

ROOF AND GUTTER OUTPUT [NOMINAL]

9 W/LF in ice or snow

12 W/LF in ice or snow

DESCRIPTION

WSR is a universal Self-Regulating cable designed for Roof & Gutter De-Icing. Ideal for residential, commercial, and industrial applications, the WSR Cable is suitable for all of your project needs.

PRODUCT CODES

5/9* Watt Cable

WSR-5/9W-1-250** -CR (120V)

WSR-5/9W-2-250** -CR (208-277V)

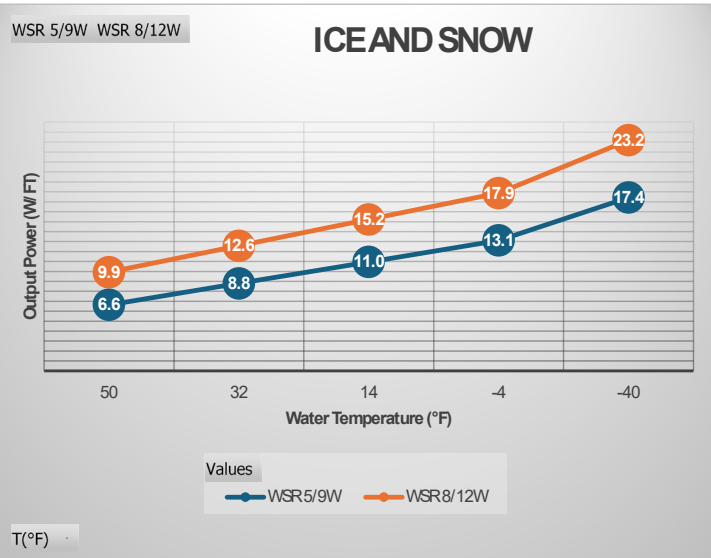
8/12* Watt Cable

WSR-8/12W-1-250** -CR (120V)

WSR-8/12W-2-250** -CR (208-277V)

*Wattages are displayed as (Output in Air)/ (Output in Water)

** All variations are available in spools of 250/LF, 500/LF, and 1,000/LF



ADVANTAGES

- Self-Regulating, Energy Efficient
- Industrial Grade, 16 AWG Buss Wire
- Suitable for all roof types
- Standard Braid with Overjacket
- Circuit Lengths to 476 Feet @ 32°F
- 120, 208-277 Volts Available From Stock

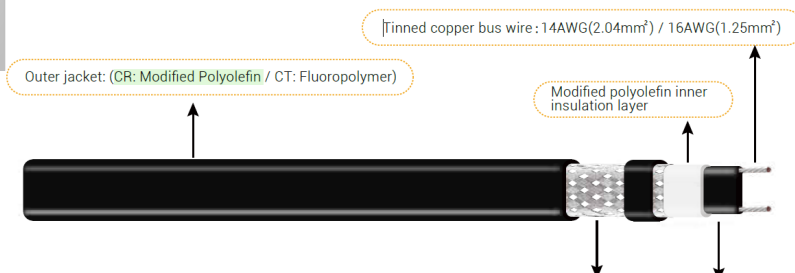
APPLICATIONS

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

SPECIFICATIONS

Nominated Voltages:	120Vac, 208Vac - 277Vac
CSA certificate, max. circuit size:	20A for roof & gutter
Maximum maintenance temperature:	150°F (65°C)
Maximum intermittent exposure temperature:	185°F (85°C)
Temperature classification:	T5/T6
IP level:	IP66/67
Minimum installation temperature:	-40°C (-40°F)
Minimum bending radius:	1.18 in. (30 mm)
Approval Mark:	c  us

