Self-Regulating Heating cable Manual



* When heating is not required or the ambient temperature is above 68°F, and no anti-freezing measures are needed, the power cord plug must be unplugged.

Functional Description：

The self-regulating heating cable is designed for the anti-freezing and thermal insulation of facilities such as pipelines, roofs, and floors. By converting electrical energy into heat energy, it can effectively prevent freezing and the accumulation of ice and snow. It is suitable for various scenarios, including residential, industrial, and agricultural applications. (The heating cable both ends should not be used while immersed in water.)

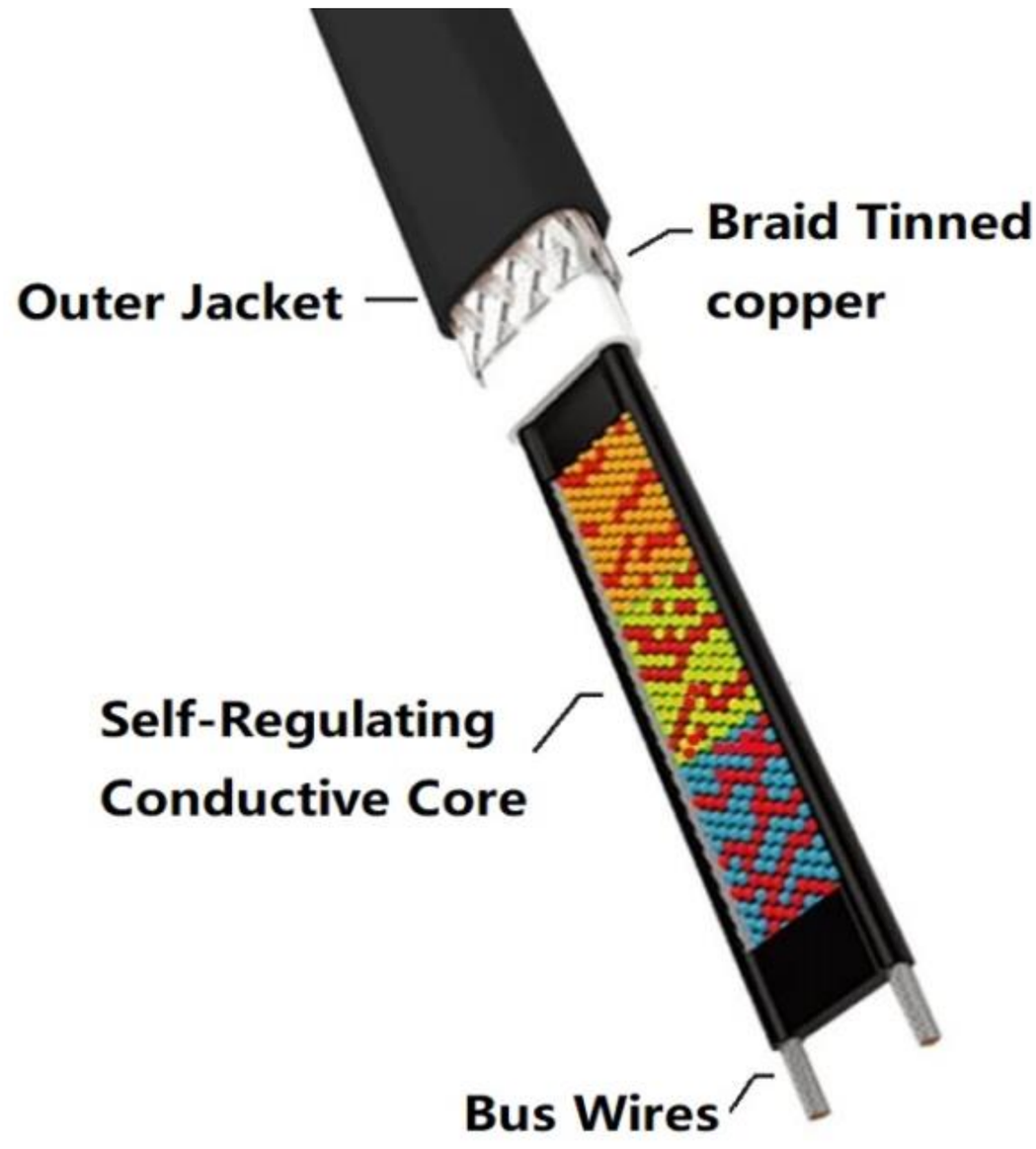
Product Configuration

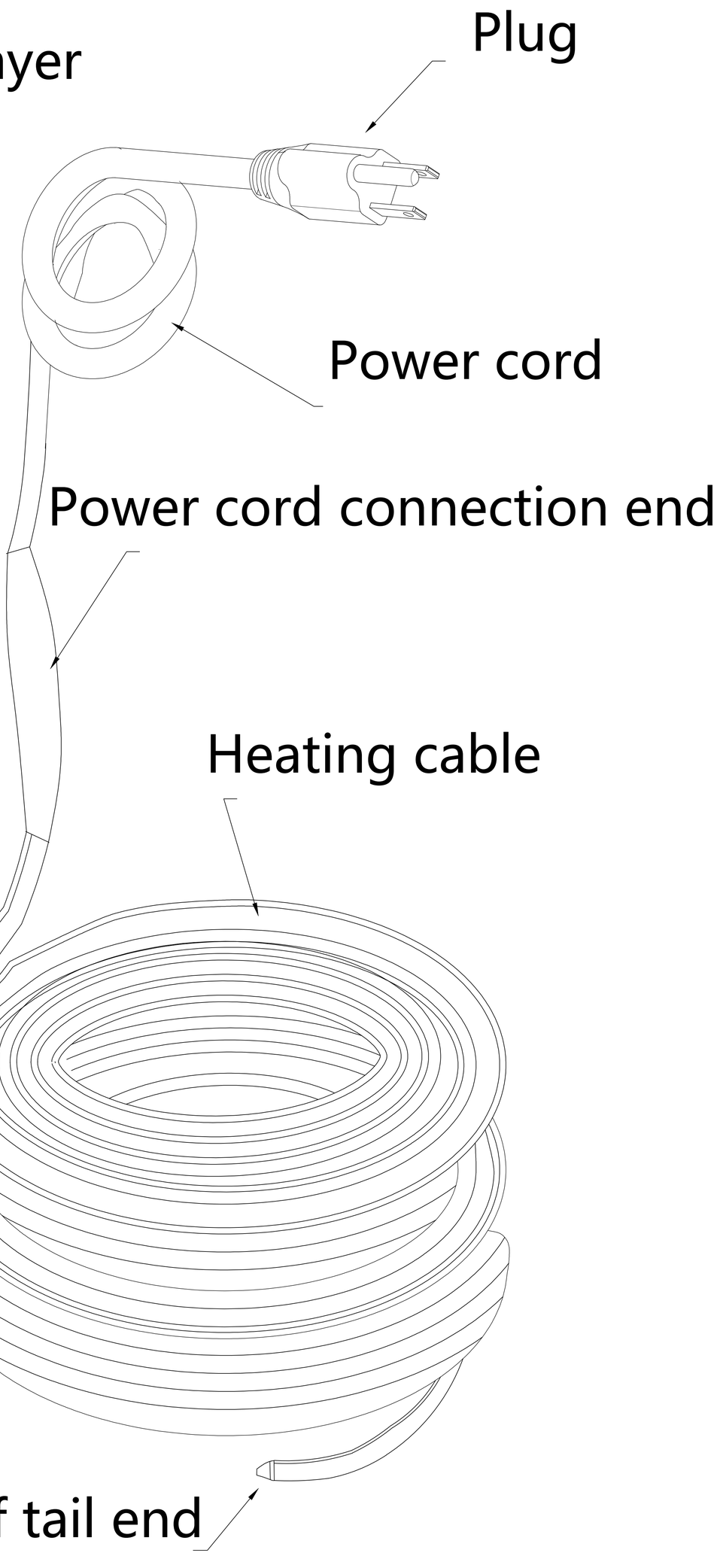
1. Conductor： Self-Regulating Conductive Core.

2. Insulating Layer： XLPE(high - temperature - resistant and flame - retardant).

3. Shielding Layer： The metal braided layer (with functions of anti-electromagnetic interference, enhanced safety, and explosion prevention).

