touch screen
- USB port for data transfer (USB flash disk included)
- Input ground fault interrupter breaker protected
- Audible and visual alarms for high and low temperature / vacuum limits
- Data logs digitally or through built-in printer: prints and records real-time status of cure including program parameters
- UL Listed



Patent 6,976,519

#### Power

- Universal input voltage: 100-130VAC, 200-240VAC
- MAINS supply voltage fluctuations up to  $\pm 10\%$  of the nominal voltage
- Transient over voltages typically found on a Category II power source: i.e. a lighting circuit.
- Frequency: 50-60Hz
- 30 amps maximum per zone

#### Vacuum

- Dual vacuum system: Built-in electric vacuum pump and vacuum venturi for each zone
- Pressure: 28" (13.8PSI)
- Ability to manually adjust pressure for each zone

#### Temperature Control

- Cures up to 1400°F (760°C)
- 10 thermocouple sensor inputs per zone
- Accepts J-type thermocouple connectors
- Accuracy:  $\pm 3^\circ\text{F}$  ( $1.67^\circ\text{C}$ )
- Monitors all thermocouples for alarms

#### Environment

- Intended for use in dry environments. Do not expose to wet spray.
- Altitude up to 6562ft (2,000m)
- Storage temperature range: -4 to 140°F (-20 to 60°C)
- Operating temperature range: 41 to 104°F (5 to 40°C)
- Maximum relative humidity: 80% for temperatures up to 88°F (31°C) decreasing linearly to 50% relative to humidity at 104°F (40°C)
- Pollution degree 2 (normally only non-conductive pollution occurs, however a temporary conductivity caused by condensation must be expected)



## ACR® 3 Hot Bonder

### Ordering Information:

The ACR® 3 Hot Bonder can be purchased either as a kit with composite curing blankets or as a base unit.

#### Kit with Composite Curing Blankets

Number of Zones	Voltage	Part Number	NSN*
1	120VAC	ACR-3-S120KIT	4920-01-538-9296
1	240VAC	ACR-3-S240KIT	4920-01-538-9296
2	120VAC	ACR-3-D120KIT	4920-01-545-5200
2	240VAC	ACR-3-D240KIT	4920-01-545-5200

\* Please indicate voltage when ordering with NSN.

#### A Kit Includes:

- ACR® 3 hot bonder unit
- One 10" x 10" (254 x 254mm) SR composite curing blanket per zone
- One 12" x 12" (305 x 305mm) SR composite curing blanket per zone
- One 16" x 16" (406 x 406mm) SR composite curing blanket per zone
- 10ft (3m) vacuum hoses (2 per zone)
- 10ft (3m) input power cord (1 per zone)
- 5ft (1.5m) heater output power cord (1 per zone)
- USB flash disk
- J-Type thermocouples (10 per zone)
- Standard connector adapters for thermocouple receptacles (10 per zone)
- Vacuum bag feed-throughs (2 per zone)
- Extra printer ribbon and paper (1 per zone)
- DVD Training Video



ACR® 3 Hot Bonder- Dual Zone



10" x 10" SR curing blanket  
(1 per zone)



12" x 12" SR curing blanket  
(1 per zone)



16" x 16" SR curing blanket  
(1 per zone)

#### Base Unit

Number of Zones	Voltage	Input Power Plug NEMA Rating	Part Number
1	120VAC	L5-30P	ACR-3-S1
2	120VAC	L5-30P	ACR-3-D1
1	240VAC	L6-30P	ACR-3-S2
2	240VAC	L6-30P	ACR-3-D2

#### Base Unit Includes:

- ACR® 3 hot bonder unit
- 10ft (3m) vacuum hoses (2 per zone)
- 10ft (3m) input power cord (1 per zone)
- 5ft (1.5m) heater output power cord (1 per zone)
- USB flash disk
- J-Type thermocouples (10 per zone)
- Standard connector adapters for thermocouple receptacles (10 per zone)
- Vacuum bag feed-throughs (2 per zone)
- Extra printer ribbon and paper (1 per zone)
- DVD Training Video



Available **FREE** online:  
ACR® 3 Hot Bonder:  
Demonstration and Training Video

## ACR® MiniPRO™ Hot Bonder



### Easiest-to-Use Hot Bonder Under 18 lbs (8kg)

- Fully-Loaded
- HD Color Touch Screen
- USB Data Port
- Small and lightweight: cure composite materials anywhere
- Easy-to-carry and setup: even up towers, ladders, staircases, and on wings



### Perform Cures Faster and Better

- Single zone
- 8.4" (213mm) full-color touch screen
- Built-in vacuum venturi
- Universal voltage: 100-130VAC, 200-240VAC
- 20 amps output
- 10 thermocouple sensors
- Accepts J-type thermocouples
- Includes everything you need
- Includes training DVD



### Easy-to-Use Software on Full-Color HD Touchscreen

- Quick 3-step programming: Store 30 programs on hot bonder
- Easy-to-follow menu choices
- Quick data entry: Complete QWERTY keyboard interface
- Secure: Multiple levels of password protection
- Multi-task: Perform several operations at once
- Retains history of last 12 cures
- Customized post cure analysis: Data logging intervals 1 to 99 minutes
- Multiple language support

### Fast and Simple Data Transfer with USB Drive

(USB Flash Disk Included)

- Transfer and archive post cure data history to your PC.
- Instantaneously analyze your data on your spreadsheet and word processor programs including Microsoft® Excel® and Word®
- Transfer your programs quickly from one BriskHeat® bonder to another
- Update your bonder easily with the latest FREE software at [www.briskheat.com](http://www.briskheat.com)



Transfer data instantly

## ACR® MiniPRO™ Hot Bonder

### Specifications

#### General

- Single zone
- 8.4" (213mm) touch screen
- USB port for data transfer (USB flash disk included)
- Input ground fault interrupter breaker protected
- Audible and visual alarms for high and low temperature/vacuum limits
- Data logs digitally
- Compact size of 16.44"L x 13.13"W x 6.81"D (41.75cm x 33.34cm x 17.30cm)
- Weighs less than 18 lbs (8 kg)

