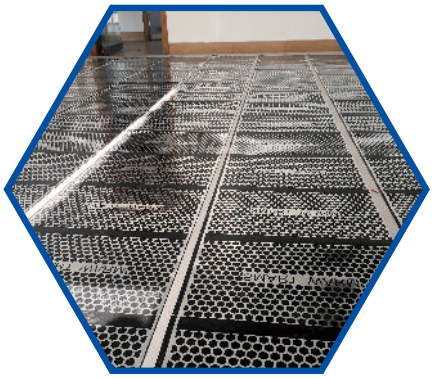
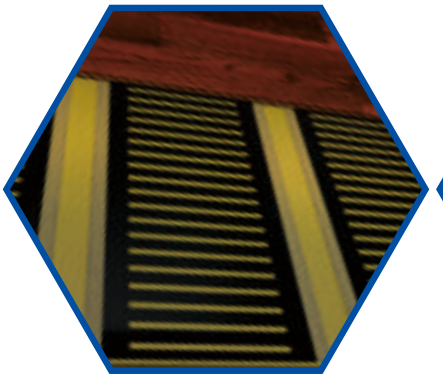
DAMING ELECTRIC UNDERFLOOR HEATING SOLUTIONS



01 PTC Self-regulating Heating Film



02 PTC SELF-REGULATING HEATING MAT

03 PTC SELF-REGULATING HEATING CABLES

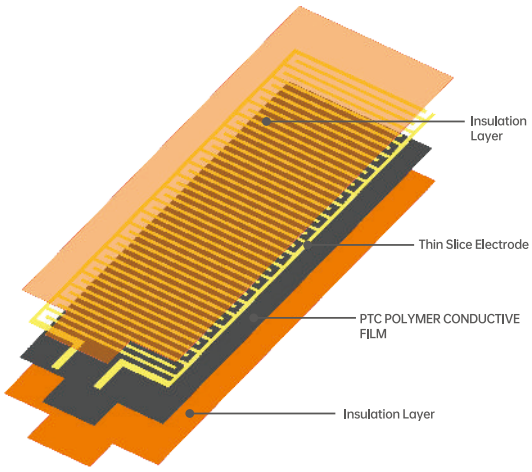
DAMING PATENT-PTC HEATING ELEMENT PRODUCTS ADVANTAGES

Safety & Stability	High-tech New Material : More stable and longer lifetime. No risk with surface covers. No daily maintenance required.
Convenient Installation	Parallel circuit structure, enabling any part of its entire length to be cut, simplifies installation and customization.
Rapid Heating	Strong far-infrared thermal radiation, reaching the settled temperature in seconds, provides rapid warming without waiting, ensuring high energy efficiency.
Energy Saving	With the PTC effect,autonomously adjust its power output with ambient temperature, relatively constant power direct 30% reduction in operating power of thermal products.
Environmentally Friendly	Eco-friendly material features and production technology, less pollution.

PTC Self-regulating Heating Film
MANUAL & APPLICATIONS

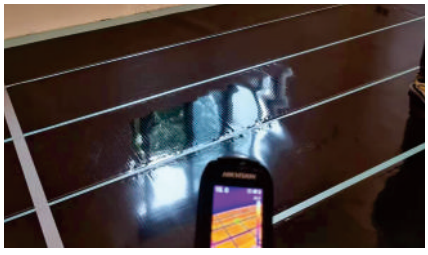
Product Description

DAMING self-regulating heating film has a multi-layer structure. The core heating element is a the PTC polymer conductive film. Conductive film and copper finger electrodes are wrapped in the polyimide material for electrical insulation.This plug-and-play heating solution requires only one power supply, integrates heating, sensing, and control functions at every point on the heater surface, eliminating the need for external sensors or controllers and ensuring enhanced reliability.



Technique Data Sheet

Item Name: PTC Heating Film(Floor Heating System)
Product Model: Size: Width 500mm ; Thickness 0.35mm; 50m/roll
Rated voltage: 24-380V
Nominal power: 50-150W
Operating temperature: 40±5℃
Heating time: 2min
PTC strength: > 10^3
Covering temperature: < 65℃
Lifetime: >10 years
Product structure: EMI honeycomb shielding/polyester PET film/Aluminium electrode /PTC carbon nanometre film/polyester PET film



Self-regulating Heating Film Installation Guide

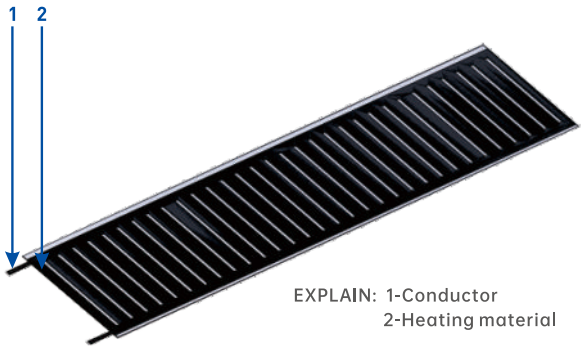
- **Underfloor heating for wooden floors, laminate floors and linoleum**
- **Underfloor heating only for dry areas**
- **Placed on concrete, plaster or chipboard**

The system is directly covered with veneers, suitable for floors, wood panels,bamboo curtains, gussets, etc., which are light and thin with a temperature resistance of more than 100℃ Floor or wall heating system with wood or synthetic fiber as the base material;
This system is easy to install, customers can cut down the pavement according to their needs;
The self-regulating heating film system occupies 2.35 cm of floor height, and the load per square meter is about 1kg. Electric design 150W-180W, constant temperature operation 80W-100W.

