Roof & Gutter

UV Resistant

Model: DSR-RGS-12

DE-ICERMAN

Self-Regulating Heat-Trace Cable Data Sheet

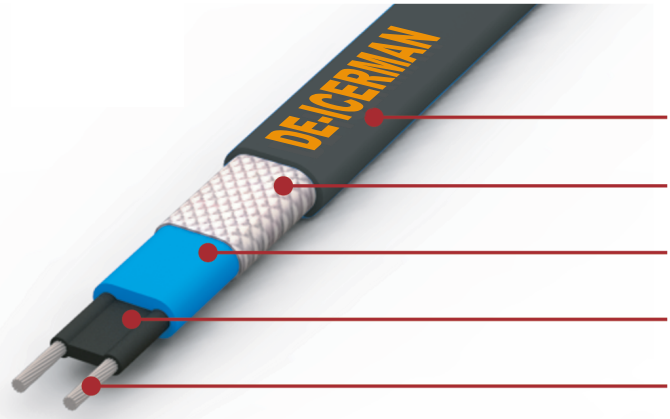
DESCRIPTION

De-Icerman self-regulating heat-trace cables are designed to automatically adjust its heat output in response to changes in ambient temperature along its length.

They consist of two parallel bus wires embedded in a semi-conductive polymer core whose electrical resistance varies with temperature decreasing in cold conditions to produce more heat and increasing in warmer conditions to reduce power output.

This self-modulating behavior prevents overheating and allows the cable to be safely overlapped or cut to length in the field.

The conductive core is typically surrounded by insulation, an optional tinned-copper braid for grounding, and an outer protective jacket made from **Thermoplastic elastomer** containing a UV inhibitor for increased UV protection.



Cable Construction

Outer jacket (UV-Resistant)

Tinned copper braid

Radiation cross-linked polyolefin insulation

Semi-conductive self-limiting matrix

Bus wire

C SA® US

416-300-7838
info@deicerman.com
www.deicerman.com

Roof & Gutter

UV Resistant

Model: DSR-RGS-12

DE-ICERMAN

APPLICATIONS

Roof and gutter self-regulating heat-trace cables are used to prevent ice dams and icicle formation on building roofs and in gutter systems during freezing conditions. They automatically adjust their heat output based on ambient temperature, ensuring efficient melting of snow and ice only where needed. Typical applications include installation along roof edges, in valleys, inside gutters, and through downspouts to maintain continuous water flow and prevent blockages that can lead to roof leaks, structural damage, or safety hazards from falling ice. These cables are widely used in residential, commercial, and industrial buildings where reliable winter freeze protection is essential.

Specification	
Supply Voltage	110 - 120V or 208 - 240V
Bus Wires	16 AWG Tinned copper wires
Normal Power Output	In Ice/Snow @ 0°C (32°F): 12 W/ft || In Air @ 0°C (32°F): 10 W/ft
Outer Jacket	Thermoplastic Elastomer
Minimum Bend Radius	1 inch (25 mm) @ -20°C (-4°F)
Max Exposure Temperature	85°C (185°F)
Min Installation Temperature	-20°C (-4°F)

Max Cable Length per Circuit Breaker

Model	Voltage	Start-up Temperature	Maximum Cable Length (ft.)			
			15A	20A	30A	40A
DSR-RGS-12-1	120	0°C (32°F)	120	150	237	237
DSR-RGS-12-1	120	-20°C (-4°F)	100	120	190	237
DSR-RGS-12-2	208	0°C (32°F)	226	282	435	435
DSR-RGS-12-2	208	-20°C (-4°F)	179	224	357	435
DSR-RGS-12-2	240	0°C (32°F)	240	300	463	463
DSR-RGS-12-2	240	-20°C (-4°F)	190	238	380	463