#### Power

- Universal input voltage: 100-130VAC, 200-240VAC
- MAINS supply voltage fluctuations up to ±10% of the nominal voltage
- Transient over voltages typically found on a Category II power source: i.e. a lighting circuit.
- Frequency: 50-60Hz
- 20 amps capacity

#### Vacuum

- Built-in vacuum venturi pump
- Pressure: 28 in Hg (13.8PSI)

#### Temperature Control

- Cures up to 1400°F (760°C)
- 10 thermocouple sensor inputs
- Accepts J-type thermocouple connectors
- Accuracy: ±3°F (1.67°C)
- Monitors all thermocouples for alarms

#### Environment

- Intended for use in dry environments. Do not expose to a wet spray
- Altitude up to 6562ft (2,000m)
- Storage temperature range: -4 to 140°F (-20 to 60°C)
- Operating temperature range: 41 to 104°F (5 to 40°C)
- Maximum relative humidity: 80% for temperatures up to 88°F (31°C) decreasing linearly to 50% relative to humidity at 104°F (40°C)
- Pollution degree 2 (normally only non-conductive pollution occurs, however a temporary conductivity caused by condensation must be expected)



### Ordering Information

Number of Zones	Voltage	Part Number
1	Universal	ACR-3-MINI

#### Includes:

- ACR® MiniPRO™ hot bonder unit
- One 10ft (3m) vacuum hose
- One vacuum bag feed-through
- One 10ft (3m) input power cord
- One 5ft (1.5m) heater output power cord
- USB flash disk
- Ten J-Type thermocouples
- Ten standard connector adapters for thermocouple receptacles

### Deluxe Packages with Heating Blankets

Part Number	Description
ACR-MINI-120KIT	ACR-3-MINI with 120V Heating Blankets - One 10" x 10" (254mm x 254mm) SR heating blanket - One 12" x 12" (305mm x 305mm) SR heating blanket - One 16" x 16" (406mm x 406mm) SR heating blanket
ACR-MINI-240KIT	ACR-3-MINI with 240V Heating Blankets - One 10" x 10" (254mm x 254mm) SR heating blanket - One 12" x 12" (305mm x 305mm) SR heating blanket - One 16" x 16" (406mm x 406mm) SR heating blanket



## TT Table Top Composite Curing Controller

### Product Highlights

- ✓ Provides basic temperature control for composite curing applications
- ✓ Portable, lightweight, and self-contained
- ✓ Eight-segment ramp / soak control
- ✓ Universal voltage option and high amperage capability: up to 30 amps



### Specifications:

- 400°F (204°C) maximum temperature control
- Simple four-key user control
- Dual display shows set-point and actual temperature
- 14 programmable alarm types
- Programmable to either °C or °F
- Visual and audible alarms
- Automatic tuning of PID parameters
- Accuracy ±1 least significant digit
- Input Voltage:
  - Universal voltage model: 100-130VAC, 200-240VAC, 50-60Hz
  - 120V model: 100-130VAC, 50-60Hz
- 30 amp circuit breaker
- Accepts standard and mini Type-J thermocouple connectors
- Sensor break protection
- Auto / manual control ability
- Program security lock levels
- 6-foot (1.8m) long input power cord



**Add Vacuum Capabilities with Optional Venturi Pump**

### Ordering Information:

#### TT Table Top Controller Kit

Part Number	Description
TT30D-S16	TT Table Top Temperature Controller Kit, Universal voltage
TTQSD-S16	TT Table Top Temperature Controller Kit with built-in high limit thermocouple input, 120VAC

TT Table Top Controller Kit includes...

- One TT Table Top Controller unit
- One 20ft Type J Thermocouple (TTQSD-S16 includes two)
- One 10ft Heater Output Cord

#### Deluxe Packages

Part Number	Description
TT30D-S16-120KIT	TT30D-S16 with 120V Heating Blankets <ul style="list-style-type: none"> <li>- One 10" x 10" (254mm x 254mm) SR heating blanket</li> <li>- One 12" x 12" (305mm x 305mm) SR heating blanket</li> </ul>
TT30D-S16-240KIT	TT30D-S16 with 240V Heating Blankets <ul style="list-style-type: none"> <li>- One 10" x 10" (254mm x 254mm) SR heating blanket</li> <li>- One 12" x 12" (305mm x 305mm) SR heating blanket</li> </ul>
TT30D-S16-VACKIT	TT30D-S16 with Vacuum Kit <ul style="list-style-type: none"> <li>- One Venturi pump</li> <li>- One 10ft (3m) vacuum hose</li> <li>- One vacuum feed-through</li> </ul>

#### Accessories

Part Number	Description
20950	Venturi pump. Converts shop / compressed air to vacuum. Requires shop / compressed air.
49758-35	Vacuum gage
20938	10ft (3m) vacuum hose
20931	Vacuum bag feed-through
49909-01	20ft (6m) Type J Thermocouple

COMPOSITE CURRING

## Composite Curing Blankets

### Product Highlights

- ✓ **Highly Flexible**
  - Bend radius as small as 1/4" (6mm)
  - Perfect for leading and trailing edge curing applications
- ✓ **Uniform Temperatures for Any Shape and Size**
  - Up to 4ft x 10ft (1.2m x 3.0m)
  - 3-D shapes such as radomes - a perfect fit everytime
  - Molded heaters for nearly any shape
- ✓ **Two-Year Warranty - Standard**
  - BriskHeat's durable design reduces common failure points
  - Eliminate the hassle and cost of failed curing blankets