PTC Self-regulating Heating Mat
MANUAL & APPLICATIONS

Product Description

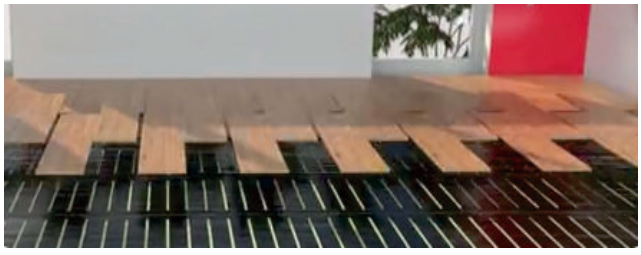
DAMING self-regulating heating mat is composed of PTC conductive heating material, two parallel metal wires and an insulating layer. Between the two wires, PTC heating materials are evenly laid, ensuring both flexibility and the ability to be cut to any desired size. With safety as a priority, the product operates at a rated voltage that eliminates the risk of electric shock, available in two specifications: 24V and 36V. This design provides peace of mind, ensuring a safe and worry-free heating experience.



EXPLAIN: 1-Conductor
2-Heating material

Technique Data Sheet

Item Name: PTC Heating Mat(Floor Heating System)
Product Model: Size: Width 240, 310, 340mm ; thickness 1.20mm ; 30m/roll
Rated voltage: 24, 36V
Nominal power: 20-60W/M
Operating temperature: 40±5℃
Heating time: 2min
PTC strength: > 10^3
Covering temperature: < 65℃
Lifetime: >10 years



Self-regulating Heating Mat Installation Guide

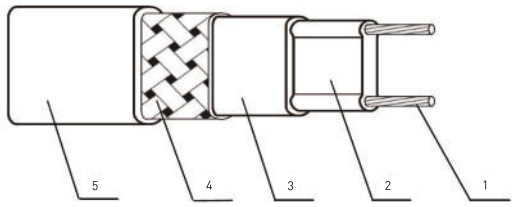
- **Underfloor heating for wooden floors, laminate floors and linoleum**
- **Underfloor heating only for dry areas**
- **Placed on concrete, plaster or chipboard**

The system is directly covered for floor or wall with wooden boards, bamboo curtains, gussets and other light wood or synthetic fiber.
This system is easy to install, different Connection voltage for choice: 380V\220V110V\36V.
Suitable for various laying methods such as suspension and keel;
the self-regulating heating plate system occupies a floor height of 2-2.5cm, and the floor load per square meter is about 2kg.
The launch output per square meter is 120W-150W, maintain output is 60W-80W.

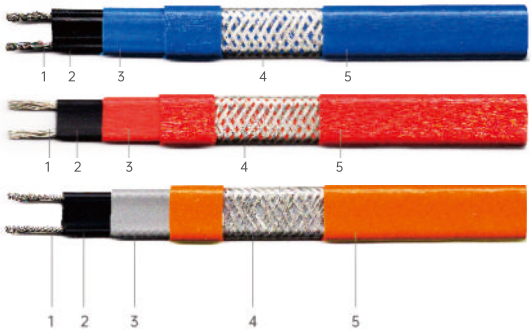
PTC Self-regulating Heating Cable
MANUAL & APPLICATIONS

Product Description

DAMING self-regulating heating cable is composed of PTC conductive material, two parallel metal wires, and an insulating jacket. The PTC material is evenly laid between the two wires, creating a system that resembles numerous parallel circuit systems formed by sensitive resistors with high positive temperature thermistor (PTC) characteristics. This design enables the cable to automatically adjust its output power as the temperature changes, thereby regulating the heating temperature. It overcomes the shortcomings of traditional constant power heating cables that require a separate temperature control system, resulting in a heating system that is more efficient, stable, reliable, safe, and energy-saving.



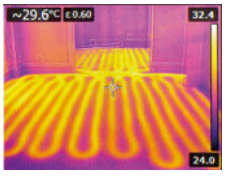
EXPLAIN:
1-Conductor
2-Heating material
3-Insulation
4-Metal Coating/Sheilding Layer
5-External Coating

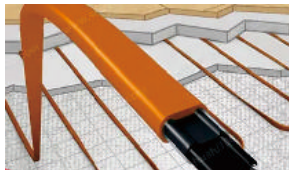


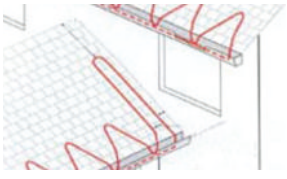
1/ Tinned/nickel-copper bus
2/ PPTC heating element
3/ Radiation crosslinked or fluoropolymer insulating material
4/ Tinned copper wire braid
5/ Radiation crosslinked or fluoropolymer insulating material

Technique Data Sheet

Item Name: self-regulating heating cable
Product Model: Size: Width 5-10mm ; Thickness 3-5mm; 100m/roll
Rated voltage: 220-380V
Available Power : 10-35W/m (Low Temperature)
35-60W/m(Middle/HighTemperature)
Max. Maintenance Temperature:
Low Temperature Series-DBR 65℃
MiddleTemperature Series-ZBR 85℃/105℃
HighTemperature Series-GBR 135℃
PTC strength: > 10^3
Lifetime: >10 years







Self-regulating Heating Mat Installation Guide

- **Underfloor heating for tiled, natural stone and linoleum floors**
- **Underfloor heating for both wet rooms and dry areas**
- **Laid in leveling compound**

This system needs to be back-filled with fine sand cement and then laid with hard decorative materials such as stone and floor tiles.
Suitable for indoor/outdoor floor heating system and road/ramp-way snow and ice melting system.
Different voltage for choice such as 380V\220V110V.
The self-regulating heating cable occupies a floor height of 3-5cm, and the floor load is approximately 2kg per square meter (excluding backfill layer), power distribution per square meter is 120W-150W, normal operation is 60W-80W.