CONSTRUCTION



CIRCUIT SIZING BY BREAKER SIZE AT MINIMUM START-UP AMBIENT TEMPERATURE

Breaker	Min Start Temp °F	WSR 5/9W 9W Roof & Gutter [Nominal 5W @ 32°F]				WSR 8/12W 12W Roof & Gutter [Nominal 8W @ 32°F]			
		120Vac	208v	240Vac	277Vac	120Vac	208Vac	240Vac	277Vac
10A	50	173	318	346	374	110	200	220	240
	32	157	289	314	339	100	182	200	218
	14	145	267	291	314	92	167	184	200
	-4	134	246	268	289	85	154	170	185
	-40	116	213	232	250	74	134	147	160
15A	50	249	459	499	538	165	301	330	360
	32	236	434	471	509	150	273	301	328
	14	218	401	436	471	138	251	276	300
	-4	201	370	402	434	127	232	255	277
	-40	174	320	347	375	110	201	221	241
20A	50	249	459	499	538	198	361	397	433
	32	238	438	476	514	190	346	380	415
	14	228	419	456	492	182	331	364	397
	-4	220	404	440	475	170	309	339	370
	-40	203	374	407	439	147	268	294	321
30A	50	249	459	499	538	198	361	397	433
	32	238	438	476	514	190	346	380	415
	14	228	419	456	492	182	331	364	397
	-4	220	404	440	475	174	316	348	379
	-40	203	374	407	439	162	295	325	354
40A	50	249	459	499	538	198	361	397	433
	32	238	438	476	514	190	346	380	415
	14	228	419	456	492	182	331	364	397
	-4	220	404	440	475	174	316	348	379
	-40	203	374	407	439	162	295	325	354
50A	50	249	459	499	538	198	361	397	433
	32	238	438	476	514	190	346	380	415
	14	228	419	456	492	182	331	364	397
	-4	220	404	440	475	174	316	348	379
	-40	203	374	407	439	162	295	325	354

PRODUCT LISTING

Product Code	Description	Roof & Gutter
WSR Heating Cable(s)		
WSR-5/9W-1-250-CR	Self-Regulated cable, 120V, 5 Watts per linear foot. Sold in 250-foot spools.	✓
WSR-5/9W-1-500-CR	Self-Regulated cable, 120V, 5 Watts per linear foot. Sold in 500-foot spools.	✓
WSR-5/9W-1-1000-CR	Self-Regulated cable, 120V, 5 Watts per linear foot. Sold in 1000-foot spools.	✓
WSR-5/9W-2-250-CR	Self-Regulated cable, 208-277V, 5 Watts per linear foot. Sold in 250-foot spools.	✓
WSR-5/9W-2-500-CR	Self-Regulated cable, 208-277V, 5 Watts per linear foot. Sold in 500-foot spools.	✓
WSR-5/9W-2-1000-CR	Self-Regulated cable, 208-277V, 5 Watts per linear foot. Sold in 1000-foot spools.	✓
WSR-8/12W-1-250-CR	Self-Regulated cable, 120V, 8 Watts per linear foot. Sold in 250-foot spools.	✓
WSR-8/12W-1-500-CR	Self-Regulated cable, 120V, 8 Watts per linear foot. Sold in 500-foot spools.	✓
WSR-8/12W-1-1000-CR	Self-Regulated cable, 120V, 8 Watts per linear foot. Sold in 1000-foot spools.	✓
WSR-8/12W-2-250-CR	Self-Regulated cable, 208-277V, 8 Watts per linear foot. Sold in 250-foot spools.	✓
WSR-8/12W-2-500-CR	Self-Regulated cable, 208-277V, 8 Watts per linear foot. Sold in 500-foot spools.	✓
WSR-8/12W-2-1000-CR	Self-Regulated cable, 208-277V, 8 Watts per linear foot. Sold in 1000-foot spools.	✓
Accessories		
SR-POWER-KIT	Power Connection Kit for Self-Regulated Cable. Includes pipe mounting bracket and an End Kit.	✓
CRDS-15-GFCI	GFCI cord set for SR cable series. NEMA 5-15p, 15 amp rated, 14/3 Ga, 120V. rating, Max Cable length 125ft.	✓
SR-SPLICEKIT	Splice/Tee Kit for Self-Regulated Cable. Includes (2) end caps.	✓
END SEAL KIT		✓
SR-ROOF-CLIP(50/BAG)	Metal single roof clips packaged and sold 50 per pkg. Secure to roof with screws or Everseal SB-190 adhesive or similar.	✓
WRGH-SB-170 SEALANT	The SB170 is a versatile adhesive to apply the Warmup ROOF-CLIP (1 tube per 50 clips recommended). Min Application Temp of -20F	✓
SR-HANGER-KIT	Downspout Hanger for Self Regulating Cable and Roof/gutter heaters Warmup Brand #HANGER-KIT	✓
SR-SFIT-SPL	In-line connection box for NAMSR, WODH and WSM/M cables. Used to join two runs of NAMSR or as an in-line repair kit for WSMM installations	✓
SR-SFIT-TEE	Weather tight 3-way Tee-Splice for NAMSR cable applications on Roofs and Pipe Freeze installations	✓
SR-END-KIT	End Seal Kit for for Self-Regulating Cable	✓
SR-SFIT-BOX-S	Power Connection Junction Box (Square) for NAMSR cables used in Pipe Freeze Protection applications. Includes pipe-mounting bracket and junction box.	✓
SR-LENDCAP	Lit End Cap for NAMSR Cable	✓