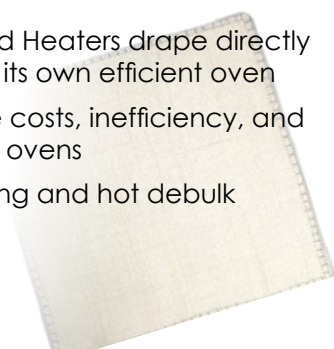


## Mold Heating - Hot Debulk Solutions



### Portable and Energy Efficient - No Oven Required!

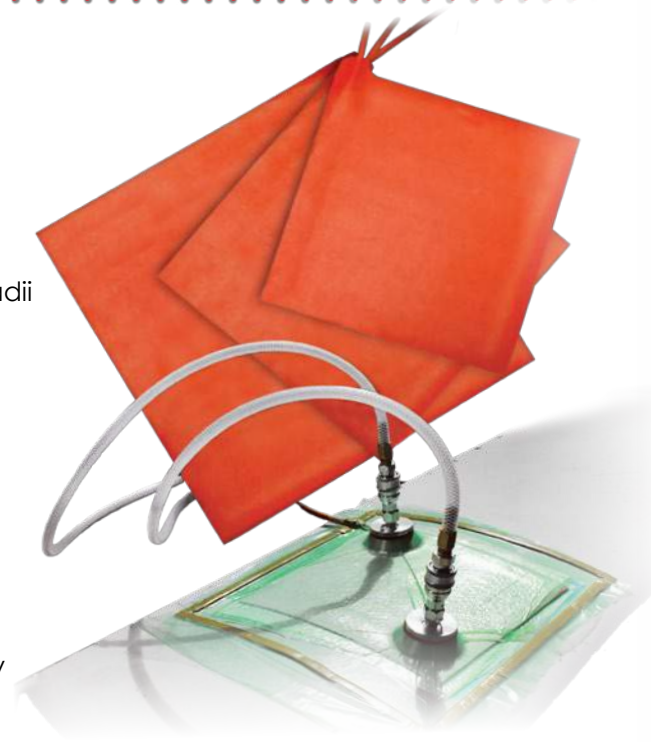
- BriskHeat Cloth Insulated Heaters drape directly over the mold creating its own efficient oven
- Eliminates the extensive costs, inefficiency, and energy consumption of ovens
- Ideal for mold preheating and hot debulk



## SR Composite Curing Blankets

### Product Highlights

- ✓ Two-year warranty
- ✓ Highly flexible: ideal for leading and trailing edges
- ✓ Quick, efficient, non-stress producing heat up to 450°F (232°C)
- ✓ Use on horizontal and vertical surfaces and on sharp radii surfaces without removing the damaged section
- ✓ Compatible with ACR® hot bonders and your current equipment



### Specifications:

- Flexibility up to 1/4" (6mm) radii
- Smooth surface against repair
- Heating element laminated between two layers of non-reinforced silicone rubber, 66 mil thick with a density of 66 oz/yd2 (2237 grams/m<sup>2</sup>)
- 450°F (232°C) maximum exposure temperature
- Power density of 5 watts/in<sup>2</sup> (0.008 watts/mm<sup>2</sup>)
- Dielectric strength of over 2000 volts
- Moisture, chemical, and radiation resistant
- Strain relief built through entire edge of blanket for increased durability
- Power cord 6-foot (1.8m) long with choice of power plug
- Ingress Protection Rating: IP54

### Ordering Information: Standard Sizes and Wattage

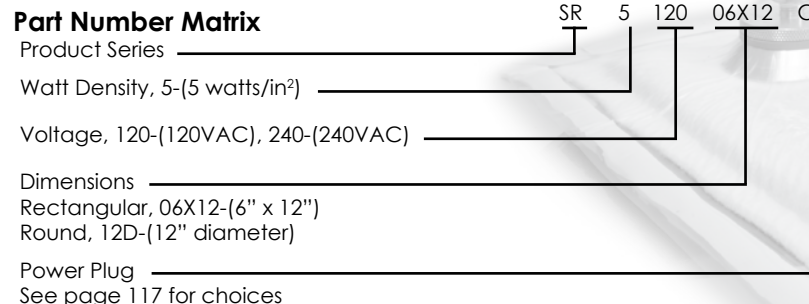
#### Rectangular

Width in (mm)	Length in (mm)	Total Watts
6 (152)	6 (152)	180
6 (152)	12 (305)	360
6 (152)	24 (610)	720
8 (203)	8 (203)	320
10 (254)	10 (254)	500
12 (305)	12 (305)	720
12 (305)	24 (610)	1440
16 (406)	16 (406)	1280
18 (457)	18 (457)	1620
24 (610)	24 (610)	2880

#### Round

Diameter in (mm)	Total Watts
6 (152)	140
8 (203)	250
10 (254)	395
12 (305)	565
14 (356)	770
16 (406)	1005

### Part Number Matrix




COMPOSITE CURING

**IMPORTANT: Temperature controller is required for this product.**  
**BriskHeat recommends the ACR® 3 or MiniPro™ Hot Bonder**

## SRV Composite Curing Blankets with Vacuum Seal

### Product Highlights

- ✓ Both a heater and a reusable vacuum bag
- ✓ Quick, efficient, non-stress producing heat up to 450°F (232°C)
- ✓ Two-year warranty
- ✓ Compatible with ACR® hot bonders and your current equipment
- ✓  CE RoHS REACH Compliant



### Specifications:

- Vacuum ports built into blanket eliminates the need for vacuum bagging materials
- Blanket seal added around edge eliminates the need for tacky sealant tape
- Flexibility:
  - With blanket seal: 3" (76mm) radii
  - Without blanket seal: 1/4" (6mm) radii
- Smooth surface against repair
- Heating element laminated between two layers of non-reinforced silicone rubber, 66 mil thick with a density of 66 oz/yd<sup>2</sup> (2237 grams/m<sup>2</sup>)
- 450°F (232°C) maximum exposure temperature
- Power density of 5 watts/in<sup>2</sup> (0.008 watts/mm<sup>2</sup>)
- Dielectric strength of over 2000 volts
- Moisture, chemical, and radiation resistant
- Strain relief built through entire edge of blanket for increased durability
- Power cord 6-foot (1.8m) long with choice of power plug
- Ingress Protection Rating: IP54