4. Jacket： Weather-resistant PVC (corrosion-resistant and UV-resistant)





Product's Technical Parameters：

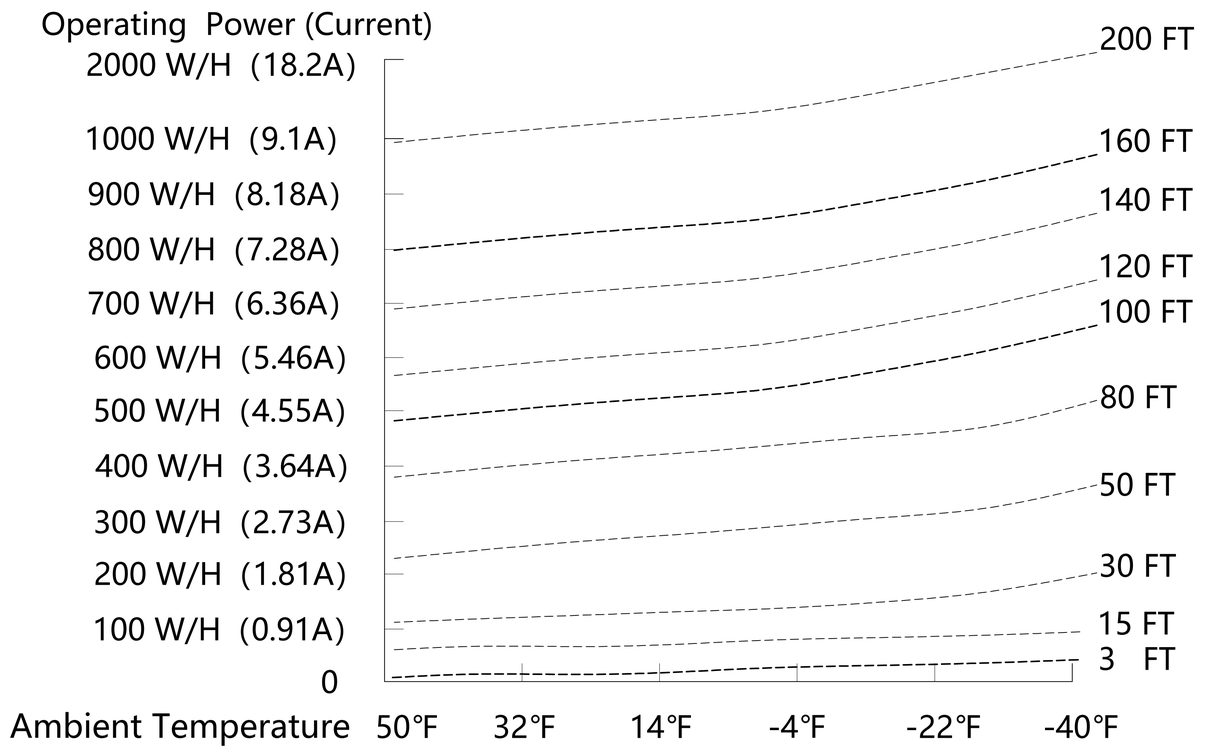
The anti-freezing heating cable works based on the principle that current generates heat when passing through a resistor. When the power is turned on, the current flows through the heating PTC inside the cable. Since the heating PTC has resistance, according to Joule's law $Q = I^2Rt$ (where Q is the heat, I is the current, R is the resistance, and t is the time), electrical energy is converted into heat energy, causing the surface temperature of the cable to rise. The heat is then transferred to the object being protected, playing a role in anti-freezing and thermal insulation.

Rated voltage: 120V AC　　Power range: 5W/FT

Maximum surface temperature: 131°F. The heating cable must be unfolded for use.　(Note: When using the heating cable, do not stack it. It should not be curled together or placed in contact with each other, as this can easily cause heat accumulation and pose a risk of overheating.)

Applicable ambient temperature: -49°F to +68°F (Please unplug the plug when the ambient temperature is higher than +68°F.)

Input Voltage	Size(FT)	Start Instantaneous Current (at 10℉)	Work Current (at 10℉)
AC 120V (60Hz)	3 FT	0.45 A	0.13 A
	6 FT	0.9 A	0.27 A
	9 FT	1.35 A	0.4 A
	15 FT	2.2 A	0.68 A
	24 FT	3.5 A	1.1 A
	30 FT	4.4 A	1.36 A
	50 FT	7.3 A	2.25 A
	80 FT	11.6 A	3.63 A
	100FT	14.6 A	4.5 A
	120FT	17.5 A	5.45 A
	140FT	20.4 A	6.36 A
	160FT	23.3 A	7.26 A
	200FT	29.2 A	9.1 A



*After the power is turned on, the heating PTC inside the cable has resistance thermosensitivity. The inrush current within 10 seconds is as shown in the table above. Please ensure that the switch socket can support it.