416-300-7838
info@deicerman.com
www.deicerman.com

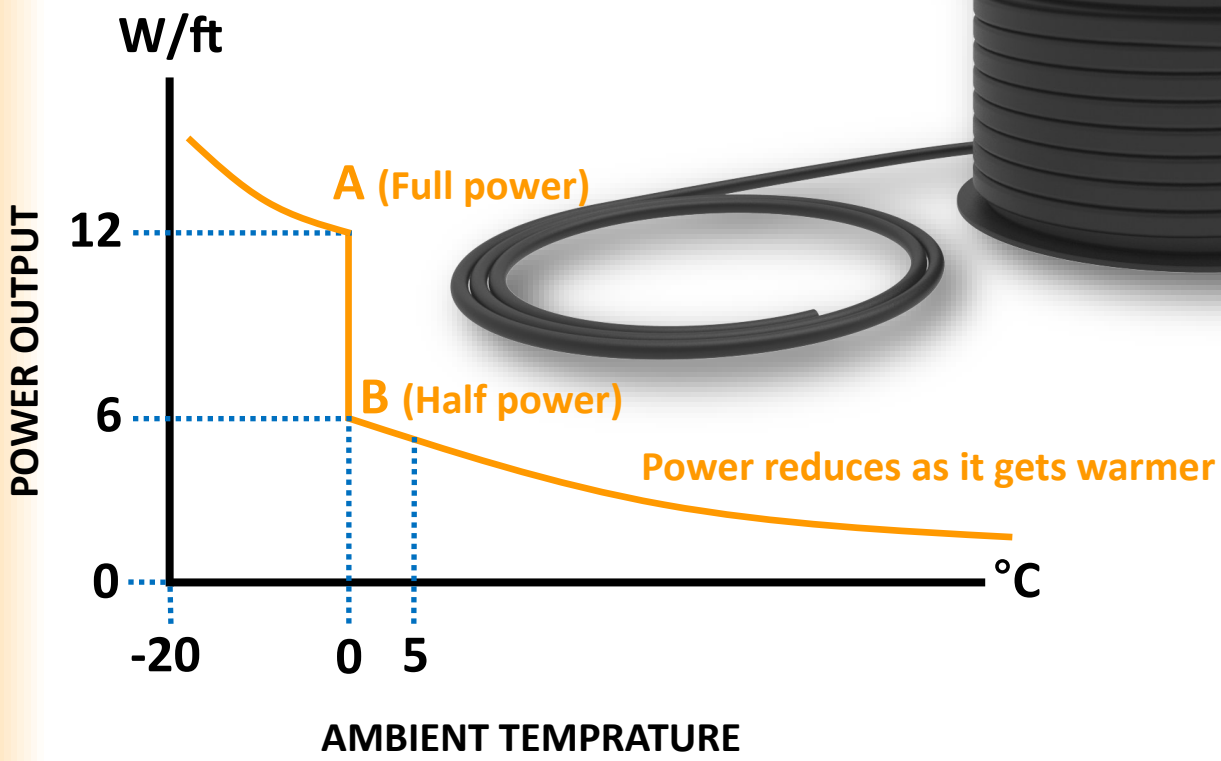
Roof & Gutter

UV Resistant

Model: DSR-RGS-12

DE-ICERMAN

POWER OUTPUT DIAGRAM



RECOMENDATIONS

Self regulating cables do adjust their heat output automatically, however they do not shut down their power completely! It is strongly recommended to combine them with sensors and controllers to maximize power consumption efficiency and lifespan. We carry a variety of sensors and controllers suitable for any type of residential, commercial, and industrial applications. Please refer to our installation manuals or contact us directly for details.

INSTALLATION & ACCESSORIES

For further details on installation and required accessories please refer to our installation manuals published on our website. We carry a comprehensive collection of accessories and connection kits to address any type of installation.

WARRANTY

At DE-ICERMAN we closely monitor the quality of our productions and manufacturing process. We offer 2-year warranty (from the date of purchase) on all our cable products.

416-300-7838
info@deicerman.com
www.deicerman.com