### Ordering Information:

#### Standard Sizes and Wattage

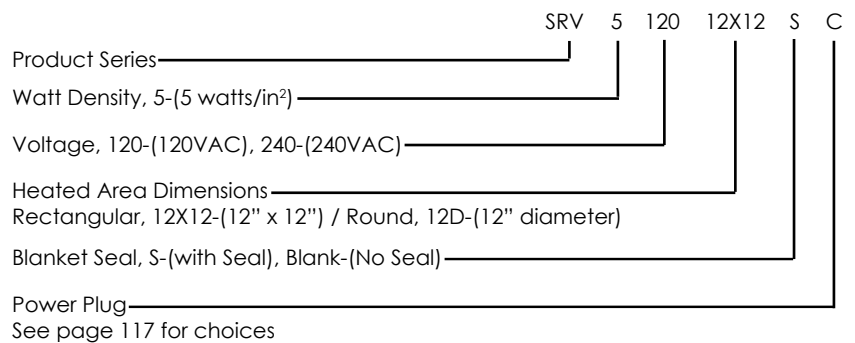
Rectangular

Heated Area		Blanket Size		Total Watts
Width in (mm)	Length in (mm)	Width in (mm)	Length in (mm)	
6 (152)	6 (152)	9 (229)	12 (305)	180
6 (152)	12 (305)	9 (229)	18 (457)	360
6 (152)	24 (610)	9 (229)	30 (762)	720
8 (203)	8 (203)	11 (279)	14 (356)	320
10 (254)	10 (254)	13 (330)	16 (406)	500
12 (305)	12 (305)	15 (381)	18 (457)	720
12 (305)	24 (610)	15 (381)	30 (762)	1440
16 (406)	16 (406)	19 (483)	22 (559)	1280
18 (457)	18 (457)	21 (533)	24 (610)	1620
24 (610)	24 (610)	27 (686)	30 (762)	2880

Round

Heated Area Diameter in (mm)	Blanket Size Diameter in (mm)	Total Watts
6 (152)	12 (305)	140
8 (203)	14 (356)	250
10 (254)	16 (406)	395
12 (305)	18 (457)	565
16 (406)	22 (559)	1005
20 (508)	26 (660)	1570
24 (610)	30 (762)	2270

#### Part Number Matrix



**IMPORTANT: Temperature controller is required for this product. BriskHeat recommends the ACR® 3 or MiniPro™ Hot Bonder**



COMPOSITE CURING

## FGH and SXH High Temperature Composite Curing Blankets

### Product Highlights

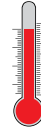
- ✓ Designed for use with the newer high temperature thermoplastic and polyimide composite materials
- ✓ Highly flexible up to a 1" (25mm) radius
- ✓ Compatible with ACR® hot bonders and your current equipment



### Specifications:

- Heating element and a 1" (25mm) layer of high-density fiberglass is covered in an abrasion resistant fiberglass cloth (FGH) or Samox® cloth (SXH series)
- Maximum exposure temperature:  
 FGH series: 800°F (425°C)  
 SXH series: 1100°F (593°C)
- Power density:  
 FGH series: 7 watts/in<sup>2</sup> (0.011 watts/mm<sup>2</sup>)  
 SXH series: 13 watts/in<sup>2</sup> (0.020 watts/mm<sup>2</sup>)
- Dielectric strength of over 2000 volts
- Power cord 6-foot (1.8m) long with choice of power plug

Temperatures up to



1100°F (593°C)



### Ordering Information:

#### Standard Sizes and Wattage

FGH series

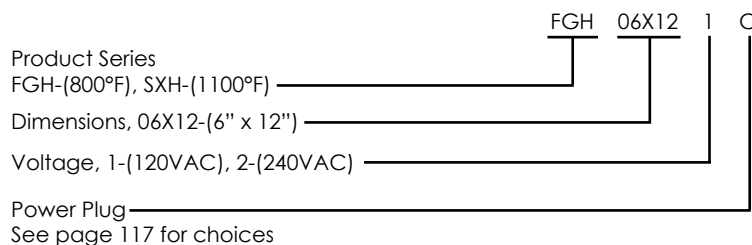
Width in (mm)	Length in (mm)	Total Watts
6 (152)	6 (152)	255
6 (152)	12 (305)	504
6 (152)	24 (610)	1008
8 (203)	8 (203)	448
10 (254)	10 (254)	700
12 (305)	12 (305)	1008
12 (305)	24 (610)	2016
16 (406)	16 (406)	1792
18 (457)	18 (457)	2268
24 (610)	24 (610)	4032*

SXH series

Width in (mm)	Length in (mm)	Total Watts
6 (152)	6 (152)	468
6 (152)	12 (305)	936
6 (152)	24 (610)	1872
8 (203)	8 (203)	832
10 (254)	10 (254)	1300
12 (305)	12 (305)	1872
12 (305)	24 (610)	3744*
16 (406)	16 (406)	3328
18 (457)	18 (457)	4212*

\* Not available in 120VAC due to high amperage requirements

### Part Number Matrix



**IMPORTANT: Temperature controller is required for this product.**  
 BriskHeat recommends the ACR® 3 or MiniPro™ Hot Bonder



COMPOSITE CURING

## Radome Composite Curing Blankets

### Product Highlights

- ✓ Ideal for wet layup and prepreg composite repairs of radomes
- ✓ Perfect three-dimensional fit around your radome
- ✓ Excellent heat uniformity
- ✓ Smooth surface
- ✓ Easy to vacuum bag
- ✓ Compatible with ACR®3 hot bonders and your current equipment
- ✓ CE



### Specifications:

- Multi-stranded heating element is uniformly placed to maximize heat distribution
- 450°F (232°C) maximum exposure temperature
- Dielectric strength of over 2,000 volts
- Moisture, chemical, and radiation resistant
- 240 VAC
- Power cord 6 feet (1.8m) long with a standard ACR®3 or MiniPRO™ Hot Bonder compatible plug (NEMA L15-30)

\* Other plug choices and bare wires are available upon request

### Ordering Information:

Part Number	Aircraft	Number of Zones	Total Watts
BHC162012C	Boeing 707, 727, 737	2	Zone 1: 1750 Zone 2: 1795
BHC162013C	Boeing 747	1	Zone 1: 3380
BHC162007C	Boeing 757	2	Zone 1: 1515 Zone 2: 1515
BHC162009C	Boeing 767	2	Zone 1: 1630 Zone 2: 1744
BHC162011C	Boeing 777	N/A	N/A
BHC162014C	Airbus A300, A310, A330	2	Zone 1: 1513 Zone 2: 1638
BHC162010C	Airbus A318, A319, A320, A321	2	Zone 1: 1630 Zone 2: 1744

We can design a heater specifically for your application and aircraft: Other sizes, shapes, watt-densities, power plugs, built-in thermocouples, and more options are available.