Preparation Before Use：

Before using the Heating cable, please read all the guidelines and make sure that you understand them.

1. Check whether the appearance of the heating cable is intact, without any damage or cracks.

2. Measure the length of the area to be heated to ensure that the length of the heating cable matches.

3. Prepare tools: electrical tape, aluminum foil tape, and cable ties.

4. Unroll the product and conduct a power - on test. The surface should feel warm. Make sure that the socket switch won't trip due to exceeding the power capacity.

Product Application:

1. Heating cable is suitable for anti-freezing of plastic and metal water pipes etc.(including inlet pipe,drain pipe, sewer , palm tree frost protection and more). Pipeline application(Figure 1).

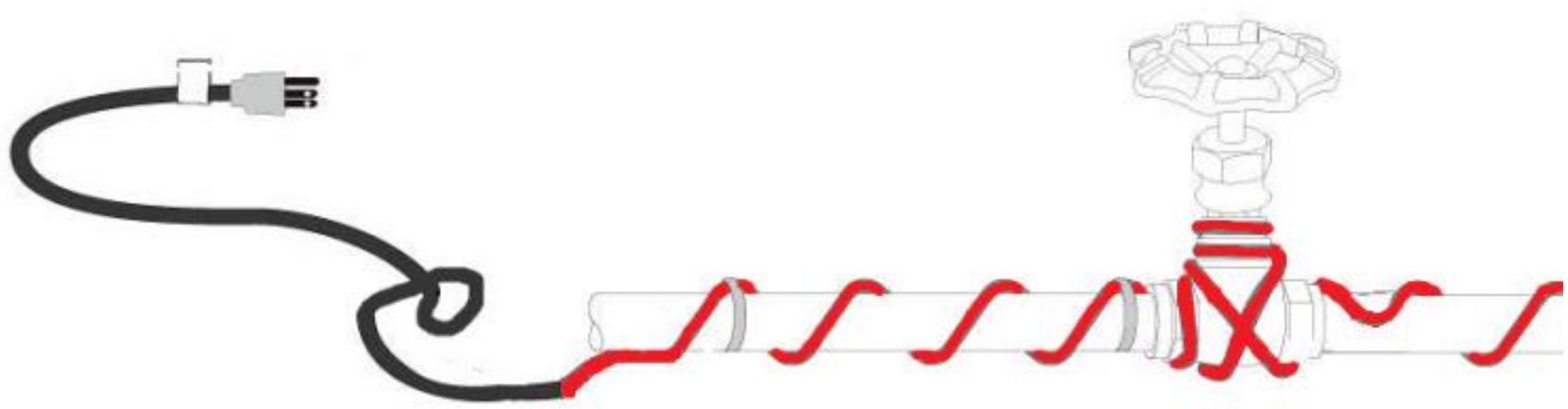


Figure 1

2. Heating cables prevent ice from forming in roofs, gutters and down-pipes and create a path from the roof to the ground when it melts, helping to end costly ice destruction.

The heating cable is installed in the roof area where the ice dam is formed (Figure 2). It can also be the entire roof edge or specific areas such as skylights, roof valleys or around skylights (Figure 3).

