

TF SBG-T2

Self-limiting heating cable - frost protection roofs and gutters

HC SBG-T2 is a self-regulating heating cable developed for effective frost protection of gutters and downspouts. With an operating temperature of up to 80°C, the cable withstands significantly higher loads than most comparable products on the market, which typically max out at 65°C. The cable is UV-resistant for reliable outdoor use year after year, and is supplied by the meter so it can easily be adapted to any roof, gutter, or downspout — without complicated calculations. A robust and flexible choice for residential, commercial, and industrial installations.

PRODUCT FEATURES

- Typical Applications;
- Technical Features:
- Supplied by the metre.
- IPX7 protection rating.
- UV-resistant outer sheath.
- Heatit SBG-T2 is designed for frost protection and temperature maintenance in residential buildings, commercial properties, agricultural facilities and industrial installations. Its self-limiting construction makes the cable particularly suitable for applications where temperatures vary along the cable length.
- The cable consists of two parallel bus conductors with a temperature-sensitive heating element between them. As the temperature decreases, the electrical resistance of the heating element decreases, increasing the heat output. When the temperature rises, the resistance increases, automatically reducing the heat output.
- This adjustment takes place locally along the entire cable length, allowing different sections to generate different amounts of heat depending on the surrounding temperature. This provides demand-based heating and helps reduce unnecessary energy consumption.
- The robust, UV-resistant outer sheath makes the cable particularly suitable for outdoor installations such as gutters, downpipes and flat roofs. The cable can also be used for frost protection of pipes and technical installations, provided the installation complies with the product's technical limitations.
- Heatit SBG-T2 is available in two power ratings, 15 W/m and 25 W/m, and is supplied by the metre for flexible adaptation to different installations. Its compact construction simplifies installation, including in confined spaces.
- Gutters. Helps prevent ice formation and maintain free water drainage.
- Downpipes. Reduces the risk of ice blockages and frozen drainage systems.
- Flat roofs. Frost protection of roof drains and drainage areas.
- Water pipes. Protects exposed water pipes against freezing.
- Drainage pipes. Frost protection of suitable drainage systems.
- Pumping stations and inspection chambers. Protects pipes and technical installations against freezing.
- Holiday homes. Frost protection of water supply and drainage installations.
- Agricultural installations. Protects water pipes and irrigation systems against freezing.
- Industrial facilities. Frost protection and temperature maintenance of suitable pipe systems.
- Drainage channels. Helps prevent ice formation in exposed drainage areas.
- Self-limiting heating technology.
- Automatically adjusts heat output according to temperature.
- Independent heat output regulation along the entire cable length.
- Available with nominal power outputs of 15 W/m and 25 W/m.
- Robust construction for demanding outdoor conditions.
- Compact cable dimensions of just 10.5 × 5.7 mm.
- Can be cut to the required length.
- Suitable for gutters, downpipes, flat roofs and pipe frost protection.
- Suitable for residential, commercial and industrial installations.
- Compatible with suitable temperature control systems for demand-based operation.
- The heating cable installation must be protected by a residual current device (RCD) with a maximum rated residual operating current of 30 mA and use suitable temperature control. System design must account for cable start-up current, ambient temperature, circuit breaker rating and maximum permitted cable length.
- Installation must be carried out by a qualified electrical installer in accordance with the current installation manual and applicable national electrical regulations.

PRODUCT DATA

Voltage	230VAC
Cable type	Self limiting heating cable
Grounding	Helically wrapped aluminum foil with return conductor
Effect pr. meter (watt pr. running meter)	15W
Bus conductor	Nickel Coated Copper Wire
Max temperature (average)	65°C
Max temperature without load	85°C
Max temperature with load	65°C
Min bend radius (mm)	25mm
Weight per meter (gram)	100g
Ambient temperature range in use	-30 to 65°C
Ambient temperature range in storage (°C)	-30 to 85°C
Min/max installation temperature	-30 to 40°C
Min. and max ambient humidity (RH%)	0 to 85%
Colour	Black
Outer sleeve material	Polyolefin (PO)
IP Code	IPX7
Certification	Reach, RoHS
EN Standards	CE
Warranty in Norway	5 years
Warranty international	2 years
Product length	1000mm
Product width	10.5mm
Product height-/depth	5.8mm
Customs number	85168000

GROUND PROTECTION/RCD/THERMOSTAT

The heating system must be equipped with an RCD with a maximum trip value of 30mA.