**IMPORTANT: Temperature controller is required for this product. BriskHeat recommends the ACR®3 or MiniPRO™ Hot Bonder.**

## Plugs for Composite Curing Blankets

Description	Image	NEMA	Voltage	Amps	Ground	Approval	Plug Part Number	Heater Plug Part Number Suffix
Bare Wires		N/A	N/A	N/A	N/A		N/A	A
Twist Lock 3 Pole 3 Wire Delta		N/A	125/250	30A	No		10108	B
Twist Lock 3 Pole 4 Wire		L15-30	250	30A	Yes	 	11270	C
Straight Blade 2 Pole 3 Wire		5-15	125	15A	Yes	 	10113	D
Straight Blade 2 Pole 3 Wire		6-15	250	15A	Yes	 	10478	E
Twist Lock 2 Pole 3 Wire		L5-30	125	30A	Yes	 	40712	F
Twist Lock 2 Pole 3 Wire		L6-30	250	30A	Yes	 	10814	G
3 Pole CPC (Circular Plastic Connector)		N/A	250	30A	Yes		20937-01	H
7 Position CPC		N/A	600	30A	Yes		20971	K

**Note: "C" Plug is compatible with standard BriskHeat® ACR® 3 and ACR® MiniPro™ Hot Bonders.**

COMPOSITE  
CURING

## VT Vacuum Curing / Debulking Table

### Product Highlights

- ✓ Heat and Vacuum in One Easy Step for Debulking and Curing Composite Parts
- ✓ Single Setup Greatly Reduces Overall Time and Cost Associated with Traditional Debulking and Autoclave Curing
- ✓ Reusable Vacuum Bag with an 800% Elongation Factor
- ✓ Curing Temperatures up to 400°F (204°C)\*

\* Achieve temperatures up to 600°F on vacuum tables without lid (manual bagging lay-up required).



### Specifications

#### Temperature Control

- Dual display shows set-point and actual process temperature
- Multiple ramp / soak steps
- Automatic tuning of PID parameters
- Programmable to either °C or °F
- Audible alarm
- Program security lock levels

#### Heater

- Highly durable and uniform multi-stranded heating element
- Heater break protection

#### Vacuum System

- 2-stage electric oil-less rocker piston vacuum pump

#### Power

- Choice of 3-phase 200, 208, 240, 277, 380 or 480VAC
- All systems are fuse protected

#### Lid

- High tear strength, reversion resistant silicone rubber reusable vacuum bag with 800% elongation
- Safety interlocked push buttons ensure both hands are on the operating console while the lid is in motion
- Dual ball screw actuators for positive lid movement

VT10000 Series



VT4000 Series

### Ordering Information

VT 10000 - 4 E 2

**Vacuum Debulking / Curing Table** \_\_\_\_\_

**Table Size:** \_\_\_\_\_

VT4000- 60" x 66" (1.5m x 1.7m) total, 52" x 56" (1.3m x 1.4m) useable  
 VT8000- 60" x 132" (1.5m x 3.4m) total, 52" x 124" (1.3m x 3.1m) useable  
 VT10000- 72" x 144" (1.8m x 3.7m) total, 66" x 138" (1.5m x 3.5m) useable

**Voltage:** \_\_\_\_\_

1- (200VAC, 3-phase)  
 2- (240VAC, 3-phase)  
 3- (208VAC, 3-phase)  
 4- (480VAC, 3-phase)  
 5- (277VAC, 3-phase)  
 6- (380VAC, 3-phase)

**Table Options:** \_\_\_\_\_

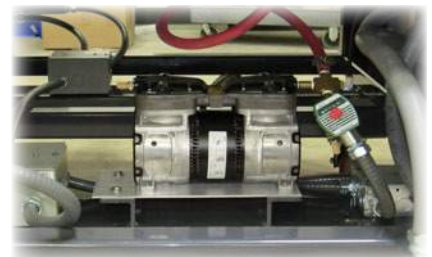
A- (Heated table without a retractable lid. Includes ramp / soak temperature control. (Manual bagging lay-up required))  
 B- (Heated table with a retractable lid. Includes ramp / soak temperature control)  
 E- (Heated table with a retractable lid. Includes ramp / soak temperature control, 16-channel monitor system, and digital data logger)

**Heated Zones:** \_\_\_\_\_

1- (Single Zone, VT4000)  
 2- (Two Zones, VT8000 and VT10000)



Easy-to-Use Operator Interface



COMPOSITE CURING



## Aircraft Non-Destructive Testing (NDT) Kits

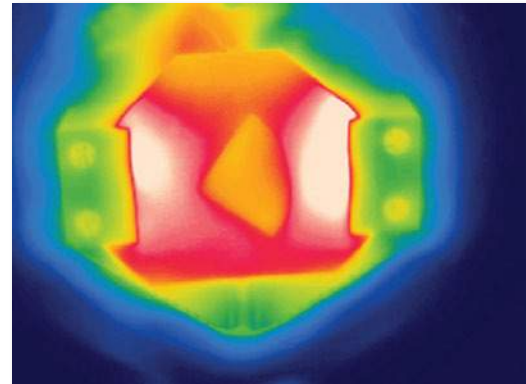
Perform Moisture Intrusion Testing on Elevators and Other Aircraft Components

