PRODUCT CODES

SR-Wattage-Voltage-Length

PRODUCT DESCRIPTION

Warmup's Self-regulating Cable solutions provide reliable protection against snow and ice build-up on roof and gutter applications. The Cable adjusts to outdoor conditions thanks to its inner carbon matrix and will allow higher heat outputs when conditions worsen. All Cables are reinforced with durable jacket and are UV resistant. The Warmup Cable presents a very low rush-in current allowing for maximum footage per breaker.
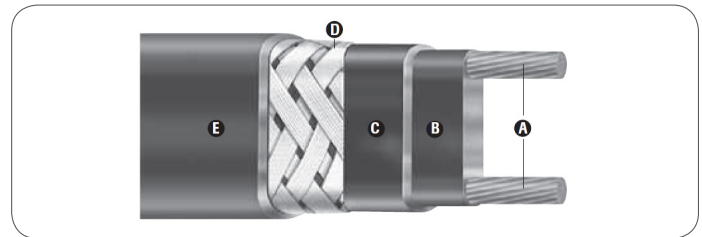
ADVANTAGES

- Self-Regulating, Energy Efficient
- Industrial Grade, 16 AWG Buss Wire
- Suitable for all roof types
- Standard Braid with Overjacket
- Circuit Lengths to 460 Feet
- 5W/ft at 50°F output, 6W at 40°F, 10W at 32°F
- 120, 208-277 Volts Available From Stock

APPLICATIONS

- Roof lines
- Flat roofs
- Metal structures
- Downspouts and Gutters

APPROVALS

- UL   c (UL) US

CONSTRUCTION

A. Buss Wires
Twin 16 AWG copper buss wires provide good current capability.
B. Matrix
A semiconductive polymer core whose electrical resistance varies with temperature. When process temperature drops, the core's heat output increases; conversely, as process temperature rises, heat output decreases.
C. Jacket
The flame retardant insulation jacket is a thermoplastic rubber material with excellent water resistance. It resists certain mildly corrosive chemicals.
D. Tinned Copper Braid
The braid covering the jacket provides an effective ground path and mechanical protection.
E. Overjacket
The TPR overcoat protects the braid, and provides resistance to water and certain inorganic chemical solutions.

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Tel.: 1-888-927-6333
www.warmup.com

CANADA: ca@warmup.com
Tel.: 1-888-592-7687
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Warmup
The world's **best-selling** electric floor heating brand™

HEATING CABLE SELECTION GUIDE
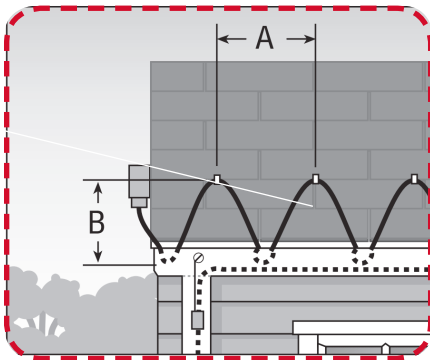
1. Determine Application Data

2. Select Cable Rating

   Using the selection chart on the following pages and application data from Step 1, above, select the correct cable rating and number of runs needed.

3. Calculate Heating Cable Quantity

4. Determine Circuits/Circuit Protection

Circuit protection depends on the breaker size being used and the start-up temperature. The Canadian Electrical Code, Part I in Canada and the National Electric Code (NEC 1999) in the USA require the use of ground fault protection breakers for heating cable. The following chart shows the maximum circuit length for a given breaker rating. To determine the number of circuits required for each pipe, divide the total cable (circuit) length found in Step 3 by the maximum circuit length found in the chart. Round up to the next higher number.

To calculate the total amount of wire needed:
- Length of gutter/roof
- Length of downspout
- Note size of overhang
- A & B Roof Coverage

Example:
Gutters   70ft total
Roof   30ft x 3
Downspout 16ft x 2

 Total = 192ft

IMPORTANT NOTES ON CABLE SELECTION

- For any "non-Standard" installations please contact Warmup at (888) 927-6333 (US) or (888) 592-7687 (Canada).
- We assume a minimum ambient temperature of 0°F and a thermal insulation of thick fiberglass wrap or equivalent. For protection to -20°F minimum ambient use 1" thick fiberglass wrap or equivalent.
- Add 1 foot of heating cable for every valve or spigot in the pipeline - make sure to apply this extra cable at each valve/spigot when installing.
- If your selected cable length is longer than your pipe length, spiral the cable evenly along the length of pipe.
- **SR-K has 5W/lin ft output at 50°F, 6W/lin ft output at 40°F and 10W/lin ft output at 32°F.**
- For 2" pipes and each 2" in diameter, double the output.
- For plastic pipes, consider 25% more heat required.