DESIGN GUIDE

- Obtain the following roof information: roof edge length, roof overhang, total gutter length, total downspout number and breaker rating.
- Calculate the amount of cable required by:
 - Multiplying the roof edge length by the roof overhang factor found in Table 1.
 - Add the total gutter length plus the total downspout length to the result obtained in Part A to determine the total length of cable required.

TABLE 1: SPACING FACTOR			
Roof Overhang	A	B	Spacing Factor
	Heating Width	Heating Height	
12"	2 ft	18"	2
24"	2 ft	30"	3
36"	2 ft	42"	4

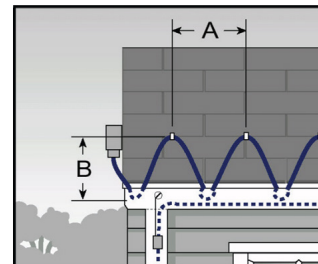


TABLE 2 - ESTIMATING THE CABLE LENGTH		
AREA	WHAT TO MEASURE	HOW TO CALCULATE
Along Roof	Overhang (A) and Length of Roof (B)	Length of roof (B) x Overhand Multiplier
Dormer	Distance around dormer	Number of dormers x Distance around dormers
Valley	Number of valleys	Number of valleys x 6 feet (1.8m)
Downspout	Number of downspouts Length of downspouts	Number of downspouts x Length of downspouts x 2

- Calculate the number of branch circuits required by dividing the total length of cable required by the maximum heater length allowed for the breaker rating from the table on page 2.

TABLE 3: WSR SR_ROOF & GUTTER [Ice and Snow]					
Breaker	Start Up @ Water [Ice and Snow]	Branch Circuit Maximum Length [In Feet]			
		WSR 9W 120Vac	WSR 9W 240Vac	WSR 12W 120Vac	WSR 12W 120Vac
10A	32 °F	157	314	100	200
15A	32 °F	236	471	150	301
20A	32 °F	238	476	190	380
30A	32 °F	238	476	190	380
40A	32 °F	238	476	190	380
50A	32 °F	238	476	190	380

- Branch-Circuit Sizing: The ampacity of the branch circuit conductor and the rating or setting of overcurrent devices shall not be less than 125% of the ampere load of the cable or units.
Example: A load of 24A x 1.25 (125%) = 30A breaker.

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
(888) 927-6333_
us@warmup.com

Warmup CANADA
(888) 592-7687
ca@warmup.com

RELATED PRODUCTS

- SNOPRO-100 - 100A Master/Satellite WiFi Enabled Control
- COMMBX
- RESIBOX
- DS SERIES (DS2, DS5, DS8, DS9)
- TRF-115