### Product Highlights

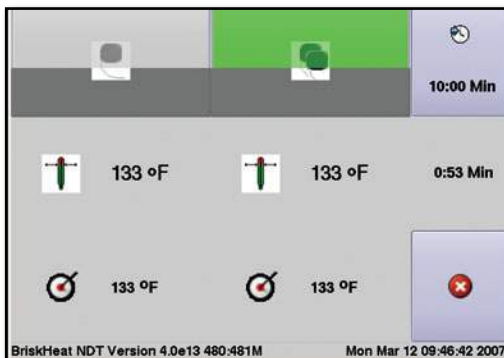
- ✓ The portable and easy heating solution for moisture intrusion testing on elevators and other aircraft components
  - Method B in Airbus Non-Destructive Elevator Test Manual 55-20-07, 55-20-08, 55-20-11
    - A300-600
    - A320
    - A330/340
  - Your aircraft not listed? We can develop a solution for you.
- ✓ Simple-to-operate pre-programmed temperature controller
- ✓ Dual 110/220 volt design - No transformer required
- ✓ Heating blankets designed for the shape of your aircraft
  - Durable parallel-wired heating elements
  - Two-year warranty



Airbus A320 Kit Shown



Thermographic Camera Image



Easy-to-Use Full-Color Touch Screen Control

### Other Features

- Single plug-n-play connector from the blanket to the controller containing all power and sensor wiring
- Testing data is easily saved to a USB flash drive (included)
- Easy to handle, wheeled transport and storage case
- Heater blanket strain relief is built through the entire edge of the blanket for increased durability
- Includes six 9" (229mm) non-slip holding clamps

COMPOSITE CURING

## Aircraft Non-Destructive Testing (NDT) Kits continued

### Specifications

#### Temperature Controller

- Universal voltage 100-240 VAC
- Dual zone will control one individual heater, or two heaters in tandem
- Automatic and independent temperature control per heater
- Preset locked ramp/soak (slope) temperature
- Accuracy  $\pm 1^{\circ}\text{C}$  ( $1.8^{\circ}\text{F}$ )
- End of cycle audible alarm
- Auto shut-down of heater power at end of cycle
- Differential ground fault (earth leakage) breakers
- Ground connection to elevator
- Visual or audible alarms for: ground fault, temperature limits, and thermocouple failure
- 13-minute dwell countdown timer
- Additional independent 10-minute test cycle timer, manually triggered
- Simultaneous reading of both heater blanket thermocouples
- Cycle will not start if process temperature is above  $60^{\circ}\text{C}$
- High temperature process shutdown and alarm at  $90^{\circ}\text{C}$
- USB port for post cycle data transfer to flash drive (USB flash disk included)
- Two-year warranty
- Transport container



Compact Storage Cases  
Fits Easily Within Luggage Compartments



Temperature Controller

#### Heating Blankets

- Sized to fit your specific aircraft elevator
- No seams; all flexible heating blankets are of a one-piece construction
- Dual voltage blankets; 110 or 220 volt
- Power density:  $1400 \text{ watts/m}^2$  ( $0.9 \text{ watts/in}^2$ )
- Two J-type thermocouples built into each blanket (1 primary, 1 spare)
- All power and sensor wires in a single connector (plug-n-play)
- Heater blanket is very flexible and durable
- Two-year warranty
- Easy-to-transport storage containers included



All Storage Cases Have Handles and  
Wheels for easy travel

### Ordering Information:

#### Temperature Controller

Part Number	Description
NDTCONTROLLER	Temperature Controller (Kit B in Airbus NDT Manual 55-20-07, 55-20-08, 55-20-11)

#### Heating Blankets

Part Number	Description
300BLANKETKIT	Airbus A300 Elevator Heating Blanket Kit (Kit A)
320BLANKETKIT	Airbus A320 Elevator Heating Blanket Kit (Kit A)
340BLANKETKIT	Airbus A340 Elevator Heating Blanket Kit (Kit A)
Different Aircraft?	Contact us for a solution.

Need help getting a Thermographic camera? Contact us for assistance.

## Hot Air Gun Curing System

### Product Highlights

- ✓ Ideal for small spot cures such as click studs
- ✓ Includes hot air gun and temperature control
- ✓ Portable, lightweight, and self-contained
- ✓ Eight-segment ramp / soak control
- ✓ High-limit temperature protection

### Specifications

#### Hot Air Gun

- Temperature factory set to 350°F (177°C)\*
- 1500 watts, 14 cfm
- 1" to 2" (25 to 51mm) diameter cure area
- Over-temperature protection: Includes high-limit Type-J thermocouple mounted in air stream

\*Other temperatures available upon request

#### Temperature Controller

- Simple four-key user control
- Two sensor inputs (One is for control and the other is for high-limit protection)
- Dual display shows set-point and actual temperature
- 14 programmable alarm types
- Programmable to either °C or °F
- Visual and audible alarms
- Automatic tuning of PID parameters
- Accuracy ±1 least significant digit
- Input voltage: 100-130VAC, 50-60Hz
- 30-amp circuit breaker
- Sensor break protection
- Auto / manual control ability
- Program security lock levels
- 6-foot (1.8m) long input power cord



### Ordering Information:

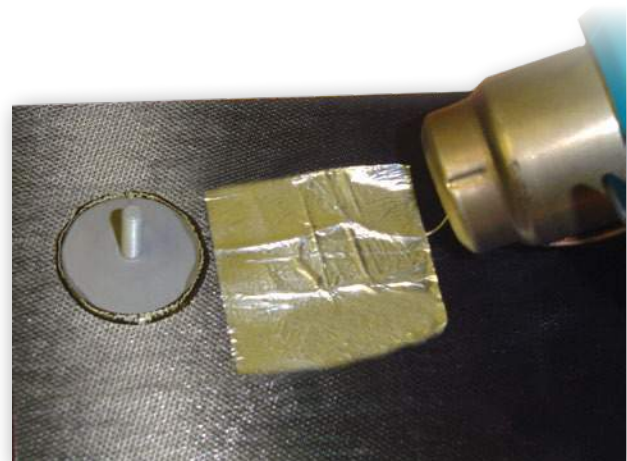
Part Number	Description
BRISKAIRSP-1	Hot Air Gun Curing System

System includes...