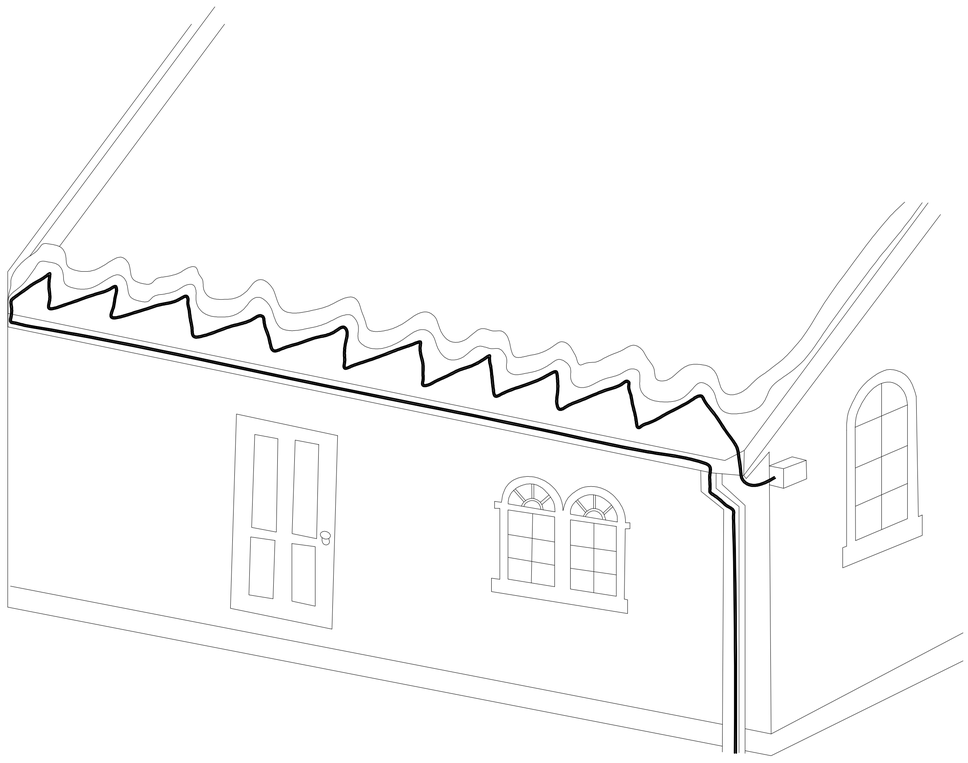


Figure 2

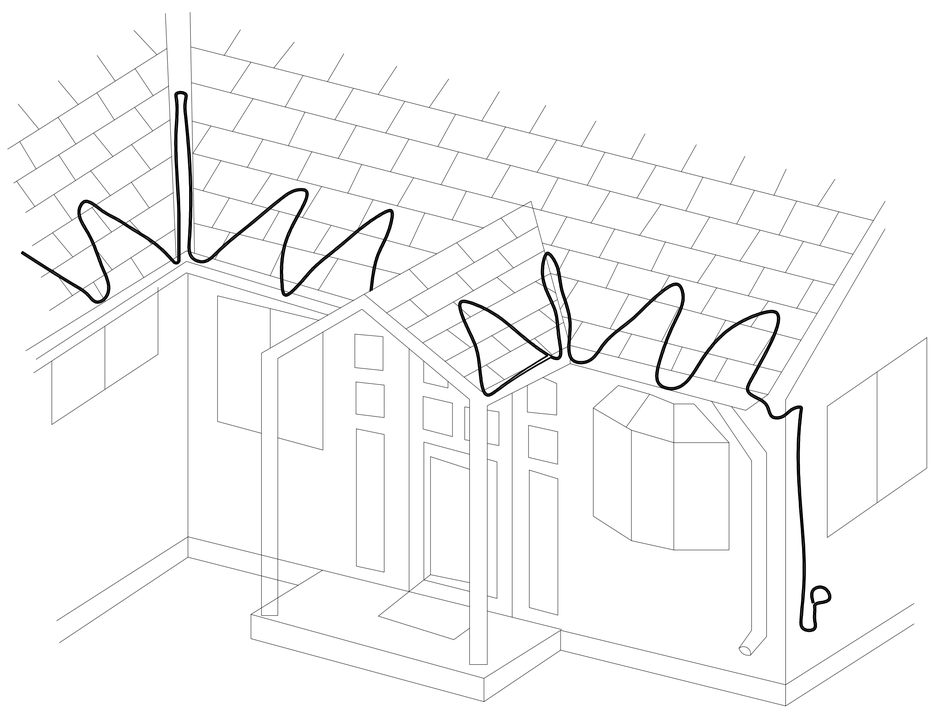


Figure 3

Abnormal Maintenance & Storage：

1, After the heating cable plug is connected, if the heating cable does not generate heat. Check that the power supply is on.

2, The overlapping of the heating cable or the accumulation of coverings will lead to local overheating, and it is necessary to readjust the laying.

3, Regularly check whether the surface of the heating cable is damaged or aged. Clean up the snow or debris covering the cable.

4, Do not twist the heating cable forcibly, as this will damage the heater.

5, Away from the fire source.

6, Make sure that water does not seep into electrical outlets, which could risk serious injury or death.

7, When the heating cable is not in use, disconnect the power supply .Wrap it properly and store in a dry place.

8, Do not cut the heating cable or power cord without a professional engineer, as this can lead to the risk of serious injury or death.

CUSTOMER SERVICE:

Product Warranty : 1 year

If you encounter any problems during the use of our products, please do not contact others. Instead, feel free to reach out to us（manufacturer）. We will provide you with a satisfactory solution!

MADE IN CHINA