The heating system must be installed with an electronic thermostat for energy efficiency and temperature control.

Product Overview

Art no.	Product	Effect per m.	
10 112 23	TF SBG-T2 Black 15W/m	15W	
10 112 24	TF SBG-T2 Black 25W/m	25W	

ADDITIONAL INFORMATION

In the Nordic climate, insulation will not be sufficient for full frost protection of pipes. Tough weather conditions with wind and cold can lead to frozen water pipes, sprinkler systems etc.
Self-limiting heating cables are built up with a temperature-dependent resistance element between two parallel copper conductors. When the self-limiting heating cable is connected to the mains voltage, the current will pass through the temperature-dependent resistance element, which is heated. When the element heats up, the resistance value rises. As a result, power consumption and heat fall again. This is what we call a self-limiting effect. This regulation of the power takes place anywhere on the cable and is adapted to the current ambient temperature.

Self-limiting heating cables have a high starting current depending on length and temperature. Fuses with C-characteristics must therefore always be used.

Special lengths with attached cold lead can be made to order.
The cable can be cut to the desired length.

MAINTENANCE

The product is maintenance-free, but it must always be installed in compliance with the manual. The product should be checked and tested annually.

RETURN AND RECYCLING

The product must be recycled as electric waste.

VARMEKABELDATA

Cable type	Self limiting heating cable	Grounding	Helically wrapped aluminum foil with return conductor
Effect pr. meter (watt pr. running meter)	15W	Bus conductor	Nickel Coated Copper Wire
Max temperature (average)	65°C	Max temperature without load	85°C
Max temperature with load	65°C	Min bend radius	25mm
Weight per meter	100g		

DISCLAIMER

Prerequisites:
230VAC nominal voltage.
Delayed circuit breakers with (C-type) max load 80%.
Max 10% voltage drop on bus conductors.

The self-limiting heating cable can be cut to the desired length.

We develop and design our products according in accordance with our strict quality requirements (ISO 9001) and environmental requirements (ISO 14001).
All electrical installations must be carried out by an authorized electrical installer. The product must be installed in accordance with our installers manual and national building codes. Any wrongful installation, misuse, damage of the product, is not covered under warranty.

Updated documentation is available at www.heatit.com or documents.heatit.com
Heatit Controls AS can not be held liable for any type of errors or omittances in our product information.
Product specifications may change without further notice.

Kabelsnitt / Cable cross section

TF SBG-T2

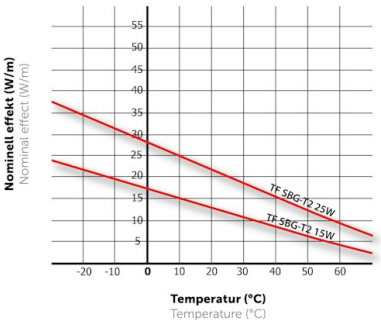
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Effektkurve / Effect curve

TF SBG-T2

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Sikring, maks kabellengde / Fuse, max cable length

TF SBG-T2

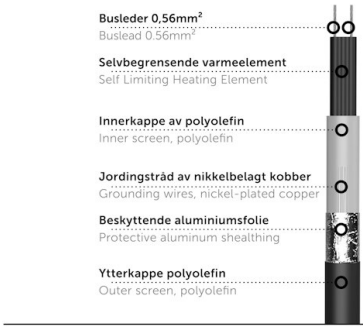
TF SBG-T2

TEMPERATUR VED TILKOBLING (°C) TEMPERATURE AT CONNECTION (°C)	NOMINELT BRYTERNIVÅ (A) NOMINALLY BRIDGE LEVEL (A)	MAKS. KABELLENGDE (m) VED 230VAC MAX CABLE LENGTH (m) AT 230VAC	
		TF SBG-T2 15W/M	TF SBG-T2 25W/M
10°C	16A	115m	92m
	20A	120m	98m
0°C	16A	105m	83m
	20A	110m	93m
-10°C	16A	95m	75m
	20A	100m	85m
-30°C	16A	93m	68m
	20A	95m	72m

Kabelsnitt / Cable cross section

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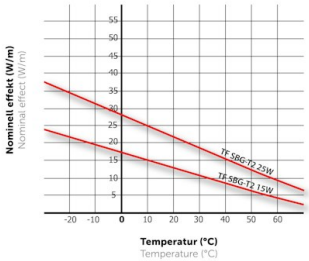
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Sikring, maks kabellengde / Fuse, max cable length

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