- One Hot Air Gun
- One TTQSD-S16 Temperature Controller (with two sensor inputs)
- One 20ft Type J Thermocouple
- One 10ft Hot Gun Heater Output Cord
- One Hot Air Gun Stand
- One Storage / Carrying Case

### Accessories

Part Number	Description
AIRSP-BLKKIT	Heating Blanket Upgrade Kit: Includes.. <ul style="list-style-type: none"> <li>- One 8" x 8" (203mm x 203 mm) SR heating blanket</li> <li>- One 10" x 10" (254mm x 254 mm) SR heating blanket</li> <li>- One Power cord adapter kit</li> </ul>



## Vacuum Bagging Materials

### Vacuum Bagging Film:

- Nylon vacuum bagging film: Ideal for composite curing applications
- Cut-to-order
- 54" (1372mm) wide per linear foot
- 0.002" (0.05mm) thick
- Tensile strength: 7000psi
- Maximum recommended use temperature: 350°F (177°C)
- Melt point: 400°F (204°C)
- Density: 1.13g/cm<sup>3</sup>
- Color: Clear

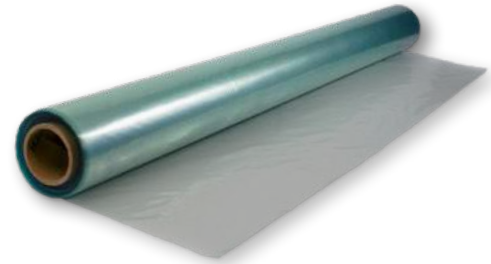
Part Number: ACR-BAG-001



### High-Performance Release Film:

- Fluoropolymer release film
- Cut-to-order
- 48" (1219mm) wide per linear foot
- 0.001" (0.025mm) thick
- Elongation at break: 350%
- Tensile strength: 7000psi
- Maximum recommended use temperature: 500°F (260°C)
- Base polymer: E-TFE
- Density: 1.73g/cm<sup>3</sup>
- Color: Blue

Part Number: ACR-FLM-001



### Breather Cloth:

- Non-woven polyester breather / bleeder cloth
- Cut-to-order
- 60" (1524mm) wide per linear yard
- Maximum recommended use temperature: 400°F (204°C)
- Nominal weight: 4oz/yd<sup>2</sup>
- Color: White

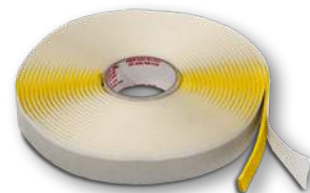
Part Number: ACR-BCT-001



### Vacuum Bag Sealant Tape:

- Roll size: 0.5" wide x 25ft long (13mm wide x 7.6m long)
- Thickness: 1/8" (3.2mm)
- Maximum recommended use temperature: 400°F (204°C)
- Base material: Synthetic rubber
- Color: Yellow

Part Number: ACR-SLT-001



## Glossary of Terms

**Ampere** – Unit of current (flow)  $I=E/R$

**AC** – Alternating current.

**Ampacity** – The current-carrying capacity of the conductor under stated thermal conditions.\*

**Conductor** – A conductor is the current-carrying, non-heat producing component of a heating element.\*

**Conduction** – The transfer of energy within or between two bodies in physical contact.

**Convection** – The movement of a mass with its associated energy (liquid or gas) from one location to another.

**DC** – Direct Current.

**Dielectric Strength** – The ability of the electrical insulation to withstand an applied voltage.

**Dielectric Breakdown** – Dielectric breakdown is the voltage at which the dielectric strength of the insulating material falls below an acceptable level.\*

**Differential** – For an on/off controller, it refers to the temperature difference between the temperature at which the heat is turned back on. It is expressed in degrees.

**Element** – An element is a resistor encased in an acceptable insulating material covered with a protective sheath.

**Ground** – A conducting connection between an electrical circuit or equipment and the earth or some conducting body that serves in place of the earth.\*

**Hazardous Location** – Locations are classified depending on the properties of the flammable vapors, or gases, or combustible dusts, or fibers which may be present and the likelihood that a flammable or combustible concentration or quantity is present.\*

**Heat** – Heat is energy in transition, or transfer, from one body to another by virtue of temperature difference existing between the bodies.

**Heater** – A heater is a completed, usable assembly containing one or more elements.

**Heat of Fusion** – Heat necessary to change solid to liquid.

**Heat of vaporization** – Heat necessary to change solid to gas.

**Hertz** – Unit of frequency of charge reversal for alternating current.

**Hi-Pot** – A high voltage quality assurance test performed on electrical components and systems.

**Hysteresis** – The temperature sensitivity designed into the on/off control action between the on and off switching points. Expressed in percentage of control range. Also known as dead band.

**Impedance Heat** – A system in which heat is generated in a pipeline or vessel wall by causing current to flow through the pipeline or vessel wall by direct connection to an AC voltage source from a dual-winding transformer.

**Insulation** – Any material that retards the transfer of heat to the environment or other components.

**Insulation Resistance** – Insulation resistance is the ability of the insulation to resist the percentage of current.\*

**Leakage** – The undesirable passage of current flow through or over the surface of an insulator.

**Leakage Current** – the total electrical current flow from the resistor through or around the insulation to a point external to the resistor when the element is energized.\*

**OHM** – The electrical unit of resistance  $R=E/I$

**Parallel Circuit** – A circuit in which the identical voltage is presented to all components and the current divides among the components according to the resistance or the impedance of components.

**Radiation** – The transfer of energy from one body to another through space by electromagnetic wave phenomena.

**Rating** – rating is the performance characteristic of an element or heater and is normally expressed in power output (watts) for a specific input voltage.

**Resistor** – A resistor is the heat-producing component of an element.\*

**Series Circuit** – A circuit in which the components are arranged end to end to form a single path for current.

**Single Phase** – A system energized from a single alternating voltage.

**Specific Heat** - The heat energy in Btu's required to change the temperature of one pound of a substance by 1°F.

**Specific Gravity (Gas)** - The ratio of the density of a gas to the density of air at 60°F and 14.7 PSIA.

**Specific Gravity (Liquid)** - The ratio of the density of a liquid to the density of water at 60°F and 14.7 PSIA.

**Thermal Resistance** – The property that opposes the flow of heat (energy) through the material.

**Terminal** – A terminal is the device or point at which external power is connected.\*

**Three Phase** – A system energized from three substantially equal voltages that differ in phase by one-third cycle or 120°.