NOMINAL POWER OUTPUT CHART

Code	Length in ft	Voltage	Power output on pipe at 40°F (5°C) in W	Power output on pipe at 50°F (10°C) in W	Power output in ice & snow at 32°F (0°C) in W
SR-K6FT	6	110-120	36	30	60
SR-K12FT	12	110-120	72	60	120
SR-K18FT	18	110-120	108	90	180
SR-K24FT	24	110-120	144	120	240
SR-K50FT	50	110-120	300	250	500
SR-K75FT	75	110-120	450	375	750
SR-K100FT	100	110-120	600	500	1000

BREAKER SIZING AT MINIMUM START-UP AMBIENT TEMPERATURE

Min. Start-up Temp.	Breaker	SR-3W				SR-5W				SR-8W			
		120V	208V	240V	277V	120V	208V	240V	277V	120V	208V	240V	277V
50°F (10°C)	15	330	624	650	702	225	423	450	491	150	276	300	333
	20	330	634	660	713	265	498	530	578	200	368	400	444
	30	330	634	660	713	265	498	530	578	210	386	420	466
	40	330	634	660	713	265	498	530	578	210	386	420	466
0°F (-18°C)	15	200	374	390	421	140	263	280	305	100	184	200	222
	20	265	509	530	572	190	353	375	409	130	239	260	289
	30	330	634	660	713	265	498	530	578	200	368	400	444
	40	330	634	660	713	265	498	530	578	210	386	420	466
-20°F (-29°C)	15	175	336	350	378	125	230	245	267	85	156	170	189
	20	230	442	460	497	165	306	325	354	115	212	230	255
	30	330	634	660	713	245	461	490	534	175	322	350	389
	40	330	634	660	713	265	498	530	578	210	386	420	466
-40°F (-40°C)	15	155	298	310	335	110	202	215	234	75	138	150	167
	20	205	394	410	443	145	273	290	316	105	193	210	233
	30	310	595	620	670	215	404	430	469	160	294	320	355
	40	330	634	660	713	265	498	530	578	180	331	360	400

ACCESSORIES

Warmup has a complete line of accessories specifically designed for use with SR cable. Use only Warmup accessories to ensure the performance of the system.

Code	Description
HANGER-KIT	Downspout Hanger for Self-Regulating Cable and Roof/Gutter heaters
POWER-KIT	Power Connection Kit for Self-Regulating Cable. Includes 2 warning labels
SPLICE-KIT	Splice/Tee Kit for Self-Regulating Cable
END-KIT	End Seal Kit for Self-Regulating Cable
ROOF-CLIP	Roof Clips. Sold 50/pkg.
SB-170	Adhesive for Warmup Roof Clips
CRDS -15-GFI	6ft lead with GFCI 3-prong molded plug, NEMA 5-15,15 amp, 14/3
SR-SFIT-BOX	Power connection Box (6x6x3) with Pipe-Mounting Bracket for Self-Reg connections
SR-SFIT-SPLICE	In-line splicing box for fast and weathertight connections in the field
SR-SFIT-TEE	3-Way T-splice box for fast and weathertight connections in the field

PRODUCT SIZE LISTING

Code	Description
SR-5W-1-250	Self-Regulated 16GA Cable, 120V, 5W/linear foot. Sold in 250' length spools.
SR-5W-2-250	Self-Regulated 16GA Cable, 208-277V, 5W/linear foot. Sold in 250' length spools.
SR-8W-1-250	Self-Regulated 16GA Cable, 120V, 8W/linear foot. Sold in 250' length spools.
SR-8W-2-250	Self-Regulated 16GA Cable, 208-277V, 8W/linear foot. Sold in 250' length spools.
SR-5W-1-1000	Self-Regulated 16GA Cable, 120V, 5W/linear foot. Sold in 1000' length spools.
SR-5W-2-1000	Self-Regulated 16GA Cable, 208-277V, 5W/linear foot. Sold in 1000' length spools.
SR-8W-1-1000	Self-Regulated 16GA Cable, 120V, 8W/linear foot. Sold in 1000' length spools.
SR-8W-2-1000	Self-Regulated 16GA Cable, 208-277V, 8W/linear foot. Sold in 1000' length spools.
SR-K6FT	SR Cable Kit, 120V, 5W 6 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.
SR-K12FT	SR Cable Kit, 120V, 5W 12 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.
SR-K18FT	SR Cable Kit, 120V, 5W 18 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.
SR-K24FT	SR Cable Kit, 120V, 5W 24 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.
SR-K50FT	SR Cable Kit, 120V, 5W 50 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.
SR-K75FT	SR Cable Kit, 120V, 5W 75 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.
SR-K100FT	SR Cable Kit, 120V, 5W 100 ft. linear length terminated at one end. Includes 6' lead wire and 3-prong molded plug.

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WARRANTY & MAINTENANCE

When installed according to the installation manual and proper testing has been performed throughout, the system requires no maintenance for the duration of its warrantied life.

The SR cable is warrantied for 10 years against manufacturer's defects. See www.warmup.com for full warranty details.

TECHNICAL SUPPORT

Warmup is available 24/7/365 at (888) 927-6333.

For quotes, layouts and specific technical information, contact us at:

Warmup USA
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us@warmup.com

Warmup CANADA
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RELATED PRODUCTS

- TRF115-005 - LINE VOLTAGE THERMOSTAT - see WSC-0801
- COMMBOX-600 - see WSC-0927
- RESIBOX-120 - see WSC-0928
- DS series controls (ASE-DS8) - see WSC-0809

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