

## TF PEXGUARD - PIPE IN PIPE

Self-limiting heating cable - frost protection of Pex water pipes 10W

TF PexGuard is a self-limiting heating cable for frost protection of water pipes, type of pipe in pipe. The heating cable is mounted between the pipes in a Pex water pipe to keep it frost-free during cold periods.

According to the building regulations, a new home has high requirements for insulation. The challenge with frozen water pipes comes when the insulation does not emit some heat in the outer walls or in the floor divisions. Thus, small chills occur against the water pipe and the water freezes. PexGuard heating cable is designed to provide a small local heating that ensures that the water does not freeze.

The work with the water pipe should be carried out by plumber. Connection of heating cable and thermostat must always be done by an authorized electrical installer.

### PRODUCT FEATURES

- Frost protection of Pex water pipes

### 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 DATA

Voltage	230VAC
Cable type	Self limiting heating cable
Grounding	Braided, tinned copper wires
Effect pr. meter (watt pr. running meter)	10W
Bus conductor	Nickel Coated Copper Wire
Max temperature without load	85°C
Max temperature with load	65°C
Min bend radius (mm)	25mm
Weight per meter (gram)	49g
Min/max installation temperature	-40 to 30°C
Colour	Silver
Outer sleeve material	Copper
IP Code	IPX7
Certification	Reach, RoHS
EN Standards	CE, EN 60800, EN 62395
Warranty Norway	5 years
Warranty international	2 years
Product height/diameter	3.9mm
Product Width	6.8mm
Product length	1000mm
Customs number	85168000



## Product Overview

Art no.	Product	Effect per m.	
10 113 01	TF Pexguard 5W/m pine-in-pipe <b>EOL</b>	5W	
10 113 07	TF PexGuard - pipe-in-pipe 10W/m	10W	

## 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.

## 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.thermo-floor.no](http://www.thermo-floor.no) and/or [documents.thermo-floor.no](http://documents.thermo-floor.no)

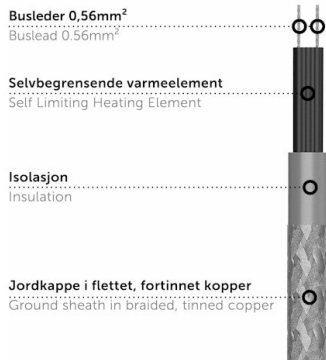
Thermo-Floor AS can not be held liable for any type of errors or omissions in our product information.

Product specifications may change without further notice.



Kabelsnitt / Cable cross section

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Sikring, maks kabellengde / Fuse, max cable length

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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 PEXGUARD 10W
10°C	16A	90m
0°C	16A	80m
-10°C	16A	70m

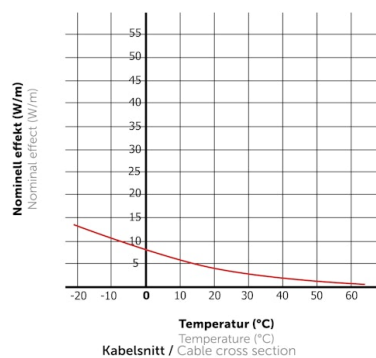
Sikring, maks kabellengde / Fuse, max cable length

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		TF PEXGUARD 10W
10°C	16A	50m
0°C	16A	40m
-10°C	16A	32m
-20°C	16A	26m

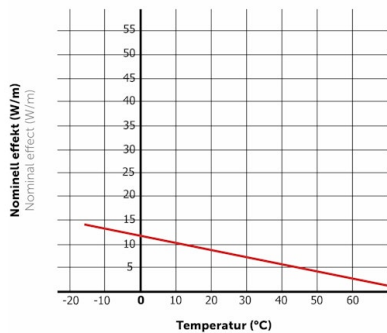
Effektkurve / Effect curve

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Effektkurve / Effect curve

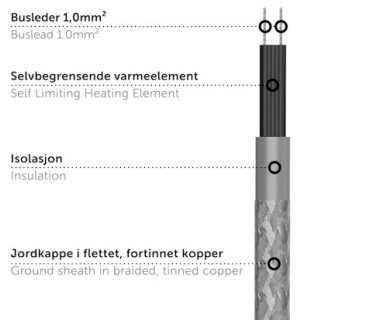
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Sikring, maks kabellengde / Fuse, max cable length

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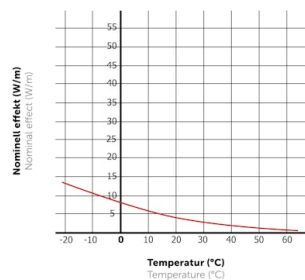
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Effektkurve / Effect curve

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**TF PexGuard - pipe in pipe can be ordered from thermo-floor.no**

All additional documentation are available on [documents.thermo-floor.no/10113-08](https://documents.thermo-floor.no/10113-08)