**Volt** – Unit of electrical pressure. 1 volt is the amount of pressure that will cause one ampere of current in one OHM of resistance  $E=EI$

**Watt** – Unit of electrical power. One watt is equivalent to the power represented by one ampere of current under a pressure of one volt.  $W=EI$

**Watt Density** – Watt density is the output of the element or the resistor in watts per square inch of surface. On heating cable elements, watt density is expressed in watts per foot of cable.\*

\* NEMA Standar

## General Heating Application Questionnaire: Part I

Company: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Email or Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Application: \_\_\_\_\_

Type of Industry: \_\_\_\_\_

### PART A: OBJECT TO BE HEATED

Object that needs heat: \_\_\_\_\_

Dimensions of object: (Please include a drawing or sketch) \_\_\_\_\_ Unit of measurement? \_\_\_\_\_

Cylinder: \_\_\_\_\_ Diameter: \_\_\_\_\_ X Length: \_\_\_\_\_ Rectangle/Cube: \_\_\_\_\_ Length: \_\_\_\_\_ X Width \_\_\_\_\_ X Height \_\_\_\_\_

Multiple objects with varying dimensions

Object wall thickness: \_\_\_\_\_

Are there any obstructions or clearance issues that may restrict heater placement?  Yes  No  
If yes, please provide documentation.

Material of Object(s):  Steel  Stainless Steel  Non-Metal  Other \_\_\_\_\_

Content: Name: \_\_\_\_\_

Flow rate: \_\_\_\_\_

Beginning state:  Gas  Liquid  Solid Desired ending state:  Gas  Liquid  Solid

### PART B: ENVIRONMENT

Unit of measurement?  °C  °F

Ambient Temperature: Maximum \_\_\_\_\_ ° Minimum \_\_\_\_\_ °

Environment: (check all that apply)  Indoor  Outdoor, Wind Speed: \_\_\_\_\_  Moisture  Chemical  
 Hazardous-Area, Class \_\_\_\_\_ Division \_\_\_\_\_ Group \_\_\_\_\_  
 Cleanroom, Class \_\_\_\_\_  Other \_\_\_\_\_

### PART C: HEAT REQUIREMENTS

Unit of measurement?  °C  °F

Starting content / object temperature: \_\_\_\_\_ °

Heat up to: \_\_\_\_\_ °, within \_\_\_\_\_ Hours

Maintain at: \_\_\_\_\_ ° but never below: \_\_\_\_\_ ° and never above: \_\_\_\_\_ °

Will you provide insulation?:  No  Yes, Type: \_\_\_\_\_ Thickness: \_\_\_\_\_

Will it cover all surfaces?:  Yes  No, please explain: \_\_\_\_\_

## General Heating Application Questionnaire: Part II

### PART D: POWER REQUIREMENTS

Voltage:  120VAC  208VAC  240VAC  277VAC  480VAC  600VAC  Other \_\_\_\_\_

Phase:  Single  3 Phase (Wye)  3 Phase (Delta)  Other \_\_\_\_\_

Frequency:  60Hz.  50Hz.  DC  Other \_\_\_\_\_

Grounded?:  Yes  No

Plug Preference:  Please Recommend  Bare Wire  Plug: \_\_\_\_\_

### PART E: HEATER CONSTRUCTION REQUIREMENTS

Do you have certain product specifications that must be satisfied with this heater/system?  Yes  No, please recommend

Product type (heating tape, heating cable, heating jacket, etc): \_\_\_\_\_

Exterior material (silicone rubber, PTFE, BriskClean cloth, etc): \_\_\_\_\_

Closure / attachment method (adhesive, hook and loop fastener, hook and lace, etc): \_\_\_\_\_

Other specifications: \_\_\_\_\_

### PART F: TEMPERATURE CONTROL REQUIREMENTS

Would you like BriskHeat® to recommend your temperature control solution?:  Yes  No

If no, please describe the temperature control that will be used: (type of sensor, model, etc)

\_\_\_\_\_

Distance from temperature controller to heater: \_\_\_\_\_

Do you intend to connect the temperature controller to a computer?:  Yes  No  Do Not Know

### PART G: ADDITIONAL COMMENTS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Thank you for filling out this questionnaire. Please submit it to the factory or your local representative for a recommendation.

# BriskHeat®

## Company Timeline

1949

“Briscoe Manufacturing Company” Started Heating Tapes

1950

Cloth Heating Jackets

1957

Silicone Rubber Extruded Tapes and Blankets  
BSAT Heating Tapes with Controller

1971

PTFE and Silicone Coating on Products  
Percentage Controllers

1972

Heating Cable

1977

Silicone Rubber Drum Heaters  
ACR Hot Bonder

1981

“BriskHeat” Trademark Registered

1984

Silicone Rubber Composite Heaters

1999

Patent Issued for Grounded Heating Element

2001

Launched Call Center

2004

Centipede® Temperature Control System

2005

Wrap-around IBC/Tote Tank Heaters

2006

HSTAT Silicone Rubber Heating Tape with  
Adjustable Thermostat Control

2008

First Sale on Online Store

2009

ISO9001:2008 Quality Management  
Certification for BriskHeat USA

2010

BriskHeat Vietnam Co., LTD Cloth Production Facility Opens

2011

Taiwan Sales Office Opens

2012

ISO9001:2008 Quality Management Certification for  
BriskHeat Vietnam Co.,Ltd

2014

BriskHeat (Shenzhen) Trading Company Limited Opens

2015

Opened Sales Office in France and Germany

2016

Moved Global Headquarters and USA Manufacturing to  
4800 Hilton Corporate Drive, Columbus OH 43232

2017

Named to Inc. magazine's Inc. 5000 list of Fastest  
Growing Private Companies in America

2018

Became part of NIBE Industrier AB

